Volume: 6 - Numbers: 1 - January, 2011

ISSN: 1997- 4507

NUML
Journal of Management & Technology

This Issue includes:

A Research Journal Published by
Faculty of Management Sciences
National University of Modern Languages
Islamabad-Pakistan
www.numl.edu.pk

NUML Journal of Management & Technology

Publisher: Faculty of Management Sciences, NUML Press, H-9, Islamabad Pakistan

Table of Contents

Conditional Capital Asset Pricing Model with Stochastic Beta: Evidence from Pakistani Stock Market

Ms. Fauzia Mubarik,
Lecturer, Faculty of Management Sciences, NUML Unversity, Islamabad, Pakistan
Ms. Atia Javed,
Lecturer, Pakistan Institute of Development Economics, Islamabad, Pakistan

ABSTRACT

This study investigates the stochastic behavior of market beta using capital asset pricing model (CAPM) of 50 stocks listed at Karachi Stock Exchange Pakistan from January 1999 to December 2009. This time varying behavior is examined by employing the state space model identified as modified Kalman Filter technique. The static version of CAPM assumes the beta factor to be constant but as the return distribution is time varying in nature thus the beta factor occurs to be non-constant in nature. The stochastic behavior of beta is examined by one of the three dynamic processes: mean reverting process, random coefficient with constant and random-walk beta. The results indicate that there is large support for the random-walk model for 29 stocks found in the sample random walk behavior for beta in returns. The improvement in fit of time-varying beta over the conventional constant beta estimated by ordinary least square in CAPM model is compared by the coefficient of determination and the variances of the errors. The results of time-varying model show significant gains in terms of a higher explanatory power and lower variance if beta is allowed to follow an appropriate time-varying model.

JEL Classification: G12, G15

Key Words: Capital Asset Pricing Model**,** Kalman Filter Technique, Mean Reverting Process with Constant, Random Coefficient Process and Random Walk Process.

1. INTRODUCTION

The Sharpe (1964) and Lintner (1965) Capital Asset Pricing Model (CAPM) continues to be the primary and dominant model when it comes to asset pricing models. However, after the introduction of CAPM, academics present many critiques invalidating its statistical significance. The consistent argument has been that the CAPM assumes

constant beta whereas return distribution is time varying in nature and so does the beta. In addition, the market risk captured by beta being an efficient measure of riskiness of a security is an important financial instrument in investment decisions regarding estimation of market models, development of investment portfolios, and estimation of cost of capital and emerging derivative markets.

The constant status of beta in estimating stock returns is questionable by the academic researchers for the high-low variation in its parameters. As systematic risk is time variant in nature, thus it is necessary to consider beta as a time series process withholding within it the stochastic behavior. Faff, Hillier and Hillier (2000) have demonstrated three modeling techniques to estimate time-varying beta namely multivariate generalized ARCH model (M-GARCH), another time varying heteroskedastic market models identified as EGARCH, TARCH and Kalman Filter approach and find that of all the three models, Kalman Filter approach along with random-walk parameterization out-performs in efficiently explaining the stochastic behavior of betas in the daily stock returns of UK. The Kalman filter approach is algorithmic calculation of current state dependent on previous state. In other words, the Kalman filter is essentially a set of mathematical equations based on Gaussian distribution that minimizes the estimated error covariance of state variables in the sample. From the time it has been developed, the Kalman filter technique has been the subject of extensive research and application in its original formulation (Kalman, 1960) in the field of finance and economics to acutely analyze the influential variables for individual and institutional investors to make investment decisions.

The main objective of this research study is to investigate the stochastic behavior of beta of 50 listed stocks on Karachi Stock Exchange Pakistan from January 1999 to December 2009 by employing state space model identified as modified Kalman Filter technique. This technique efficiently captures the unobserved variables in the data and estimates the variation in beta along with observed variables. If the Gaussian assumption is relaxed, the Kalman filter is deemed to be the best (minimum error variance) filter out of the class of linear unbiased filters as is evident from the study of Mergner and Bulla, 2008.

The present study investigates the stochastic behavior of beta of 50 listed stocks on Karachi Stock Exchange Pakistan from January 1999 to December 2009. This study contributes to the existing literature on asset pricing model in several ways. This study examines the time varying behavior by employing the state space model identified as modified Kalman Filter technique which identifies the underlying dynamic process in beta and take account of autoregressive and heteroskedasticity in stock returns by taking GARCH specification of variance. This study provides guidelines in investment decisions regarding portfolios formation, cost of capital and derivative markets decisions. The study provides comparison of constant beta with time varying beta and finds robust results for portfolio diversification and dynamic hedging strategies because of its stochastic nature to capture variation in systematic risk.

The plan of the study is as follows. This study is further divided into four sections. Section two provides literature review of the relevant literature, section three discusses

the data and methodology, section four is comprised of data analysis and interpretation of empirical results and section five offers the conclusion.

2. LITERATURE REVIEW

The standard CAPM is extensively tested by many studies and evidence shows that there is no significant relationship between average returns and market beta. The time varying CAPM is mostly tested for the developed markets, very few studies are done for developing markets.

Jostova and Philipov (2005) have examined the mean-reverting stochastic process of systematic risk. The sample comprises of U.S. industry portfolios of financial, utilities, manufacturing, retail and wholesale firms. The stochastic beta model is employed and the results conclude that the model outperforms in providing best forecasts for beta in the stock returns and also strongly supports conditional CAPM model in analyzing the stochastic behavior of systematic risk. Lin and Lin (2000) demonstrate the stochastic behavior of betas for international markets by employing one-factor international capital asset pricing model (ICAPM) within a framework of random coefficients models for United States, the United Kingdom, Canada, France, Germany, Japan, South Korea, Singapore, Taiwan, Hong Kong and Australia are selected for testing time varying country betas for the time period of February 1975 to June 1998. Based on generalized least squares method technique, the ICAPM model shows stochastic behavior of country betas and its power to forecast. Jong (2000) has examined the term structure of U.S. interest rates with maturities running from 1-month to 30 years for the time period of 1947 to 1991 by combining time series and cross section information. The affine class of term-structure models along with Kalman Filter quasi-maximum likelihood approach is employed for estimation and results conclude that these models are easy to implement and identify and develop panel data in a consistent manner.

Asgharian and Hansson (2000) have investigated the explanatory power of time-varying beta along with other factors for cross sectional variation in stock returns of Swedish stock market for the time period of 1983 to 1986. The study is tested by employing bivariate GARCH (1,1) process to estimate stochastic behavior of beta of the sample against the constant beta that is measured by the application of ordinary least squares technique. The results show the efficient performance of bivariate GARCH(1,1) to capture the dynamic behavior of beta due to fluctuating behavior of stock returns. It is also evident from the result that risk premium for beta; size and book-to-market rely on one another to avoid any biases in the estimated coefficient for beta. Choudary (2001) has investigated the stochastic behavior of beta of three emerging Asian markets based on daily data for the time period of January 1989 to December 1998. The study has employed bivariate GARCH-M model and autoregressive fractionally moving average (ARFIMA) model to demonstrate the time-varying beta of daily returns. The tests find a slow mean reverting beta indicating its ability to forecast beta and stock returns by possessing a long memory in the parameters. Lam (2001) has examined the asymmetric risk-return relationship in the Hong Kong stock market for daily returns of 132 stocks for the time period of January 1980 to December 1995 characterized to two bull and two bear

markets. The results demonstrate strong relationship between positive betas and returns in bull markets and between negative betas and returns in bear markets. Grieb and Reyes (2001) have analyzed the time-variation in betas for 38 Brazilian investable stocks through the application of Schwert and Seguin (SS) single factor model. This model is followed by applying maximum likelihood techniques used to estimate MA(1)-GJR-GARCH(1,1) to obtain estimates of world market volatility to test SS market model. The results indicate that the systematic risk of Brazilian stocks increases as the fluctuation in aggregate market increases. Rockinger and Urga (2001) have examined the time varying parameters of Central and Eastern European Financial Markets for the time period of Aril 1994 to July 1997 by applying Kalman-Filter framework to capture time-varying latent factors in stock indexes and analyze the GARCH effects in the stock markets. The findings indicate significant GARCH effects in the selected stock markets and show high asymmetric volatile effects particularly in case of Hungary. Lettau and Ludvigson (2001) have investigated the time variation of beta across stock returns and portfolios by employing conditional capital asset pricing model. The results show that the model significantly captures the time varying parameters across returns in contrast to static measure of beta across returns as is evident through the static capital asset pricing model. This stochastic behavior of the model provides room for more multiple factors to be employed in the study to capture cross-sectional effects of time-varying parameters across stock returns and portfolios

Moonis and Shah (2003) have studied time variation in beta in Indian stock market by employing modified Kalman Filter approach on 50 daily returns for the time period of May 1996 to March 2000. In contrary to bivariate GARCH models, modified Kalman Filter approach clearly indicates beta to mean reverting with less evidence of random walk process. The results also show that it best captures the reduction in variance of market model if beta is time varying in nature. The study finds this model to be robust for portfolio diversification and dynamic hedging strategies because of its stochastic nature to capture variation in systematic risk. Chan and Maheu (2002) have examined jump dynamics in stock returns through a simple-filter approach identified as autoregressive conditional jump intensity (ARJI). The study supports the time varying jump behavior of stock returns in forecasting behavior and ex-ante probability of jumps during stock market downturns. Ang and Liu (2004) have studied the dynamic behavior of betas, risk premium and risk-free rates for valuing discounted cash flows. The results find betas to be time varying in nature thereby deriving dynamic discounted cash flow based on conditional capital asset pricing model. The study support the discount curve in the model efficiently indicates the dynamic cash flows of time varying betas, and risk premiums. Hodgson and Vorkink (2003) have studied the conditional betas through Gaussian quasi-maximum likelihood estimation technique for daily stock returns with three portfolios placed into quartiles developed by sorting firms traded on NYSE, AMEX and NASDAQ for the time period of January 1996 to December 1997. The results indicate that the semi parametric efficient estimates of the conditional betas work better on the Gaussian quasi-maximum likelihood estimates with the presence of non-normality in the conditional capital asset pricing model.

Compton and Costa e Silva (2005) have examined the relationship between finance-business cycles for the recession period of 2001 by investigating the contribution of stock market, debt and money markets to U.S. business cycles by employing dynamic factor model and Markov-switching model and time varying transition probability model. The result indicate that all the three models provide support for stock return movement with business cycle and one way relationship from stock markets to GDP evident from Granger causality test. Mergner and Bulla (2005) have demonstrated based on in-sample forecasting results, the standard ordinary least square estimates show the weakest results as compared to stochastic volatility models with Kalman Filter out-performing the most among all results. Similarly, for out-sample forecasting results, the time-varying betas are best explained by the random walk process of Kalman filter for weekly excess returns of eighteen pan-European industry portfolios for the time period of December 1987 to February 2005.

Choudhry and Wu (2008) have investigated the stochastic behavior of beta with GARCH models and Kalman Filter method. Kalman Filter is employed to explicitly model the stochastic process of beta of twenty U.K. firms for the time period of January 1989 to December 2003 and is compared with bivariate GARCH, bivariate BEKK GARCH, GARCH-GJR and bivariate GARCH-X. The Kalman Filter technique shows asymmetric distribution of conditional betas having a wider range as compared to GARCH models and accurately forecasts the future returns to actual returns of the firms. Bali, Cakici and Tang (2009) investigate the relationship of time-varying conditional betas based on the dynamic information available for the industry portfolios for the daily returns of financial and non-financial firms listed on NYSE, AMEX and NASDAQ stock exchanges for 1963 to 2004. The autoregressive, moving average and generalized autoregressive conditional heteroskedasticity in mean (GARCH-M) model to obtain time-varying conditional betas for each stock based on ex-ante measures of risk are employed. The results indicate positive relation between conditional betas and expected returns and show that the average portfolio returns increases from the low-beta movement to high-beta movement both at firm level and portfolio level. Bauer, Cosemans and Schotman (2008) have tested the time-varying risk on three factor model of Fama and French model on 16 European markets for the February 1985 to June 2002. Seemingly unrelated regressions technique and time series tests show significant time variation in risk factor loadings. The study finds that size, book-to-market and macro-economic variables forecast significant time variation in expected returns. In the present century, researcher have examined the time-variation in investor risk aversion preferences for 25 portfolios on book-to-market and size for the time period of 1990 to 2004. Based on Bollerslev, Gibson and Zhou model, the results show that the explanatory power of time-varying risk aversion innovations for cross-section of stock returns

3. METHODOLOGY AND DATA

The Capital Asset Pricing Model (CAPM) is devised as an equilibrium asset pricing model by Sharpe (1964) and Lintner (1965). The basic idea of the CAPM is that if a share helps to stabilize a portfolio that is to make it more in line with the market portfolio then a share will earn a similar rate of return to the market portfolio. Whereas, if a share

of a portfolio deems to be more risky than the market portfolio, the demand of the share decreases which in return declines the price of the share and its expected rate of return rise above the market rate of return. Conversely, if a share reduces the risk of a portfolio compared to the market portfolio the demand increases and its price stabilizes with a lower rate of return than the average market rate of return. It also assumes that in an efficient market all diversifiable risk will be eliminated (given that there is no transaction cost) so that the risk only risk that will be priced by the market on a portfolio is systematic or market risk. Thus, CAPM model only caters on the pricing of diversifiable market risk.

The CAPM model assumes that the behavior of an investor is perfectly rational in the sense that their only concern is the returns from their investment. The investors are not only interested in the expected returns on an investment they are also concerned with the possible distribution of rate of return. The risk accompanying a possible investment is typically characterized by the distribution of such possible returns. While investors are virtually unanimous in preferring high returns to low returns, it is also the case that most investors are risk averse. That means they prefer a lower standard deviation to a higher one given the same expected returns. This implies that if the risk on an investment appears to be large, investors are likely to accept such high risk only if it is accompanied by a high expected return and vice versa.

3.1 Methodology

If investors wish to purchase an asset having zero risk, they still demand a return as an attempt to rearrange current consumption. Such a return is called a risk free rate of return (r_f) in return used to define risk premium on j^{th} asset, as the excess return over the risk free rate (r_f), that is (r_j) - (r_f) = risk premium. Investors minimize the risk by diversifying their investment to a number of securities with varying degree of risk and this concept is employed in CAPM theory shown as the following equation:

$$(r_{it} - r_{ft}) = \alpha + \beta_i (r_{mt} - r_{ft}) + \varepsilon_{it} \quad (1)$$

Where (r_j - r_f) is the risk premium for security j, (r_m - r_f) represents the overall market risk premium and $\beta_j = (\sigma_{jm} / \sigma_m)$ expresses the dependence of security j's return on the market return.

The static version of CAPM estimated by Ordinary Least Square (OLS) assumes that beta factor is constant. As the return distribution is time varying in nature so the moments like mean, variances and co-variances are also time varying which implies that beta factor is not constant. This study focuses on test of beta instability based on Kalman filter technique. The traditional Kalman filter assumes that the CAPM model residual is Gaussian and homoskedastic in nature. This is inconsistent with the empirical evidence which has shown about heteroskedasticity of stock returns Bollerslev et al. (1988) and Bollerslev et al. (1992). Harvey et al. (1994) derive the modified Kalman Filter, which is quasi-optimal when errors show conditional heteroskedasticity. This study uses the modified Kalman Filter technique to test the stochastic behavior of beta of 50 daily stock returns.

The Kalman Filter technique show best results when errors of state variables with minimum square estimates are normally distributed Harvey, (1989). However, CAPM model with this assumption of normality of errors is incompatible as is evident from the empirical evidence which favors unconditional non-normality in stock returns Bollerslev et al., (1992) and Harvey et al., (1994) who proposed a modified Kalman filter technique with presence of GARCH error terms. Influenced by such model, this technique is applied to estimate time-varying betas in case of Pakistani stock market. The following equations give the empirical specification of the model based on CAPM:

$$r_{it} = \alpha_{it} + \beta_{it} r_{mt} \varepsilon_{it} \tag{2}$$

$$\beta_{it} = \beta_i + \phi(\beta_{it-1} - \overline{\beta}_i) + \eta_{it} \tag{3}$$

$$\varepsilon_{it}^{*} \sim N(0, h_{it}) \text{ and } \eta_{it} \sim N(0, Q) \tag{4}$$

$$h_{it} = \omega_0 + \alpha_0 \varepsilon_{it}^2 + \alpha_1 h_{it} \tag{5}$$

Here r_{it} and r_{mt} are the daily returns on the stock i and the market respectively demeaned by the risk free interest rate. The beta in this model is time dependent and is modeled as an AR(1) process described by Equation (3). The errors of the CAPM model are conditionally normal and follow a GARCH (1,1) process given by Equation (5). To use the modified Kalman filter of Harvey et al. (1994) we need to rewrite these equations as follows.

$$R_{it} = \begin{pmatrix} R_{mt} & 1 \end{pmatrix} \begin{pmatrix} \beta_{it} \\ \varepsilon_{it} \end{pmatrix} \tag{6}$$

$$\begin{pmatrix} \beta_{it-1} - \overline{\beta} \\ \varepsilon_{it-1} \end{pmatrix} = \begin{pmatrix} \phi & 0 \\ 0 & 0 \end{pmatrix} \begin{pmatrix} \beta_{it-1} \\ \overline{\beta}_i \end{pmatrix} + \begin{pmatrix} \eta_{it} \\ \varepsilon_{it} \end{pmatrix} \tag{7}$$

$$E(\eta_{it}^{*} \eta_{it}^{*'}) = \begin{pmatrix} Q & 0 \\ 0 & h_{it} \end{pmatrix} = Q_t^{*} \tag{8}$$

$$R_{it} = R_{mt}^{*} \beta_{it}^{*} \tag{9}$$

$$\beta_{it}^{*} = \phi^{*} \beta_{it-1}^{*} + \eta_{it}^{*} \tag{10}$$

The equation (9) and Equation (10) are the modified observation and state equations respectively. The Kalman filter consists of the following six equations. The model presented above describes how the time-variation in beta is modeled. The parameters to be estimated in this model are $\overline{\beta}, \phi, Q, \omega, \alpha_0, \alpha_1$, and these parameters are estimated by using the modified Kalman filter algorithm. To test the hypothesis of time-variation in beta, the null hypothesis of OLS beta $(Q = 0, \phi = 0)$ is tested versus the alternative of time-varying beta $((Q \neq 0, \phi \neq 0))$ in this model. If the hypothesis of beta constancy for a particular stock is rejected, the next stage is to find the appropriate model for beta variation. The three models that have been extensively used in the existing literature are the mean reverting model, the random coefficient model and the random walk model.

The mean reverting beta process or the AR(1) and constant mean to use as an option if shocks are supposed to be random coefficients with some persistence and the coefficients eventually return to their mean values as shown in the following equation;

$$\beta_{it} = \overline{\beta}_i + \phi(\beta_{it-1} - \overline{\beta}_i) + \eta_{it} \quad (11)$$

The random coefficient beta process or the constant mean is an option, if shocks to the random coefficients have no persistence from period to period as shown in the following equation;

$$\beta_{it} = \beta_i + \eta_{it} \quad (12)$$

The random walk beta process is used as option if shocks to the random coefficients persist indefinitely as shown in the following equation;

$$\beta_{it} = \beta_{it-1} + \eta_{it} \quad (13)$$

The non-normality of errors of state variables is the phenomenon of volatility clustering which is taken into account in this model by specifying the residual following GARCH (1,1) process.

This study tries is to capture the time variability with GARCH error process. Therefore, modified Kalman filter is used to estimate time-varying betas. In time-varying coefficients, it has the option of testing whether these coefficients follow random-walk, random-walk with drift, random coefficient with constant and AR(1) with constant.

3.2 Data

The data used in this study includes daily returns for 50 listed stocks of Pakistan for the time period of January 1999 to December 2009 with total observations of 2,536. The daily data is used to acutely analyze the time varying behavior of beta of stock returns. The data is collected from the websites of Business Recorder and Karachi Stock Exchange.

4. EMPIRICAL RESULTS

The empirical evidence suggest that beta is not stable rather it is time varying in nature. The investor make expectations about future return by updating their information about moments (mean, variance and co-variance), which are time-varying and beta is also labeled as random. The time varying behavior is modeled by estimating time varying variance by applying different models of family of ARCH models in the previous literature for Pakistan (Javid and Ahmad, 2008; Iqbal et al, 2008). In this study, the time variability of beta is estimated by applying modified Kalman Filter technique Harvey et al, (1994).

The null hypothesis of constant beta is tested against the alternative of time varying beta. If $(Q = 0, \phi = 0)$ turns out to be true, this implies that beta is constant. If the hypothesis of constant beta is rejected then next step is to find appropriate model for beta variability. The Kalman Filter is estimated to test if beta is not stable then it follows one of the three

dynamic processes. The process could be mean reverting (AR(1) with constant) or beta has random coefficient with constant or it could be random-walk beta. To test the random coefficient model against the mean reverting model impose the restriction that $(\phi = 0)$. For testing the random-walk model, restriction of $(\phi = 1, \overline{\beta} = 0)$ is imposed.

The stochastic behavior of beta can be estimated in a general form known as the state space form. The dynamic model of beta is specified using Kalman Filter which is a state space estimation technique. To specify a time-varying parameter model, three structures for state equation are used, random walk to use as an option if shocks to the random coefficients persist indefinitely. The AR(1) and constant mean is used as an option if shocks are supposed to be random coefficients with some persistence, but that the coefficients eventually return to their mean values. The constant mean is an option, if shocks to the random coefficients have no persistence from period to period.

Once it is identified that betas are not constant, the 50 stocks are tested for the various time varying beta models. The results of Table 1 indicate 14 stocks are found to have betas which behave as mean reverting dynamic process. The results indicate that 14 firms out of 50 have AR(1) and constant mean time varying behavior, that is, if shocks are supposed to have random coefficients with some persistence coefficients eventually return to their mean values. The results of Table 3 reveal that 6 firms out of 50 have random coefficient with constant dynamics. This means that shocks to the random coefficients have no persistence from period to period. Large support for the random-walk model for 29 stocks is found in the sample as is evident from Table 2 which shows 29 firms following random walk behavior for beta.

Table 1: Estimating Beta by Mean Reverting Process: AR(1) With Constant Mean

$$\beta_{it} = \overline{\beta}_i + \phi(\beta_{it-1} - \overline{\beta}_i) + \eta_{it}$$

	β	ϕ	Q	Ω	α_0	α_1	R^2	LL-hood
ABOT	0.34*	0.38*	0.32***	0.03	0.03*	0.68*	0.81	64.85
	(2.00)	(2.16)	(1.87)	(1.04)	(2.54)	(2.34)		
ACBL	0.66	0.24*	0.44	0.05	0.03***	0.75*	0.63	111.74
	(2.23)	)2.00)	(2.23)*	(0.79)	(1.86)	(2.18)		
ENGRO	0.05*	0.02**	0.14**	0.03**	0.16***	0.85*	0.73	86.40
	(2.46)	(1.97)	(4.91)	(1.89)	(1.92)	(9.30)		
FUJI	1.03*	0.03**	0.18*	0.01*	0.03**	1.05*	0.64	142.7
	(5.17)	(1.89)	(3.44)	(3.31)	(1.92)	(9.81)		
FABL	0.26*\	0.05*	0.53*	0.01*	0.08*	0.88*	0.49	7213.89
	(2.24)	(5.57)	(9.59)	(10.91)	(13.47)	(15.11)		
GHNL	0.22**	0.20*	0.58*	0.06*	0.12*	0.84*	0.48	5951.16
	(1.76)	(7.98)	(9.95)	(16.04)	(16.83)	(14.34)		
ISMAIL	1.04*	0.02*	0.01	0.02*	0.04*	0.96*	0.63	5747.02
	(3.15)	(3.08)	(0.030)	(7.98)	(10.72)	(17.26)		
LUCK	1.22**	0.04*	0.69*	0.03*	0.18**	0.72*	0.72	6337.41
	(1.99)	(5.04)	(11.69)	(11.80)	(12.38)	(43.37)		
MARI	1.26*	0.03*	0.54*	0.04*	0.23*	0.68*	0.67	5005.05
	(2.41)	(11.4)	(31.31)	(14.82)	(14.12)	(42.09)		
NESTLE	1.36*	0.05*	0.87*	0.03*	0.14*	0.85*	0.77	3524.54
	(4.13)	(16.5)	(10.79)	(10.96)	(17.35)	(12.77)		
PGLC	2.04**	0.12*	0.99*	0.04*	0.10*	0.83*	0.52	5186.78

	(1.86)	(16.6)	(16.97)	(11.11)	(14.86)	(78.19)		
PSMC	0.14* (2.28)	0.09* (1.86)	0.58* (13.24)	0.07* (6.64)	0.24* (20.84)	0.80* (13.73)	0.83	4816.01
SILC	1.54** (1.78)	0.42*** (15.8)	0.37*** (2.514)	0.000*** (16.34)	0.253*** (13.60)	0.58*** (25.27)	0.50	5758.19
SPLC	0.26* (2.24)	0.05* (5.57)	0.53* (9.59)	0.01* (10.91)	0.08* (13.47)	0.88* (15.11)	0.49	7213.8

Note: The figures below coefficients are t-ratios. The * indicates Level of Significance 1%,** indicates level of Significance at 5% and *** indicates significance at 10%.

Table 2: Estimating Beta by Random Walk Coefficient: $\beta_{it} = \beta_{it-1} + \eta_{it}$

	β	Q	Ω	α_0	α_1	R^2	LL-hood
CEPBR	0.96 (5.17)	0.07 (2.30)	0.01 (1.47)	0.06** (1.95)	0.87* (8.61)	0.58	91.79
AICL	0.07* (1.95)	0.16 (2.14)	0.03 (0.49)	0.02* (1.96)	0.81* (2.00)	0.72	85.65
DAWH	0.09** (1.92)	0.06*** (1.89)	0.02 (2.40)	0.32 (2.55)	0.50 (3.69)	0.53	100.88
EFUG	0.25* (1.89)	0.01* (2.10)	0.03* (11.03)	0.17* (6.60)	1.05* (3.72)	0.73	67.01
ENGRO	0.05* (2.42)	0.06** (1.93)	0.04 (1.62)	0.14*** (1.84)	0.86 (8.96)	0.55	86.34
EFU	0.34* (2.49)	0.57 (1.93)	0.06* (4.62)	0.07 (5.26)	1.04* (13.16)	0.52	70.69
FUJI	1.19* (2.09)	0.09* (4.65)	0.07* (15.69)	0.15* (11.92)	0.68* (39.54)	0.45	6199.33
FEROZ	1.03* (2.46)	0.07* (16.29)	0.03* (14.29)	0.23* (15.32)	0.67* (40.37)	0.49	7059.45
GHFL	1.33* (2.61)	0.11* (3.91)	0.05* (9.96)	0.19* (13.84)	0.78* (58.16)	0.71	6841.09
HABSM	1.28* (18.55)	0.05* (4.66)	0.06* (12.95)	0.14* (14.42)	0.77* (61.73)	0.60	4322.67
HOND	1.32** (1.87)	0.06* (4.66)	0.06* (12.95)	0.14* (14.42)	0.77* (61.7)	0.60	6509.04
ICI	0.91* (6.296)	0.05** (1.82)	0.04* (7.75)	0.04* (16.09)	0.95* (4.96)	0.68	1309.70
KESC	0.85* (4.69)	0.07* 14.85)	0.03* (13.95)	0.15* (20.07)	0.84* (19.44)	0.46	5212.38
KTML	0.03* (11.43)	0.54* (31.31)	0.04* (31.31)	0.23* (14.12)	0.68* (42.09)	0.67	5005.05
LAKS	0.05* (16.58)	0.87* (10.79)	0.03* (10.96)	0.14* (17.35)	0.85* (12.77)	0.77	3524.54
MAPLE	0.12* (16.63)	0.99* (16.97)	0.04* (11.11)	0.10* (14.86)	0.83* (78.19)	0.52	5186.78
MCB	0.09* (1.56)	0.58* (13.24)	0.07** (6.64)	0.24** (20.84)	0.80* (13.73)	0.83	4816.01
NAKIR	0.04* (15.86)	0.37* (2.51)	0.000* (16.347)	0.253* (13.605)	0.579* (13.605)	0.50	5758.19
NLRL	0.05* (5.57)	0.53* (9.59)	0.01* (10.91)	0.08* (13.47)	0.88* (15.11)	0.49	7213.89
PKGS	0.04* (2.25)	0.02*** (1.81)	0.07* (3.39)	0.29** (1.90)	0.26** (1.92)	0.79	88.16

PAKMI	0.05* (16.58)	0.87* (10.79)	0.03* (10.96)	0.14* (17.35)	0.85* (12.77)	0.77	3524.54
PAKD	0.05* (2.42)	0.06** (1.93)	0.04 (1.62)	0.14*** (1.84)	0.86 (8.96)	0.55	86.34
PECO	0.09** (1.92)	0.06*** (1.89)	0.02 (2.40)	0.32 (2.55)	0.50 (3.69)	0.53	100.88
PAKT	0.25* (1.89)	0.01* (2.10)	0.03* (11.03)	0.17* (6.60)	1.05* (3.72)	0.73	67.01
PIAA	1.19* (2.09)	0.09* (4.65)	0.07* (15.69)	0.15* (11.92)	0.68* (39.54)	0.45	6199.33
PTCLA	1.03* (2.46)	0.07* (16.29)	0.03* (14.29)	0.23* (15.32)	0.67* (40.37)	0.49	7059.45
SHELL	1.28* (18.55)	0.05* (4.66)	0.06* (12.95)	0.14* (14.42)	0.77* (61.73)	0.60	4322.67
SITC	1.32** (1.87)	0.06* (4.66)	0.06* (12.95)	0.14* (14.42)	0.77* (61.7)	0.60	6509.04
ULEVER	0.04* (2.25)	0.02*** (1.81)	0.07 (3.39)	0.29** (1.90)	0.26* (1.92)	0.79	88.16

Note: The figures below coefficients are t-ratios. The * indicates Level of Significance 1%,** indicates level of Significance at 5% and *** indicates significance at 10%.

Table 3: **Estimating Beta by Random Coefficient: Constant Mean plus Noise**
Coefficient: $\beta_{it} = \beta_i + \eta_{it}$

	β	Q	Ω	α_0	α_1	R^2	LL-hood
CEPBR	0.72 (1.96)	0.46 (38.22)	0.01 (1.47)	0.06** (1.95)	0.87* (8.61)	0.58	91.79
DADX	0.07*** (1.83)	0.02** (1.92)	0.03* (4.79)	0.06* (13.87)	1.02* (9.87)	0.84	106.73
DAWH	0.04* (2.25)	0.02*** (1.81)	0.07 (3.39)	0.29** (1.90)	0.26* (1.92)	0.79	88.16
FZTM	1.44* (3.05)	0.02* 13.06)	0.04** (16.56)	0.29* (18.39)	0.68* (43.27)	0.56	3651.75
JDW	1.01** (1.84)	0.04* (17.61)	0.07* (26.21)	1.17* (53.66)	0.12* (10.98)	0.85	5756.27
NIRE	0.05* (2.42)	0.06** (1.93)	0.04 (1.62)	0.14*** (1.84)	0.86 (8.96)	0.55	86.34

Note: The figures below coefficients are t-ratios. The * indicates Level of Significance 1%,** indicates level of Significance at 5% and *** indicates significance at 10%.

The improvement in fit of time-varying beta over the traditional constant beta estimated by OLS in CAPM model is compared by two estimation methods; the coefficient of determination (R^2) and the variances of the errors. The results of time-varying model show significant gains in defining accuracy in terms of a higher R^2 and lower variance when beta is allowed to follow an appropriate time-varying model.

Table 4: Comparison of Constant (OLS) With Time Varying Beta

	OLS		Time Varying	
	R^2	Var(ε)	R^2	Var(ε)
ABOT	0.71	19.597	0.81	17.935
ACBL	0.55	30.910	0.63	28.891
ENGRO	0.62	28.470	0.73	25.462
FUJI	0.53	23.089	0.64	20.091
FABL	0.38	21.991	0.49	19.924
GHAZI	0.32	39.682	0.48	30.575
ISMAIL	0.66	31.449	0.72	28.650
LUCK	0.69	25.412	0.72	16.635
MARI	0.54	25.399	0.67	18.940
NESTLE	0.65	24.977	0.77	19.774
PGLC	0.49	19.396	0.52	17.910
PSMC	0.8	14.954	0.83	12.846
SFL	0.47	23.002	0.50	20.900
SPLC	0.49	23.870	0.49	21.226
CEPBR	0.47	33.912	0.58	29.177
AICL	0.61	32.662	0.72	28.464
DAWH	0.49	25.249	0.53	19.914
EFUG	0.64	24.575	0.73	21.539
ENGRO	0.48	19.935	0.55	15.935
EFU	0.55	31.891	0.52	28.891
FEQM	0.44	25.091	0.49	21.091
GHNL	0.47	23.924	0.71	19.924
HABSM	0.68	40.575	0.60	29.575
HOND	0.55	34.650	0.60	28.650
ICI	0.57	26.635	0.68	22.635
KESC	0.48	25.940	0.66	21.940
KOHTM	0.46	25.774	0.67	24.774
LAKS	0.67	20.910	0.77	17.910
MARE	0.77	18.846	0.52	19.846
MCB	0.52	23.900	0.83	20.900
NAKIR	0.43	25.226	0.50	23.226
UPFL	0.50	37.177	0.59	32.177
PKGS	0.49	33.464	0.79	33.464
PECO	0.53	25.914	0.77	22.914
PAKD	0.66	25.539	0.55	20.539
PAKT	0.66	31.891	0.73	27.891
PIAA	0.45	30.462	0.47	26.462
PTCLA	0.49	25.091	0.56	21.091
SHELL	0.60	23.924	0.60	18.924
SITC	0.68	40.575	0.60	40.575
ULEVER	0.68	34.650	0.79	29.650
CEPB	0.48	26.635	0.58	23.635
DADX	0.76	25.940	0.84	21.940
DAWH	0.66	25.774	0.79	20.774
FZTM	0.49	20.910	0.56	17.910
JDW	0.77	18.846	0.85	16.846

NIRE	0.51	23.900	0.55	21.900
Average	0.56	26.796	0.64	23.148

The average R^2 over the sample of stocks is studied when betas are allowed to be time-varying as is evident from table 4.

5. SUMMARY AND CONCLUSION

This study investigates the stochastic behavior of beta of 50 listed stocks on Karachi Stock Exchange Pakistan from January 1999 to December 2009. This time varying behavior is examined by employing the state space model identified as modified Kalman Filter technique. This technique efficiently captures the unobserved variables in the data and estimates the variation in beta along with observed variables. The static version of CAPM estimated by Ordinary Least Square (OLS) assumes that beta factor is constant. As the return distribution is time varying in nature so the moments like mean, variances and co-variances are also time varying which implies that beta factor is not constant. The Kalman Filter approach is estimated to test if beta is not stable then it follows one of the three dynamic processes. The process could be mean reverting (AR(1) with constant) or beta has random coefficient with constant or it could be random-walk beta. To test the random coefficient model against the mean reverting model the restriction imposed is $(\phi = 0)$ and for testing the random-walk model restriction of $(\phi = 1, \overline{\beta} = 0)$ is imposed on the data. The improvement in fit of time-varying beta over the traditional constant beta estimated by OLS in CAPM model is compared by two estimates; the coefficient of determination (R^2) and the variances of the errors. The results of time-varying model show significant gains in a accuracy in terms of a higher R^2 and lower variance when beta is allowed to follow an appropriate time-varying model. The results indicate that 14 firms out of 50 have AR(1) and constant mean time varying behavior. That is, if shocks are supposed to have random coefficients with some persistence coefficients eventually return to their mean values. Only 6 firms out of 50 firms show random coefficient with constant dynamics. This means that shocks to the random coefficients having no persistence from period to period. Large support for the random-walk model for 29 stocks is found in the sample random walk behavior for beta in returns.

The results find time varying beta effects on Karachi Stock Market which is in line with previous studies that have found evidence of beta variation in various other countries. The strong evidence in favor of time-varying betas provides evidence of superior performance of time-varying betas over OLS betas based on the results of larger R^2 and reduction in the variance of errors. One of the contributions of this work over the existing literature is that time-variation in variance of the market model errors has been considered and taken into account in the algorithm. This work also suggests that time-variation in beta is present in case of developing markets as in case of developed markets. The overall results have important implications for financing and investing decisions. Another implication of this study is that this model is appropriate to study the dynamic behavior of hedging strategies at any point of time.

REFERENCES

Ang, A., and Lin, J., (2004), 'How to discount Cash flows With Time Varying Expected Returns', *The Journal of Finance*, Vol.59 (6):2745-2783.

Asgharian, H., and Hansson, B., (2000), 'Cross-Sectional Analysis Of Swedish Stock Returns With Time Varying Beta: The Swedish Stock Market 1983-96', *European Financial Management*, Vol.6 (2):213-233.

Bali, T., G., Cakici, N., and Tang, Y., (2009), 'The Conditional Beta and the Cross-Section of expected returns', *Financial management*, Vol.38 (1):103-107.

Bauer, R., Cosean, M., and Schotman, P., C., (2008), 'Conditional asset pricing And Stock Market anomalies In Europe', *European Financial Management*, and Vol.16 (2):165-190.

Bollerslev, T., Chou, R., and Kroner, F., K., (1992), 'ARCH Modeling In Finance:A Review Of The Theory And Empirical Evidence', *Journal of Econometrics*, Vol.52:5-59.

Bollerslev, T., Engle, R., F., and Wooldridge, J., M., (1988), ' A Capital Asset Priocing Model With Time-Varying Covariances', *Journal of Political Economy*, Vol.96(1):116-131.

Chan, W., H., and Maheu, J., M., (2002), 'Conditional Jump Dynamics In Stock market Returns', *Journal Of Business And Economic Statistics*, Vol.20(3):377-389.

Choudhry, T., (2001), 'The Long Memory Of Time-varying Beta: Examination of Three Emerging Asian Stock Markets', *Managerial Finance*, Vol.27(1/2):5-23.

Choudhry, T., and Wu, H., (2008). 'Forecasting Ability of GARCH vs Kalman Filter Method: Evidence from Daily U.K. Time Varying Beta', *Journal Of Forecasting*, Vol.27:670-689.

Compton, R., a., and Silva, J., R., (2005), 'Finance and The Business Cycle: A Kalman filter approach With Markov Switching', *Central Bank of Brazil Working Paper*, No. 97.

Faff, R., W., Hillier, D., and Hillier, J., (2000), 'Time Varying Beta Risk: An Analysis of Alternative Modelling Techniques', *Journal Of Business Finance and Accounting*, Vol.27(5):523-554.

Grieb, T., and Reyes, M., (2001), 'Time-Varying Betas in an Emerging Stock Market, The case of Brazil', *American Business Review*, Vol.19:118-124.

Harvey, A., C., (1989), 'Forecasting, Structural Time Series Models and The Kalman Filter', *Cambridge, UK:Cambridge University Press*.

Harvey, A., C., Ruiz, E., and Shephard, N., (1994), 'Multivariate Stochastic Variance Models', *Review of Economic Studies*, Vol.61:247-264.

Hodgson, D., J., and Vorkink, K., P., (2003), 'Efficient Estimation Of Conditional Asset Pricing Models', *Journal Of Business And Economic Statistics*, Vol.21(2):269-283.

Iqbal, J., Brooks, R., D., and Galagedera, D., U., A., Galagedera, (2008), 'Testing Conditional Asset Pricing Model: An Emerging Market Perspective', *Working Paper 3/08*, Monash University, Australia.

Javid, A., Y., and Ahmad, E., (2008), 'Conditional Capital Asset Pricing Model:Evidence from Pakistani Listed Companies', *PIDE Working 49.*

Jong, F., (2000), 'Time Series and Cross-Section Information in Affine Term Structure Models', *Journal Of Business and Economic Statistics*, Vol.18(3):300-314.

Jostova, G., and Philipov, A., (2005), 'Bayesian Analysis Of Stochastic Betas', The *Journal Of Financial And Quantitative Analysis*, Vol.40(4):747-778.

Karathanasis, G., Kassimatis, K., and Spyrou, S., (2010), 'Size And Momentum In European Equity Markets; Empirical Findings From Varying Beta Capital Asset Pricing Model', *Accounting And Finance*, Vol.50:143-169.

Lam, K., S., K., (2001), 'The Conditional Relation Between Beta And Returns In The Hong Kong Stock Market', *Applied Financial Economics*, Vol.11:669-680.

Lettau, M., and Ludvigson, S., (2001), 'Resurrecting The (C)CAPM: A Cross-sectional Test When Risk Premia Are Time Varying', *Journal Of Political Economy*, Vol.109(6):1238-1287.

Lin, H., and Lin, W., (2000), 'A Dynamic and Stochastic Beta and Its implications in Global Capital Markets', *International Finance*, Vol.3 (1):123-160.

Lintner, J., (1965), 'The Valuation of Risky Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets', *Review of Economics and Statistics*, Vol.47:13-37.

Mergner, S., and Bulla, J., (2008), 'Time Varying Beta Risk of Pan-European Industry Portfolios: A Comparison Of Alternative Modeling Techniques, *European Journal Of Finance*, Vol.14(8):771-802.

Moonis, S., A., and Shah, A., (2003),'Testing For Time Variation In Beta In India', *Journal Of Emerging Markets Finance*, Vol.2(2):163-180.

Rockinger, M., and Urga,G., (2001), 'A Time Varying Parameter Model To Test For Predictability And Integration In the Stock Markets Of Transition Economies', *Journal Of Business And Economic Statistics*, Vol.19(1):73-84.

Sharpe, W., (1964), 'Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk', *Journal of Finance*, Vol.19:425-442.

Appendix

Table A1: Summary Statistics of Data

	Mean	Median	Std.Dev.	Skewness	Kurtosis	Jarque-Bera	Prob
ABOT	0.00	0.00	0.10	-0.53	4.42	16.30	0.00
ACBL	0.00	0.02	0.15	-1.24	6.47	94.91	0.00
AICL	0.01	0.00	0.22	-0.46	5.47	36.26	0.00
ASKL	0.01	0.00	0.12	0.62	5.37	37.41	0.00
CEPBR	0.01	0.00	0.11	0.19	3.73	3.54	0.17
DADX	0.01	0.00	0.12	0.63	6.66	78.13	0.00
DAWH	0.01	0.00	0.11	0.71	6.19	63.77	0.00
DKTM	-0.01	0.00	0.13	1.81	13.58	641.21	0.00
EFUG	0.01	0.01	0.17	-1.06	6.57	89.57	0.00
ENGRO	0.00	0.00	0.13	-0.94	7.50	123.70	0.00
FEQM	-0.01	0.01	0.15	-0.70	4.36	19.71	0.00
FUJI	0.00	0.01	0.11	-0.81	7.64	126.04	0.00
FABL	0.00	0.00	0.14	-1.25	9.38	244.48	0.00
FZTM	0.03	0.00	0.15	4.30	30.94	4378.96	0.00
FEROZ	0.02	0.01	0.12	0.09	4.43	10.79	0.00
GHNL	0.01	-0.01	0.21	0.90	4.28	25.43	0.00
GHFL	0.01	0.00	0.16	0.26	5.00	21.80	0.00
HABM	0.01	0.00	0.13	0.21	4.00	6.17	0.05
HCAR	0.00	0.00	0.17	-0.60	5.38	37.03	0.00
ICI	0.01	0.00	0.20	3.22	27.86	3435.23	0.00
ISIL	0.01	0.00	0.09	1.61	10.51	342.24	0.00
JDW	0.03	0.00	0.15	1.22	6.95	110.66	0.00
KESC	-0.01	-0.01	0.17	-0.18	6.86	78.16	0.00
KTML	0.01	0.00	0.19	0.65	5.78	48.29	0.00
LAKS	0.02	0.00	0.12	0.99	6.66	89.44	0.00
LUCK	0.02	0.02	0.18	-0.27	4.36	11.28	0.00
MLCF	-0.02	0.00	0.35	-6.75	66.95	22249.73	0.00
MARI	0.01	0.00	0.13	-0.10	4.07	6.08	0.05
MCB	0.02	0.03	0.15	-1.00	5.56	55.07	0.00
NAKIR	0.00	0.00	0.07	0.29	8.21	140.60	0.00
NESTLE	0.02	0.01	0.11	0.47	6.09	54.40	0.00
NIRE	0.00	-0.03	0.23	0.50	3.10	5.35	0.07
PKGS	0.01	0.00	0.11	0.56	8.28	150.40	0.00
PAKMI	0.01	0.00	0.19	0.28	9.22	203.15	0.00
PAKD	0.01	0.00	0.14	0.38	3.74	5.89	0.05
PAEC	0.03	0.00	0.26	0.29	6.10	51.93	0.00
PGLC	0.01	0.00	0.14	0.27	7.48	106.14	0.00
PSMC	0.01	0.00	0.15	0.69	4.89	28.32	0.00
PAKT	0.01	0.00	0.15	0.43	5.58	38.25	0.00
PIAA	0.00	-0.01	0.18	0.51	4.95	25.16	0.00
PTCLA	0.00	0.00	0.12	0.02	3.29	0.45	0.80
SAPF	0.01	0.00	0.13	0.56	5.10	29.00	0.00
SPLC	0.01	0.00	0.12	0.66	5.51	41.80	0.00
SHELL	0.01	0.00	0.10	-0.16	3.44	1.56	0.46
SITC	0.02	0.00	0.10	0.73	4.31	19.94	0.00

UPFL	0.01	0.00	0.07	1.19	12.07	458.09	0.00
YOUTM	0.00	0.00	0.19	0.20	4.19	8.08	0.02

Table A2: Results OF OLS

	β	Ω	α_0	α_1	R^2
ABOT	0.14* (2.00)	0.03 (1.04)	0.03* (2.54)	0.68* (2.34)	0.71
ACBL	0.54 (2.23)	0.05 (0.79)	0.03*** (1.86)	0.75* (2.18)	0.55
FZTM	0.20* (2.24)	0.01* 10.91)	0.08* (13.47)	0.88* (15.11)	0.38
GHFL	0.12** (1.76)	0.000* (16.04)	0.12* (16.83)	0.84* (14.34)	0.32
ISMAIL	0.94* (3.15)	0.02* (7.98)	0.04* (10.72)	0.96* (17.26)	0.66
LUCK	0.82** (1.99)	0.03* (11.80)	0.178* (12.386)	0.72* (43.37)	0.69
MARI	0.46* (2.41)	0.04* (14.82)	0.23* (14.12)	0.68* (42.09)	0.54
NESTLE	1.36* (4.13)	0.03* (10.96)	0.14* (17.35)	0.85* (12.77)	0.65
PGLC	0.04** (1.86)	0.04* (11.11)	0.10* (14.86)	0.83* (78.19)	0.49
PAKME	0.14* (2.28)	0.07* (6.64)	0.24* (20.84)	0.80* (13.73)	0.83
SPL	0.59* (1.78)	0.08* (16.347)	0.25* (13.605)	0.59* (25.273)	0.50
SPLC	0.26* (2.24)	0.01* (10.91)	0.08* (13.47)	0.88* (15.11)	0.49
FEQM	0.14* (1.89)	0.01 (1.47)	0.06** (1.95)	0.87* (8.61)	49
CEPB	0.87 (5.17)	0.01 (1.47)	0.06** (1.95)	0.87* (8.61)	0.47
ACBL	0.04* (1.95)	0.03 (0.49)	0.02* (1.96)	0.81* (2.00)	0.61
DKTM	0.07** (1.92)	0.02 (2.40)	0.32 (2.55)	0.50 (3.69)	0.49
ENGRO	0.01* (2.42)	0.03 (0.49)	0.02* (1.96)	0.81* (2.00)	0.64
EFUG	0.22* (2.49)	0.02 (2.40)	0.32 (2.55)	0.50 (3.69)	0.48
FUJI	0.89* (2.09)	0.03* (11.03)	0.17* (6.60)	1.05* (3.72)	0.62
FZTM	0.84* (2.46)	0.06* (4.62)	0.07 (5.26)	1.04* (13.16)	0.48
GHNL	0.04* (2.04)	0.07* (15.69)	0.15* (11.92)	0.68* (39.54)	0.44
HABM	0.68* (2.61)	0.03* (14.29)	0.23* (15.32)	0.67* (40.37)	0.47
HOND	 (18.55)	0.05* (9.96	0.19* (13.84)	0.78* (58.16)	0.68
ICI	0.77** (1.87)	0.06* (12.95)	0.14* (14.42)	0.77* (61.73)	0.55
KESC	0.64* (6.296)	0.06* (12.95)	0.14* (14.42)	0.77* (61.7)	0.57

KTML	0.03* (11.43	0.04* (7.75)	0.04* (16.09)	0.95* (4.96)	0.68
LAKS	0.05* (16.58)	0.03* (13.95)	0.15* (20.07)	0.84* (19.44)	0.46
MLCF	0.12* (16.63)	0.04* (14.82)	0.23* (14.12)	0.68* (42.09)	0.67
MCB	0.09* (1.56)	0.03* (10.96)	0.14* (17.35)	0.85* (12.77)	0.77
NAKIR	0.042* (15.866)	0.04* (11.11)	0.10* (14.86)	0.83* (78.19)	0.52
UPFL	0.05* (5.57)	0.07* (6.64)	0.24* (20.84)	0.80* (13.73)	0.83
PKGS	0.04* (2.25)	0.07* (16.347)	0.25* (13.605)	0.59*** (25.27)	0.50
PAKME	1.44* (3.05)	0.01* (10.91)	0.08* (13.47)	0.88* (15.11)	0.49
PAKD	0.01* (2.42)	0.04 (1.62)	0.14*** (1.84)	0.86 (8.96)	0.53
PAEC	0.05** (1.92)	0.02 (2.40)	0.32 (2.55)	0.50 (3.69)	0.51
PAKT	0.17* (1.89)	0.03* (11.03)	0.17* (6.60)	1.05* (3.72)	0.66
PIAA	0.79* (2.09)	0.07* (15.69)	0.15* (11.92)	0.68* (39.54)	0.41
PTCLA	0.88* (2.46)	0.03* (14.29)	0.23* (15.32)	0.67* (40.37)	0.47
SHELL	0.58* (18.55)	0.06* (12.95)	0.14* (14.42)	0.77* (61.73)	0.56
SAPF	1.32** (1.87)	0.06* (12.95)	0.14* (14.42)	0.77* (61.7)	0.60
UNVL	0.02* (2.25)	0.07 (3.39)	0.29** (1.90)	0.26* (1.92)	0.68
CEPBR	0.62 (1.96)	0.01 (1.47)	0.06** (1.95)	0.87* (8.61)	0.48
DADX	0.05*** (1.83)	0.03* (4.79)	0.06* (13.87)	1.02* (9.87)	0.76
DAWH	0.01* (2.25)	0.07 (3.39)	0.29** (1.90)	0.26* (1.92)	0.66
FABL	0.88*	0.04**	0.29*	0.68*	0.49
	(3.05)	(16.56)	(18.39)	(43.27)	
JDW	0.77***	0.07*	1.17*	0.12*	0.77
	(1.84)	(26.21)	(53.66)	(10.98)	
NIRE	0.02* (2.42)	0.04 (1.62)	0.14*** (1.84)	0.86 (8.96)	0.51

Note: The figures below coefficients are t-ratios. The * indicates Level of Significance 1%,** indicates level of Significance at 5% and *** indicates significance at 10%.

The Impact of Effective Communication and Service Climate on the Performance of Employees: A Study on Marketing Officers of Private Banks of Pakistan

Kamran Ilyas Raja
kamranraja2000@yahoo.co.uk
PHD (Scholar), & Director NAB, Islamabad

Waqas Fazal
PHD (Scholar), Preston University, Islamabad, Pakistan

Abstract

Endeavors have been put in this piece of research to find out the relationship between the effective communication, service climate and employee's performance working as marketing officers in the private banks. 72 marketing officers from Mirpur, Islamabad and Rawalpindi were being given the questionnaire consisting of standardized scales, using 5-points likert scale, it was also self administered. The results in the end revealed a positive relationship between effective communication, service climate and employee's performance in the private banks of Mirpur, Islamabad and Rawalpindi. Implications of research for sector usage along with directions for future research and limitations of present study have also been discussed in the paper

Key words: Communication, Service Climate, Employee Performance, Banking Sector of Pakistan

1. INTRODUCTION

This research paper is based on the idea that effective communication and service climate is a basic way to improve performance of employees. There are obvious evidences that in business practices, effective communication, service climate are getting increased importance as a competitive parameter in service industry especially the focused banking sector Effective organizational communication is very important for Employee performance, according to litearture, there are many mediums that a organization use with in organization to inform their employees about their responsibilities, tasks and goals, to know about employees problems faced in different areas of the job

(Moriarty,1998). and if firm is sucessful in their communication practices effectivley they can enjoy employees performance which leads further for organizational productivity. It is seen, organizations in which there is a lack of organizational communication practices, creats communication gap among employees, specially between top and lower level management so it become cause of low employees performance and productivity when employees don't aware about their job responsilities, task and goals (Orpen,1997). . So with connection of this problem the basic theme of this research paper is to highlight the impartance of effective organizationl communication with respect of employees perfromance.

The researchers of earlier time on service climate examined its association with and argued that climate was positively related to employees perception of service quality, courtesy, adequate staffing and overall perception of the employees about the workplace. Schneider,B. ,White,S.S. and Paul,M.M. (1998). Service climate has been shown to relate to employee performance and satisfaction (Andrews and rogerblerg, 2001) as well as a variety of employees and customer perception of work place practices. (Schenider et al, 1998)

This study planned to explore the influence of effective organizational communication and effective service climate on the employee's peformance that what is impact of effective organizational communication and climate on the performance of marketing officers in the private banks in pakistan. The basic purposes of the study are:

- To know the importance of effective organizational communication.
- To know the effect of different communication practices on employee performance.
- To know the employee's performance in case of lack of organizational communication practices .
- To know the importance of effective service climate practices to increase the employee performace.
- To know the affect of communication pactices and service climate on performace of bank employees partucarly on marketing officers of the private banks in pakistan.

This study shall be helpful to banks in Pakistan for need of formulation and development of different communication practices and applying different service climate structures that shall make sure high level of marketing team's performance resulting in increased commitment reduce absenteeism, achievement assigned task & goals and productivity.

2. LITERATURE REVIEW

2.1 Effective Communication and Employee Performance

Dictionary.com defines communication as an interchange of thought, ideas etc. however with the interchange of idea the most important factor to consider is the importance of communication.

Duncan and Moriarity (1998), defines communication as a human activity in order to link people together while creating relationship. Importance of communication can be observed in an organizational context when each and every component of an organization has to communicate effectively for the smooth operation. Large number of theories and literatures supported the importance of effective communication for effective operation of an organization.

The success or failure of the organization is directly proportional to communication as cited by Orpen (1997), clear and timely communication can get good results while unclear signals can cause operations of the organization. Norman and Joe (1998) are of the view that a complex situation can be countered through effective communication. Many things have been written and published above communication, however the main purpose of this research paper is to figure out the impact of effective communication on employee's performance, however, it is important to discuss the overall effectiveness of communication before moving further. In their study Nader Sheykh, Anees and Amanita (2010), established that effective supervisory communication is one of the factors that affect employee job satisfaction.

As discussed by Nader Sheykh, Anees and Anahita (2010), in order to maintain competitive advantage and to achieve firm objectives and missions, the need is an effective application and implementation of communication process. Mueller and Lee (2002) in their study discussed that in interpersonal (personal feedback and supervisory communication), group (co-worker communication and organizational integration in the workgroup), and organizational contexts (corporate communication, communication climate, and organizational media quality) the quality of LMX have a strong influence on subordinate's communication satisfaction.

Clampitt and Down (1993) in their study confirmed that different communication factors impacted on employees productivity in number of ways. There was fluctuation in the degree and reasons for the impact. It is important to clearly define the duties and responsibilities of the employees in an organization, employees even want to know the responsibilities they have to undertake and the duties very clearly so that they should knowing what to do, things should be made clear before they proceed with their assignments. An argument was made by Velch and Jackson (2007), while communicating with employees the internal corporate communication concept may be useful for communication managers. The concept may be defined as a communication amongst organization's strategic managers and internal stakeholders, which is helpful to promote organizational commitment, a sense of belonging to it, consciousness of changing environment and understanding of its evolving aims.

The study of Azman et.al (2009) found a positive relation between sufficient support and good communication which may lead to induced positive attitudinal and behavioral outcomes such as performance, good working ethics, trust, commitment and satisfaction. As cited by Litterst and Eyo (1982), productivity has a relation with formal communication. However, the informal communication cannot be ignored, it is an inevitable part of any organisation. Nader Sheykh, Anees and Anahita (2010), argued that

if the formal form of communication does not provide adequate information to the employees, the employees will then turn to informal form of communication. According to Clampitt and Downs (1993), effective communication results in numerous positive outcomes for managers and then organization ultimately. Factors like greater commitment to organizational goals, reduced absenteeism and increased productivity are encompassed by the effective communication.

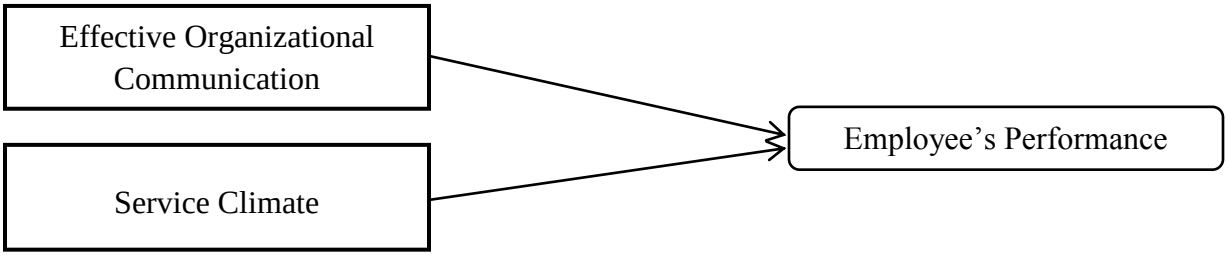
According to (Adejimola, 2008) it is very crucial to mention that an entrepreneur cannot succeed without communicating with his or her human elements in the organization. The major purposes of communication in any business organization, therefore, are summarized as follows: **a.** to establish and disseminate the goal of a business enterprise. **b.** To develop plans for laudable achievements. **c.** To organize human and other resources in the most effective and efficient way. **d.** To select, develop and apprise members of the business enterprise. **e.** To lead, motivate and create a climate in which people want to contribute. **f**. To control performance. **g.** To achieve effective communication.

2.2 Service Climate and Employee Performance

In current era the researchers and practitioners have been largely considering the services sector. Huge amount of studies have been conducted in service climate by many researchers. According to Solnet and Paulsen (2005), when a particular firm focuses on quality of service and motivation of its employees then there exists an effective service climate. Moreover, the there is a positive relationship between the service climate and commitment made to the customer in order to acquire excellent services. Andrews and Rogerblerg (2001) found that the service climate is a missing link between performance parameters internally and externally.

As proved by Schenider et al (1998), that climate was positively related to customer perception of service quality, courtesy of staff, adequate staffing and overall administration. The definition of the service climate given by Schenider et al (1998) has been mentioned by Andrews and Rogerlbere (2001) along with their main focus on service climate which is the collective perception of employees that the organizational practices and procedures facilitate the excellent quality service and management rewards, supports and encourages the excellent service. Computer mediated communication has become important part of organizational communication, valuable literature prove for example Rice (1987) says computer-mediated communication systems not only process information about innovation that organizations must process, a circumstance that provides organizations with opportunities and challenges for enhancing their resourcefulness and responsiveness. After reviewing the literature, simple model developed.

3. THEORETICAL FRAMEWORK



Hypotheses
***H_1**: Effective organizational communication positively affects employee's performance*
***H_2**: Effective service climate has positive impact on the performance of employees*

4. METHODOLOGY

Islamabad,Rawalpindi and Mirpur were selected for the collection of data where questionairres to 80 people in the beginning was distributed out of which 72 were found to be useful for the study, hence making a response rate of 90%, the research was self administered and convenience sampling was used. 6-items used by Mueller & Lee (2002) has been used for the measurement of Effective Communication and service climate has been measured using 6-items scale as applied in their reasearch by Schenider & White Paul (1998) and employee performance was measured by using 6-items scale scale. Questionairre consisted of 18 questions 5 points likert scale to measure the variables. To find out a relationship between variables coorelation matrix was used as used by many researchers in their papers. All Marketing officers were male aging 25-40, all were male and were same in their job nature so demographics were not addresed in the questionnaire.

5. FINDINGS & DISCUSSION

After the data was obtained through questionairres, the reliability for employee's performance variable, effective communication and service climate were found as .772, .727 and .704 respectively, since all alpha values are greater than the standard of .70 hence finding no resctriction in further analyses.

Table 1. Correlation Matrix

	EP	Comm.	SC
Employee Performance	1		
Communication	.461**	1	
Service Climate	.304**	.047	1

***. Correlation is significant at the 0.01 level (2-tailed).*
N= 72

Table 2.Regression Analyses

Variables	Beta	t-value	p-value
(Constant)	.813	1.239	.022
Effective Communication	.473	4.418	.000
Service Climate	.373	2.790	.007

N = 72, R^2 = .292, Adjusted R^2= .272,
F = 14.261, P < 0.000
Dependent variable= employee's performance

As calculated by the coorelation matrix, in Pakistan's Private banks the effective communication is strongly correlated with employee's performance (r=0.461), and according to regression analyses (t=4.418), also shows that effective communication is a strong predictor of employee performance. The result supports the H1 which says that effective organisational communication has a positive affect on employee's performance, which has been found correct while analysing private banks of Pakistan.

BDO's are informed and motivated towards performing their duties well through effective communication. Since the case under consideration is the private banks of Pakistan, especially the banks chosen for this study, therefore it has been observed that different types of communication has been focused by the private banks of Pakistan. BDO's are kept informed regarding different matters including new services, their performance and achievements and are motivated by the top management adopting different modes of communication, and it has been observed that this practice has a positive affect on employee's performance.

The correlation matrix mentioned that service climate is also strongly correlated with employee's performance in Pakistani private banks (r=0.304) and as per reggression analyses (t=2.790) also shows that effective communication is a strong interpreter of employee performance. This result supported H_2 that service climate positively affects employee's performance. This result show that service climate also has a positive impact on employee performance because an effective climate includes all variants such as good envoinment, concern for employees, adequate staffing, proper training and proper

handlimg of issues etc so that employees get encourged and their performance get better because of the steps taken by the management.

6. CONCLUSION

It has been concluded from the study carried out that effective communication and service climate have a positive impact on BDO's performance working in the private banks of Pakistan. It has been observed that the BDO's performance is affected in a positive way by the communication practices adopted by the bank including all type of communications. According to the study it has been observed that the service climate also have a positive affect on employee's performance, an effective climate includes all variants such as good environment, concern for employees, adequate staffing, proper training and issue handling etc. The employees get encouraged and they perform better provided steps taken by the management. By taking valuable step towards effective communication practices and by providing an effective service climate employees performance can be enhanced in every service organization and especially in the private banks of Pakistan according to our study.

7. RECOMMENDATIONS, DIRECTIONS FOR FUTURE RESEARCH AND LIMITATIONS

The banking sector can be benefited from this research if they revise their communication practices along with enhancement of service climate. Future policies can be devised and implemented with the help of this research. Time constraints along with small sample size are possible shortcomings of this research and in future it can be applied on a large scale and more variables may be tested and can also be applied on others service sectors.

8. REFERENCE

Adejimola, A. S. (2008). Language, communication and information flow in Entrepreneurship. *African Journal of Business Management*, 2 (x), 201-208.

Andrew, T. L. and Rogelberg, S. G. (2001). A new look at service climate: It's relationship with owner service values in small businesses. *journal of business and psychology*, 16(1),119-131.

Azman, I., Sieng, L.L.C., Ajis,M.N., Dollah, N.F. & Boerhannoeddin, A. (2009). Relation between supervisor's role and job performance in the workplace training program.

Clampitt, P. & Downs, C. (1993). Employee perceptions of the relationship between communication and productivity: a field study. *Journal of Business Communication*, 30(1),5-28

Duncan, T., & Moriarty, S. E. (1998). A communication-based marketing model for managing relationships. *Journal of Marketing, 62(2)*, 1-13.

Litterst, J. K., & Eyo, B. (1982). Gauging the Effectiveness of formal communication programs: a search for the communication- productivity link. *Journal of Business Communication, 19(2)*, 15-26.

Mueller, B. H. and Lee, J. (2002). Leader-Member Exchange and Organizational Communication Satisfaction in Multiple Contexts. *The Journal of Business Communication*, 39, 220-244

Nader S. A. E. K., Anees J. A. & Anahita A. (2010). Organizational Citizenship Behavior in Concern of Communication Satisfaction: The Role of the Formal and Informal Communication. *International Journal of Business and Management, 5(10)*, 51-61.

Norman F. & Joe O. (1998). Some consequences of e-mail vs. face-to-face communication in experiment. *Journal of Economic Behavior & Organization*, 35, 389-403.

Orpen, C. (1997). The interactive effects of communication quality and job involvement on managerial job satisfaction and work motivation. *The Journal of Psychology, 131(5)*, 519-522.

Rice, R. E. (1987). Computer-mediated communication and organizational innovation. *Journal of communication*, 37(4), 65-94.

Schneider,B. & White,S.S. and Paul,M.M. (1998). Linking Service Climate and Customer Perceptions of Service Quality Test of a Causal Model. *journal of Applied Psychology*,83(2),150-163.

Solnet, D., & Paulsen, N. (2005). Service climate, employee identification, and customer outcomes in hotel property rebrandings. *Journal of Hospitality and Leisure Marketing.* 13(3/4), 3-27.

Velch, M. & Jackson, P.R. (2007). Rethinking internal communication: a stakeholder approach. *Corporate Communications: An International Journal,* 12 (2), 177-198.
http://dictionary.reference.com/browse/communication

NUML Journal of Management & Technology
Vol: 6, No: 1. January, 2011 ISSN 1997-4507

Discovering the Annals of Competitive Advantage in Business Organizations

Dr. Naveed Akhtar, Assistant Professor,
National University of Modern Languages, Islamabad, Pakistan

Dr. Rasheed Ahmed Khan, Dean Faculty of Management Sciences
National University of Modern Languages, Islamabad, Pakistan

ABSTRACT

Competitive advantage is life blood for any organization and is the aim of each strategy to achieve it and earn above-normal returns. There are different theories which prescribe different ways to achieve competitive advantage. This paper aims to explore those methods, prescriptions, and strategies that enlighten organizations to outperform the rivals. It is the prime managerial concern to measure the outcome of their strategies and business performance. It is observed that competitive advantage entails to superior economic performance. Therefore, this exploratory and descriptive study will identify those dimensions which can measure the competitive advantage. At the end of this research article a questionnaire is proposed for the academicians and researcher who are interested to measure the organizational strategies and their ensuing increased business strategic and economic performance.

Keywords: Competitive advantage, strategy, organizational learning, business performance

1. INTRODUCTION

Increased competition, global or local, has forced organizations to be agile, and be competitive in each area that creates value or supports the value creation. It can be within or outside organizational environment. For that organizations need to know those specific areas where they can and should create expertise and make their leverage points so that competitors could be kept at the bay. Moreover, these leverages; internal or external should be hidden from the eyes of the rivals, or at least the idiosyncratic mix and exploitation of the internal, external, or internal and external resources remains implicit. This non-disclosure enables the organizations to sustain the competitive advantage or at least causes delays in the creation of competitive parity within the industry.

The paper is aimed at exploring different theories that detail the creating the competitive advantage. The article is aimed at identifying, developing, and proposing the various dimensions that are important in creating advantage. It will also explore the dimensions which are considered most appropriate to empirically measure the existence and outcome of advantage in the business organizations. Furthermore, the questionnaire will be prescribed for any future research.

The coming sections are designed to explore the various concepts of competitive advantage, theories of competitive advantage, and the concepts that measure these concepts.

2. COMPETITIVE ADVANTAGE: CONCEPTS AND DEFINITIONS

The section aims to define and discuss the multidimensional concept of competitive advantage. Different theories that enable organizations to achieve competitive advantage are elaborated. Finally, it also throws light upon the measurement of business performance strategy research.

Organizations compete through designing, defining, and implementing strategies. Put simply competition makes organizations set strategy (Porter, 1985). Competitive advantage is a key concept in strategic management research. Literature reveals (Barney, 1991) that a firms is able to reap the advantages of its competence only when no other competing firm in the industry is able to duplicate the strategy or even unable to duplicate the benefits of the strategy. Hence the competitive advantage is defined as the relative edge over competitors of similar business because of certain organizational abilities and resources which are at best exploited by a single firm in a point in time.

3 THEORIES OF COMPETITIVE ADVANTAGE

Literature revealed that the competitive advantage is a multi-dimensional concept and can be achieved by exploiting different internal capabilities, resource through creating value to win the competition. For that two parallel streams are available to manage organizational strategic performance and to design strategies. First, analyze and understand their internal resource. Second, by analyzing the external market. Before organization set out to compete they have to understand their markets their internal resources and capabilities.

3.1 Exploring Internal Leverage

Identification of resources at hand is necessary to further develop them into core competencies which enable organization to create leverage points to generate super normal rents and achieve sustainable competitive advantage. It depends on endowment acquisition, development and exploitation of the resources required by organizations. Resources, competencies, and capabilities and their behavior determine the competitive strength of any organization. Because of the little consensus in the strategy literature regarding the three concepts of resources, competencies, and capabilities; it is decided to discuss the contributions of all these concepts briefly.

3.1.1 Resource-based View (RBV)

It is relatively easier to know about the organizational "keepings" and endowments, instead of designing strategies on the basis of the knowledge of external dynamic environment. Because information regarding the inner strengths can be gathered with certainty as compared to the information regarding the economic forces in the external environment in which any organization is operating. Therefore, it is better to

identify and know the organizational resources in the first place. In ever changing outer environment it is experienced that the organizational internal resources and capabilities can be used as a stable platform to design organizational strategies to a certain extent.

According to Wernerfelt, who used the term resource first time, (1984) a resource can be tangible or intangible and it is a strength or weakness of a given firm. Resources can be tangible and intangible and are divided into three broad categories: physical, human, and organizational i.e. plant and machinery; manager's skills and abilities; and assets, capabilities, organizational processes, information, knowledge economic rents (Barney, 2002, 1991). Chase, Jacob and Aquilano (2004) identified three key resources, tangible resources, intangible resource, and organizational capabilities. Tangible resources help firm create value for its customer. Intangible resources include experience, and human and managerial skills, innovation resources, and reputation resources. Capabilities are organizational competencies or skills which help transform inputs into outputs. For example, outstanding customer service etc. Resources can not generate advantage but is the specific configuration and complexity of resources which enables organization to generate rents achieving competitive advantage.

Resources provide sustained competitiveness by creating value. They are heterogeneous, can not be substituted, immobile, valuable, rare, inimitable and have no strategic equivalent (Ireland & Hitt, 2005; Barney, 1991). An asset is valuable if improves organizational efficiency and increases profits. Profit depends on the greater utility enjoyed by customers i.e. value creation (Sirmon, Ireland & Hitt, 2007). Inimitabilty means ambiguity between causal link and competitive advantage. This ambiguity makes it difficult for organizations to duplicate the resource that is being appropriated by a firm maintaining competitiveness. An inimitable, immobile and non-substitutable resource creates a barrier to duplication (Fahy, 2000). Firm can achieve similar advantage by acquiring or developing a resource which enable organization to launch the similar strategies instead of duplicating the similar resource possess by competing firm. For example a charismatic leader with a very clear vision of the future can not be copied instead it can be substituted by managers with a clear vision (Barney, 1991).

Competencies perspective of RBV views that tacitness, specificity, complexity, and their interaction cause barriers to imitation by making them causally ambiguous and generate sustained competitive advantage. These characteristics of competencies create a 'lack of understanding' and make it difficult for an entrant to understand the processes that generates returns (Barney, 1986a). A competency is a peculiar skill and a resource that a firm possesses. It is also the superior way in which these resources are being used. Firm's competencies are manipulated to achieve competitive advantage. According to Reed & DeFillipi (1990) the competency and competitive advantage are neither synonymous, nor they generate each other. The advantage is the end-result of the strategies which are based on the firm's competencies. Advantage is best achieved when it becomes difficult for competitors to identify those competencies which generate it.

Tacitness embodies within the skill component of competencies leaving rivals unable to imitate because it is difficult to decipher the tacit knowledge. Complexity results from the interrelationship between skills, and between skills and assets. Complexity arises from core competencies which entails ambiguity and results in a barrier to imitation. Specificity is the result of skill and resource deployment which are firm specific and cause barrier to imitation. Specificity is the commitment of skills and resources to the requirement of individual customer and locks-in the customer.

Competitive advantage remains an advantage only if it is sustainable in future. Inability to sustain ensues into non existence of advantage. Capability of a firm to generate value exploiting the resources held by a firm deteriorates with the change in environment, technology, and industry structure in which a particular firm operates. The present resources become valueless in changing landscape of competition. New resources replace the old. Hence, new capabilities are needed to develop and maintain the new resources.

Culture has been treated in the resource based view as a capability (Fahy, 2000) and an important organizational resource (Oster, 1999; Barney, 1991, 1986b). Literature reveals that it is a complex set of assumptions, symbols, values, beliefs, attitudes practiced by individuals, groups and communities. (Barney, 1986a). A culture is said to achieve competitive advantage when it puts the customer first, has the ability to change, and react to challenge. Culture can be a source of sustained financial performance if exhibits the characteristics that are necessary for a resource that possess a potential for sustained competitive advantage i.e. imperfect imitability, valuabilty, and rareness. Barney (1986a) says superior performance is an economic concept so culture must exhibit the positive economic consequences. So for that culture must be valuable in the first place and help organizations achieve high sales, low cost, high margins and add financial value to the possessing organization. Secondly, it must exhibit the characteristics which are uncommon and unmatched to other firms (being rare). Thirdly, imperfect imitability must prevail in the culture of the organization which is to achieve sustained competitive advantage and conversely superior financial performance. According to him when a firm possesses a culture of this type then it will enjoy the positive economic consequences of its culture (p. 659)".

According to Oster (1999) corporate culture is another form of competitive advantage and is a complex characteristic to be copied. It is composed of a complex set of formal rules and structures, myths, traditions, and style of leadership. "An organization's culture creates value because it allows that organization to strike deals with its suppliers, customers, and employees that are not available to other firm (Oster, 1999, p. 139)".

3.1.2 Capabilities and competitive advantage

Capabilities are organization's "collective mix" of internal resources (tangible and intangible) that provide a competitive advantage in a particular area when used strategically forming a unique mix of different resources. These can be called a combination of localized bundles of resources that collectively enable the organization to

perform better (Marr, 2006) or an organization's capacity which deploys tangible and intangible resources (Chase et al., 2004). Capabilities are inter-action-based, difficult to duplicate because of causal ambiguity (Fahy, 2000, p. 98).

3.1.3 Core competencies and competitive advantage

According to Prahalad and Hamel (1990) the core competencies are like a tree, the trunk represents the core products, branches represent business units, the end products are represented by leaves. The core competence qualifies as a core competence only when it carries the potential of providing the access to a wider market; contributes to the perceived customer benefits of the end products; and difficult to imitate. Therefore a competitive advantage is achieved through capabilities and competencies only if they are difficult to imitate, valuable enabling a firm to outperform competitor (Mooney, 2007, p. 112)". A competitive advantage can be enjoyed by having favourable location or a strong brand name. Resources do not generate rents, but a firm's distinctive competence enables a firm to use these resources in a better way (Mahoney & Pandian, 1992, p. 365).

3.1.4 Interconnections of competencies, capabilities, and resources

It is observed that the researchers have noted the ambiguity between three concepts: resources, competencies, and capabilities. Leading authors have addressed the issue more deeply (Chase et al., 2004; Ray, Barney & Mohanna, 2004; Barney, 2002; Fahy, 2000; Prahalad & Hamel, 1990). Chase, Jacob and Aquilano (2004) identified that core capabilities or resources help organizations to develop strategies based on those capabilities. Ray, Barney and Mohanna (2004), and Barney (2002) have used resources and capabilities interchangeably. Similarly Prahalad and Hamel (1990) consider the competencies as corporate resources. In similar vein Fahy (2000) suggests that all terms i.e. competencies, core competencies, distinctive competencies, capabilities (skills, core skills) can be replaced by the term resources to reduce any ambiguity. Therefore, the researchers conclude that to avoid any misunderstanding and to make the concept more vivid it is viewed that the term "strategic resource" can be used in place of all three above discussed concepts.

On the basis of insights of literature a resource can be defined as the inherent ability of an organization to identify, bring out, develop, and express the latent rent generating potential of all organizational possessions achieving customer perceived advantage and appropriating above-normal rents persistently.

3.2 ANALYZING EXTERNAL IMPACTS

Competitive advantage can be achieved by following generic strategies, analyzing industry structure by exploring underlying economic forces and turning then into the favor of organization. The concepts: competitive forces and competitive advantage; generic strategies and competitive advantage; technology/Information Technology, Value Chain and competitive advantage are discussed separately because of their strategic nature and theoretical explanations.

3.2.1 Competitive forces and competitive advantage

The idea of defining the strategies based on the economic forces was first presented by Porter (2008, 1980). He presented a framework to measure the attractiveness of an industry by examining the industry structure which comprises an analysis of powers exerted by buyer and supplier, by studying threats posed by substitute and new entrants. Finally my considering rivalry among existing competitors. These forces help managers to design strategies after understanding these economic forces that determine the attractiveness of the industry. Therefore, to determine success of a firm it is essential to understand the attractiveness of the industry in which firm competes. According to Porter (2008) although the nature and organization of five forces is different for different industries but underlying drivers of profitability and the five forces are the same. Therefore, it is imperative to turning these five forces, in the favor of a particular organization, is crucial to strategy.

New entrants desire to gain market share, bring substantial resources (Porter, 1980) and compete through the prices, cost. At the same time customer switching cost, capital requirements, research and development, advertising, restrictive government policies, and high investments are threats for the new entrants (Porter, 2008). Suppliers charge high prices, reduce quality of purchased goods and services to exploit the buyer switching costs are high for buyers (Porter, 2008). Another player in the industry is the buyers who exploits when demand better quality, low prices, more service by playing industry participants against one another at the cost of industry profitability. The threat of a substitute is high when the switching cost to the substitute product is low. Finally the rivalry among existing competitors may through price reduction, advertising campaigns, new product introductions, and service improvements limiting the profitability of an industry. Number and size of competitors, rate of industry growth (firm strives for market share), exit barriers determine (because of specialized assets) the rivalry among competitors.

3.2.1 Generic Strategies and Competitive Advantage

In addition to the attractiveness of the industry discussed in above paragraphs another competing strategy is through holding attractive relative position. This ability to position itself in the industry enables firm to achieve above average performance and sustain an advantage. Literature shows tow basic types of competitive advantage: low cost, and differentiation (Oster, 1999; Porter, 1985, 1980). Three generic strategies: cost leadership, differentiation, and focus can be designed (Porter, 1985). Cost-leadership business strategy gains advantages by reducing economic costs below all of its competitors (Barney, 2002, p. 233). Differentiation is second generic strategy (Barney, 2002; Porter, 1985, 1980) and aims to provide unique dimensions (Porter, 1985) to the extent to which customer perceive this product or service is different from the other competing firms (Pearce & Richard, 2005) and are widely valued by buyers (Porter, 1985). These dimensions can be design changes, brand image, technology, and feature. Third generic strategy selects a segment or group of segments in the industry and tailors

its strategy to serving them to the exclusion of others and may take many forms (Porter, 1985, p. 15).

Technology/Information Technology, Value Chain and Competitive Advantage

Advantage on the basis of exploiting the technology depends on the ability to exploit it. The technology permeates each activity of today's business organization and is the practical manifestation of knowledge generated on the basis of available amount of information. Technology interconnects the strategy and competitive advantage, is regarded as a resource, and is defined as "all the knowledge, products, processes, tools, methods, and system employed in the creation of goals or in providing services (Khalil, 2000, p.1)". Advantage can be achieved when technology resource is integrated with the strategy. The strategies are formed by identifying the activities performed in an organization and the value chain (Porter, 1985) facilitates reveal those leverage points to which can be exploited and appropriated for the achievement of competitive advantage. Value chain has a strategic significance and highlights areas where technology should be used to add value to products and services (O'Brien, 2004). Every activity in value chain has both a physical and an information processing component. Information technology has transformed the way value activities are performed and the nature of linkages among them. Value chain (Porter, 1985) identifies technical activities already happening, reveals which technology is to develop, and facilitate decision making to acquire new or develop present technologies. Information technology has established new linkages within and outside the company and enabled organizations to coordinating closely with buyers and suppliers. It has enhanced the ability to exploit existing linkages.

According O'Brien (2004) Information technology should be viewed strategically. Strategic information system shapes the competitive position and develops strategies of an organization. An organization can succeed by developing competitive strategies that counter the threats of five competitive forces (Porter, 2008, 1980) in its industry. These five competitive forces are cost leadership, differentiation, innovation, growth, alliances and other strategies (O'Brien, 2004).

3.3 ORGANIZATIONAL LEARNING AS A FIRM COMPETENCY

Organizational learning (OL) or learning organization (OL/LO) has been the focus of academicians and researcher. Seminal work is done on the concept of OL/LO by Senge (2006), Garvin (1993), Goh (1993, 2003) and few dimensions have been recommended which when instituted strategically develop organizations to achieve competitive advantage. OL is considered as a strategic resource and an important organizational capability (Smith, Vasudevan & Tanniru, 1996) that can designed, developed and diverted with strategic intent to achieve of competitive advantage as is pursued in the resource based view (RBV). LO has the capability to proactively foresee the future and facilitate and enable individuals and organizations to compete and achieve advantage by developing new horizons and enlarging the present canvass. A learning organization build organizational competitive capabilities by building few disciplines; mental models, shared vision/mission, personal mastery/personal growth, systems thinking, leadership, knowledge/information flow, team learning (Akhtar, 2010, Akhtar

& Khan, 2011). Argyris and Schon (1978) suggest that organizations enhance learning by challenging basic assumptions and by challenging the basic routines. Institutionalizing contextual factors and reconsidering the basic routine improves the organizational learning and makes organizational processes and activities more competitive.

Literature reveals the empirical links between firm competencies and levels of learning (Murray & Donegan, 2003; Smith et al. (1996). Findings appear closer the theoretical claims of Goh (1998; Senge, 2006). The claim was that the learning organizations can expand the capabilities of their employees, learn by identifying the gap between present and desired level, and by challenging their existing norms and patterns. Challenging basic assumptions allows new learning and improves organizational performance.

In view of the above discussion it can be concluded that the resource-based view, technology/ information technology, generic strategies, culture, and organizational learning all achieve competitive advantage in their own realms. Moreover their own strategic existence can not be denied and to excellence in each area demands deliberate planned operational HRD activities.

Strategies are designed to achieve the advantage and earn super normal rents. Strategic intervention, change through training or processes is aimed at improving organizational effectiveness. But, without measurement strategy will be a fruitless effort. Hence, strategic changes underscore their impact through measuring which is the objective of next section.

3.4 STRATEGY AND BUSINESS PERFORMANCE

The thing which is measure is noticed (Pfeffer, 2005). Strategy without measuring the performance is of no value. Research shows that firm performance is the objective of strategy (Barney, 2002). It is noted that no single measure of performance is without flaws. Therefore, this paper talks different dimensions of strategy which can be suggested to measure the competitive advantage of a firm depending upon the nature and business of a particular firm with few changes.

In addition to superior quality and market share (Garvin, 1993), other tangible objective in a business can include shareholders return and profit maximization (Shim & Siegel, 1987; Bharadwaj, Varadarajan, and Fahy, (1993.p.86), and return on investment (Bharadwaj, Varadarajan, & Fahy, 1993.p.86). There are few studies (Dimovski, 1994; Bontis, Crossan and Hulland, 2002; Jashapara, 2003; Morgan and Turnell, 2003) which measured organizational performance by employing the perception of performance measures.

It is also found that the performance measures include objective and subjective measures. Literature provides few reasons for collecting perception of the managers on organizational performance, and using objective and subjective measures. First, as per McGuire and Schneeweis (1983), Smith (1982) identified 45 reputable U.K. companies

using five or more dubious financial engineering techniques (cited in Jashapara, 2003), therefore using only objective measures can harm the quality of the study. Secondly, Venkatraman and Ramanujum (1986) found that the perceptual measurement of the objective measure of organizational performance is valid, which is further supported by the Morgan and Turnell (2003). They identified a high correlation between objective and perceptual indicators.

Thirdly, Eccles and Nohria (1992) have noted that there is no wide spread agreement of a definitive approach to measure performance (cited in Jashapara, 2003). Finally, it is noted that the measurement development can not be carried out in isolation of the theoretical network (Venkatraman, 1989). Therefore, this theory focuses to develop valid measure based upon a particular theoretical conceptualization of strategy concept.

The variables chosen to measure organizational performance are market share, sales growth (Morgan & Turnell, 2003); overall organizational performance, reputation (Jashapara, 2003); return on revenue, (Bontis, Crossan & Hulland (2002); ROI, debt/ equity ratio etc., (Dimovski, 1994). Strategy measurement literature reveals business economic performance (BEP) as being the most focused and commonly used measure of performance with three dimensions: sales growth, net income growth, and return on investment (ROI) (Venkatraman, 1989; Venkatraman & Ramanujum, 1986).

Strategy literature revealed firm resources and competencies, management skill and capabilities, generic strategies, Porter's five forces, information technology and value chain, and finally the business economic performance. Variables chosen from the literature are: reputation, brand image, research and development (resources or competences), cost, differentiation, market share (market growth), and financial performance and sales growth (business economic performance).

3.5 CONCLUSIONS

The extant literature review has revealed that the competitive advantage is a multifaceted concept and has the linkages with the various concepts like: resource-based view, competencies, capabilities, culture, technology/ information technology, generic strategies and organizational learning capability. Organizations have to excel consider, develop, and excel in these respective areas to fight out the competitors and achieve sustainable competitive advantage. Strategy can be formulated on the basis of these concepts which provide internal and external compatibilities to formulate a unique bundle of strengths. Organizational learning has been taken as a capability. The concepts like: resource-based view, competencies, and capabilities are suggested to call as strategic resources as future terms avoiding any ambiguity between these terms. Further the idea of measurement of all theses concepts is presented in this paper to measure the extent of competitive advantage of any organization and ensuing business performance along the dimensions discussed in the 'strategy and business performance'.

3.6 FUTURE RESEARCH AREAS

All the strategic concepts given are important and can be taken as distinct research areas i.e. resource-based view, strategy, business performance etc. All the concepts discussed under competitive advantage can be measured through a questionnaire which is presented in the appendix to measure such capability. The competitive advantage capability can be measured independently by using first part of the questionnaire as a single distinct concept by simply adding score achieve on all dimensions. Moreover, all the concepts of competitive advantage can be taken as independent variables and performance of any organization can be measured on the basis of specific concepts along the measures given in part-2 of the questionnaire. The dependent variable suggested for the independent variables of competitive advantage is the Business Strategic & Economic Performance. Therefore, this questionnaire is presented for future study in the field of strategy and its measurement across the organizations and industries.

REFERENCES

Akhtar, N (2010). The Relationship of Organizational Learning and Competitive Advantage: A case study of Petroleum Companies of Pakistan. An unpublished Ph. D. dissertation by National University of Modern Languages, Islamabad, Paksitan.

Akhtar, N. & Khan, Rashid A. (2011). Exploring the Paradox of Organizational Learning and Learning Organization. *Interdisciplinary Journal of Contemporary Research In Business, 2(9).*

Argyris, C., & Schön, D. (1978) *Organizational learning: A theory of action perspective*, *Reading*, Mass: Addison Wesley.

Barney, Jay B. (2002). *Gaining and Sustaining Competitive Advantage (Second Edition)* Prentice-Hall of India Private Limited, New Delhi 110001.

Barney, Jay B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.

Barney, Jay B. (1986a). Strategic Factor Markets: Expectations, Luck, and Business Strategy. ManaFFgement Science, 32 (10). 1231-1241. October 1986.

Barney, Jay B. (1986b). Organizational Culture: Can it be a source of sustained competitive advantage. The Academy of Management Review, 11(30, 656-665. July 1986.

Bharadwaj, Varadarajan, & Fahy, J. (1993). Sustainable Competitive Advantage in Service Industries: A conceptual model and research proposition. *Journal of Marketing, 57(4*), 83-99

Bontis, N., Crossan, M.M., Hulland, J. (2002). Managing Organizational Learning Systems by Aligning Stocks and Flows. *Journal of Management Studies*, 39(4), June 2002.

Burgelman, Robert A., Maidique, Modesta A., Wheelright, Steven C. (1995). *Strategic Management of Technology and Innovations (second edition)*. Irwin McGraw Hill. USA.

Chase, Jacob and Aquilano (2004). Operations Management for Competitive Advantage. Harvard Business School Publishing. McGraw-Hill.

Dimovski, Vlado (1994). Organizational Learning and Competitive Advantage: A theoretical and Empirical Analysis. Doctoral dissertation. Cleveland State University. Retrieved on 21st July 2008 from http:// www.cek.ef.uni-lj.si/dodtor/dimovski.pdf (Received on personal request from Professor Dr. Vlado Dimovski.

Fahy, John (2000). Section 1: A Capabilities driven perspective. The resource-based view of the firm: Some stumbling blocks on the road to understanding sustainable competitive advantage. *Journal of European Industrial Training*, 24(2/3/4), 94-104.

Garvin, D. (1993). Building a learning organization. Harvard Business Review, 71(4), 78-92.

Goh, S.C. (1998). Towards a Learning Organization: The Strategic Building Blocks. *SAM Advanced Management Journal, 63 (2)*. Spring 1998.

Goh, S.C. (2003). Improving Organizational Learning Capability: lessons from tow case studies, *The Learning Organizations*, 19(4)

Ireland, R.Duane, Hitt, Michael A. (2005). Achieving and Maintaining Competitiveness in 21st Century: The role of strategic leadership. *Academy of Management Executive*, 19(4), 2005.

Jashapara, Ashok (2003). Cognition, Culture and Competition: an empirical test of the learning organization. *The Learning Organization*, 10(1), 31-50.

Khalil, Tarek M. (2000). *Management of Technology: The key to competitiveness and wealth creation*. McGraw-Hill, NY.USA

Mahoney, Joseph T., Pandian, Rajendran J.(1992). The Resource-Based View Within the Conversation of Strategic Management. Strategic Management Journal, 13(5), June, 363-380.

Mooney, Ann (2007). Core Competence, Distinctive Competence, and Competitive Advantage: What is the Difference? *Journal of Education for Business*, November/December.

Morgan, R.E., Turnell, C.R. (2003). Market-based Organizational Learning and Market Performance Gains. *British Journal of Management*, 14, 255-274.

Murray, P., Donegan, K., (2003). Empirical linkages between firm competencies and organizational learning. *The Learning Organization*, Vol., 10 (1): pp. 51-62. Navarro & Moya (2005). Ch-2

O'Brien, James A. (2004). *Management Information Systems: Managing information technology in business enterprise (Sixth Edition)*. McGraw-Hill, Boston.

Oster, Sharon M. (1999). Modern Competitive Analysis, Oxford University Press, Oxford.

Pfeffer, Jeffrey (2005). Producing Sustainable Competitive Advantage through the effective management of people. *Academy of Management Executive*, 19(4).

Porter, Michael E. (2008). The Competitive Forces that Shape Strategy. *Harvard Business Review*, January 2008.

Porter, Michael E., Miller, Victor E. (1985). How information gives you competitive Advantage. *Harvard Business Review*, July-August.

Porter, Michael E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. The Free Press. New York.

Porter, Michael E. (1980). *Competitive Strategy: Techniques for analyzing industries and competitors*. The Free Press. London.

Prahalad, C.K., Hamel, Gary (1990). The Core Competence of the Corporation. *Harvard Business Review*, May-June 1990.

Ray, Gautam; Barney, Jay B., Muhannaa Waleed A. (2004). Capabilities, Busienss Processes, and Competitive Advantage: Choosing the Dependent Variable in Emprical Tests of the Resource-Based View. *Strategic Management Journal*, 25, 23-

(This article was received on 5th March 2008 on personal request from Prof. Jay Barney through e-mail).

Reed, R., & Defillipi, R.J. (1990). Causal Ambiguity, Barriers to Imitation, and Sustainable Competitive Advantage. The Academy of Management Review, 15(1), 88-102.

Senge, P.M. (2006). *The Fifth Discipline: The Art and Practice of the Learning Organization*. Currency Doubleday, New York.

Shim, J. k., Siegel, J. G. (1987). *Theory and Problems of Managerial Finance (International Edition)*. McGraw-Hill. New York, U.S.A.

Sirmon, David G; Hitt, Michael A., Ireland, R. Duane (2007). Managing Firm Resources in Dynamic Environment to create Value: Looking Inside the Black Box. *Academy of Management Review*, 32(1), 273-292.

Smith, K.A., Vasudevan, Satish P., Tanniru, M.R. (1996). Organizational learning and Resource-based theory: an integrative model. *Journal of Organizational Change Management*, Vol. 9(6): pp. 41-53.

Venkatraman, N. (1989). Strategic Orientation of Business Enterprises: The Construct, Dimensionality, and Measurement. *Management Science*, 35(8), 942-962.

Venkatraman, N., Ramanujam, V. (1986). Measurement of Business Performance in Strategy Research: A comparison of Approaches. *The Academy of Management Review*, 11(4), October 1986, 801-914.

Wernerfelt, Berger (1984). A Resource-Based View of the Firm. *Strategic Management Journal*, 5, 171-180.

Appendix-A

Dear Sir,

The purpose of the survey is to prepare a profile of how significant members "experience and perceive their organizations". You are one of the significant members and your frank responses are requested.

Please read each statement and indicate how much it is true about organization.

5: Fully True
4: Fairly True
3: Neutral (Neither True/nor Wrong)
2: Somewhat False
1: Fully False

Part-I **Competitive Advantage**	
Organizational Learning	
A1. In our organization systems and processes are standardized and help employees in their work	1 2 3 4 5
A2. In our organization employees know how to do their basic work	1 2 3 4 5
A3. Employees of our organization are allowed to take decisions in their work-related matters	1 2 3 4 5
A4. In our organization individuals are willing to listen to the ideas of others	1 2 3 4 5
A5. In our organization mutual acceptance is preferred in key decisions through dialogue	1 2 3 4 5
A6. In our organization successful processes of one department are shared with all employees	1 2 3 4 5
A7. In our organization new knowledge is shared at all levels	1 2 3 4 5
A8. In our organization employees are given proper guidance to complete their work	1 2 3 4 5
A9. Managers in our organization are willing to listen to the employees	1 2 3 4 5
A10. Our employees understand the objective of the organization	1 2 3 4 5
A11. Managers rewards the new ideas of employees	
Industry Strategic Attractiveness	1 2 3 4 5
B1. It is difficult for new firms to enter into this industry easily (Entry Barrier)	1 2 3 4 5
B2. It is difficult for new business to compete already existing firms (incumbent advantage)	1 2 3 4 5
B3. Few big organizations have monopoly in this industry (industry concentration)	1 2 3 4 5
B4. Customers more often switch over to use the product of our competitors (customer loyalty)	1 2 3 4 5
B5. Customer feel satisfied with our products and services	1 2 3 4 5
B6. Firms in our industry face intense competition as compared to other industries (intensity of competition)	1 2 3 4 5
B7. Firms in our industry spend heavy amounts on advertisement if compared	1 2 3 4 5

with other industries (advertising intensity)	
B8. There is a continuous increase in business as compared to competitors	1 2 3 4 5
B9. Our industry is still is still growing faster as compared to other businesses (industry maturity)	1 2 3 4 5
B10. Technology plays an important role in our business processes and production	1 2 3 4 5
B11. We receive regular and in time supplies	1 2 3 4 5
B12. Suppliers play an important role in our industry	1 2 3 4 5
B13. Customers play an important role in our industry	1 2 3 4 5
B14.There are a lot of substitute products in our competition (Threat of substitute)	1 2 3 4 5
B15.Cost of our products are generally low in the industry	1 2 3 4 5
B16.Success rate of our new products/service is generally high in the industry	1 2 3 4 5
B17.Our R & D expense is more than that of our competitors	1 2 3 4 5
B18.Our organization more often introduces innovative products	1 2 3 4 5
B19.Our firm has earned generally a better brand image than that of our competitors	1 2 3 4 5
Part-II	
Measurement of Business Strategic & Economic Performance	
C1. Our market share has improved in the last five years	1 2 3 4 5
C2. Over the past five years, our financial performance has exceeded that of our competitors	1 2 3 4 5
C3. Over the past five years, our sales growth has exceeded that of our competitors	1 2 3 4 5
C4. Over the past five years, our net profits are more than our competitors	1 2 3 4 5
C5. Our corporate reputation has been better than that of our competitors.	1 2 3 4 5

Does organization provide relevant training according to your appointment / technology?

_____

_____

Training has an impact on your organizational performance?

_____

_____

Please note down your comments about learning activities and market-driven approach to satisfy customers.

_____

_____

Any other comments:

_____

_____

Personal Information

All information is important statistically and will be kept confidential.

I.1. Name:_____

I.2. Organization: _____

I.3. Department:_____

I.4. Designation: _____ I.5. Email: _____

I.6. Gender:

a) Female:
b) Male:

I.7. Education:

(a) Graduate
(b) B.Sc. Engineer
(c) M.B.A
(d) M.A/M. Sc/M. Phil
(e) B.Sc. Engineer & MBA
(f) Diploma
(g) Other

I.8. Management Level:

a) Upper
b) Middle
c) Lower

I.9. Approximate date of establishment of your Organization in Pakistan (since Year):_____

I.10. Total No. of employees in the organization:

a) Up to 500
b) 500 – 1000
c) 1001 – 2000
d) 2001 – 5000
e) More than 5000

I.11. Total number of officers (including all levels):

a) Up to 500
b) 500 – 1000
c) 1000 and More

I.12. Total experience in years:

(a) 0 – 5 years
(b) 6 - 10 years
(c) 11 -15 years
(d) 16 -20 years
(e) 21-25 years
(f) 26- 30 years
g) 31- Above years

I.13. Age Group:

(a) 20-30 years
(b) 31-40 years
(c) 41-50 years
(d) 51-60 years
(e) 60+ years

NUML Journal of Management & Technology
Vol: 6, No: 1. January, 2011 ISSN 1997-4507

HRD Practices in Banking Sector of Pakistan

Muhammad Arif khattak
Muhammad Ali Jinnah University, Islamabad, Pakistan.

Nadeem Iqbal, Executive Director
Indus International Institute, Dera Ghazi Khan, Pakistan

Dr. Ansar Ali Rajput, Associate Dean
Muhammad Ali Jinnah University, Islamabad, Pakistan.

Abdul Qadeer, Phd Scholar & Research Associate
Mohammad Ali Jinnah University, Islamabad, Pakistan

ABSTRACT

The purpose of this research is to find those HRD practices that are being functional in bank subdivision of Pakistan, with motivation as dependent and job description, performance appraisal, progress, guidance and reparation as sovereign variables. The relationship and impact of independent variable on depended variable has been investigated. In order to produce an effective research congregate literature review first which includes 30 articles and theories as well that are guided a lot in research. Than followed by Gagne theory in research for the purpose of literature review. The methodology that have followed in research is questionnaire, observation and the was all about the different HRD practices that are the essential part of any organization; it includes the questions related to the motivation, performance appraisal, compensation, training, job description and career planning and for analysis were used all possible techniques but utilize Ms –Excel and SPSS that are easy and give accurate result for data analysis.

Key words: HRD Practices; Motivation; Job Description; Gagne Theory

1. INTRODUCTION

HRD Practices

Human Resource Management Play fundamental part in achievement or malfunction Function in expansion of union/organization and HRD acts an essential role in the development of an organization by training their employees now a days.HRD practices has one of the significant part in the organization is to train their current employees for their future .now a days most of the HR Manager used to practices make of buy strategy for training their employees.

In the past decade this field was not used as a specialized department, there were not enough knowledge related to that field, but with the passage of time Human Resource Department has become a fundamental of any organization specially bank. Now in the banking sector the systematically training secession are more important, after the announcement of SBP they offer training program for bank's employee. The main idea behind the selection of the research about HRD practices in the banking zone of Pakistan is that there is very limited study of HRD practices in the field of Banking. Although there is lot of research available on Human Resource Practices in other sector, especially on the training and motivation but the banking sector had been on the low side.

The scope of Research is to classify the bang of HRD practices on employees' enthusiasm and effect of motivation on the workers presentation towards organization and also identify the impact other HR component that may also affect the employees' performance. The research on HRD practices by using same variables can be conducted on any other sector or industry and Improved the quantity of sample size of survey then there is very much chances of desired results.

The main purpose of study is to attain useful data concerning the impact of HRD practices on employee motivation in the functioning of banking sectors which is very necessary to fully understand the primary functions & hence it fulfill the purpose of the Research. Know how to write objectives and evaluate whether these objectives are beneficial for banking sector or new entrance in the bank sector. Aim of explore is to verify the impulsive role on employees and organization performances and objective of research is how we can use all possible tools and techniques to accomplish aim

The focus in HRD practices is on the "Employee Performance" through "Motivation" because it is the main aspect of an organizational success. In Pakistan, Incentive in banking zone is generally on lower side, although there are certain rules and regulation or policies regarding HR but some of them are used to accomplish the organization's intention. The studies clearly described the turn over rate high due to employees dissatisfaction towards their organization.

The geographic area for the project is banks of twin cities Islamabad/Rawalpindi and the sample size is 100. Research Results will help the Banking Sector to recognize and develop the new policies according to the changing environmental conditions. Further classification of the report includes the Literature Reviews, Methodology, Data Analysis and Conclusion. In literature review describe difference between the literature review and the actual practices in the banking and followed by Methodology which include data type, source of collection, link of hypothesis and model used to conclude the data and analysis which depend on data which we get from survey form filled by different banks of twin cities Islamabad & Rawalpindi and at the end conclusion of the research.

2. LITERATURE REVIEW

In present age, supervisors are known as 'human resource management' and submit to the tasks a union exploits human resources efficiently. Global party should be aware of

administration in present inclusive environment. The Gagne Briggs presumption is relevant to activities and approach learning its also Presentation of sets of methods for coaching which are attached to communal theory Foremost affair in theory is concentration parallel to that of communal learning and next affair is enlighten the ideas and trigger the method of trainees attention. There are several attention seeking gestures like raising voice or clapping hands etc., "may I have your attention please" but the most effective technique is the training sessions. Inform the learner of the goal or objective Recall what you have learnt earlier. It is important to know that what new is going to be learned in the following training session. This Literature Review suggests that HRD practices are significance for every organization and nation motivation is crucial for success of any organization. Organization must invest or separate their budget for HRM because it makes the organization more productive than others organization.

The main points to be focused in this research are the idea of top management commitment for HRD practices in organization satisfaction of employees and customers. In well structured organizations where is an essential part in producing the services and put positive impact on the Employee satisfaction and commitment. In highly structured and established organization the financial objectives and quality is achieved by implementing HRD practices, developing healthy culture and work place environment. Employee's commitment with work affects the service quality of the organization, Expertise and skills and performing the work proficiently and also the employees' commitment to providing supervisor services for the customers and their satisfaction. The research was on the impact of HRD practices in banking sector of Pakistan, in our research motivation is the depended variable and training, job description, career planning, performance appraisal, compensation are independent variables. According to Milkovich and Newman 2002, compensating the employees refers to the financial returns visible benefits that are given to the employees for building relationships. The importance of compensation and motivating employees has been described by many researchers. The major considerations in HRM are the compensation benefits such as pay, medical and transportation etc because it provides employees with a solid reward for their work.

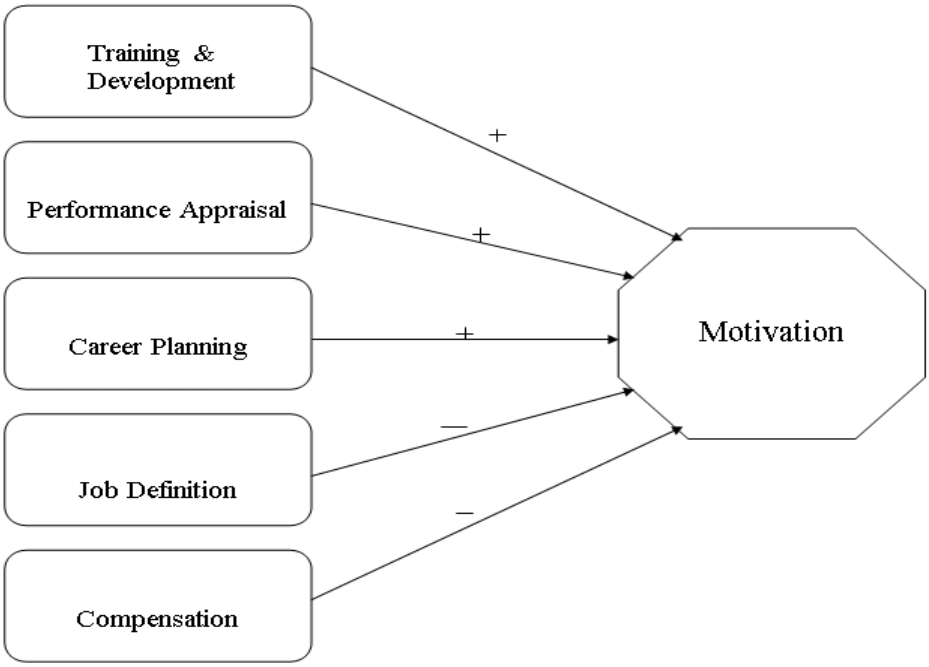
HRM recognizes that the benefits provided to the employees encourages them and direct their behavior towards the particular goals. There are different reasons for the people motivating by money. One of the reasons is that it provides basic necessities for life (Kovach, 1987). The message of the management for the employees is given by the benefits that are given provided to them and it tells the employees how to direct their attitude and behaviors (Beer, et al 1999). Jerald, 1997 has described that there has been an impact and link between absentees and turnover with employee satisfaction and pay level. The individual and organizational performance can be affected by link between pay and behavior of the employees. (W. N. Cooke: 1994) the pay system characteristics and level of pay can affect the employee's decision to join the firm. (E. E. Lawler: 1971).
There has been a study related to strategic decisions to organizational performance convenience sampling technique was use involving 314 companies response. The results indicated that no significance difference was found between the performance of company that make and buy. With reference to (Advance writer, 14 July, 2010).The economy is

moving at a fast pace and there is a shortage of qualified workers and it has created a serious issue for the motivation of employees and their recognition to the organizations.

Every human being is different and may have different motivation factors. One employee can be interested in higher income while the other may be looking forward to an interesting job.

They may need flexibility in their work and a balance of work and their personal life. Other things may include good peer relationship and growth opportunities. The organizations have to find how the employees are motivates and once they identified it.it will be easy for them to achieve the objectives. The human resource sustainability can be maximized the motivation process.

3. RESEARCH MODEL



Hypothesis:

H_1= Training and Development has positive impact on Motivation
H_2= Performance Appraisal has positive impact on Motivation
H_3= Career Planning has positive impact on Motivation
H_4= Job Definition has positive impact on Motivation
H_5= Compensation has positive impact on Motivation.

4. METHODOLOGY

Research methodology provides a systematic way of finding solution to the problems. It is to explore, collect and analyze the information for increasing the knowledge. For research process there are certain steps that are comprised namely defining and redefining problem, formulating hypothesis or suggested solutions, collecting, organizing and

evaluating data, reaching conclusions, testing conclusions to determine whether they fit the formulated hypothesis".

Data Collection

There were two sources of data collection: Surveys & Observation. We have collected primary data through internet and collected 30 article related to impact of HRD practices banking sector. In secondary data we have conducted survey from different banks in twin cities. Banks are UBL, MCB, ASKARI, BANK ALFALAH, HBL and SILK BANK. We have visited different banks of twin city of Islamabad/Rawalpindi and for the comprehension of results we filled 100 survey forms of different banks. The sampling technique use was judgmental and continent. The respondents who were asked to fill out questionnaires were the employees of different Banks. As a widely used instrument for research is the questionnaire so, that purpose we targeted one hundred respondents and all of them were the different level workforce of Banks. The collected data were analyzed by using SPSS V.17 which facilitated us for shaping the graphs and drawing the tables based on the outcome we got through the survey.

Figure: 1

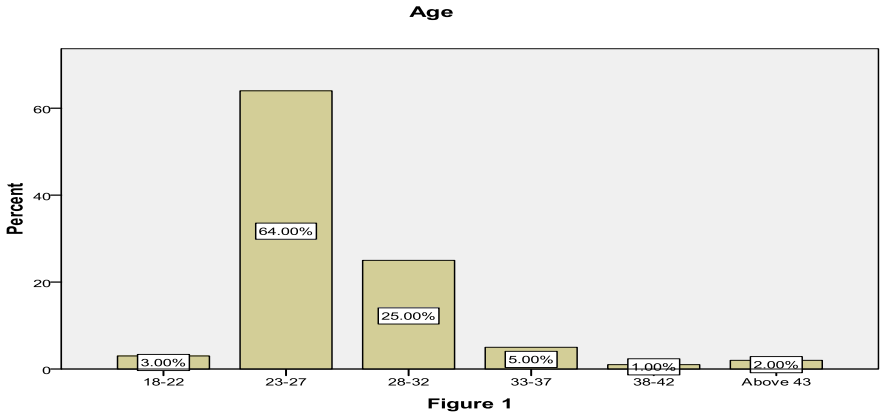


Figure 1

Figure: 2

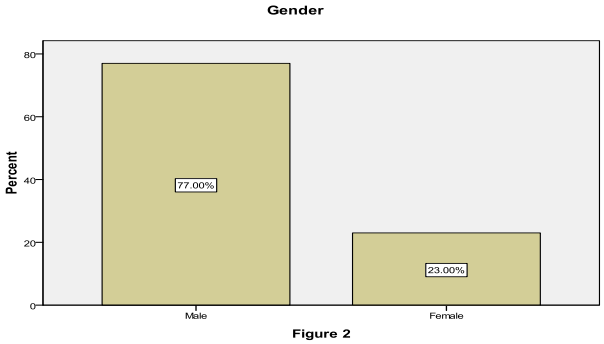


Figure 2

Descriptive Analysis

In order to assess the impact of HRD practices on motivation level of employees, data gathered through questionnaires are being analyzed by applying regression and

correlation tests. Descriptive statistics for data have also been calculated. Results of these tests are reported as under.

Correlation Table

	Mean	Stan. Devi.	Motivation	T & Devel.	Perf. Apprais	Career Pla	Job Defi.	Compensati.
Motivation	2.1167	0.5444	1.0000					
Training & D	2.124	0.5852	0.5925	1.0000				
Perf. Appraisal	2.222	0.7826	0.7020	0.5322	1.0000			
Career Plan.	2.154	0.6714	0.6737	0.6240	0.6894	1.0000		
Job Definition	2.005	0.5839	0.4669	0.5584	0.6165	0.5494	1.0000	
Compensation	2.148	0.6492	0.6003	0.5723	0.7697	0.7378	0.5576	1.0000

The Highest positive relationship among the Motivation and Performance Appraisal is 0.70 it shows that performance appraisal plays an important role in the motivation and is highly related with each other. Job Definition has least correlation with Motivation and that is 0.46, it has least relationship with the dependent variable. The Training and Development, Career Planning and Compensation are positively correlated with the Motivation. However career planning and compensation are highly correlated with motivation after performance appraisal. These are the same relationships as were found by descriptive stats.

Regression

Regression Formula

$Y=\alpha+\beta_1 x_1+\beta_2 X_2+\beta_3 X_3+\beta_4 X_4+\beta_5 X_5+\varepsilon$

Y= Motivation
α= Constant
β= Coefficients of variables
X_1 = Training and Development
X_2 = Performance appraisal
X_3 = Career Planning,
X_4 = Job Definition
X_5 = Compensation
ε= Standard Error

Coefficients

	Coefficients	t Stat
Intercept	0.6760	4.4347*
Training and Development	0.2285	2.7325*
Performance Appraisal	0.3371	4.3024*
Career Planning	0.2383	2.7245*
Job Definition	-0.0785	-0.9425
Compensation	-0.0696	-0.714

Table III presents the relationship of training and development, performance appraisal, career planning, job definition and compensation with motivation of employees in banking sector. Results shows that training and development, performance appraisal, and career planning has a significantly positive impact over motivation i-e with an improvement in these factors employee motivation increases. Surprisingly Job Definition and Compensation has negative impact on Motivation however these relationships are found to be insignificant. Literature Review suggests a positive relation between these factors but in our research project it is found negative. The reason behind is the level of research we have conducted was limited, the limited number of respondents, limitation or lack of knowledge of the target population or the respondents were not entitled to disclose any information related to the personal matter of the organization.

F value shows the overall significance of the model. For our study, F stat is found as 27.56 which is highly significant. This shows that our independent variables (Training and Development, Performance Appraisal, Career Planning, Job Definition and Compensation), contributes well towards the motivation level of employees in banking sector. R^2 for the study is found 0.5945 which means 59% of motivation is affected by HRD practices selected in our study.

5. CONCLUSION

After the research it can be suggested that human resources must be taken into consideration so as to achieve by competitive edge and be united in the current global financial recession period than the banking sector is experiencing highly stress and pressure level from the external environment. Motivation, The important part of the organization is training and development. The growth of the company is much effected by employee training and motivation level.

As consideration of result Performance Appraisal is vital in the banking sector because there is 70% positive impact on the motivation of employees that is huge from rest of the others factors. The employee's performance can be helpful in attaining high levels of performance. 67% result of Career Planning that shows clearly employees from banking sector they really want to seek better, bright future in banks. Compensation is always fruitful and effective tool for the manger's to motivate their employees, result shows 60% employees think that compensation must be given to them for the motivation and encouragement performance graph move up automatically by using this tool According to the results the maximum employees in banking sector is master education and satisfy with reasonably periodically increase in salary High level of compensation and a good working environment is related to motivation and the banking sector must identify what type of work place and environment can motivate their employees. How to compensate their employees that they work benefit for the organization in the long run? Moreover the banking sector in Pakistan develop a compensation structure that is up to the requirement of employees and they have no worries for their basic needs

Trainings can be costly and time taking, that's why there is 59% impact on the motivation of employees that's low because training session are only specific. Keeping up to date

with the trends and the technology and occasional refresher courses will add a new life to both the employee and the organization. Last point which is Job Description equally important for employees result shows 46% positive impact on the motivation of the employees that's not good as compared to the others factors employees adds values in the organization success if they don't known what to do and how to do they how they can perform up to standard which is acceptable .

From the Regression result our two hypothesis Job Description and Compensation show negative relation with the motivation because in the banking sector there is environment Bosses cannot define the job to their employees and they can take extra work, employees can not know what are the responsibilities of their position if they work over time then they cannot get reward from organization. Training, Performance Appraisal, Career Planning they shows positive relation with the motivation because employees from banking sector they known training or performance appraisal can valued for them training leads to the promotion and career planning that highly appreciated in the banking sector because employees know that's lead to the increase in the salary and other incentive and satisfaction as well.

6. RECOMMENDATIONS

After the analysis being completed it can be suggested that following recommendations to the banking sector of Pakistan can be helpful for motivating the employees and designing better job description including training programs which elevates skills, abilities and also increases the image of banking sector.

Job Description is defined and if employees go for extra work then they should compensate or rewarded. Employer must not get extra work and should follow the working hour's policy. In the banking sector performance appraisal is appreciated so they utilize Training and other factors as well. Employer must make career planning because employees are motivated by perceiving their future in the sector. Compensation should value to employees both in terms of promotion and increment in salary. Don't expect everyone to do things your way. Allowing people to be creative and that create a more optimistic environment and can lead to awesome new ideas.

7. REFERENCES

Beer, M. and Walton, E. R. 1990 "Reward Systems and the Role of Compensation" Manage People, Not Personnel: Motivation and performance Appraisal. A Harvard Business Review Book, Chapter 2, pp.15-30.

E. E. Lawler, 1971, Pay & Organizational Effectiveness: A Psychological View, New York, McGrew-Hill, Inc.

Jerald, G. and Robert, A. B., 1997. Behavior in Organizations: Understanding and Managing the Human Side of Work, Upper Saddle River, NJ: Prentice-Hall, Inc.

Kovach, K., 1987. What Motivates Employees? Workers and Supervisors Give Different Answers. Business Horizons.

Milkovich & Newman, 2002. Compensation, 7th ed, The McGrew-Hill Companies, Inc.

W. N. Cooke, 1994, "Employee Participation Programs, Group based Incentives & company Performance," Industrial and Labour Relations Review 47, pp. 603- 36.

NUML Journal of Management & Technology
Vol: 6, No: 1. January, 2011 ISSN 1997-4507

Impact of top management support, knowledge management and work place spirituality on performance:

A case study of Rawalpindi and Islamabad Universities

Jawad Javaid, Lecturer Faculty of Management Sciences, NUML University
Muhammad Niaz Khan, Lecturer Faculty of Management Sciences, NUML University

ABSTRACT

This purpose of this research is to analyze the impact of top management support, effective knowledge management, work place spirituality on organization performance in universities of the twin cities of Rawalpindi and Islamabad. A questionnaire consists of 20 questions was distributed among the faculty members of the universities. The questionnaire is based on liker five-point scale items of the questionnaire were adapted from the different researches. SPSS 16.00 is used for regression. Results show that the top management support, effective knowledge management, work place spirituality have positive impact on organization performance. Sample size and generalization is the limitation of study. This study may conduct in different organization with greater sample size in order to generalize

Keywords: Knowledge Management, Work Place Spirituality, Twin Cities

1. INTRODUCTION

Organization is group of people gel together in a common plate form to achieve common goals (Wino grad & Flores, 1987). Organization performance is always a primary concern for the top manager (Day et al., 2000).The primary objective for ever organization is to improve its performance to achieve the excellence the top manger is always look for the best practices there are several factors effect the organization performance (Ali, 2007).

Central theme for every school of management (scientific, classical, behavioral human relation) is to enhance the organization performance (Smith & Farquhar, 2000). Knowledge management and work place spirituality are the new dimension through which organization can drastically improve there performance (Senge, 1994).

This paper will determine the impact of top management support, knowledge management and work place spirituality on organization performance. Knowledge management is the discipline that helps organizations to manage knowledge for competitive edge (Ali, 2007). Interest in workplace spirituality has increased steadily over the last decade of the twentieth century and into the new millennium (Giacalone & Jurkiewicz, 2004).Workplace spirituality emphasis that divine values has had an impact on work performance and organization productivity. While some corporations have institutionalized spirituality, ways that managers and administrators in both the public and the private sector can use workplace spirituality to increase performance and develop ethical organizations. The findings suggest that when people experience workplace spirituality, they feel more affectively attached to their organizations, experience a sense of obligation/loyalty and feel less instrumentally committed (Hayen, 2007).

Current reform in some of the Malaysian organization put a greater stress or the effective leadership and school progress. Traditions highlighted the importance of leadership in successful school development and change (Day et al., 2000)
The objective of this paper is to determine the top management commitment and support to ward knowledge management, work place spirituality.

1. How much knowledge management and contributing towards organization performance?
2. How much workplace spirituality contributing towards organization performance?

This paper is significant in ways that in order to which organizations motivate employees collectively not only fulfill the physiological need of the employees along with it they need to fulfill their psychological need emotional and spiritual need.

The stakeholders of this research are those organization profit and non-profit organization. A dynamic organization improves their performance not on the expense of their employees rather by working with them and achieves both organizational as well as individual goals. The researcher this paper will help them to understand how mental and spiritual needs can improve employees' performance. The collective use of variables like knowledge management and workplace spirituality are being rarely seen.

2. LITERATURE REVIEW

Any program will have no fruitful and desired outcomes unless it is initiated driven supported or sponsored by top management (Senge,1996).Top manager support help organization in forecasting trends, developing networking, building relationships (Hayen, 2007). Leadership role and top management support is vital and lack of management support may be the impendent on the firm's competitive edge and success (Maponya, 2004). Upper stratum of literature has put emphasis on the role of top managers in strategy formation and the resulting organizational outcomes (Hambrick, 2007).

Top management support moderates' the relation ship between new product development process and teams learning process (Islam, 2009).Top management support sheltered

vital assets for human development, and ease of use and integration of other related in-house resources in embracing and development process (Hayen, 2007).

Consequences advocate that top management vision is an important addition to top management support for smooth the progress of and the implementation of supportive practices (Islam, 2009).Empirical investigation examining the role of top management vision and top management support in creating managerial prospect for persons with disabilities (Moore, 2010). the success of knowledge management is dependent on support of top management are most critical and influential factors(Islam, 2009).top management support and vision gives employees the direction and motivation to perform efficiently and effectively in pursuit to achieve organization goals (Moore, 2010).

Knowledge management is a systematic rational process for creation, inventory, representation and classification of Knowledge this leads to improve the operational efficiency (Alryalat & ALHawari, 2008). Knowledge is the most significant and valuable resource in today's competitive world (Gore & Gore, 1999).Knowledge management is keenly endorsed by various formal and informal manners by the top management of the organizations (Ribiere & Sitar, 2003).

Top-level managers encourage, inspire and support all organizational employees to actively participate and engage employees in the knowledge management related activities. Firms effectively and efficiently manage its knowledge resource to gain long-term competitive edge to be learning organization to improve over all organizational performance (Ali, 2007).knowledge management is based on broader and long term ways to achieve long term goals , it reflect the system ,it shows as a discipline and cultural values (Waltz , 2003).

Employees are acknowledged and rewarded for giving and sharing valuable and innovative ideas & information that become the basis for corporate knowledgebase system (Ribiere & Sitar, 2003). Knowledge can be classified into two forms one is tacit knowledge which comes from the ones experience include his beliefs ,views and values where other form is the explicit or codified knowledge which can easily be documented (waltz ,2003).

Organization performance is always a primary concern for the top manager (Day et al., 2000).The primary objective for ever organization is to improve its performance to achieve the excellence the top manger is always look for the best practices there are several factors effect the organization performance (Ali, 2007). Central theme for every school of management (scientific, classical, behavioral human relation) is to enhance the organization performance (Smith & Farquhar, 2000).Organization performance reflects how effectively and efficiently organization achieves its goals. In order to measure the impact of knowledge management and work place spirituality on company performance, easy to follow measures of performance (Baker & Sinkula, 1999).New product development ensure success, growth, profitability (Han et al., 1998).Improved-harmonized, more-supportive organizations that generate, attain, and (most importantly)

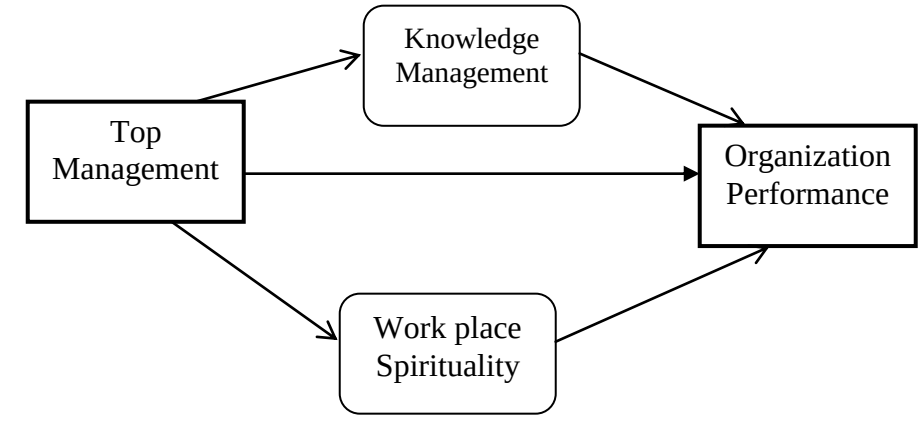
use knowledge more effectively should do a superior job of transforming resources into customer satisfaction, and hence should be more profitable (Ali, 2007)..

The process level of performance concerns workflows and support infrastructures designed to support business level goals. Given that the process level is where work is accomplished, it is the key link between organizational and individual levels of performance (Ali, 2007).

Effective Employees are those who work with the combination physical, mental and spiritual (hearts) efforts. Spirituality motivated employees find work more meaningful and purpose full, it is a sort of fulfillment that reflect that the in workplace employees expresses their whole selves and fully satisfied. Spiritual level is significant because they not only ease strain, minimizes conflict, reduces the level of absenteeism, but also enhances on the job performance (Krahnke et al., 2003). High degree of intrinsic motivation can be achieved if one considers his/her work as meaningful. Work then becomes an integral and decisive part of ones life.

Mahoney and Graci (1999) have suggested that spirituality is combination a sense of giving, a sense of bonding and connection with the community, a sense of forgiveness, and a clear sense of honesty. Factors of spirituality in the workplace shows an alignment with personnel and organization needs (Kinjerski and Skrypnek, 2004).The community environment has a spiritual characteristic in that it "is a place in which people can experience personal growth, be valued for themselves as individuals, and have a sense of working together [for a common purpose]" (Ashmos & Duchon, 2000, p. 139).One dimension of a psychologically safe work environment is the freedom employees have to express their feelings and the core facet of their personal beliefs as related to their job. A psychologically safe environment encourages job involvement.

3. RESEARCH MODEL



4. METHODOLOGY

Present research is being carried out to find out the impact top management support, effective knowledge management, work place spirituality on organization performance (universities of the twin cities of Rawalpindi and Islamabad). Data is collected from both public and private sector universities of twin cities. For the analyses, primary data collection method is used. In the beginning of the survey an introductory statement given that, ask respondents to oversee their responses and assure them the confidentiality of their data. The demographic information was followed this statement.

The questionnaire was distributed among public. This data collection process was done by distributing the questionnaire, which is self-administered total number of respondents, were 206. Some of the responses were rejected and the reason appropriate responsive is missing. This study gauges the respondents through four factors of top management support, effective knowledge management, and work place spirituality and organization performance. For the analyses of the construct and hypotheses, SPSS (Statistical Package for Social Sciences) is used.

Measure

All the constructs used in this study are measured through reliable and established scales which were used in the previous studies of SHRM. All these factors which were adapted in this study measured on five point Likert scale from 1= strongly agree to 5= strongly disagree. Purchase loyalty: The items of purchase for measuring this construct. The Cronbatch alpha of purchase loyalty was 0.72.

Hypothesis1: Top management support is positively related with organization performance.
Hypothesis2: Top management support is positively related with work place spirituality.
Hypothesis3: Top management support is positively related with effective knowledge management.
Hypothesis 4: work place spirituality is positively related with organization performance.
Hypothesis5: Effective knowledge management is positively related with work place spirituality.

5. RESULTS

The outcome of values marks coefficients β of individuals highlights that the result is significant and positive if viewed from broader perspective. Research indicates the dependent variable Organization Performance With Top Management Support i.e. the independent variable as regression values are greater in number as compared to residuals value observed in spss test. R Square 0.117 shows that the model has 11.71% variation in the dependent variable due to independent variable. Gives a significant result as $P < .05$, $F = 26.988$ hence hypothesis is verified in table 2

Constant	TOP MGT S (IV)	R Square	F
1.415	.290	0.117	26.988
(.130)	(.056)		
[10.886]	[5.195]		
.000	*.000*		*.000*

TABLE 3

Constant	TOP MGT S (IV)	R Square	F
.579	.722	0.5371	236.349
(.109)	(.047)		
[5.300]	[15.374]		
.000	*.000*		*.000*

The outcome of values marks coefficients β of individuals highlights that the result is significant and positive if viewed from broader perspective. Research indicates the dependent variable Work Place Spirituality with Top Management Support i.e. the independent variable as regression values are greater in number as compared to residuals value observed in spss test. R Square 0.5371 shows that the model has 53.7% variation in the dependent variable due to independent variable. Significant result as P< .05, F = 236.3 hence hypothesis is verified IN TABLE 3

TABLE 4

Constant	TOP MGT S (IV)	R Square	F
..586	.713	0.555	254.787
(.104)	(.045)		
[5.668]	[15.962]		
.000	*.000*		*.000*

The outcome of values marks coefficients β of individuals highlights that the result is significant and positive if viewed from broader perspective. Research indicates the dependent variable effective knowledge management has deep relation with top management Support i.e. the independent variable as regression values are greater in number as compared to residuals value observed in SPSS test. R Square 0.555 shows that the model has 55.5% variation in the dependent variable due to independent variable.

Significant result as P< .05, F = 254.7 the standard error <1 hence hypothesis is verified IN TABLE 4

TABLE 5

Constant	**WPS (IV)**	**R Square**	**F**
1.169	.408	0.224	58.873
(.121)	(.053)		
[9.699]	[7.673]		
.000	*.000*		*.000*

The outcome of values marks coefficients β of individuals highlights that the result is significant and positive if viewed from broader perspective. Research indicates the dependent variable organization performance has deep relation with work place spirituality i.e. the independent variable as regression values are greater in number as compared to residuals value observed in SPSS test. R Square 0.224 shows that the model has 22.4% variation in the dependent variable due to independent variable. a significant result as P< .05, F = 58.873 and the standard error <1 hence hypothesis is verified TABLE 5

TABLE 6

Constant	**EKM (IV)**	**R Square**	**F**
1.152	.418	0..221	57.927
(.124)	(.055)		
[9.314]	[7.611]		
.000	*.000*		*.000*

The outcome of values marks coefficients β of individuals highlights that the result is significant and positive if viewed from broader perspective. Research indicates the dependent variable organization performance has deep relation with effective knowledge management i.e. the independent variable as regression values are greater in number as compared to residuals value observed in SPSS test. R Square 0.221 shows that the model has 22.1% variation in the dependent variable due to independent variable. Significant result as P< .05, F = 57.927 and the whereas the standard error <1 hence hypothesis is verified TABLE 6

6. CONCLUSION AND RECOMMENDATION

Achieving excellence in performance is a quest of every organization. Organization performance is a dynamic process organization whether profit oriented or non profit organization can achieve excellence with the support and encouragement of top management. Any organization practice can achieve its objectives as long as it is fully backed by their top management following are the result concluded from this research paper if top management support works place spirituality it will have positive impact on the organization member as the spirituality attach with their work and consequently have positive impact on organization. Along with spirituality organization need to support knowledge management programs to build their intellect which is mutually beneficial for

both employees and organization. The purpose of this study is to determine factors of organization performance as it is evident from the study that if top management support effective knowledge management and work place spirituality it is beneficial for the organization**.** This model can be tested with the variable like emotional intelligence in order to analyze the cognitive impact of factors on organization performance

7. REFERENCES

Ali ,Bakhtiar. (2007).critical success factor for effective knowledge management in corporate sector's .doctorial dissertation submitted in NUML University Islamabad

Alryalat H. and AL Hawari S. "A review of Theoretical Framework: How to Make Process about, for, from Knowledge work," *In proceedings of 9th International Business Information Management Association Conference (IBIMA)*, 2008, pp. 37-50, Marrakech, Morocco.

Ashmos, D. P., & Duchon D. (2000). Spirituality at work: A conceptualization and measure. *Journal of Management Inquiry, 9*(2), 134–145.

Baker, W. E., & Sinkula, J. M. (1999b). The synergistic effect of market orientation and learning orientation on organizational performance. Journal of Academy of Marketing Science, 27(4), 411−427.

Day, C., Harris, A., Hadfield, M., Tolley, H. and Beresford, J., 2000. *Leading Schools in Times of Change.* Buckingham: Open University Press.[18]

Giacalone, R. A., & Jurkiewicz, C. L. (2004). A values framework for measuring the impact of workplace spirituality on organizational performance. *Journal of Business Ethics, 49:* 129-142.

Gore,C.,& Gore,E. (1999).knowledge management: the way forward. Total quality management, 10(4), 554-560

Hambrick, D. (2007). 'Upper echelons theory: an update'. *Academy of Management Review*, **32**, 334–43.

Han, J. K., Kim, N., & Shrivastava, R. (1998, October). Market orientation and organizational performance: Is innovation a missing link? Journal of Marketing, 62, 30−45

Hayen R., Rutashobya C., Vetter D., (2007)," AN INVESTIGATION OF THE FACTORS AFFECTING DATA WAREHOUSING SUCCESS", Central Michigan University, USA.

Kinjerski, V.M., B.J. Skrypnek, and B.J. 2004. Defining spirit at work: Finding common ground. Journal of Organizational Change 17, no. 1: 26–42.

Krahnke, K., R.A. Giacalone, and C.L. Jurkiewicz.(2003). Point-counterpoint: Measuring Workplace spirituality. Journal of Organizational Change 16, no. 4: 396–405.

Mahoney, M.J., and G.M. Graci. 1999. The meanings and correlates of spirituality: Suggestions from an exploratory survey of experts. Death Studies 23: 521–8.

Maponya, P.M. (2004).knowledge management practices in academic libraries: A case study of university of Natal, Pietermaritzburg Libraries (pp.1-31),

Mark E. Moore, Alison M. Konrad, Judith Hunt, (2010) "Creating a vision boosts the impact of top management support on the employment of managers with

disabilities: The case of sport organizations in the USA", Equality, Diversity and Inclusion: An International Journal, Vol. 29 Iss: 6, pp.609 – 626

Md Zahidul Islam, Jason A. Doshi, Hanif Mahtab, Zainal Ariffin Ahmad, (2009) "Team learning, top management support and new product development success", International Journal of Managing Projects in Business, Vol. 2 Iss: 2, pp.238 - 260

Ribiere,V.M., sitar , A.S.(2003).critical role of leadership in nurturing a knowledge supporting culture .*knowledge management research and practice.*

Senge, P. M. (1994). *The fifth discipline: The art and practice of the learning organization*. New York:Currency-Doubleday.

Senge,P.,(1996).leading learning organizations,the bold ,the powerful, and the invisible. in M.Goldsmith,&F.Hasselbein (eds),leader of the future .san Francisco : jossey bass

Smith, R. G. and Farquhar, A. (2000). The road ahead for knowledge management: An AI perspective. *AIMagazine, 21*, No. 4, Winter 2000, 17-40.

Waltz, E., (2003).knowledge management in the intelligence enterprise. Norwood,MA:Artech House

Winograd, T. and Flores, F. (1987). *Understanding computers and cognition: A new foundation for design*.Reading, MA: Addison-Wesley.

A Research Journal Published by
Faculty of Management Sciences
National University of Modern Languages
Islamabad-Pakistan
www.numl.edu.pk