

**SCMS JOURNAL OF INDIAN MANAGEMENT**  
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## *The Chairman speaks ...*



The popularity of hybrid financial securities has shot up during the recent past. Conventional balance sheet reporting of certain types of hybrid securities by managements does not sometimes represent the true picture of the risk involved or the leverage employed. There is a general consensus on the need for improvement of accounting standards by incorporating better transparency, consistency and compatibility in financial reporting. In spite of growing focus on this requirement, the threat of corporate misbehaviour still remains unchecked.

It is against this backdrop that we bring out an excellent study paper on this topical subject in this edition as the lead article.

Indian retail industry has seen phenomenal growth in the last five years. It accounts for nearly 13 per cent of our GDP and 8 per cent of our workforce. It is the largest source of employment after agriculture in the country. Our country is today positioned as the leading destination for investment in retail sector. We could see a shopping revolution taking place in the coming years, which will open up enormous opportunities.

The study paper on Indian Retail industry brings to our attention some of the aspects which Indian retailers need to focus upon on a priority basis.

We hope that this edition will make an interesting and informative reading for our readers.

**Dr.G.P.C.NAYAR**  
*Chairman, SCMS Group of Educational Institutions*

## SCMS Journal of Indian Management

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## Editorial

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### Dream-storming

We're all familiar with the concept of brainstorming.

We're also familiar with letting ideas, thoughts, and images roam freely with the hope that they may lead to some new solution to a difficult question or problem or new thinking.

*Have we ever thought of the possibilities of "dream-storming?"*

Our dreaming mind has an uncanny ability to sort through a large number of details. It processes material in a way that's not limited by the usual roles of logic. Thereby, very novel and innovative suggestions are generated. When we're frustrated by a problem in our waking lives, we may find ourselves in a rut. We may go forth and back across the same familiar but unproductive ground.

In dreams, it seems we can almost hover, like a humming bird, or fly back and forth, up and down, or sideways, in order to see the problem that is stalemating us from a new angle or perspective.

A plethora of examples are provided to document the significant changes that have occurred in the worlds of art, music, drama, literature, films, architecture, politics, military conquest, athletic performance, scientific discovery, and religion because somebody acted upon inspirational imagery revealed in a vivid dream. But it is not very much so in the world of business and management.

It is interesting to learn how our ancestors experienced dreams. Dreams have been revered, feared, and puzzled ever since the dawn of history. Dreams were of different dimensions to different kinds of people. It is also challenging to know the prominent place dreams held in the nineteenth century before Freud "discovered" them.

It is a puzzling dilemma to know whether "reality" is better glimpsed with open eyes during daylight hours or with closed eyes while dreaming.

Dream imagery has the potential to serve as a "mental X-ray" allowing diagnosis of an impending physical problem before it shows up with full blown, obvious symptoms in the waking of life. There are factors that influence dreams, both physiologically and psychologically. How dreams are currently evaluated by means of EEG (brainwave monitoring) technology. How scientists tabulate the elements found in dreams to discover the patterns of dream content that exist for an individual or a particular class of dreamers?

Data are presented to show how dreams change as we age, how the dreams of men and women are different, and how stress can influence the outcome of the dreams. There is a kind of dream called lucid dreams in which the dreamer is consciously aware of participating in a dream. Repetition of these experiences can often lead to enhanced feelings of freedom, self-confidence, and rapture and cause dreamers to examine metaphysical questions with a seriousness and urgency that, for many people, may be surprising and without personal precedent.

Many of the ills in management education could be solved if the students are conscious of the advantages of being good dreamers too which enhance their quality to use the faculty to fancy and imagine.

Be good dreamers and be good managers.



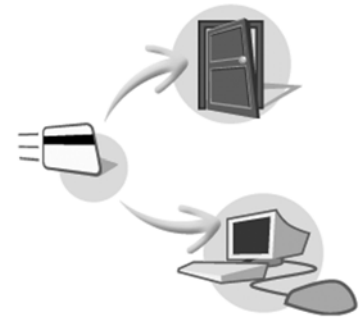
Dr.D.Radhakrishnan Nair

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Editorial Assistant: Mr.E.V.Johnson

# Financial Statement Distortion

# Hybrid Debt-Equity Securities

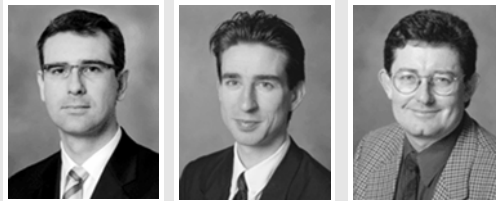


Nigel Finch, Tyrone M. Carlin and Guy Ford

This paper reports on a study of a sample of hybrid securities issued by large Australian listed corporations. The paper focuses on the key financial reporting impacts of issuers of income securities, reset convertible preference securities and perpetual step-up securities. From a balance sheet perspective these include the frequency with which the securities were classified as equity and the resulting impact on leverage ratios and other traditional risk measures. The impact of these securities on reported earnings, key financial performance metrics, market capitalization and operating cash flow is also discussed.

In the wake of a global epidemic of revelations of corporate misbehaviour in the beginning years of this decade came a resurgence in interest in and attentiveness towards the objective of improving corporate governance (Carlin & Ford, 2004). A major element of that wave of consciousness was manifested in a heightened focus on the need for improvements in the transparency, consistency, comparability and decision usefulness of corporate financial reports. Failures on one or more of these dimensions more often than not lay at the heart of high profile corporate scandals and collapses such as those epitomised by Enron, WorldCom, Global Crossing<sup>1</sup>, HIH<sup>2</sup> and Parmalat<sup>3</sup>.

From the time the global wave of governance crises reached its tumult until the present, the Australian market for hybrid financial instruments has burgeoned in size. According to estimates compiled by the Reserve Bank of Australia, the value of outstanding hybrid financial instruments more than doubled between 2001 and 2004, while hybrid issuance as a proportion of non-intermediated corporate debt issuance more than tripled over the same period<sup>4</sup>. Yet there are persistent questions as to the legitimacy of hybrid financial instruments, some commentators suggesting that their entire existence rests upon a foundation of regulatory arbitrage and that in consequence they are to be seen as another example of a classic financial



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reporting mirage. At first glance they appear equity like, but closer inspection reveals a lineage far more dominated by the hallmarks of debt<sup>5</sup> (Williams, 2005).

Such views are not without foundation. The mandatory requirement for adoption of international accounting standards by listed Australian companies with reporting periods beginning on or after 1 January 2005 has already caused shockwaves. The key reason for this is that IAS 32<sup>6</sup> has shifted the basis for classification of financial instruments as falling into the categories of debt or equity by requiring that this task be dominated by considerations related to the economic substance, not the legal form, or the instrument. The thin veneer sufficient to imbue instruments with an equity-like character under the previous regulatory regime appears unlikely to suffice in a changed reporting environment and in consequence corporate Australia has responded with a raft of pre-emptive buybacks<sup>7</sup>, covenant modifications for pre-existing instruments<sup>8</sup> and continued innovation<sup>9</sup> in the design and packaging of new security offerings.

This tension between the objectives of greater transparency and accuracy in financial reporting and the regulatory arbitrage laced current which underpins the existence of hybrid securities provides an interesting backdrop for empirical research, of which surprisingly little has been undertaken in the Australian context, though some influential research relating to hybrids has been published internationally (e.g., Hopkins, 1996; Engel et al, 1999; Laurent, 2000). Consequently, a key motivation of this paper is to provide evidence and analysis to fill that gap. In particular, this paper demonstrates the potentially distorting impacts of the use of hybrid securities as an element of firm capital structure under both historical and forward looking financial reporting regimes.

It is argued that despite the advances in the quality of the financial reporting architecture associated with Australia's adoption of international financial reporting standards, the risks of these

distortions remain essentially undiminished. As a result, further development of the reporting framework is argued to be necessary if the goal of greater transparency and accuracy in financial reporting is to be achieved. In supporting these arguments, the paper proceeds as follows.

Section 2 provides background context by describing nature and size of the Australian market for hybrid securities. Section 3 sets out details of the methodology we employed to measure the impact of hybrids on key measures of financial performance, risk and firm value. We set out our results in Section 4, while in Section 5 we briefly outline our conclusions and some suggestions for future research.

### The Australian Hybrids Market

Even as recently as the late 1990s bank lending dominated corporate debt rising in Australia. The Reserve Bank of Australia estimates that as at June 1999, only 18 per cent of total corporate debt rising was non-intermediated, with hybrids comprising a paltry one per cent of total debt raised<sup>10</sup>. By June 2004, Australian debt capital markets had changed significantly, with 40 per cent of debt raised in non-intermediated form. By this time, hybrid issuance represented seven per cent of total debt raisings in Australia (RBA, 2005a, p. 54).

Thus not only had Australian corporations increasingly moved towards the creation and issue of their own debt securities rather than relying on traditional bank loan products, the type of instruments used by these organisations to facilitate the raising of capital had also substantially altered. Hybrids in particular, became far more popular than they had been even a short period earlier. This rise in popularity is captured in the data set out in Table 1, which sets out the gross value of hybrid issuance of hybrids by Australian corporations in both domestic and offshore capital markets between 1998 and 2005.

**Table 1: Gross Issuance in Australia by Market Type (\$b)**

Year of Issuance	Domestic Market	Offshore Market	Total Market
1998	1.461	2.203	3.664
1999	6.963	0.490	7.453
2000	1.200	1.002	2.202
2001	3.328	2.112	5.440
2002	5.004	0.787	5.792

Year of Issuance	Domestic Market	Offshore Market	Total Market
2003	4.539	5.345	9.884
2004	4.362	2.993	7.355
2005	1.660	1.640	3.300
TOTAL	28.518	16.571	45.089

Source: Reserve Bank of Australia (2005 data to May 2005 only).

Although the domestic market has been the principal destination for hybrid capital raisings by Australian corporations, the data also reveals a strong capacity on the part of Australian corporations to raise capital by issuing hybrid securities into offshore capital markets. Further, as the data in Table 2 (below) demonstrates, both financial

and non financial issuers have actively participated in hybrid issuance, with non financial corporations playing an increasingly important role in more recent years as Australian financial institutions reached their Tier 1 capital limits for hybrid securities after several years of substantial issuance activity (RBA, 2005b, p.55).

**Table 2: Gross Issuance in Australia by Issuer Type (\$b)**

Year of Issuance	Financial	Non-financial	Total Issuers
1998	2.444	1.220	3.664
1999	5.295	2.158	7.453
2000	0.295	1.907	2.202
2001	1.035	4.405	5.440
2002	3.464	2.327	5.792
2003	6.470	3.414	9.884
2004	4.489	2.866	7.355
2005	1.375	1.925	3.300
TOTAL	24.867	20.222	45.089

Source: Reserve Bank of Australia (2005 data to May 2005 only).

The Australian market for hybrid securities has also been characterised by rapid innovation in instrument design. This echoes experience with hybrid securities in international contexts (Smithson et al, 1993). In the Australian context, a number of factors combine to explain innovation. First, hybrid securities have been targeted far more to a retail investor audience than traditional corporate bond offerings. This has biased the design of many instruments towards the provision of higher yields<sup>11</sup> than those available on alternative asset classes, or on access to streams of tax credits not normally associated with distributions paid on traditional debt instruments (Moody's, 2001, p. 5).

Changes to financial reporting requirements have also been a strong driver of variations in instrument design. The data set out in Table 3 below shows clear patterns associated with this phenomenon. It is particularly noteworthy for example, that over recent periods, the single most dominant form of hybrid security issued by Australian corporations falls into a category known as perpetual step up preference shares, while issuance activity of more traditional hybrid forms such as income securities has ceased altogether. As discussed below, step up securities have been designed to satisfy the requirements for classification as equity under international accounting standards, something not possible in relation to traditional income securities given their particular design features.

**Table 3: Gross Issuance in Australia by Security Type (\$b)**

Year of Issuance	Income Security	Convertible Preference Share	Convertible Note	Reset Convertible Preference Share	Reset Convertible Notes	Perpetual Step-up preference share	Other	Total (\$ Billion)
1998	0.261	0.455	2.185	-	-	0.075	0.688	3.664
1999	5.640	0.726	0.586	0.490	-	-	0.011	7.453
2000	-	0.440	1.012	0.740	-	-	0.010	2.202
2001	0.065	0.315	0.978	2.070	0.400	-	1.612	5.440
2002	-	0.016	0.718	4.060	0.210	-	0.787	5.792
2003	-	0.029	0.950	4.394	1.540	2.970	-	9.884
2004	-	-	0.115	0.956	0.851	3.957	1.476	7.355
2005	-	-	-	0.110	-	2.425	0.765	3.300
TOTAL	5.966	1.981	6.544	12.821	3.001	9.427	5.350	45.089

Source: Reserve Bank of Australia (2005 data to May 2005 only).

The degree of security design innovation inherent in the Australian hybrid security market has resulted in considerable fragmentation. Many issues are small in terms of absolute dollars raised and are often unrated. Compared to vanilla debt security offerings they are complex, yet ironically have been most often pitched at a retail investor base which may not fully appreciate the magnitude and nature of risks associated with exposure to them (Smith, 2003).

Despite the high degree of variation in instrument design, which we have noted characterises the Australian market for hybrid instruments, it is possible to capture the broad parameters of the most important sub-classes of securities, which exist within the marketplace. As the data in Table 3 (above) makes clear, the three most significant of these subclasses are hybrids, which can be generally described as income securities, reset convertible preference shares and, more recently, perpetual step up preference shares. The essential features of these security sub-classes are summarised in Table 4, below.

**Table 4: Features of Key Hybrid Security Sub Classes Issued in Australia**

Type	Key Features
Income securities	Perpetual securities with regular interest or coupon payments. They are only redeemable at the option of the issuer.
Perpetual step-up securities	Similar to income securities, except that the interest payment on the security increases if the issuer does not redeem the security on a certain date.
Reset convertible preference shares/notes	The issuer has the option to change the terms or redeem the securities on a predetermined date. The investor has the option to accept the new terms of the security, or to request an exchange. If an exchange is requested, the issuer decides whether it is for ordinary shares or cash.



While income securities dominated the Australian market for hybrid securities in the late 1990s, by far the most common form of hybrid found in this jurisdiction at present is the reset convertible instrument. Both are highly vulnerable to reclassification as debt under IFRS, the former because they are essentially indistinguishable from subordinated debt<sup>12</sup> and the latter because reset convertibles typically gave investors the right to convert their securities into a variable number of ordinary shares on defined dates or in response to certain defined events<sup>13</sup>.

Perpetual step up securities have become the most significant form of hybrid issued in Australia since the Australian Accounting Standards Board announced<sup>14</sup> pending Australian Accounting Standard 132<sup>15</sup>, pursuant to which most pre-existing forms of hybrid securities would be vulnerable to reclassification from equity to debt for financial reporting purposes. Their popularity is not coincidental, but rather, is based upon the fact that step up securities issued since December 2003 have been designed specifically to avoid being classified as debt for financial reporting purposes. They therefore represent a continuation of the tendency of issuers to design hybrid instruments with a view to achieving regulatory arbitrage classification as equity while not far beneath the surface lie many of the characteristics of debt.

Thus, far from destroying the inertia of the Australian market for hybrid securities, the introduction of IFRS<sup>16</sup> has merely stimulated further design innovation and greater instrument design complexity<sup>17</sup>. Hybrid issuance continues apace, but it is not at all clear that the objectives of greater transparency and accuracy will in fact be engendered by the arrival of a new set of financial reporting rules from 2005 onwards. Thus, IFRS or not, an investigation of the potential impact of hybrids on the quality and accuracy of financial disclosures appears warranted. Section 3 below describes our methodology for investigating the nature and magnitude of the problem.

### Measuring the Impact of Hybrids

A central contention of this paper is that the regulatory arbitrage upon which the construction of hybrid securities is founded results in the systemic treatment of these instruments as equity for financial reporting purposes. It is in turn posited that this has the potential to distort reported financial aggregates such that common measures of financial performance and risk calculated on the basis of those aggregates fail to convey an appropriate image of the underlying organic financial reality of the reporting entity.

Testing these propositions requires the implementation of a two-stage methodology. The first component of this methodology goes to acquiring evidence relating to the first contention, that those organisations which use hybrids as an element of their capital structure systemically misclassify them as equity when categorisation as debt would represent a more appropriate treatment. The second component relates to acquisition of evidence of the distorting impact (if any) resulting from any detected misclassification. Jointly, this body of evidence provides a composite picture of the impact of the use of hybrid securities by Australian corporations, and by extension, the likely impact in other jurisdictions with similar regulatory structures<sup>18</sup>.

We test our first contention by applying a debt / equity characteristics matrix technique against a sample of hybrid securities currently outstanding in Australian capital markets. Specifically, our sample includes one randomly selected example of each of the three main classes of hybrid securities in existence in Australia; being income notes<sup>19</sup>, reset convertible preference shares<sup>20</sup> and perpetual step up securities<sup>21</sup>. In order to determine the appropriate classification of each security we examine, we compare its essential characteristics against a six point debt/equity characteristic matrix, and determine, on balance, whether the inherent characteristics of the instrument suggest that the instrument lies closer to "pure debt" or "pure equity."

In undertaking this analysis, we classify pure debt as having the following characteristics. First, it enjoys contractually defined cash flows. Second, debt enjoys priority claims to the cash flows of the debtor entity while that entity remains a going concern, and to distributions flowing from disposal of assets in the case of liquidation. Finally, pure debt instruments are structured to have a finite, known maturity. By way of contrast, pure equity instruments do not enjoy contractually defined cash flows; have only residual claims to cash flows (both while the business remains a going concern and in the context of liquidation) and have an indefinite maturity<sup>22</sup>. We discuss the results of this analysis in section 4, below.

Where we determined that an instrument we reviewed had been misclassified, we undertook the task of recasting selected elements of the raw financial statements released by the organisations, which issued the misclassified hybrids we detected in our sample. The most obvious impact of misclassifying a debt instrument, as equity is to reduce the apparent leverage of the issuing organisation. Therefore, where necessary, we recast the balance sheet by

removing inappropriately classified hybrids from outstanding equity and adding them to the issuing entity's on balance sheet liabilities. We capture any differences by measuring changes in both the debt / equity ratio and the leverage ratio. The results of this analysis are discussed in section 4, below.

In addition to the obvious balance sheet impact however, there remains the possibility of a material profit and loss impact, since cash distributions paid to holders of misclassified hybrid instruments are typically accounted for as distributions of retained earnings rather than treated as expenses<sup>23</sup>. We make relevant adjustments and measure the impact on earnings per share, return on assets and return on equity. We also test for any impact on reported cash flows from operating activities, since it is normal to classify interest payments as cash outflows from operating activities, but distributions to equity instruments as cash outflows from financing activities.

Finally, by holding the price earnings ratio of the issuing entity's ordinary equity securities constant, we estimate the potential impact on market capitalisation, which would result from a restatement of earnings per share flowing from a recasting of the profit and loss statement to reflect the status of outstanding hybrid securities as debt rather than equity<sup>24</sup>.

## Results

As briefly noted in section 3, for the purposes of this study we examined a randomly selected income note, reset convertible preference share and perpetual step up security. The income note security we examined for the purposes of this study was the so-called Woolworths Income Note (or WINs), issued by Woolworths Limited<sup>25</sup> in November 1999.

With a face value of \$100, the WINs securities were officially quoted on the Australian Stock Exchange on 9 December 1999<sup>26</sup>. The instruments are structured so that their holders have no voting rights and rank ahead of preference and ordinary shares for a return of capital in the event of winding up. However, they are subordinated to all creditors of Woolworths. Interest payments on WINs are made quarterly in arrears, and were initially set at a rate of two per cent per annum above the 90 day bank bill rate (BBR) or a minimum rate of 7.25 per cent per annum in each quarter until 15 December 2000, whichever was the greater.

Subsequently, the floating interest rate has been adjusted every quarter<sup>27</sup> at two per cent per annum above the BBR. These payments do not attract franking credits. WINs are perpetual securities and have no maturity, however Woolworths can redeem each security for \$100 cash at any date on the occurrence of a 'Tax Event' (i.e. where there is an unfavourable change in the taxation status of WINs to the detriment of Woolworths), and Woolworths has the option to redeem any outstanding WINs securities on or after 15 December 2004 for \$100 cash.

In light of these characteristics, and applying the methodology we describe in section 3 above, we take the view that despite being treated as equity by Woolworths Limited, these instruments are most appropriately classified as debt. The principal equity like feature they carry is their perpetual maturity, but this is more than offset by the contractual nature of the cash flows enjoyed by the holders of the securities and the prioritisation of the claims enjoyed by holders of WINs over both ordinary and preference equity holders. Essentially, we contend that in substance, these instruments are more akin to subordinated debt than to equity, and ought properly to be treated as such in the financial statements of the issuing organisation.

The reset convertible preference share security which we examined for the purposes of this study was the RePS security issued by David Jones Limited<sup>28</sup> in May 2002, raising \$AUD 65 million. With a face value of \$100, these RePS were officially quoted on the Australian Stock Exchange on 2 July 2002 under the ticker code DJSPA. Holders of RePS have no voting rights and though RePS are subordinated to all creditors of David Jones they rank ahead of ordinary shares for a return of capital in the event of winding up and dividends on RePS are paid in priority to any dividends declared on ordinary shares.

The preferential non-cumulative dividends on RePS are paid six-monthly in arrears and are fixed until the first reset date of 1 August 2007 at the greatest of eight per cent per annum and the swap rate (on allotment) plus two per cent. The dividend rate assumes full franking, so in the event that a dividend is unfranked or partially franked, the dividends on the RePS will be increased to compensate for any unfranked amount. The holder may elect to convert the RePS to ordinary shares at any time up until the reset date at a fixed rate of conversion (70.1754 ordinary shares per RePS). David Jones may elect to convert at any date in certain circumstances including a takeover or scheme of arrangement, or proposed changes to taxation regulation.

On the reset date, either David Jones or the holder may elect to convert the RePS to ordinary shares using a conversion factor comprising two elements: (a) the average of the daily volume weighted average price of the David Jones ordinary shares over the 20 days prior to the conversion day; and (b) adjusting that price for a conversion discount of five per cent. Notwithstanding, a maximum and minimum conversion rate applies of not less than 70.1754 ordinary shares per RePS and not more than 1052.6316 ordinary shares per RePS.

At the first reset date (1 August 2007), David Jones will reset the dividend rate for the RePS, as well as the next reset date, the conversion discount rate, and the maximum and minimum number of ordinary shares on conversion. Those holders who have not already converted are therefore accepting the new terms for RePS.

Having regard to the overall characteristics of these securities by applying our debt / equity classification methodology, we take the view that these securities would be more appropriately classified as debt than equity, though they are classified as equity by David Jones Limited. In forming this judgement, we have had particular regard to the priority claims conferred on the holders of these securities, as well as the strongly contractual features of the designated cash flows associated with the instruments.

The step up security we examined for the purposes of this study are known as FUELS<sup>29</sup>, and were issued by Australian listed oil and gas producer Santos Limited<sup>30</sup> in September 2004, raising \$500 million. With a face value of \$100, FUELS were officially quoted on the Australian Stock Exchange on 5 October 2004<sup>31</sup>.

The FUELS securities carry no voting rights except in relation to a limited set of circumstances including proposals that affect the rights attached to FUELS, or that reduce the share capital of the company. FUELS rank ahead of ordinary shares for a return of capital

in the event of winding up and are subordinated to all creditors of Santos.

The securities are designed such that preferential non-cumulative floating-rate dividends are paid six-monthly in arrears until 30 September 2009 and calculated by adding a 1.55 per cent margin to the bank bill swap rate (BBSW) for 180 day bills as at the first business day of each dividend period. For the period on or after 30 September 2009, the dividend calculation is increased by a one-off step-up in the margin by 2.25 per cent (i.e. 1.55 per cent margin + 2.25 per cent step-up + BBSW). The dividend rate assumes full franking, so in the event that a dividend is unfranked or partially franked, the dividends on the FUELS will be increased to compensate for any unfranked amount.

FUELS are perpetual securities and have no maturity, however Santos may convert or exchange some or all of the FUELS for ordinary shares or \$100 cash on 30 September 2009 and each dividend payment date thereafter. Santos may elect to convert at any date in certain circumstances including a takeover or scheme of arrangement, or proposed changes to taxation regulation or accounting standards.

The ratio at which FUELS will convert to ordinary shares is calculated by reference to the market price of the ordinary shares during the 20 business days immediately preceding, but not including, the conversion date, less a conversion discount of 2.5 per cent. Notwithstanding, the conversion ratio will not be greater than 400 ordinary shares for each FUELS security. Again, having regard to the inherent characteristics of the FUELS securities, particularly the contractual nature of the cash flows associated with the instruments and the level of priority afforded to the holders of the securities, we take the view that despite Santos' classification of the instruments as equity, they would be more appropriately treated as debt. We summarise our findings in Table 5, below.

**Table 5: Characteristics of Sample of Hybrid Securities Issued in Australia**

Security	Cash flow	Claims	Maturity	Our vs Issuer Classification
STOPB	Contractual	Priority	Indefinite	Debt/Equity
DJSPA	Contractual	Priority	Definite	Debt/Equity
WOWHA	Contractual	Priority	Indefinite	Debt/Equity

The above analysis demonstrates the empirical reality of the phenomenon about which we conjectured in our introductory remarks – namely that the design of hybrid securities is configured to allow issuers of such securities to adopt equity like accounting treatment even though the economic substance of the instruments tends more closely towards the characteristics of debt. This gives rise to questions as to the potential impact on key measures of financial performance and position caused by the misclassification problem we identify and discuss above.

Our methodology for undertaking this investigation is discussed in section 3, above. We first tested for impact on key balance sheet based measures of financial position, particularly leverage. Our results are presented in Table 6, below.

The data demonstrates that the reclassification of hybrid instruments from that adopted by their issuers (equity) to our suggested

treatment, as debt would have materially impacted both the debt to equity and leverage ratio of each of the organisations we studied.

Were a reclassification to occur, this could have potentially significant impacts on both investor perceptions of the degree of risk associated with providing debt or equity capital to the organisations in question, and could also place the organisations studied at greater risk of breaching predefined debt covenants and other similar contractual obligations.

This may explain the increase in buyback and instrument redesign behaviour we noted previously, in the wake of the Australian Accounting Standards Board's release of draft Australian Accounting Standard 132<sup>32</sup>.

**Table 6: Hybrid Issuers Balance Sheet Analysis**

BALANCE SHEET	STO	DJS	WOW
Reported debt/equity ratio	0.70	0.72	1.99
Adjusted debt/equity ratio	1.04	0.99	3.18
<b>Difference</b>	<b>48%</b>	<b>37%</b>	<b>60%</b>
Reported gearing	1.70	1.72	2.99
Adjusted gearing	2.04	1.99	4.18
<b>Difference</b>	<b>20%</b>	<b>16%</b>	<b>40%</b>

For reasons we set out in the discussion of our methodology, the misclassification of hybrid instruments as equity also has implications for key corporate performance measures, by reason of the treatment of cash flows to security holders as distributions of retained equity rather than as interest expense. We therefore measured

reported earnings per share, return on assets and return on equity for our sample and subsequently adjusted these measures to our estimate of the values they would have taken on had the cash flows been treated as interest costs (consistent with balance sheet classification of debt). We present our results in Table 7, below.

**Table 7: Hybrid Issuers Profit and Loss Analysis**

PROFIT AND LOSS	STO	DJS	WOW
Reported EPS (\$)	0.65	0.16	0.71
Adjusted EPS (\$)	0.60	0.15	0.68
<b>Difference</b>	<b>-7%</b>	<b>-6%</b>	<b>-4%</b>
Reported ROA (%)	0.063	0.082	0.12
Adjusted ROA (%)	0.06	0.08	0.11
<b>Difference</b>	<b>-7%</b>	<b>-6%</b>	<b>-4%</b>
Reported ROE (%)	0.11	0.15	0.36
Adjusted ROE (%)	0.12	0.16	0.48
<b>Difference</b>	<b>10%</b>	<b>8%</b>	<b>25%</b>

Across our sample, both earnings per share and return on assets fall when adjusted for hybrid misclassification, the magnitude of the change being in the order of five per cent. Conversely, adjusted return on equity (ROE) increases for each of the organisations we study, a result driven primarily by the significant increases in adjusted leverage we set out in Table 6, above.

We also tested the cash flow data disclosed by our sample of organisations to determine the extent to which the misclassification of hybrids as equity impacted on the presentation of organisational cash flow data. The impetus for this investigation is the realisation

that while cash distributions to equity holders are typically classified as cash outflows arising from financing activities, interest payments to debt holders are by convention classified as cash outflows arising from operating activities.

Since cash flow from operating activities is generally accepted to be a vital metric pertaining to organisational financial health and value generation intensity (e.g., see; Naser, 1993; Mulford & Comiskey, 2002), we test for the degree of impact on cash flow presentation brought about by hybrid misclassification. We set out our results in Table 8, below.

**Table 8: Hybrid Issuers Cash Flow Analysis**

CASH FLOW	STO	DJS	WOW
Reported operating cash flow (\$m)	565.3	167.0	1,262.3
Hybrid distribution paid (\$m)	14.7	5.3	42.9
Adjusted operating cash flow (\$m)	550.6	161.7	1,219.4
<b>Difference in operating cash flow (%)</b>	<b>-2.60%</b>	<b>-3.15%</b>	<b>-3.40%</b>

Though not highly material as a proportion of total reported operating cash flows in our sample, each organisation we studied did nonetheless adopt the convention of treating their cash distributions to hybrid security holders as cash flows from financing activities, even in cases where the documentation describing the structure of their hybrid securities clearly labels such distributions as "interest."

Finally, having regard to our revised estimates of earnings per share (as set out in Table 7, above), we estimated the potential impact on market capitalisation of the sample of organisations we reviewed in the event that they reclassified their hybrid instruments as debt and

altered all profit and loss reporting commensurately with that transformation. As discussed in the description of our methodology, for the sake of conservatism and consistency, we elected not to alter the observed price earnings ratios exhibited by our sample organisations in the conduct of this exercise.

As the data in Table 9 below indicates, the estimated impact on market capitalisation for each organisation appears material, a matter of concern for ordinary equity holders as well as those with considerable wealth contingently tied to the value of the firm's ordinary equity, for example option holders.

**Table 9: Hybrid Issuers Market Analysis**

PROFIT AND LOSS	STO	DJS	WOW
Reported EPS (\$)	0.65	0.16	0.71
Reported EPS (\$)	0.65	0.16	0.71
Share Price (\$)	8.48	1.89	11.40
Price Earnings Ratio (times)	13.1	11.9	16.1
Market capitalisation (\$m)	4,960.2	778.1	11,768.2
Adjusted EPS	0.60	0.15	0.68
Adjusted Share Price (\$)	7.90	1.78	10.92
Adjusted Market cap (\$m)	4,618.0	734.7	11,272.2
<b>Difference in market cap (\$m)</b>	<b>-342.1</b>	<b>-43.4</b>	<b>-496.0</b>
<b>Difference in market cap (%)</b>	<b>-7%</b>	<b>-6%</b>	<b>-4%</b>

## Conclusion

The essential premise which motivated this paper was that despite a growing focus on improved transparency, accuracy and consistency in financial reporting evident in the wake of a raft of high profile corporate scandals which broke in the beginning years of the new millennium, significant threats to such ideas still remained unchecked. We examined hybrid securities as an example of a construct, which as the evidence we have discussed above clearly suggests, demonstrates that this threat is not merely conjectural, despite high profile "reform" to financial reporting rules in Australia in the form of the adoption of international financial reporting standards.

In our view, this only adds weight to the calls made by other scholars (e.g., Anthony, 2004; Brilof, 2004; McBarnet & Whelan, 1999) for

continued revisions to me made to financial reporting frameworks with a view to further engendering a reporting philosophy and culture founded on the principal that financial statements should reflect economic substance rather than being trapped as the slaves of form.

Our study provides evidence that much territory remains to be covered before such a state of affairs is likely to be reached. In particular, our study reinforces the dynamic nature of regulatory arbitrage, as evidenced by the redesign of hybrid financial instruments to a form amenable to survival under forthcoming financial reporting regulatory regimes before the commencement date of those regimes. In effect, by designing financial reporting standards with a highly technical and detail based bent, regulators appear to have stoked the fires of instrument design creativity and

ensured the continued viability of financial reporting practices which, even at best, must be viewed as questionable.

While the case of hybrid financial instruments is of interest treated alone, as we have done here, the better view is that hybrid instruments represent only one of a matrix of phenomena which continue to derogate from the quality of external financial reporting, including, in particular, off balance sheet financing vehicles, certain forms of lease financing structures and equity linked compensation instruments, including options.

While this may seem an eclectic list, the difficulty inherent in each of its constituent elements is the failure of current financial reporting practices to adhere to a substance-based approach. The data we present and discuss in relation to hybrids adds to understanding of the magnitude of the danger inherent with continued adherence to financial reporting rules not firmly embedded on the philosophy of giving precedence to highlighting the underlying economic substance of transactions or positions, above all other objectives. Much room remains for further empirical and theoretical work aimed at providing further illumination in relation to this critical point.

**Keywords: Hybrid Securities, Financial Reporting, Creative Accounting**

#### Note

- 1 These three being in the U.S.A.
- 2 An Australian example.
- 3 An Italian example.
- 4 For the purposes of compiling its statistics, the Reserve Bank of Australia categorises hybrid instruments as debt, irrespective of the accounting or taxation treatment accorded to them.
- 5 This has led one influential Australian commentator, Tom Ravlic the policy advisor to the Australian National Institute of Accountants to dub hybrids “the transvestites of the accounting world.” In Ravlic’s view, hybrids are made up to look like equity “but once you strip away the lipstick and mini-skirt, you end up with debt.” (Quote drawn from Williams, 2005, p.71).
- 6 And thus its Australian corollary – AASB 132 *Financial Instruments: - Disclosure and Presentation*.
- 7 For example the ReCAPS hybrids issued by large Australian retailer Coles Myer. These instruments, through which Coles Myer raised approximately AUD \$700 million were originally issued in December 2000. All were bought back by the company in July 2005. The company explained that its motivation in engaging in the buyback was to “provide a simpler, more efficient capital structure that will benefit the company and shareholders over time.” Given that these were perpetual instruments of no fixed maturity, their survival for so limited a period speaks volumes as to the fragility of the desirability and usefulness of hybrid instruments in the face of regulatory change.
- 8 For example the “WINS” hybrids issued by Woolworths Limited, another large Australian retailer. Note 24 to the company’s 2004 annual report notes that the trust deed governing these instruments was altered post balance date, in preparation for the changed reporting environment ushered in by the adoption of international financial reporting standards.
- 9 An important example of this is the arrival of so called “step up” securities into the Australian hybrids market. These are of recent invention and should continue to allow classification as equity for financial reporting purposes. These are discussed in greater detail later in the paper.
- 10 For the purposes of compiling its statistics, the Reserve Bank of Australia’s standard protocol is to classify hybrids as debt irrespective of accounting or taxation treatment.
- 11 One indication of this is evident in the Reserve Bank of Australia’s recent estimate that hybrid securities typically cost their issuers between 70 – 100 basis points more than equivalently rated traditional debt instruments (RBA, 2005a, p. 58).
- 12 Though they managed to be classified as equity due to their perpetual maturity and the existence of some degree of conditionality in relation to the right on the part of investors to receive promised cashflow streams.
- 13 As noted in the introduction to this paper, many organisations have responded to this likely change in classification by engaging in pre-emptive buy-backs of these instruments. As a further example, in August 2004, Computershare Limited notified holders of its reset preference shares that it had opted to invoke an early conversion of the instruments to ordinary equity, in accordance with the terms of issue of the reset preference shares. Its explanation for its decision to do this was that: “The board has made this decision following the release in December 2003 by the Australian Accounting Standards Board with effect from 1 January 2005 of pending Australian Accounting Standard 132: Financial Instruments Disclosure and Presentation (AASB 132). AASB 132 will have the effect of requiring the RPS (currently treated as equity) to be treated as debt for accounting purposes.”

- 14 In December 2003.
- 15 AASB 132: Financial Instruments Disclosure and Presentation.
- 16 Together with changes in prudential regulatory rules relating to the classification of securities as tier 1 capital of financial institutions announced by APRA in April 2004.
- 17 This applies not only to the actual design features of the instruments, but to the nomenclature of the instruments. A sample of the acronyms used to describe hybrid securities currently outstanding in Australian capital markets includes; CARES, CARS, FIRTS, FUELS, PARS, PAVERS, PERLS, PINES, POWERS, PRESSES, RENTS, RePS, SAINTS, SHEDS, SITES, TELYS, TICKETS, WINES and WINs. In many cases, the acronyms are designed to in some way reflect the nature of the underlying business of the issuing entity. Thus FUELS (Franked Unsecured Equity Linked Securities) were issued by energy company Santos, PRESSES (Preferred Reset Securities Exchangeable for Shares) were issued by newspaper and media company Fairfax Limited – and so on.
- 18 An obvious example being other jurisdictions, which have adopted or which are moving towards the adoption of IFRS.
- 19 We use the WINs securities issued by large listed retailer Woolworths Limited as our example of this class of security.
- 20 We use the reset convertible preference shares (RePS) issued by listed specialty retailer David Jones Limited as our example of this class of security.
- 21 We use the FUELS securities issued by listed oil and gas producer Santos Limited as our example of this class of security.
- 22 Albeit with slight modifications to terminology each of Moody's, Standard & Poor's and Fitch Ratings use essentially the same approach that we describe above to differentiate between debt and equity securities for the purposes of undertaking credit analysis.
- 23 That is, interest expense.
- 24 We assume in doing so that capital markets have priced the ordinary equity securities issued by the firm without impounding the potentially dilutive impact on EPS of a reclassification of that firm's hybrid securities to debt, from equity. Further, for the sake of conservatism, we hold the p/e multiple applied to EPS constant for the purposes of deriving an estimate of the impact on market capitalisation.
- 25 ASX Stock ticker code WOW.
- 26 They carry the ASX ticker code WOWHA.
- 27 A process, which will continue throughout the life of the instruments.
- 28 ASX Stock Ticker Code DJS.
- 29 Franked Unsecured Equity Linked Securities.
- 30 ASX Stock Ticker Code STO.
- 31 Under the ticker code STOPB.
- 32 Refer to sections 1 and 2 of this paper for a review of this discussion. In this vein, it is particularly interesting to note the circumstances under which the perpetual step up security we examined for the purposes of this paper – the Santos Limited 'FUELS', came into existence. Santos issued the FUELS securities in 2004 in part to fund the buy back of AUD \$350 million worth of previously issued reset convertible preference shares (RCPS). These securities were vulnerable to reclassification from equity to debt as a result of the changed accounting rules embodied in AASB132. The new rules took effect for all accounting periods commencing on or after 1 January 2005, so from this point of view, the buyback of the pre-existing RCPS securities prior to the conclusion of 2004 was distinctly advantageous.

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# Behavioural Finance: A Review

Valeed Ahmad Ansari



Behavioural Finance (BF) relaxes the strict rationality assumption of traditional economic models and studies the effect of human fallibilities and irrationalities in financial markets. BF conceptualizes that people are limited in their self-interest, calculating ability and willpower and therefore, prone to errors in judgment and preference. It assumes that people are normal not rational in behaviour. BF emerged in response to difficulties faced by rational framework to account for anomalies and puzzles that surfaced in 1980s and 90s. The present paper aims to provide a review of the main underlying concepts of this new perspective on finance and discusses its applications. As a prelude to discussion on BF, it also presents a summary of the main building blocks of traditional finance and highlights the prominent anomalies and puzzles that are hard to reconcile with the rational models. It concludes with the note that BF is on the verge of "going mainstream."

The field of economics is the study of behaviour of economic agents such as consumers, investors, and producers. These agents are assumed to behave with extreme rationality and consider all available information in the decision making process. However, researchers have reported large amount of evidences that show disturbing deviations from this assumptions. The studies "reveal repeated pattern of irrationality, inconsistency and incompetence in the ways human beings arrive at decision and choices when faced with uncertainty" (Bernstein (1998).

There has been concerted attempt in the last two decades to relax

these implausible assumptions and conceptualize that people are limited in their self-interest, will power and calculating ability.



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This move towards incorporating psychological realism into study of human behaviour is commonly bracketed under the rubric of Behavioural Economics.<sup>1</sup> Behavioural finance (BF) is a sub discipline of Behavioural Economics, which has made the maximum headway in this sphere.

The fabric of traditional finance is woven around three main concepts: rationality, market efficiency and Capital Asset Pricing model. In recent times, a large body of evidence (labeled as anomalies) has accumulated contrary to the predictions of these concepts. The

failure of rational paradigm of finance to account for these departures has led economists to search for behavioural explanations. The proponents of behavioural finance have responded by arguing that the psychology of decision-making under uncertainty may lead to market inefficiency and market anomalies. Behavioural finance relaxes the traditional assumptions of rationality by allowing for observable, systematic, and very human departures from rationality into standard models of financial markets (Barber and Odean, 1999). Succinctly put, it replaces the 'mechanical' element in behaviour with 'human.' In behavioural Finance, people are assumed to be 'normal' in behaviour unlike traditional finance, which assumes 'rational.' This incorporation of human fallibilities and irrationalities in economic behaviour can explain many unresolved puzzles in finance.

This paper aims to provide a review of this new perspective on finance. It examines how it contrasts with traditional finance, and what are its applications and implications.

The remainder of the paper is organized as follows. Section 1 sets the context for discussion on BF, and briefly deliberates on the salient concepts of traditional paradigm of finance and highlights the evidences that are puzzling and inconsistent with this paradigm. Section II provides an introduction to behavioural finance and discusses its main ingredients and arguments. Section III describes some of the applications of Behavioral Finance. The last section concludes.

## Section I

The traditional paradigm of finance rests on three concepts: (1) Rational behaviour (2) The Capital Asset Pricing model and (3) Market Efficiency. The *rationality* implies that: (a) investors act in unbiased fashion in order to maximize the value of their portfolio and (b) investors always act in their own self-interest. It is also assumed that investors use the expected utility theory which predicts that investors will choose the alternative that provides highest expected utility (given the expectation derived from the available information). In other words, investors are 'rational (non-emotional) wealth maximizers.'

Efficient market theory is the cornerstone of modern finance (Fama, 1970, 1991). The efficient market hypotheses make two types of predictions about stock price behaviour. The first is that stock prices are "correct" in the sense that asset prices reflect the fundamental

(intrinsic) value of security. Any mis-pricing from fundamental value will be exploited and corrected by arbitrageurs. The second principle of efficient market hypothesis is "unpredictability." In an efficient market, it is not possible to predict future stock price movement based on publicly available information. In other words stocks follow "random walk."

The efficient market theory reached its pinnacle of academic dominance around 1970s (Shiller 2003). Sharpe (1964), Lintner (1965) and Black (1972) developed statistically testable capital asset pricing model (CAPM). CAPM describes that with competitive market, symmetric information and no frictions, the only variation in return across assets are due to differences in risk. In the world of CAPM, Beta captures this risk. Beta measures the extent to which return of an asset and market moves together. It is only difference in  $\beta$ s that cause difference in return. The efficient market theory and CAPM are internally consistent and connected in the sense that latter provides a means for testing the former.

This synthesis opened a door for validation of both the hypothesis and through this door (read floodgates), hundreds of research papers streamed to address the validity of both and a large number of empirical tests found that these theories can not be rejected. However, after a while, during 1980s and 1990s, many studies reported the existence of anomalies (stylized facts) that caused disquiet. The anomalies are events that are not in conformity of with the predictions of efficient market hypothesis or CAPM (See Schwert (2003) and Ansari (2000)). These contradictions of efficient market and CAPM were hard to interpret using rational framework of traditional finance and brought to the fore its inadequacies. Below, we summarize some of the representative anomalies that are disturbing for the proponents of traditional paradigm:

### Volatility

It has been reported that asset prices vary far too much relative to fundamentals (Shiller 1981). In a rational world stock price responds only to news. The aggregate stock price appears to move more than can be justified by, say the present value of future dividend (which represents fundamentals). The excess volatility remains unexplained.

### Volume

The volume of trading observed in equity market seems to be excessive as hundreds of million shares are traded everyday.

Although, there is absence of any benchmark for rational volume of trading, the volume of trading is difficult to reconcile with trading needs of investors. Standard models of finance predict very little trade. In extreme case when rationality is common knowledge, there is virtually no trading. Traditional rationality models of finance offer no insight why people trade as much as they do (Barber and Odean 1999).

### Closed-End Funds

Closed-end-mutual funds often sell at significant discount to net asset value (NAV) (Dimson and Marsh (1999)). The fully rational explanations fail to explain the evidence.

### The Equity Premium Puzzle

Mehra and Prescott (1985) coined the term equity premium puzzle. It is used to refer puzzlingly higher historical average returns of stocks relative to Treasury bill (risk-free return). The magnitude of difference can not be rationalized using standard paradigm of financial economics (Mehra 2003).

### Predictability

One of the assumptions of efficient market is unpredictability that is future returns from one period to the next should be statistically independent. This implies that stock returns are not predictable on the basis of publicly available information. Now there seems a consensus that stock prices are at least partly predictable on the basis of past returns. Many violations of unpredictability have been reported as measure of price to earning or price to book ratios, company announcement of earning or dividend changes serve good predictor of future returns (Fama 1991). This evidence appears damaging to the notion of market efficiency.

### Dividends

Modigliani and Miller (1958) and Miller (1986) demonstrated that in an efficient market with no taxes, no frictions, and symmetric information, dividend policy is irrelevant. Incorporating the fact that dividend are taxed higher than capital gain, why do most firms pay cash dividend when they can make their shareholders better off by repurchasing shares? This puzzles remains unresolved. Black (1976) called dividend puzzle as the thorniest issue in finance.

### Book to Market Ratio, Value versus Growth and Size

The CAPM postulates that only the return on the market portfolio should be priced but empirical evidences suggest that book to market ratio and size are priced in U.S. and international markets (Fama and French, 1993, 1996). Connected to this controversy is the tendency over long period of time for value-based stocks to earn higher returns than growth-based stocks. So far no convincing rationality based explanation has been offered why book to market and size should have anything to do with expected returns (Campbell (2000)).

### Momentum and Reversal

DeBontdt and Thaler (1985) and Chopra, Lakonishok and Ritter (1992) reported that over long-horizon (i.e., returns over multi-year period (three to five years) past loser (stocks with low returns) have higher returns than past winners (stocks with higher returns). This is a kind of reversal or contrarian effect. On the other hand, Jegadeesh and Titman (1993) found that over intermediate horizon (3 to 12 month holding periods) recent good or bad performance of particular stock continues or there is momentum. Thus stock prices experience momentum in the short run and reversal in the long run. The rational frameworks fail to provide a convincing explanation for this evidence.

### Section II

People are not computers- they do not undertake endless calculations rather they behave like human being. They are prone to error, irrationality and emotion. In light of these realizations of human frailties, the theory of finance underwent fundamental transformation in 1990 with the development of Behavioural finance (Shiller, 2003). Behavioural Finance amends a major error in most rational models that is neglect of human element.

### What is Behavioural Finance?

"Behavioural Finance- that is finance from a broader social science perspective including psychology and sociology" Shiller, 2003.

"Behavioural finance is simply a moderate, agnostic approach to studying financial markets" Thaler, 1999.

"I think of behavioral finance as open- minded finance" Thaler, 1992.

"Behavioural economics (Finance) is the combination of psychology and economics that investigates what happens in markets in which

some of the agents display human limitations and complication” Mullainathan and Thaler 2000.

“Behavioural Finance is application of psychology to financial behaviour- the behavior of practioner,”Hersh Shefrin 1999.

“Behavioural finance is the integration of classical economics and finance with psychology and decision making sciences,”Fuller 1998.

The common strand in all these definition is that it is the application of psychology to understand human behaviour. It explains why and how people make seemingly irrational and illogical decisions when they spend, invest, and borrow money.

Richard Thaler who spearheaded the behavioural finance movement also labeled it as “open minded” and “agnostic” approach to study financial market behaviour. The reason is that for most economists, *it was* and *it is* an article of faith (read religion) that financial market; reach rational aggregate outcomes, despite the reports of irrational behaviour exhibited by some participants. Any challenge to this notion is regarded an act of apostasy by zealots of rationality.<sup>2</sup> Thaler (1999) states “Behavioural finance will be dominated by young scholars who are not burdened with large investment in the old paradigm even economists have trouble ignoring sunk cost.”

In the traditional paradigm where agents are rational, security prices equal fundamental value, no investment strategy can earn excess risk adjusted returns or average returns greater than warranted for its risk. Put simply, prices are “right” and there is “no free lunch.” Proponents of behavioural finance argue that psychological phenomena prevent agents from acting in a rational manner, security risk premium are not fully captured by security betas, market price regularly contradicts with fundamental values and the arbitrage is limited in financial markets.

The behavioural finance increases the explanatory power of economic theory by providing it with more realistic psychological foundation. It employs the methods that originate in psychology, along with traditional finance research methods to understand financial phenomena. BF acknowledges that human cognitive resources such as time, memory and attention are limited (Simon (1955), Kahneman and Tversky (1974). As the human information processing capacity is limited, there is need to simplify the decision making process and develop rule of thumbs. Heuristics refers to “rule of thumbs” or mental short cuts which human mind use to make decisions in a competitive and uncertain environment. This simplification helps brain to solve the complex problems quickly

and economize on cognitive faculties. Such heuristics are effective when applied to appropriate problems. However, when heuristics are used in wrong situations (when wrong rule of thumb is used to solve a problem), a heuristics bias can cause the persons to make mental mistakes and error. Cognitive psychology suggests that human decision processes are subject to several heuristics biases. Optical illusions<sup>3</sup> are simple way of understanding heuristics biases.

BF is a new field and currently there is no unified theory. However, a common theme is that decision makers suffer from ‘errors of judgment’ and errors of preferences.

Judgment is concerned with the process people employ to estimate probabilities. Preference explores the process people use to select among actions, taking into reckoning any relevant judgment they may have made about. The violation of rationality principle results from both in judgment (beliefs) and choice (preferences). Some illustrative example of departure in judgment includes overconfidence, optimism, anchoring, extrapolation, or likelihood based on salience (the availability heuristic) or similarity (representative heuristic). Much of the contradictions from rational choice are explained by prospect theory (Mullainathan and Thaler (2000). Below we describe some of these heuristics biases and theories that help us understand human behaviour better.

### Overconfidence

Extensive evidence reveals that people tend to be overconfident in their judgment and abilities such as their driving abilities, own skills, sense of humor or even talents as an investor trying to beat the market (Odean 1998, 1999). Such undue optimism on part of investors to overestimate their predictive abilities has side effects and can lead to excessive trading.

### Anchoring

It has been observed that in arriving at quantitative estimates, people may be influenced by previous value of the item. In other words, people “anchor” too much on the initial value (Barberis and Thaler 2003). This can lead an investor to expect a share to trade in a defined range or to expect a company’s earning to be in line with historical trends, causing possible under reaction to new information.

### Representativeness (Similarity Heuristics)

It is the tendency of the people to try to predict or assess the probability of a state of world or future events by seeking the

closest match to past pattern or the degree to which evidence is similar to or typical of recently observed events. In other words people. "If it looks like a duck and quacks like a duck, it probably is a duck." Representativeness can also arise in the guise of the 'law of small numbers' whereby investors tend to assume small sample represents the properties of population. This error can lead investors to buy hot stocks and to avoid stocks, which have performed poorly in the recent past. This phenomenon could provide explanation for investor overreaction (De Bondt and Thaler, 1985).

**Salience and Availability Effect** A tendency to be influenced by salient and attention grabbing information signals or creating association that facilitates recall (Kahneman and Tversky (1973). This leads to overweighting of the evidence that comes easily to mind or retrievable. The bias creep as there is undue focus on information that stands out or is often mentioned, ignoring the information that blends in with the background. More recent events and more salient (distinctive, prominent, obvious) events will weigh heavily and distort the estimate. In other words, people underweight the probabilities of contingencies that are not available for consideration.

**Conservatism:** The phenomena that under appropriate circumstances individuals do not alter their beliefs, as would a rational individual would in the face of new evidence. This leads to shortfall in updating prior beliefs. It implies under weighting of new evidence. People react too little to new data and draw upon too much on their priors.

**Confirmation Bias:** The tendency to interpret evidence in a fashion that is in consonance with their own prior beliefs and ascribe too little weight to evidence that is inconsistent with their views. Once people have formed a hypothesis, they persist in their belief even new data invalidates the hypothesis. It is related to conservatism as in both cases, new data is neglected. For instance, if people develop a faith in rationality of behaviour they may continue to believe in it even in the face of contradictory evidences.

### Self-Attribution Bias occurs

When people attribute successful outcome to their own skill, sound judgment or hard work but blame unsuccessful outcomes to external causes; bad luck. Succumbing to this bias can lead individual overweight information that confirms their original view and underweight information that is inconsistent with their original view.

### Prospect Theory

It describes how people make choice under uncertainty. It was offered as an alternative to the expected utility paradigm (Kahneman and Tversky 1979). The important features of Prospect theory<sup>4</sup> are:

- § People are more concerned with changes in wealth rather than absolute wealth. Investors obtain utility from gain and losses rather than from total wealth. It is in tune with the way people perceive attributes such as brightness, loudness or temperature relative to earlier level rather than absolute level.
- § Loss aversion corresponds to greater sensitivity to losses than to gains. It suggests that individuals are far more upset by losses that they are pleased by equivalent gains. They experience more pain from losses than pleasure from gains. This may explain why investors hate to sell loses.
- § It shows that when making economic decision people are easily influenced by 'framing' that is by the context and ambience that accompany decision problem. In other words, the description of a situation determines the judgment and choice.

Thaler (1999) broadened the framing concept of Kahneman and Tversky (1979) and coined the concept of *mental accounting*. According to Thaler "Mental accounting is a set of cognitive operations used by individuals to organize, evaluate and keep track of financial activities." People use mental accounting to keep track of where their money is going, and have check on expenditure. This tendency places particular events into mental compartments such as tracking of gain and losses and evaluate outcomes on asset-by-asset basis. It contends that most people sort the portfolio money into accounts or pockets. Some money is for retirement, children's education, vacation etc. Individuals attach different levels of utilities to each portion. The concepts of mental accounting stands in contrast with the standard view in economics that money is fungible (i.e substitutable) It predicts that money in one mental account is separate and non-transferable in other account and people spend money coming from different sources in different ways. Mental accounting prevents investors from seeing the big picture. In the colourful language of Bernstein (1998) "Mental accounting is like focusing on the hole instead of doughnut."

### Limits to Arbitrage:

Economists argue these behavioural biases and deviations from rationality are not material as the people who repeatedly make mistakes will learn out of their mistakes and the biases will disappear. Although learning can mitigate the mistakes but it cannot eliminate it altogether. (Barberis and Thaler (2003). Further, the proponents of traditional finance point out that these behavioural biases would not matter as any mis-pricing would be corrected by arbitrage.

The proponents of behavioural finance believe that stock prices can diverge from their intrinsic value because of limits of arbitrage. The arbitrage depends on the law of one price, which states that identical securities should sell at identical price. The most cited example of this violation is Royal Dutch and Shell case<sup>5</sup>. The twin securities show enormous divergence from the expected one (Froot and Dabora 1999). This evidence is a deep challenge to efficient market theory. The explanations such as risk and trading cost cannot account for such large deviations.

The behavioural economists assert that arbitrage can be limited due to fundamental risk, implementation costs and model risk (Shelifer and Vishny 1997). They argue that arbitrageurs may be exposed to fundamental risk. The concept of arbitrage relies on the notion of price convergence: that price of the security will eventually converge to fundamental value. Suppose one buys an under priced security in the hope of earning profit. But it may happen that price may not converge, or might diverge much before it converges, and the investors may end up losing money. The irrational traders can infect prices with their irrational beliefs and push it in wrong direction. Secondly, exploitation of arbitrage opportunity might be difficult because of the costs involved such as margin requirements or restriction placed on short selling may hamper it. Lastly, the model used to value security might be faulty. For instance, Capital Asset pricing model is widely used model of asset pricing but it may be the case that CAPM does not hold.

### Section III

BF has offered some creative and compelling explanations to anomalies and puzzles that have defied rational explanation. In this section, a sample of these interesting applications of BF in the realm of investor behaviour, asset pricing and corporate finance is provided.

Benartzi and Thaler (1995) argue that the historically high equity premium (the average return on stocks in excess of the riskless rate) can be explained by myopic loss aversion i.e. the fact that investors have a relatively short horizon (for example one year) and are loss averse. The equity premium serves as a compensation for the high down side risk at short evaluation period.

The close-ended fund puzzle is explained by Lee, Sheliefer and Thaler (1991). They argue that some of the investors who are the primary owners are noise (irrational) traders, exhibiting irrational swings in their expectations about future fund returns. Sometimes, they are too optimistic while at other times they are too pessimistic. Change in their sentiments affects share prices and also the difference between prices and net asset value.

The behavioural explanation for excessive trading in stock market is overconfidence. People believe they have information to justify a trade while in fact the information is too weak to warrant any action (Odean 1999).

The winner and loser effect (DeBondt and Thaler 1985) can be explained by representative heuristic because investors could become overly optimistic about past winners and overly pessimistic about past losers and this bias could cause prices to deviate from their fundamental value. Individual overreacting to the good news will drive the prices of these stocks too high and poor performers will eventually have prices that are too low.

The behavioural theorists have developed models of securities markets based on irrationality or heterogeneous investors groups. Some of the models marry the two effects short run momentum and long run reversals in a common framework. The notable models are Barberis, Shelifer and Vishny 1998, Daniel and Hirshleifer and Subrahmanyam (1998) and Hong and Stein (1999).

Daniel, Hirshleifer and Subrahmanyam's model is based on two psychological biases: Overconfidence and self-attribution. The authors define "overconfidence" to mean that investors place too great a weight on their private information, which leads to systematic over reaction to private information and too little on public information which trigger under reaction. "Biased self attribution," means that investors attach too much significance to their prior belief and too little significance to information signals that contradict it. This assumption imply that the confidence of the investors grows when public information is in agreement with his information, but it does not fall commensurately when public information is

inconsistent. In this setting, DHS model produces both short run momentum and long run reversal.

Barberis, Shleifer and Vishny (1998) build a model based on the concept of representativeness and conservatism. As described in section III 'representativeness' means that investors ignore the laws of probability and act as if the events they have already observed are typical of the return generating process. Conservatism means that investors are slow to update their prior belief in response to new information. These two tendencies combine to produce in some circumstances under reaction and in other overreaction. If investors have some prior view about the company when they receive earning news about the company, they do not revalue the company due to conservatism. This behaviour gives rise to under reaction of prices to earning information. On the other hand, when the investors come across repeatedly with earning surprises, they exhibit representativeness and overreact to the news.

Hong and Stein (1999) model the phenomenon of under reaction and overreaction by assuming that market is composed of heterogeneous investors. They assume two types of investor "newswatcher" who trade on private information and do not learn from market prices and "momentum traders" who have no private information and trade on simple forecast by extrapolating past price changes. The model predicts that stock prices will under react to information in short to medium run, but will overreact in the long run.

BF has tremendous applications in corporate finance also. The issue why investors exhibit preference for dividend is unresolved issue in finance. Shefrin and Statman (1984) offer explanations for dividend puzzle based on self-control, regret and mental accounting.

Self control means controlling emotions. People succumb to temptations. One way to overcome loss of self-control is to put rules into place to guard against temptation. For example to control overspending people may follow the rule "consume from dividend but do not dip into capital." Dividends are labeled as income not capital. Investors feel comfortable-choosing stocks that offer high dividend and spending from dividend.

The second explanation for dividend is based on mental accounting. The firms by paying dividend help investors to segregate gains from losses and hence increase their utility. When stock prices soar, dividend can be savoured separately from capital gain. When stock prices decline, dividends serve as a cushion to a capital loss.

Another rationale for dividend is regret avoidance. Regret is the emotion experienced for not having made the right decision. Consider the case of two investors one sells stocks to pay for purchase of computer and another uses dividend for it. If stock price soars later, the one who sold stock to finance expenditure would feel more pain than the one who used dividend. Therefore, dividend may be preferred to minimize regret.

The majority of research in corporate finance assumes rationality on the part of two agents: investors and managers. BF replaces the traditional rationality assumption considers the effect of less than fully rational behaviour on the part of investors and managers on financing and investment patterns. There are mainly two approaches to study the influence of psychological underpinnings on corporate finance (Baker, Rubak and Wurgler (2004)). The first approach assumes that managers are irrational and prone to psychological biases (some of these are discussed in section III) and investors are rational (irrational managers, rational investors). In this approach, irrational managers operate in an efficient market. The current literature on (irrational manager/ rational manager) approach mostly focuses on the effect of the biases of optimism and overconfidence. The other is to model managers as rational, and they use their rationality to perceive mis-pricing in the markets and exploit it (rational managers, irrational investors). Here rational managers operate in an inefficient market. In this approach, issues pertaining to merger activity, the cluttering and timing of corporate security offering, capital structure, dividend policy etc are analyzed. Both channel of irrationality (Irrational managers and irrational investors) may operate at the same time but the existing literature has generally concentrated on first two approaches. (See for extensive surveys on Behavioral Finance (Hirshleifer 2001), Barberis and Thaler (2003, Daniel et al. (2002) and Baker et al. (2004)).

## Conclusion

Although behavioural finance is a young field, the rapid strides it has made is remarkable. The discipline has reached to a point where textbook treatment is possible. It has the promise of capturing the reality of human behaviour and potential to enhance the explanatory and predictive power of finance. Financial economists have grown more receptive to entertaining psychological explanations. It is worth noting that when De Bondt and Thaler's (1985) paper was published many scholars attributed the findings to programming error.

There was a time when efficient market theory was thought to be the most established fact in finance (Jensen 1978). BF has altered



this view both on theoretical as well as empirical grounds. Recent empirical works suggest that markets may be inefficient and the driving force behind the efficiency, arbitrage has limits. Further, a lot of success has been attained in modeling financial markets with less than fully rational. Thanks to BF, we now understand a lot about investor behaviour how they make portfolio choice and have shifted away from normative paradigm, which erroneously contends that asset pricing can be modeled in the absence of any knowledge about the agents in the economy. Taken together, these are substantial accomplishments.

However, it does not mean intellectual blank check for behavioural finance. Critics have pointed out that behavioural finance is not unified theory but instead a collection of tools, ideas and interesting stories. Rubinstein (2001) calls it "litany of explanation drawn from burgeoning, clearly undisciplined and unparsimonious behavioral finance literature." The proponents of BF counter this by pointing out that as behavioural finance is in its infancy, absence of standard taxonomy and modeling is not surprising.

Another reason cited in favour of rationality assumption is that it makes economic models based on it tractable and incorporation of behavioural realism will make the models complicated and will open up Pandora's Box. Rabin (2002) takes this issue and says that economists can't really claim to be very "Complexity- averse." He takes a dig at the rationalists and states "It is odd on the one hand to be told during such debates that economists must forego behavioural realism for the sake of keeping our models simple- When in other hand we are holding a copy of *Econometrica*." Supporting behavioural perspective on finance, Shleifer (2000) writes "the world of finance becomes much more difficult and less elegant but more accurate as well." It may be a complicated world, but also the one that we live in.

Critics also posit that behavioural finance models contradict one another. The response of behavioural economists is that this also applies to rationality-based models. Behavioural economists argue that it is not a sign of weakness but reflects robustness of the field that its proponents do not feel compelled to cling around certain precepts.

Although it is too early to pronounce final verdict on the arguments of opponents and proponents of BF (perhaps it will never be the case), yet there can be no denying that advent of BF on the map of academic finance is like a fresh wind which is refreshing and invigorating. It has delivered rich, compelling and novel insights

about many aspects and issues in finance, which cannot be ignored. This may be the reason why behavioural fever has infected financial economists and has many converts to this belief.

Thaler (1999) writes, "I predict that in too distant future, the term "behavioural finance" will be correctly viewed as redundant phrase. What kind of finance is there? In their enlightenment, economists will routinely incorporate as behaviour into their models as they observe in real world. After all, to do otherwise, would be irrational." Camerer and Lowenstein (2004) predict in similar vein that in the long run behavioral economics (finance) is not meant to be separate approach and behavioural models will gradually replace strict rationality models. In conclusion, it can be said that behavioural finance is on the verge of "going mainstream."

## Notes

1. In the 19<sup>th</sup> century there was no schism between psychology and economics. Adam Smith who is famous for his book *Wealth of nation* also wrote a lesser-known book "The theory of moral sentiments." This book is replete with penetrating insights about human psychology. Economics till first half of twentieth was much more of a social science. John Maynard Keynes stressed psychological factors to explain economic behaviour. In his famous book *The general Theory of Employment, interest, Money*, Keynes describes stock markets, "... so to speak, a game of snap, of old Maid, of Musical chairs-a pastime in which he is victor who says *Snap* neither too soon nor too late, who passes the old Maid to his neighbor before the game is over, who secures a chair for himself when the music stops."

The exclusion of academic psychology in economic analysis began with neo- classical revolution. At the turn of 20<sup>th</sup>, Economists aspired that their discipline could achieve the exactness and preciseness of natural sciences. Psychology was in nascent stage at that time, and was thought to be too raw and unscientific to serve as foundation of economics.

Therefore, in this attempt 'good psychology' was expunged from economics. It goes without saying that all economics is based on some sort implicit psychology. Although (Simon (1955) took a critical view of rationality assumption and introduced the concept of " bounded rationality" but by middle of twentieth century discussions of psychology had largely disappeared from economics (See Camerer and Lowenstein (2004).

2. Late Merton Miller was a formidable supporter of rational school and market efficiency. Thaler's dissent of traditional paradigm was so serious that he refused to talk to him. Roger Lowenstein narrates this story in an article published in New York Times magazine entitled "Exuberance is rational or at least human." This article was reproduced in Khaleej Times issue dated April 19, 2001.
3. Vision is a very complex problem for the brain to solve. The eye produces bewildering amount of information, which must be quickly analyzed and interpreted by the brain to create the image, which we "see." The brain evolves mental short cuts for interpreting vision data but sometimes if used in wrong context may cause optical illusions. Some typical examples of optical illusions are:
  - § The bending of stick in water
  - § The constant size of the moving car
  - § Two equal line paradox.
4. The name prospect theory bears no resemblance to the subject matter. Bernstein asked Kahneman where the name had come from? Kahneman's reply was "We just wanted a name that people would notice and remember" (See Bernstein 1998).
5. Royal Dutch and Shell are independently incorporated in Netherlands and England. In 1907, they signed an agreement in which two companies agreed to merge their interest on 60:40 bases. Royal Dutch trades primarily in the US and Netherlands and Shell predominantly in the U.K. The cash flows are effectively split in this proportion. According to any rational model, which assumes that market is efficient, the shares of these two companies should trade in this ratio. The value of Royal Dutch should be 1.5 times greater than the market value of Shell (currency adjusted). However, this is not the case as the actual price ratio has deviated from the expected one by more than 35 per cent (See Froot and Dabora (1999)).

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# Mergers and Acquisitions

## Human and Cultural Issues

Prakash Pinto and Balakrishna C.H.



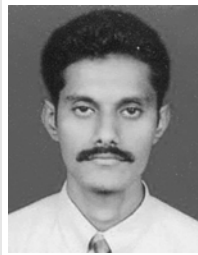
The last two decades have witnessed extensive mergers and acquisitions as a strategic means for achieving sustainable competitive advantage in the corporate world. Estimates suggest that at least half of all mergers failed to achieve the expected financial and operating synergies. As a matter of fact, mergers and acquisitions are seen through the financial sense neglecting the human and cultural aspects arising from such integration. Merger is not just putting two organizations together; it is putting people and their cultures together. Against this backdrop, the paper highlights the trends in mergers and acquisitions, the relevance of human and cultural issues in premerger planning and postmerger integration, and the strategies for successful human and cultural integration in mergers and acquisitions.

In the fast changing business world, it has become difficult for mediocre companies to operate efficiently. Companies have to strive hard to achieve quality and excellence in their fields of operation. Such companies have to be efficient, flexible, adaptable and above all growth oriented. Companies are increasingly using mergers and acquisitions in recent years in order to maintain their positions in the market and to excel.

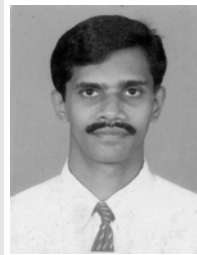
The continuing popularity of mergers and is probably a reflection of the widespread belief that acquisitions provide a quicker and seemingly easier route to achieve growth and

diversification objectives (Brahma, 2003, p.855). It is believed that

the very nature of mergers and acquisitions is to provide the enterprises with new capabilities, entry into new markets, lower costs and enhanced shareholder value. In behavioural terms M&As are associated with a range of factors which adversely affect productivity and organizational performance, for example high labour turnover and departure of key personnel, increased absenteeism, employee apathy and job dissatisfaction (Walsh, 1988; Cartwright and Cooper, 1996). As the gains to be derived from M&As have increasingly become dependent upon the successful



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integration of cultures of the combining organizations and people, the role of human factors in determining merger outcomes has assumed greater relevance.

Against this backdrop the present paper attempts to highlight the trends in mergers and acquisitions and the relevance of cultural and human issues in the various stages of mergers and acquisitions. The paper also makes an attempt to suggest certain HR solutions to make mergers and acquisitions more effective.

### Trends in mergers and acquisitions

Mergers and acquisitions are an extensive worldwide phenomenon. In 1997 there were over 6000 mergers and acquisitions in Europe alone the collective value of which exceeded 300 billion dollars. (Cartwright and Hudson, 2000, p.269). Between 1990 and 1998 the value (global) of M&As rose nearly five fold. The following table provides data regarding mergers and acquisitions in India from 2000 to 2003 (Table 1).

**Table 1: Number of Mergers and Acquisitions and Value of Acquisition from 2000—2003 in India**

Year	Number of Mergers	Number of Acquisitions	Value of Acquisitions (Rs. Crores)
2000	292	1208	38644
2001	319	1040	26742
2002	395	973	33020
2003	285	812	20095
Total	1291	4033	118501

Source: CME Database.

In addition to the above data, the overseas acquisitions by Indian companies are on the

rise, which is evidenced from the table below (Table 2).

**Table 2: Indian Companies' Overseas Acquisitions**

Item	2002	2003	2004
Total number of overseas acquisitions	28	49	60
Total value of overseas acquisitions in Rs mn.	9415	80,491.61	76497.10
Total value of overseas acquisitions in US\$ mn.	209	1788.70	1699.90

Source: Winterbotham J and Taraporevala K, "Indian corporate finance deals," The Hindu Business Line, Monday 17<sup>th</sup> January 2005, 9

Though the merger deals are increasing day by day, the research evidence suggests that many mergers and acquisitions prove disappointing in financial terms. Conservative estimates suggest that at least half of all mergers fail to achieve the expected synergies and economies of scale (Cartwright and Cooper, 1996; Marks and Mirvis, 1986).

### Why Mergers Miscarry?

Generally, mergers are motivated by financial considerations such as increasing market share, shareholder value and profits. Human and cultural issues arising from the mergers are not given much importance. However, mergers should be evaluated from a comprehensive perspective rather than the financial considerations. Mergers and acquisitions have the greatest implications not only for size of investment, control, integration but also for people management issues. Therefore in the mergers and acquisitions not only the financial and strategic aspects should be addressed but also the human and cultural aspects arising from such integration. It should be noted that the human and cultural issues arising from merger negotiations have received little attention. Around the world retention of key talent, integration of cultures and communication were most often rated as crucial issues in the integration. (Pattanayak, B, 2005, p.401). To be very specific, ill conceived human resource integration strategy, cultural clashes between the two entities are identified as the major reasons of failures in mergers and acquisitions (Schuler and Jackson, 2001).

As noted earlier, mergers represent pooling of not only resources but also the cultures of the combining organizations. Culture is concerned with the internalization of values, attitudes and mindsets of the human beings in an enterprise. Culture influences the behaviour of the employees in an enterprise. Organisations have their independent cultures. Therefore mergers of culturally different enterprises may result in a conflict immediately after the merger, which may lead to decrease in the productivity and efficiency of the organization. The merger decisions are generally made at the top management on the basis of financial considerations rather than on HR and cultural considerations. There is a misunderstanding that matching at the top will percolate downwards to the soft issues also which in reality is not true. Though the mergers are motivated by synergy, the result is cultural clash.

Individual combining corporations possess their own identity and cultural values and beliefs, which distinguish them from others. When combined people in these nuclear corporations may try to

follow their old cultures assuming that their old culture was superior and provided better cultural solutions when confronted with problems. This creates "we-they" feeling in the merged corporation. If this feeling is not managed and integrated properly may cause serious post merger productivity problems. Therefore combining organizations should realize that cultures of the merging corporations are an integral part of the success or failure of the mergers. The merger of Procter and Gamble and Godrej provides a best example for the cultural clash Procter and Gamble being a multinational corporation has an informal work culture whereas Godrej being a traditional value based corporation has a culture which follows line of command in addition to demanding such values like paying respect to the seniors. These cultural differences are to be managed and integrated for better postmerger performance.

### Cultural and HR Issues in Mergers and Acquisitions

To develop a successful HR strategy for M&As the responsible HR department requires timely access to all relevant information. However a common 'double handicap' often arises at this phase.

- First, the HR department of the acquiring company is often not involved in the evaluation until after a decision for a merger has been made. HR department is then asked with executing the merger and handling all HR issues.
- Second, merger candidates rarely fully disclose detailed personnel data with all strengths and weaknesses. Often, small or medium size businesses do not have meaningful personnel reporting systems.

Human resource management is therefore often faced with the major challenge of developing an HR integration strategy without having a complete overview of all facts.

Broadly a merger evaluation involves the following three stages.

- 1 Premerger stage
- 2 Transition Stage
- 3 Post merger integration

#### 1. Pre Merger Stage

The first step towards any cultural integration is to make a detailed study of the cultures of the combining organizations and to work

out a strategy for the effective post merger integration of the cultures. A HR team must be formulated to carry out this function. The HR team should make a scrupulous cultural assessment of the combining corporations with reference to the cultural values and practices and suggest action plans for the post merger performance.

Practically it is impossible to anticipate the cultural and HR problems as a result of merger and to design suitable preventive action plan for such problems. However to minimize such problems it is better to prepare a checklist in the form of series of questions which will aid in identifying the problems. Managing the employee benefits is one such HR problem in mergers. There are many issues to be resolved and many questions to be tackled when the HR manager deals with the employee benefit plans when the corporations merge. Will the pension plan of the employees merge? Or discontinue? How to deal with group insurance, medical benefit plans or such similar plans?

There can be multiple answers to the questions posed above. There cannot be "the best" answer to the questions because no two mergers can be similar. Therefore each merger and its evaluation must be treated, as unique and specific and suitable plans should be worked out. However the questions identified above provide a general idea in dealing with the employee plans.

An effective premerger planning of the employee benefit plans will avoid post merger employee benefit negotiation between the merging companies and a well defined policy is established at an early stage. In the case of horizontal mergers and where a close working relationship is expected between the employees of the merging companies, a standardized benefit plan may be thought of. However in the case of mergers of two companies whose operations are totally unrelated and where there is geographical separation, one need not think of a standardised employee benefit plan. Though there can be standardised or non-standardised employee benefit plans after the merger, in order to follow homogeneity and with the intension of building team spirit it is better for the companies to follow a standardised benefit plan.

Another relevant HR aspect, which needs to be addressed in the preacquisition stage, is difference in compensation and performance appraisal system between the two firms. If there exists a big difference in the systems, it should be handled with utmost care. Usually firms try to equalize the systems so that similar jobs are paid at roughly equivalent levels. But a change in the existing system or imposing a new system is likely to elicit strong negative reactions

among employees. Therefore, extra care should be taken to resolve this issue.

Regarding stress related issues in M&As, researchers have suggested that M&A event and ensuing integration process may expose employees to a plethora of potential stressors. Some of these stressors may be relatively temporary, for example vulnerability to redundancy, others may be of more enduring nature such as ambiguity and culture change dependent upon the speed of integration.

Three important potential stressors common with mergers and acquisitions are:

**(i) Stress Associated with Survival:**

From the outset M&As mobilize employees fears about their continued personal survival and financial effects which redundancy might have on their quality of life (Magnet, 1984). If they remain in employment, employees may be required to relocate or accept a position with reduced status, pay or responsibility. Their role may change, sometimes involving reduced levels of control. Their future career paths may be adversely affected.

**(ii) Stress Associated with Loss of Identity and Uncertainty:**

The loss of identity a concomitant feeling emerges as strong themes within the M&A literature (Marks, 1988; Schweiger, Ivancevich and Power, 1987). Uncertainty and delayed change contribute to create a state of organizational 'limbo,' which is likely to be stressful. Managers may have difficult decisions to make about the information that should be communicated and that which should be withheld. Thus, some employees may experience a dearth of information that leads to uncertainty and others may experience information overload.

**(iii) Stress Associated with Changed Working Arrangements and Relationships:**

Relationships with others may be a source of stress during mergers due to increased political maneuvering and power games. Failure to replace experienced, departing personnel may increase the workload of those who remain. Changes in staffing arrangements invariably means that employees have to adapt to new peers and supervisors who are likely to have different work methods.



Colleagues may also be the source of conflicting and negative rumors, which induce stress.

## 2. Transition Stage

In this stage the most critical issue is to appoint an integration manager who will carry out the whole process of implementation. The integration manager plays the roles of a communicator, advisor, team leader and negotiator. In addition to this a new organization structure has to be created taking into account the overall merger objectives. A clear talent assessment is very important at this stage. Retention and motivation of the key talent is the HR challenge at this stage.

The other challenges are

- Defining the key roles of the employees
- Designing the reporting relationships
- Planning the lay offs
- Managing the transition psychology of the employees

## 3. Post Merger Integration:

In the course of integration the merging firms have to confront the following HR issues.

**a) Changing the Board of Directors:** Board level positions may have to be restructured to achieve directional expertise with the emerging needs of the post merger competitive advantage. The new board should be change leaders so that they can carry out the change process warranted by the merger. Board level changes could also be inspirational for the rest of the organization. This is particularly so where the merging partners had experienced performance problems, which triggered the merger.

**b) Choosing Right People for the Right Position:** In all M&As there will be competition for senior executive positions such as the chairman, CEO, heads of divisions, heads of functions such as R&D etc. if both merging firms had these positions prior to the merger. Right persons should be chosen for right job for effective post merger performance failing which the success of the merger will be in question. Such choices should be based on transparent processes otherwise it will lead to perceptions of bias and lack of good faith. The disappointed managers may either leave the organization or their commitment and dedication will jeopardize

**c) Managing Headcount Reduction:** In all M&As which focus on cost savings the headcount reduction becomes inevitable. In such cases, managing headcount reduction should be driven by transparently genuine concern for the welfare of the people being made redundant. Companies often arrange for counseling, training and outplacement programmes to reduce the distress to the employees.

**d) Key People Retention:** Due to uncertainty during M&As there is high probability of the leaving the organization. A merger is also the time when the firm's competitors attempt to capitalize on the uncertainty and lure away the 'key talents' as happened in many investment banks undergoing mergers (Sudarsanam, S., 2004). Key people retention may be achieved through devices such as golden handcuffs i.e., special bonuses or stock options or generous earn outs etc. Often these people, probably already wealthy, may be tempted to stay not with offers of more wealth but with positions of power and prestige that reflect their merit.

### Recommendations:

Based on the extensive review of literature and the issues discussed above the following recommendations are worth noting for successful integration of human and cultural issues in mergers and acquisitions:

- HR department should play a vital role in first two stages of mergers i.e., pre merger stage and transition stage. This would ensure that all HR related issues are anticipated well in advance and are adequately handled which may increase the chance of success of the M&As.
- Premerger evaluation should not only focus on the financial benefits of the mergers but also an equal importance should be given to the cultural aspects arising out of such integration. Cultural audits focusing on values, performance parameters and attitudes enable one to predict how successful the integration and ultimate business performance of the merged corporation will be.
- In the event of headcount reduction the companies should actively pursue outplacement policies, which would help to handle redundancies without any loss of goodwill. Handling redundancies with sensitivity will also boost the morale of the retained employees.

- Communication pertaining to all aspects of mergers should be made for all the employees irrespective of the level to which they belonged to. In addition to that the communication should also focus on providing adequate solutions to the inhibitions, which have crept into the minds of the employees regarding the M&As.
- The reward system should be planned based on systematic and unbiased job evaluation process. Further, a fair and equitable job fitment process should be carried out and the key talents and other personnel should be given appropriate positions in the merged corporation. There should not be any room for ill feeling on the part of the employees that they are underplaced or underprivileged.
- Arranging stress management training programmes may be of immense help to the employees to cope with the stress experienced by them in the changed working environment.

## Conclusion

The past couple of years have seen a plethora of M&A activity. M&As from high tech companies to small traditional companies are on the increase. However, many mergers have focused on financial considerations like increasing the market share, bootstrapping the earnings etc ignoring the critical people management issues, which in turn contributed to their failure. Therefore, to make the M&As more effective one should focus on HR and the cultural dimensions in addition to the financial considerations.

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# IT and IT-Enabled Services

Jose T.Payyappilly and N.Rajagopal



By eliminating time and distance, IT enables individuals and organizations to develop networks of interest that transcend national boundaries. IT sector increases the integration of production systems and markets, the speed of communications and the velocity of capital flows. Both India and China process dynamism in changing the world's economy with regard to IT and ITES. Nowadays Indians are playing significant roles in the global innovation chain. Indian engineering houses use 3-D computer simulations to tweak designs of everything from car engines and forklifts to aircraft wings for such clients as General Motors Corporation and Boeing Co. The Chinese IT companies are increasingly bidding for international outsourcing projects. In this article the authors try to elucidate the current trends in IT and ITES in both India and China.

## Globalisation and IT Services

Globalization is a process of interaction and integration among the people, companies and governments of different nations. That is a process driven by international trade and investment, and aided by information technology. This has effects on the environment, culture, political systems, economic development and prosperity, and on human physical well being in societies the world over. Technology is the other principal driver of globalization. Advances in information technology, in particular, have drastically transformed economic life. Information technologies have

| given all sorts of individual economic actors—consumers,



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investors, businesses valuable new tools for identifying and pursuing economic opportunities. They include faster and more informed analysis of economic trends around the world, easy transfers of assets and collaboration with far-flung partners.

By eliminating time and distance IT enables individuals and organizations to develop networks of interest that transcend national boundaries. IT sector increases the integration of production systems and markets, the speed of communications and the velocity of capital flows.

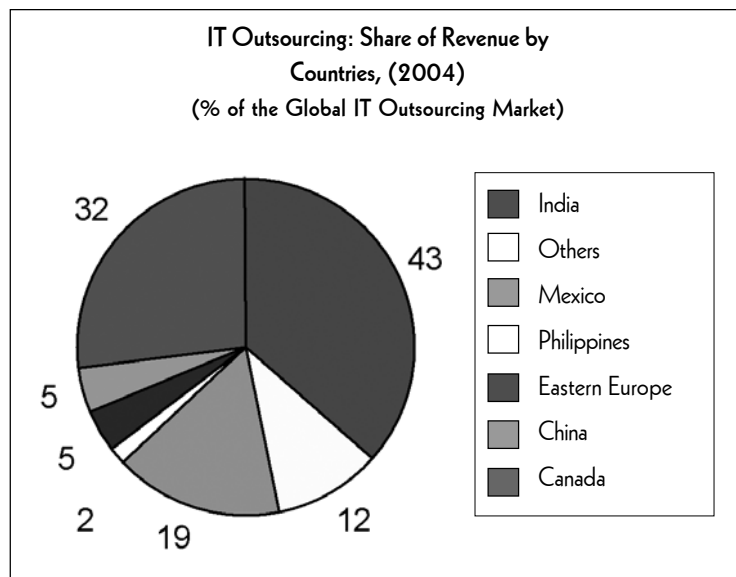
### IT Outsourcing—World Scenario

Now let us analyse the outsourcing aspects of the IT industry. Recently outsourcing has been accepted as one of the most popular means for achieving excellence across industries. To cut costs and optimise resources IT industry has adopted outsourcing and India and China are the preferred destinations.

With regard to Information and Communication Technologies (ICT), the major destinations of global foreign direct investment are India, China and the United States. These three countries together have more than 50 per cent of the total investment to their credit. Anyhow

their investments are in three different fields: India's concentration is in research and development (R&D) and IT Enabled Services; the United States specializes in IT services projects and China in ICT manufacturing. India and the United States have not attracted much ICT manufacturing investments. But China has already got investments in the IT services projects and for R&D. It is due to China's well-educated and cheap labour force. Thus there are a lot of foreign investors in China and thereby there is great demand for ICT products and services. In the year 2004 global IT outsourcing was around \$39.6 billion, of which India's and China's shares were around \$17.2 billion and \$1.9 billion respectively.

**Chart 1 shows the Share of IT Outsourcing Resources by Region in 2004.**



Source: Nasscom, India, 2004

### Recent Developments in IT and ITES — India and China

Nowadays Indians are playing significant roles in the global innovation chain. Motorola, Hewlett-Packard, Cisco Systems etc. now rely on their Indian teams to devise software platforms and multimedia features for next-generation devices. Google principal scientist Krishna Bharat is setting up in Bangalore a lab complete with colourful furniture, and a Yamaha organ—like Google's Mountain View (Calif.) headquarters—to work on core search-engine technology.

Indian engineering houses use 3-D computer simulations to tweak designs of everything from car engines and forklifts to aircraft wings for such clients as General Motors Corporation and Boeing Co. Financial and market-research experts at outfits like B2K, Office Tiger, and Iris crunch the latest disclosures of blue-chip companies for wall street. By 2010 such outsourcing work is expected to increase four times to \$56 billion a year.

Both India and China process dynamism in changing the world's economy with regard to IT and ITES. It won't be a wonder that, if it overcomes US in the near future. "Never has the world seen the

simultaneous, sustained takeoffs of two nations that together account for one-third of the planet's population. For the past two decades, China has been growing at an astounding 9.5 per cent a year, and India by six per cent. Given their young populations, high savings and the sheer amount of catching up they still have to do, most economists figure China and India possess the fundamentals to keep growing in the seven per cent to eight per cent range for decades" (Engardio, 2005). An accelerating trend is that technical and managerial skills in both India and China are becoming more important than cheap assembly labour. India's future is in software, design, services and precision industry. China will remain dominant in mass manufacturing in future also. China is one of the few nations building multibillion-dollar electronics and heavy industrial plants.

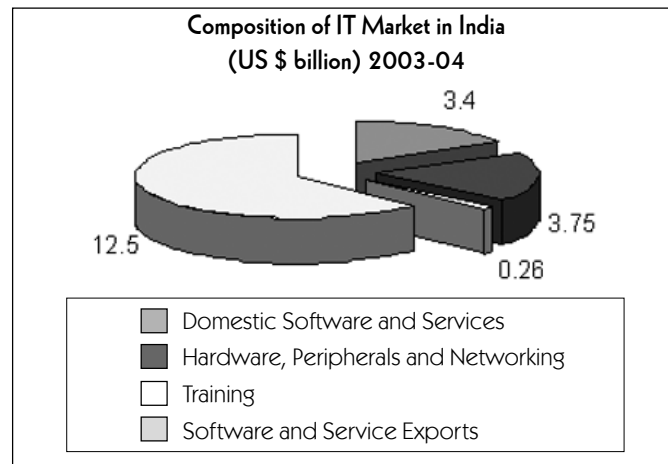
In fact the immense workforces of these two countries are already converging. Even though the annual trade between these two

economies is just \$14 billion, due to the internet and plunging telecom costs, multinationals are having their goods built in China with software and circuitry designed in India. The distance between India's low-cost laboratories and China's low cost factories shrinks by the month.

### IT- Enabled Services in India

The IT industry's contribution to the Indian GDP has increased from about 1.4 per cent in 1998-99 to more than three per cent in 2003-04. The Indian IT industry includes hardware, peripherals, networking, training, domestic and export market for software services and BPO. India's IT market reached a turnover of US\$ 16.2 billion in 2004-05. The IT sector employs 697,000 people. This is likely to reach 2 million by 2014. IT Companies are expected to account for 8-10 per cent of GDP by 2008 from their contribution of 1.4 per cent in 2001. India's IT and IT Enabled

### Graphical Representation of IT Market in India is given below:



Source: Nasscom, 2004

Services exports go to 133 countries. Indian IT companies train people in 55 countries. NIIT and APTECH have 200 training centers in China. Turnover of the top three companies, namely Tata Consultancies, Infosys and WIPRO are over one billion dollars each (figures are from NASSCOM and Evalueserve analysis of various years).

### IT- Enabled Services in China

Following are the trends in favour of Chinese expansion in the outsourcing market: the liberalization of government regulations, growing middle class, large-scale investments in technical education,

a vibrant economy and the availability of cheap labour force. But China needs to build its workforce capabilities with regard to English language proficiency and project management skills, so that it can emerge as a viable alternative to India in the global outsourcing market. In addition, India and China should deal with the mounting competition from other low-cost countries such as Russia, Philippines, Ireland and Israel.

China shares many of India's advantages in the outsourcing market such as cheap labour costs and favourable government policies. But the Chinese lack English language skills and expertise in western business practices. The Indian Government has gained from years

of investment in IT education and from lenient policies towards the IT industry.

The Chinese IT companies are increasingly bidding for international outsourcing projects. They are also leveraging on their proximity to markets such as Japan and South Korea. In these countries they have an advantage due to geography and language. However, China has still to gain expertise in project management and achieve economies of scale before it can compete with countries such as India in the global outsourcing market.

The Chinese Government and the IT service providers are working at various levels to compete with the dominant Indian participants in the global IT outsourcing market. India has 44.0 per cent share of IT outsourcing projects. Thus India is considerably ahead of China in the global outsourcing market; but this gap in revenues is estimated to reduce as soon as China leverages on its advantages.

According to Sarma (2005), following are the key success factors of an IT outsourcing destination:

- Abundance of technically skilful labour force
- Low cost workforce
- Quality of service
- Regulatory environment
- Robustness of infrastructure
- Knowledge of English
- Time zone attractiveness

During the years 2003 and 2004 India had around 813000 knowledge professionals as IT software and ITES BPO employees; therefore

### Positive Aspects of India and China in IT & ITES

India	China
Largest pool of technically qualified people with low wages	Low wage "hub" for providing ITES. Technical competencies
Cumulative annual growth of 24 per cent of IT professionals	Strong support from Hong Kong, Taiwan, US and Canada
English-proficient graduates ideally suited to the growth of the ITES Industry	Politically stable
Quality telecom infrastructure	Significant improvement in the overall infrastructure
Intellectual Property Right laws have been implemented	Government policies in China are investment friendly
Experienced in software development since late 1980s	Initiatives in training its population in the English language
With good management and process skills	Low cost manufacturing base & manufacturing competences over a period of time, especially in hardware manufacturing

### Negative Aspects of India and China in IT & ITES

India	China
Complicated and time-consuming legal system	Chinese professionals are not proficient in English
Corruption is still widespread	Low emphasis on higher technical education until 1999
Brand equity in the global market is poor, although beginning to improve	Limited supply of IT and management professionals
Cultural misalignment between India and Western countries still poses problems	Wages of IT professionals in China are now 15-20% higher than in India
Political relations with China have yet to be completely normalized	China does not rank high on process and management skills
	There is a lack of innovative products due to weak R & D. Chinese services do not have a good brand image

India had tremendous advantage in most of the above factors. More than 65 IT companies achieved SEI CMM Level five assessment at the end of 2003 and many more companies are expected to follow.

Thus we can see that both the countries are now ripe enough to have a take-off in the IT and ITES. In this context it will be appropriate to assess the positive and negative aspects of both the countries with regard to ITES: -

#### Conclusion

The latest figures of National Association of Software and Service Companies (Nasscom, 2006) reveals that the export of IT and IT-enabled services was expected to grow between 30-35 per cent in 2005-06. In this context, as emerging contributors in the field of IT and IT Enabled services India and China are potential threats to the developed countries of the world in the coming future.

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# Colour, Colour Everywhere....

## In Marketing too

Rohit Vishal Kumar and Radhika Joshi



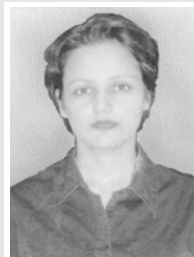
Colours are a dominating force in every aspect of human life; so much so that we today cannot imagine a world without colours. In the area of marketing, especially in advertising, colours provide the cornerstone of creativity and visual appeal. Colour coordination has become the buzzword in fashion technology, interior designing, publishing, (both traditional and net based) and in a host of other domain. With such a huge impact of colour on every aspect of human behaviour, marketers cannot afford to misunderstand colour – however the literature of marketing pays scant attention to the subject of colour. This paper is an attempt to collate the available literature on colour and its impact on human behaviour; and provide the marketing fraternity with a better understanding of how colours can be utilized in various aspects of marketing.

“Colours are the mother tongue of the subconscious,” commented the founding father of psychology, Carl Jung (1875-1961). It is no coincidence that the strongest use of colour is often seen in the field of marketing. “Colours represent an insidious kind of communication. Carefully chosen, they can help get a message across that would otherwise be difficult to express-and perhaps appear less credible in words alone” (Fraser & Banks, 2004). Many a times, consumers tend to mistrust advertising campaigns. However judicious use of colour helps in breaking the consumer defenses as colours appeal to the subconscious level. Colour symbolism is a powerful brand recall tool and has driven some of the biggest advertising campaigns. The production and

promotion of colours have become an industry in itself, linking colour forecasters with designers, manufacturers, and marketing directors.



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Not surprisingly therefore, well known brands tend to associate colours as a part of their identity—for example Pepsi – Blue, Coca Cola – Red. However, in spite of such a widespread use of colours in the world of marketing, it is strange that they have not been properly studied. In this paper we try to fill the gap, we take a look at the theories behind colour and then study the impact of colours on advertising. In section two we study the impact of colour on human reactions. In section three we look at colour from a cultural point of view and try to summarize whether there is universality to the colour meanings and symbolism across cultures. In section



four we look at some uses of colour in the context of marketing and then study the change in some Indian organisations from the point of view of colour and finally we try to summarise the issues involved.

### The Prevalance of Colours

According to physics, when light falls on a surface it is reflected, absorbed or scattered. A surface, which reflects all wavelengths equally, is perceived to be white; where as a surface which absorbs all wavelengths equally is perceived to be black. The full spectrum (or distribution of colour intensities) of the incoming radiation from an object determines the visual appearance of that object and its perceived colour. The familiar colours of the rainbow in the spectrum contain all those colors that consist of visible light of a single wavelength only, the pure spectral or monochromatic colors.

However, the dominance of colour in human life goes far beyond physics. So much so that almost all known field of study have contributed to the understanding of colour. It has been shown that on a biological level, colours tend to affect the mechanisms of the human eye. Muscles either relax or tense up; pupils expand or contract when exposed to different colours. The physical effects are considered by authorities to be the result of photochemical action on the glandular system. On a psychological level, colours tend to deliver a powerful subliminal communication. It tends to reinforce and enhance (or negate) the message being delivered by the marketer. The overall colour design tends to either create a pleasant visual harmony, which appeals to the aesthetic senses, or it ends up creating a cluttered chaotic experience, which generates negative feelings (Lee, 2002).

The effect of colours is more profound on human beings than perhaps any other medium. In 1976, Rikard Kuller demonstrated how colour and visual patterning affects not only the cortex but also the entire central nervous system. Colour has been shown to alter the level of alpha brain wave activity, which is used in the medical sciences to measure human alertness. In addition, it has been found that when color is transmitted through the human eye, the brain releases certain hormones, which affects our moods, mental clarity and energy levels (Engelbrecht, 2003).

The impact of colours on human biological aspect may well be the foundation of the use of colours in occult studies. The development of visual arts — painting, photography and more recently computer

based designing — lead to the development of “colour theory.” Colour Theory is a set of basic rules for mixing colours for achieving a desired result. The attractiveness of “colour theory” lies in the fact that it allows us to define simple rules for understanding colour. Goethe, in his *Theory of Colours*, first proposed a symmetric colour circle. James Clerk Maxwell (1831-1879) is credited with having discovered the “Additive Colour System” which uses the three primary colours — Red, Green and Blue — to produce other colours. The use of additive colour system is commonly seen in various electronic devices like computer monitors and Televisions picture tubes. The much older “Subtractive Colour System” explains how colours are created by mixing paints, dyes and inks to create colours, which absorb some wavelength of light and reflect others. Modern print technology makes use of the Subtractive Colour System using Cyan, Magenta, Yellow and Black for printing purpose (Wikipedia, 2006b).

### Colour and Culture

Given the prevalence of colours in day-to-day life, it is not surprising that colours have cultural connotations and have been differently interpreted by different cultures. It is generally believed that perception regarding colours differ in various cultures. However it should be noted that the colour association may be completely individual (due to extremely personalized experiences) or they may be spread across a whole spectrum (because of political, religious and racial origins).

For example, in politics we also see an association of colours with various ideologies primarily for identification and easy recognition by voters. Red usually signifies communist or socialist parties. Conservative parties generally use blue or black. Black is also associated with fascist or neo-fascist parties. Pink tends to signify moderate socialist. Yellow is often used for liberalism. Green is the colour for environmentalist. In the past, Purple was considered the colour of royalty, but is rarely used by modern-day political parties. Colour associations are useful for mnemonics when voter illiteracy is significant. Another case where they are used is when it is not desirable to make rigorous links to parties, particularly when coalitions and alliances are formed between political parties and other organizations.

### Similarity of Colour Symbolism

In an international research conducted by Osgood, May and Miron (1975) it was found that colour meanings have many more similarities

than differences across cultures. Concrete identifications of color (for example White – snow, truce), were the same for every culture. Majority of the cultures studied shared the same concrete associations (for example Red– sacrifice, heat; Yellow – plague; Green – spring and nature). Abstract associations (like White for eternity, innocence and light and Black for evil and death) showed similarities among cultures with very few exceptions. Only the Abstract symbolism was a bit arbitrary and related more closely to deities, religions and social classes such as castes.

Another study carried out by Olga Dmitrieva (2002) at the Tomsk State University in Russia compared the colour association between Russian and English speaking respondents. It was found that the colour Red evoked more or less similar emotional states associated with it. For example both set of respondents tended to associate Red with intense emotions and states both positive (love, passion, sex, beauty, ardor) to negative (aggression, danger, pain, betrayal). The study concludes that there may be significant similarities in the same language families across cultures and the differences that are present are primarily because of cultural, political or purely linguistic factors.

Various attempts have been made to explain the existing similarity of colour meaning across cultures. An explanation of this universality is the fact that all humans have a common relationship to this universe and Mother Nature. It could also be that all of mankind has common links to ancient origins. Swiss psychologist, Carl Jung believed in what he called an uncontrollable “Collective Unconscious.” According to this theory, inherited memories of mankind’s entire experience (of evolution) are stored in the genetic building plan of our brain. Throughout human life the individual refines this genetic plan through experience and learning. The commonality of the genetic plan-giving rise to the universality of meaning (Byrne, 2003). Another explanation for the universality of colour is provided from the field of linguistics. The linguistics theory argues that as most languages have evolved from the Indo-European languages, the meanings of certain key words have been retained across cultures (Davidoff, Davies & Roberson, 1999).

### Dissimilarity of Colour Symbolism

In spite of the apparent similarities of the colour meaning, differences do abound. The differences are significant to affect the marketing and advertising strategies. Thus the issue of studying colour meaning in a multitude of cultures becomes extremely relevant for companies who compete in international markets (Fraser & Banks, 2004).

Differences in the meaning of colour can arise due to various reasons. It has been seen that younger people tend to prefer brighter and more solid colours while adults tend to prefer more subdued colours. In other words, preference for hues of longer wavelength at childhood gives way to that for hues of shorter wavelength as one matures (Biggs, 1956). Research in the United States has shown that working class people tend to prefer colours that can be named: like Blue, Red, Green, etc. While more highly educated classes tend to prefer colours that are more obscure: like Taupe, Azure, Mauve, etc. In many cultures, men tend to prefer cooler colours (Blue, Green) while women tend to prefer warmer colours (Red, Orange). Western men are also more likely to be colour blind and so unable to see some of the differences in colour on web pages (Kyrmin, 2006). Many investigations have indicated that there are differences between genders in preferences for colours. In another study Guilford and Smith (1959) proposed that women might be more colour-conscious and their colour tastes more diverse.

Colour preferences have also been seen to vary with climate — dependent on the quality of sunshine and the clarity of atmosphere. The intensity of sunlight affects vision: as one approaches the equator it leads to red sightedness (accommodation to long waves of light) and thus predilection for warm hues. Opposite is true as one moves towards the poles (Biggs, 1956). Similarly, White is the color of death in Chinese culture, but purple represents death in Brazil. Yellow is sacred to the Chinese, but signified sadness in Greece and jealousy in France. In North America, Green is typically associated with jealousy. People from tropical countries respond most favourably to warm colours, people from northern climates prefer the cooler colours (Campbell, 2002).

In order to understand the diversity of colour and associated meaning, a compilation from various sources (Johnson, 2000-2006; Wikipedia, 2006a; Bhat, 2006; AFSIT-SIG for IT Internationalization, 1997) have been undertaken and presented in Table 1. The table compares the most common symbolism associated with colour in American and Indian culture. In compiling the table, care has been taken to present both positive and negative association of the various colours. It can be seen from the table that in Indian context many of the entries are blank — this is partly due to the fact that no clear-cut consensus emerged regarding colour symbolism in Indian societies and partly due to the lack of available literature.

**Table 1: Common Meaning of Colour in American and Indian Culture**

Colour	American Meaning	Indian Meaning
Red	Passion Excitement Sex Danger Radical Aggression	Happiness Marriage Prosperity Danger Crime Anger
Green	Environment Money Health Envy Inexperience Greed	Harmony Fertility Peace Islam – –
Blue	Calm Intelligence Stability Coldness Depression Obscenity	Divinity Truthfulness Royalty – – –
Black	Authority Power Style Submission Evil Influences Villains	– – – Superstition Evil Influences Death
White	Innocence Purity Humility Sterility Cowardice Coldness	Peace Purity – Mourning Widow –
Yellow	Cheerful Optimistic Hope Illness Avarice Sissification	Royalty Religion Happiness Warning Decadence Illness / Jaundice

A look at the table suggests that there are differences as to how the two cultures interpret colours. For example, Indian culture tends to associate Black with evil and inauspicious events whereas American culture tends to look up to Black for power and style. However similarities are also noticeable — e.g. White represents purity in both the societies. In the context of marketing, therefore, the understanding of colour meanings and interpretation takes on an important dimension – especially in today's global context. In the next section we look at colour in the context of marketing.

### Using Colours in Marketing

Colours have been used successfully for marketing purpose the world over. Coca-Cola owes a huge part of its success to its visual identity. A flash of red and a curved white line is enough to get people thinking about their favourite soft drink. Mobile company "Orange" has appropriated the Orange colour to create one of the most successful brands. The golden arches of McDonalds are recognized the world over as a welcoming place. Tiffany's choice of its signature colour has given a distinct identity to the brand.

Similarly, Nivea's image is its visual identity composed of blue and white colour scheme. The Nivea Blue specially developed for Nivea transmits the positive associations of harmony, friendship and loyalty besides providing it with the synergistic effect of recognition (Haig, 2004).

The impact of colour on various aspects of marketing has been well studied in the Western countries. Table 2 summarizes the results of a study conducted by Loyola College, Chicago on the use of colours in various activities and the percentage change in response rates (Abraham, 2005).

**Table 2: Impact of Colour on Various Activities**

Activity	Percentage Increase (approximate)
Willingness to Read	80%
Improvement in Decision Making	70%
Increase in Retention Levels	78%
Increase in Recall	60%
Increase in Attention Span	82%
Increase in Selling Potential	80%

Another survey of colour preferences conducted in USA by the renowned psychologist H.J. Eysenck (1916-1997) placed six leading colours in the following order of preference with blue being the most favourite — Blue, Red, Green, Violet, Orange, Yellow (Eysenck 1941). It is therefore not surprising that most of the organizations worldwide have Blue as a dominant colour in their company colours (Neupaney, 2004).

Colour psychologists attribute different qualities to different colours but broadly it can be said that bright vivid colours, such as Red and Blue are energizing and outward focused. Extremely bright and electrifying colours such as Lime Green and Fuchsia are festive, dynamic and appeal to the young generation. Muted Gray based colours, such as Taupe, are sophisticated and reserved and appeal to the higher socio-economic groups. Similarly, dark shades such as deep forest green and navy blue convey the image of dignity and professionalism; where as light shades of most colours such as Pink or Blue are delicate and ethereal. Yellow is the hardest to absorb but has the highest visibility and also greatest memorability. In general, pure colours and those at the Red end of the colour spectrum have a greater visibility (Biggs, 1956). It has also been seen that the temperature of colour also affects its association with business category. Cool colours like Deep Blue and Emerald Green work well with medical, automotive and technological businesses;

where as Warm colours such as Golden Tan and Brick Red work well with food related business such as restaurants (Lee, 2002). No wonder, fast food restaurants the world over prefer using shades of Reds and Oranges because people tend to consume more in presence of these colours. Khan and Wansink (2004) have shown that people tend to eat more when variety is present – variety being reflected by prominence of colour in the food which is served.

Market researchers have also determined that colour affects shopping habits. Impulse shoppers respond best to Red, Orange, Black and Blue. Shoppers who plan and stick to budgets respond best to Pink, Teal, Blue and Navy. Traditionalists responded best to pastels - Pink, Rose, Blue (Campbell, 2002). Similarly, certain colours have become associated with certain categories of products, for example, pastel blue and pink with toiletries in USA. Similarly, Yellow has also been associated with photographic films worldwide mainly due to the efforts of Kodak. Similarly Tangerine colored I-Mac's are sold more in the Far East while Indigo Blue and Graphite are most popular in the rest of the world.

### Implications for Marketing

Martin Lindstrom (2005) has argued in his book – BRAND Sense – that colours contributes to the “smashability” of a brand. Successful

brands can be “smashed” like a glass bottle and consumers would still recognize the brand from its pieces. Logically, then, marketers should place a “signature” colour at the center of all branding efforts. Trade marking the colour is even better, as it secures the hue as a distinct part of the brand’s sensory experience. More to the point, it prevents competitors from using the trademarked colour or any confusingly similar shade to promote their products. Of course, marketers have long recognized this fact, and the history of the marketing world is dappled with attempts to “own” a colour. Examples range from Campbell Soup’s quest to monopolize Red and White to Kraft’s claim for Royal Blue on Silver solely for its Klondike bars in 1986 to Cadbury’s successful attempt of securing trade mark registration in New Zealand for the colour Purple for its chocolate brands. Picking a colour that has no intrinsic connection with the product makes it harder for competition to dismiss imitation as coincidence.

While choosing a particular colour for its brand a company should ensure that the chosen colour supports the brand attributes and is appropriate for the particular product or service. The chosen colour should also complement the brand personality, psycho-graphic and behavioural factors relating to the target segment. Moreover, the colour should be relevant to the target audience and should be featured consistently on all communications materials and sales tools. Care should also be taken to ensure that the colour does not have any negative connotations in other parts of world where the company aims to sell the product in the future.

Cheryl Swanson (2004) has suggested that though cultural influences and trends must always be considered when designing brands, it is the personality of the brand that must be the primary concern. In this “Survival of the Fastest” era, in which humans process information hundreds of time faster than at any other time in human history, it’s important for brands to symbolically grab attention, and to keep it by creating “symbolic bookmarks” for easy recall and effective marketing. The importance of colour as a “symbolic bookmark” is also growing because with the advent of Globalization and the concept of “one world,” colour symbols are being increasingly accepted across cultures. For example, brides who have traditionally worn Red in China now prefer to wear White. In Thailand where White was the traditional color of mourning, now people wear Black. This integration of cultures can be used by the marketers as a useful tool in marketing products and services across the globe.

Although efforts have been made by various researchers to provide a complete emotional palette for colours — relating every colour

to some human feeling — the only conclusive finding is that the colours of the spectrum can be broadly associated with two moods: Warm active and exciting qualities of Red (and its shades), and the cool, passive and calming qualities of Blue, Violet and Green. Beyond these, there is wide speculation, since reactions to colour are influenced by concerned subject matters and changing circumstances and contexts. It is true that colour do evoke certain material, abstract, sensory and emotional associations that stay quite stable across cultures; there is much scope of further research into what actually makes one react in a certain way to a certain colour specially in a country like India.

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# Leadership and Competency

## on Organizational Performance

Raduan Che Rose, Naresh Kumar and Syafiq Alfonse Abdullah



The main objective of this study was to examine the relationship between leadership characteristics and managerial competency of the CEO to organizational performance. The findings did indicate that the relationship did exist, with leadership characteristics contributed significantly more to organizational performance than managerial competency. The findings also indicated the leadership characteristics of persistence accounting more for organizational performance than any of the other leadership characteristics or managerial competency variables, although the managerial competency grouping of results driven showed a significant relationship with organizational performance. With regard to the demographic profile of the CEOs, the educational level did indicate a significant relationship with organizational performance. Similarly the size of the business organization also did indicate a significant relationship with organizational performance.

The ability of a nation to be successful depends not only on the government but also on business and corporate leaders to make things happen for their organizations (Yeoh, 1995). In the Malaysian context, the government has been relinquishing its active participation in the business sector in favour of the private sector. The agenda calls for Malaysian chief executive officers (CEOs) with the ability to innovate and to manage business organizations profitability. Given the powers the CEO wields, they in all means have to expose their leadership competencies and undoubtedly their action enormously impact on company's strategy, structure and culture (Vries, 1998). A view

supported by Nadler and Heilpern (1998), successful corporate transformation depends on effective decision-making and CEO's leadership, as he/she is the executive who has overall responsibility for the conduct and performance of the firm.

Up till now, numerous studies have been carried out which absolutely reveals the relationship between CEOs' succession and its impact on organization performance (Thomas, 1988; House, Spangler & Woycke, 1991, Koene, Vogelaar, & Soeters, 2002). However there has been almost wiry systematic attempt to link leadership characteristics and managerial competency of the



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CEOs with organizational performance. This gap in the literature is unfortunate as CEOs' leadership characteristics and managerial competency may provide significant insights on organizational performance improvement (Daily & Nair, 2000). This is especially likely in business organizations where the dominant CEO maintains a unique or strong presence. Indeed Smith, Carson and Alexander (1989) argued that one has to first determine if a leader is effective or not before assessing the impact of the leader on the performance of the firm. With this in mind, this study focused on the leadership characteristics and managerial competency of the Malaysian CEOs to determine if the CEOs as the leader of the business organizations possessed the necessary and specific leadership and managerial capabilities to lead their organizations, and if these leadership characteristics and managerial competency of the CEOs had an impact on the performance of the business organizations.

### Leadership Characteristics

Taking into consideration various definitions, leadership characteristics of the CEO is defined as personal factors an individual possess which separates him or her as a leader from others. This study implies that possessing the appropriate traits only makes it more likely to facilitate whatever action taken by the leaders will be successful. The leadership theories supporting this are the great man theory and the trait theory. The trait theory is more applicable to this study because it states that leadership is a combination of special characteristics that the individual possesses, which enables them to induce others to accomplish task. It does not make assumption whether leadership characteristics were inherited or acquired. This view is served as the underlying basis for this research. Based on the literature review and the pre-survey results (on the leadership characteristics the respondents deem as necessary for one holding a position of a CEO), the study identified five leadership characteristics to measure the leadership quality of the CEO: persistence, honesty, intelligence, self-confidence, and vision. The five leadership characteristics were also selected as it represented the common leadership characteristics highlighted by most writers on leadership and were easily understandable as well as quite applicable to the Malaysian context where this study is carried out.

### Managerial Competency

The 1980s saw a renewed interest in competency, especially managerial competency because the changes in the world business environment brought about by technological advances. The change

put tremendous pressure both on the business organizations and its managers. Besides forcing business organizations to be competitive, it also required the business leaders to possess "managerial skills" which would be easily transported across the situations. The CEO as the head of the business organization had to have a better understanding of his/her role functions. One way to assist the CEO faced with the rate of change is to furnish him/her with a better understanding of his/her role and functions. Unfortunately as echoed by Hunt and Wallace (1997a, 1997b), the prevalent models of management and managerial activity are unlikely to advance an individual's understanding of his/her management role. Thus the focus on the managerial competency of the CEO allows the comparisons of performance in a particular work context.

Arriving at a definition of competency is not easy because as a term it is often used as an umbrella word to cover almost anything that might directly or indirectly affect the job performance (Woodruffe, 1993). However, the managerial competency of the CEO in this study refers to the ability to perform in a given context and the capacity to transform knowledge and skills to a new task and situation (Hunt & Wallace, 1997a). It is also gauged in the same manner as that of leadership characteristics of the CEO. Based on the review of literature, this study identified five competency grouping incorporating all the competencies as described by the three main grouping models (the US model – Boyatzis (1982), UK model – Management Charter Initiative (1988) and the Australian model – Hunt and Wallace (1997a). This is necessary as competency as subject of study is still new in the Malaysian context. The competency groupings generated by the researchers through the review of the literature and studies on competency were as follows: i) strategic thinking and learning, ii) motivating and leading people, iii) results driven, iv) business acumen, and v) building coalition and communication.

### Organizational Performance

There is still no universalistic definition or accepted model for organizational performance, since the best criteria remain elusive because of the goals and objectives of organization are multiple and difficult to identify (Yulk, 2002). As a concept it has a number of approaches and there is no consensus on which it is appropriate. However, organizational performance of the business organizations in this study is measured in terms of profitability of the organization. Organizational profitability was chosen to represent organizational



performance for several reasons. First, profitability is one common objective measurement of business leaders' performance and efficiency (Ahmad Farid, 1980; Gupta, 1989). Secondly, it provides an objective way to reflect organizational effectiveness (Lawriwsky, 1984). Thirdly, profitability figures are easily obtained because as a measure, it assesses the efficiency with which plant, equipment, and current assets are transformed into profit (Weiner & Mahoney, 1981). Lastly, profitability as a measurement of performance is especially useful for business leaders because it allows them to use one comprehensive measure instead of several measures that often point in different directions (Gupta, 1989).

Sonnenfield (1995) asserted that discussion on whether leadership does or does not make a difference to organizational performance have generated much debate evolving into one of conceptualists (leaders are constrained by situational factors that they have become ineffectual) versus constructionists (leaders have a significant impact on the performance of the organization they head). The conceptualists argue that the constraints placed on leadership by situational factors make it virtually impossible for the leader to significantly affect the behaviour of the organization and its final level of performance (Kramer, 1995). While constructionists argue that triumphant decisions made by visionary leaders of competitor firms facing common contextual challenges give testimony to the fact that individuals do matter and always did. For example Bill Gates, Jack Welch, Henry Ford, Anita Roderick is convincing challenges to the nation that leaders merely ride the waves of success and failures caused by other forces (Sonnerfield, 1995). Although opinion on leadership and performance is divided to the degree which leadership influences the performance of the organization, it is nevertheless acknowledged leadership does matter, and organizational outcomes could be particularly predicted by the background characteristics of the CEO. For example Hambrick and Mason (1984) pointed out the association between observable characteristics of the upper echelon of the organization performance. The observable characteristics include, age, functional track, career expose, formal education, socio economic background, financial position and group heterogeneity. While Noburn and Birley (1988) predicted that the upper echelon theory should be considered more powerful as predictive mechanism for corporate performance. In as similar vein, one of the studies by Lieberman and O'Connor (1972) revealed that situational factors besides leadership, affect organizational performance. Moreover, Weiner and Mahoney (1981) point out that organizational performance as a function of environmental, organizational and

leadership influences. The organizational variable in Weiner and Mahoney's study includes the size of the organization. Similarly this study attempts to look at the relationship of the characteristics of the business organizations to see how it affects organizational performance.

Based on the literature review the following premise is drawn: (i) leaders (CEO) do indeed possess leadership characteristics; (ii) managerial competency can differentiate between managers (CEO); (iii) CEO does have an impact on the performance of the organization; and most importantly (iv) organizational success is a combination of strong leadership and management (Kotter, 1990). Thus the basic argument of the study is that an effective CEO is a combination of leadership characteristics and managerial competency ( $CEO = LC \times MC$ ), and organizational performance is a result of a CEO with strong leadership characteristics and managerial competency  $\{OP = CEO (LC \times MC)\}$ . More specifically the study attempted to:

1. identify the specific leadership characteristics and managerial competency possessed by the CEO, and to what extent these two dimensions influence the organizational performance
2. identify the specific demographic variable (profile) of the CEO that have and effect on organizational performance.
3. identify the specific characteristics of the business organizations that have an effect on organizational performance.

## Method

Self-administered questionnaire was developed and employed to gather data for this study. The instrument consisted of four sections. The first section consisted of 30 statements (incorporating the five leadership characteristics of persistence, honesty, intelligence, self-confidence, and vision) was aimed at gauging the leadership characteristics of the CEO. This particular section was modeled along the principles of the Leadership Trait Questionnaire -LTQ, (Northouse, 1997). It also incorporated some elements of the Multifactor Leadership Questionnaire of Bass and Avolio (1997). The second section consisted of 25 statements covering the five competency groupings to gauge the managerial competency of the CEO. A five-point scale ranging from one (strongly disagree) to five (strongly agree) was employed to indicate the possession level of leadership characteristics and managerial competency.

The third section of the questionnaire collected information on the organizational performance. The profitability of the business organization was based on the organization's financial data for a period of five years (1997 – 2002). This information was obtained from the respondent (CEO) who was asked to rank their organizations on a scale of 1 to 5, with 1 indicating very low performance (ROA less than one per cent), 2 for low performance (ROA around 1 – five per cent), 3 for average performance (ROA around 6 – 10 per cent), 4 for high performance (ROA around 11 – 15 per cent), and 5 for very high performance (ROA above 16 per cent). This study used ROA (return on assets) as the measure of performance, as ROA reflects goal attainment, resource acquisition and one constituency – investors or shareholders. Moreover it is the most common measure of firm performance in management research (Gomez, Mejia & Palich, 1997). The average score of the five years data represented overall organizational performance. The final section of the questionnaire comprised questions aimed at capturing the demographic profile of the respondents and the characteristics of the business organizations like size, type and activities of the businesses.

A pilot study was arranged with 29 local managers that were available to help with improvement of the questionnaire. Their feedback and comments led the questionnaire to be revised so that the final form of the questionnaire was deemed to be free of error. A reliability test on the questionnaire was undertaken using SPSS software and almost all the Cronbach's Alpha value was well above .75. Indeed, in some cases the alpha values were above .86.

The population for this study consisted of individuals (CEO) from the manufacturing sector based in the Klang valley, which has a heavy concentration of industries in comparison to other parts of the country (Malaysia). Having validated the questionnaire through pilot testing, a sample of 250 CEOs in both public listed and private limited companies were randomly selected from the membership directory provided by Federation of Malaysian Manufactures (FMM). Indeed, only business organizations in existence for more than five years were selected for this study, as the organizational performance variable of the businesses was based for a five-year period (1997–2001). The questionnaire was mailed to local managers at their respective subsidiaries. The response rate was initially not encouraging and thus reminders were sent out. Furthermore the researchers have made personal telephone calls to most of the respondents to improve the response rate. As a result, 173 valid responses were received which the researchers felt to be reasonable for this kind of

study. Taking into account the invalid responses, the response rate for this study was 70 per cent. The collected data was tabulated and analyzed using SPSS.

## Findings and Discussion

### Profile of the Respondents and Organizations

In terms of the gender, the distribution was uneven with 91 per cent male respondents in comparisons to nine per cent females. Women are noticeably absent at the highest level of decision making as such positions are still considered jobs for men. With regards to age, most of the respondents were in the above 40 years of age group (83 per cent). This reflects that in Malaysia as in most Asian society, seniority is often associated with older age group. Moreover, the higher the manager in the organizational hierarchy, the more they involved in the leadership process (Khalelee and Woolf, 1990). About 65 per cent of the respondents had a bachelor degree and professional qualifications. 17 per cent were educated at the diploma level, while 19 per cent of the respondents were educated at the O'levels (Sijil Pelajaran Malaysia). Out of the 173 participating business organizations, only 19 per cent were from public listed companies. Majority of the participating companies (53 per cent) were from the electric and electronic sector, followed by construction or building sector (20 per cent).

### The influence of leadership characteristics and managerial competency on organizational performance

With regard to the first objective of the study, the research findings showed Malaysian CEOs do possess a high level of leadership characteristics and managerial competency. As seen from the descriptive statistics (Table 1), the CEOs had more than the mean value of 3, for all the components in the leadership characteristics and managerial competency. While with regards to the organizational performance, the descriptive statistics did indicate that most of the business organizations in the study had an above average mean value. Perhaps this shows that most of the business organizations were doing well despite the economic uncertainty especially after the Asian financial crisis in 1997.

Having identified that Malaysian CEOs do possess a high level of leadership characteristics and managerial competency, the study next attempted to determine if both leadership characteristics

**Table 1: Descriptive Statistics of Variables used in the Study**

Components	Mean	Standard Deviation
<b><i>Leadership Characteristics</i></b>		
Persistence	4.4624	.51153
Confidence	4.3932	.51304
Honesty	4.4046	.49224
Vision	4.3295	.48357
Intelligence	4.3988	.49108
<b><i>Managerial Competency</i></b>		
Strategic thinking and learning	4.4335	.49700
Motivating and leading people	4.3006	.45984
Business acumen	4.4451	.49842
Result driven	4.2197	.41521
Building collation and communication skills	4.4162	.49436
<b><i>Organizational Performance(Average of ROA)</i></b>	3.8543	.99349

and managerial competency have an impact on organizational performance. Pearson correlation analysis (Table 2) showed both the variables registering significant relationship with organizational performance, with leadership characteristics showing an r-value of .227 and managerial competency showing an r-value of .211. Both the relationships were significant at .01 level (2-tailed). Although this value is considered small, in the context of this study it was considered significant as a study of this nature was being conducted for the first time locally. Surprisingly, the leadership characteristics of honesty showed a negative relationship with a very low correlation value ( $r = -.062$ ). The findings of this study contradict with the findings of Bennis (1993), which revealed that honesty was ranked as number one out of the 20 leadership characteristics surveyed. Most of the CEOs participated in this study seems to be convinced that honesty is not an absolute necessary leadership characteristic. However honesty is generally accepted as one of the

key values that should be inculcated in business. Indeed Malaysia's transparency record for the year 2000 had a CPI index score of 4.8 points out of 10 with slight improvement to 5.2 points in 2003. CPI index refers to the Transparency International Corruption Perceptions Index. Therefore, there is a need to promote good governance in all sectors of the economy before Malaysia can get back to the position it once enjoyed in the early sixties when Malaysians took pride that corruption was something that happened only in other countries. The findings also revealed that there is a significant correlation between organizational performance and the leadership characteristics of persistence ( $r = .271, p < .01$ ), confidence ( $r = .186, p < .05$ ), and intelligence ( $r = .191, p < .05$ ). However failed to correlate significantly with vision and organizational performance ( $r = .139, p > .01$ ).

The results of the test (Table 2) showed only the managerial

**Table 2: Pearson Correlations between Leadership Characteristics, Management Competency and Organizational Performance**

Leadership Characteristics	r	Management Competency	r
Persistence	.248**	Strategic thinking & learning	.137
Confidence	.186*	Motivating & leading people	.103
Honesty	-.062	Result driven	.186*
Vision	.139	Business acumen	.081
Intelligence	.191*	Building coalition & communication skills	.163*
Overall mean score	.227**	Overall mean score	.211**

\*\* correlation is significant at the 0.01 level (2 tailed)

\* correlation is significant at the 0.05 level (2 tailed)

competency of result driven ( $r=.186, p < .05$ ) and building coalition and communications ( $r=.163, p < .05$ ) had a significant positive correlation with organizational performance. The managerial competency of results driven refers to the desire to achieve results. The managerial competency of building coalition and communication was seen as the ability of the leaders (CEO) to make their followers aware of their vision. This required CEO's inclination to seek out pleasant social relationship. Similarly it required the element of influencing and negotiating, interpersonal skills, oral and written communication. The low correlation between the managerial competencies of strategic thinking and learning ( $r=.137, p > .05$ ), and business acumen ( $r=.081, p > .05$ ) with organizational performance is quite anticipated. In a similar manner, the managerial competency of motivating and leading people ( $r=.103, p > .05$ ) do not score high marks with regards to relationship with organizational performance. The managerial competency of motivating and leading people has some elements of self-confidence. Since the leadership characteristics of self-confidence recorded no significant correlation with organizational performance, the result between the managerial competency of motivating and leading people with organizational performance was quite anticipated.

Next the study applied the stepwise regression to see which of these two variables affect the dependent variable, organizational performance. The analysis showed the leadership characteristics variable explaining 5.2 per cent of the variability in organizational

performance. The result was quite expected, with one of the previous study recording 6 – 15 per cent the effect of leadership on organizational performance (Lieberson & O'Connor, 1972). Further analysis on the components of leadership characteristics and management competency, reveals that the leadership characteristics of persistence and managerial competency grouping of results driven contributing significantly to organizational performance. The multiple regression analysis showed the leadership characteristics of persistence explaining 6.1 per cent of the variability in organizational performance. This is quite a respectable result with leadership characteristics (overall) accounting 5.2 per cent of variability in organizational performance. Similarly the multiple regression analysis showed the managerial competency grouping of results driven explaining 3.4 per cent of variability in organizational performance.

### **The Effect of Demographic Variable (Profile) of the CEO on Organizational Performance**

To identify the specific characteristics of the CEOs (the respondents) that have an effect on organizational performance, one – way ANOVA test was used. The results indicated a significant difference in organizational performance among the education level of the respondent especially the respondents with educational qualifications of degree, diploma or SPM ( $F = 2.176, p = .093$ ). The salary factor of the respondent also showed a significant difference in

organizational performance ( $F = 6.684, p = .000$ ). While other factor like the age of the respondents showed no significant difference in organizational performance.

## The Effect of Characteristics of the Business

### Organizations on Organizational Performance

With regard to the third objective of the study, the results of the one-way ANOVA indicated a significant difference in organizational performance among the size of the business organization ( $F = 2.461, p = .035$ ). The size of the business organization was based on the total number of employees. The results expected as organizational size reflects the resources available for the organization and determines the amount of economic activity the firm can engage in. The results showed higher organizational performance among business organizations with a work force of 501–1000 persons and 1001–2000 persons in comparison to those with a work force less than 50 persons, 51–100 persons, 101–500 persons and more than 2000 persons. The results did not indicate any significant difference in organizational performance among the other business organization profiles like the business activity, and type of business. With regard to the type of business, one would have expected to see a higher organizational performance among the listed companies in comparison to non-listed, because of their size and paid capital.

### Significance of the study

There has been almost no systematic attempt to link both these variables leadership characteristics and managerial competency of the CEO with organizational performance, neither to empirically investigate these two important but generally ignored linkages. However, this study has helped to establish a link between the strategic leadership theory on the CEO and effect on organizational performance; and organizational behavior theory on the characteristics and competency of a CEO, providing a better understanding of the relationship between the tested variable. The study showed a significant relationship between these variables and organizational performance.

In the Malaysia context this study represented a “first” with regards to research on the CEO and organizational performance. Most of the local research has concentrated on management styles rather than leadership with a heavy emphasis on management styles of foreign companies and their subsidiaries in Malaysia. Indeed this study filled that gap with regard to a study on leadership (CEO) and its impact on organizational performance in the Malaysian context. Hopefully it will serve as a catalyst for future studies on leadership in the Malaysian business world.

While on the practical aspect, the study provided a potentially useful basis for identifying the type of CEO needed by the business organization. Given the important role of the Malaysian private sector as the engine of economic growth, the identification of leadership characteristics and managerial competency of the CEO will allow Malaysian business organizations to perform better if the people in the leadership position (CEO) have the designated leadership characteristics and managerial competency. The study besides providing a benchmark for business organizations in their selection of their business leaders could also enable the CEOs themselves to evaluate their personal leadership characteristics and managerial competency. Besides its contributing significantly to the conceptualization of the role of leadership characteristics and managerial competency of the CEO to organizational performance, this study provides a useful platform for future research on studies of leadership especially in the business sector.

### Limitations

The study only involved the CEOs from the public listed and private limited business organizations in the manufacturing sector. The business organizations were all located in the Klang valley. It would have been appropriate if the sample came from across the country as well as the other sectors, as the study would be able to cross-check the findings across industries and geographical locations. Thus this is seen as one of the limitations of the study.

The sample of this study consisted of the business organizations and its CEO in manufacturing sector. As such the generalization of the findings may be limited to the CEOs and business organizations in the manufacturing sector. But its limited applicability does not decrease the research’s scientific value even though the generalizability to the findings to other organizational settings is restricted to a certain extent (Sekaran, 2003). Nevertheless as this study represented the first reported attempt to examine the leadership characteristics and managerial competency of the CEO to organizational performance, it could serve as a guide to other sectors of the economy including the public sector.

### Research Suggestions

Further research should be carried out on an expanded research instrument from the present one. More leadership characteristics and managerial competency items should also be included to get a broader picture of the leadership characteristics and managerial competency of the CEO. While with regards to the sample, there are two suggestions, one to expand it to include other sectors of the

economy. This would give a cross section of industries and the findings would be used to generalize across industries. The other is since the study of such nature is still at its infancy stage, perhaps for the initial research the sample should only include public listed companies or the Multinational Corporations (MNCs). This might give a better indication of the profile of the CEOs.

Another aspect that needs to be looked at is the evaluation of leadership characteristics and managerial competency. The present study used self-evaluation by the CEOs themselves. Further studies should look at expanding this to include evaluation of the CEO's leadership characteristics and managerial competency by the peers and subordinates of the CEO concerned. This might give an indication of how those close to CEO evaluate him/her in comparison to his/her own self-assessment. Future studies could incorporate environmental and cultural factors besides leadership characteristics and managerial competency and its influence on organizational performance.

**Keywords Leadership Characteristics, Managerial Competency, Organizational Performance, Chief Executive Officers, Malaysia.**

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# Indian Retail Industry:

## Emerging Trends and Challenges



Chirag B.Rathod and Devang J.Desai

The word 'Retailing' has become a buzzword nowadays in India. Indian retail sector has an enormous influence on economic condition of the country. The Retail industry has reached a very critical stage in India. Stores in modern formats have emerged in the metropolitan cities but the maximum Retail Business happens through traditional retail formats till today. A nation of savers, India has now become a nation of spenders; the rate of growth of spending on discretionary items has been growing at an average of nine per cent per year over the past five years. India's vast middle class and its almost untapped retail industry are key attractions for global retail giants wanting to enter newer markets. This paper analyses the Indian Retail formats in the past and present, the Growth of retailing in India, changing trends in Indian Retail industry, and developments in Organized Retailing in India. The paper also analyses the challenges for Indian Retail Industry.

The word 'retail' is derived from the French word 'retailleur.' It means 'to cut a piece off' or 'to break bulk.' In simple terms it is an activity and platform whereby product or services are sold to final consumers after breaking the bulk in small quantities. Retailing is tap at the end of the pipeline of the supply or distribution channel where customer finally purchases the product or service according to his or her need. The customer can be individual or even an organization and mostly families are the target customers.

Retail has played a major role to the world economy by increasing productivity across a wide range of consumer goods and services. It is the largest and oldest

private industry in the world, with total sales of US \$6.6 trillion. The impact can be best seen in countries like U.S.A., U.K., Mexico, Thailand and more recently China. Economies of countries like Singapore, Malaysia, Hong Kong, Sri Lanka and Dubai are also heavily assisted by the retail sector.

Retail is the second-largest industry in the United States both in number of establishments and number of employees. It is also one of the largest worldwide. The retail industry employs more than 22 million Americans and generates more than \$3 trillion in retail sale annually. Retailing is a U.S. \$7 trillion sector. The National Retail Federation (NRF) predicts that U.S. retail sales in 2006,



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excluding automobiles, gas stations, and restaurants, will increase 4.7 per cent from last year. A slowdown in the economy and consumer spending is expected to restrain industry sales gains.

Wal-Mart is the world's largest retailer. Already the world's largest employer with over one million associates, Wal-Mart displaced oil giant Exxon Mobil, as the world's largest company when it posted

\$219 billion in sales for fiscal 2001. Because of the size, strategies, new technological adoption and efficient efforts, Wal-Mart has become the most successful retail brand in the world. Wal-Mart heads Fortune magazine list of top 500 companies in the world. Forbes Annual List of Billionaires has the largest number from the retail business, as from 497 billionaires 45 are retailers.

**Table 1: Top Ten Retailers Worldwide**

Rank	Retailer	No. of stores owned	Revenues in FY-04 US\$(million)
1	Wall-Mart Stores Inc. (USA)	5,189	285,222
2	Carrefour Group (France)	6,987	90,297
3	The Home Depot, Inc	1,890	73,094
4	Metro AG (Germany)	2,300	70,093
5	Royal Ahold (Netherlands)	4,000	64,615
6	Tesco PLC (UK)	1,800	62,284
7	The Kroger Co. (USA)	3,763	56,434
8	Sears, Roebuck and Co. (USA)	1,970	55,800
9	REWE Handelsgruppe (Germany)	11,530	50,698
10	Costco Wholesale Corp. (USA)	442	48,107

Source: Ernst & Young research and publicly reported figures

The Retail industry in the world is a fast changing and a retailer not only needs to keep up with the ever-changing expectations and consumer demands but he has to cope up with constant evolution on the industry side, competition, technology and changing format design.

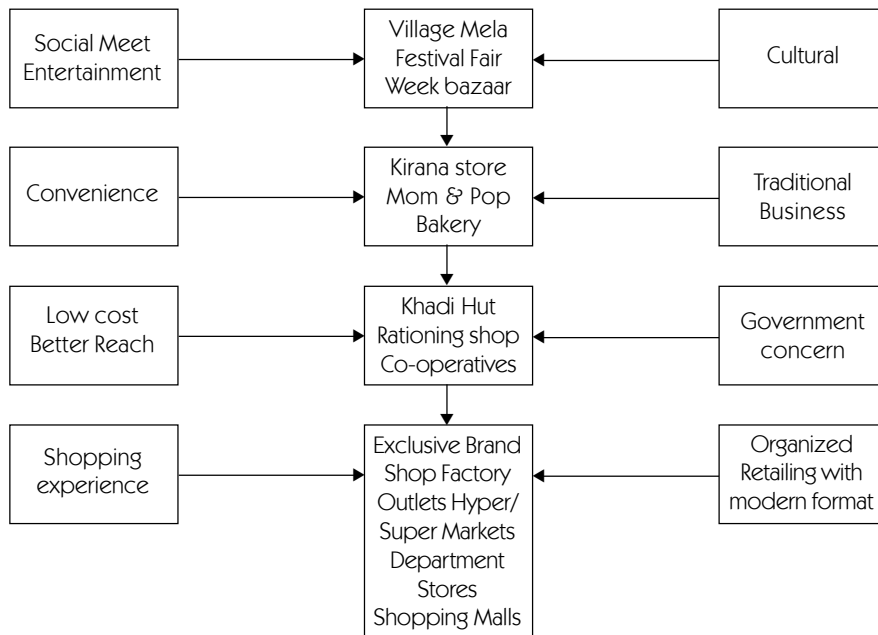
### Retailing in India

The traditional Indian local markets and Kirana stores are witnessing a retail revolution. With the changing demographics and an increase in the quality of life and culture of urban people, grocery or home items shopping no longer means neighbourhood markets or shops. Who introduce the revolution are chains like Big Bazaar, Food world, Shoppers Stop, Star India Bazaar, and Adani supermarket and hypermarket.

Retail is the country's largest source of employment after agriculture, has the deepest penetration into rural India, and generates more than ten per cent of India's GDP. With close to 12 million retail outlets, India has the highest retail outlet density in the world. The Indian retail sector is worth roughly Rs10000 Billion, and roughly two per cent of this is classified as organized retail. Of the 12 million stores in India almost 95 per cent are less than 500 sq. ft in area. The retailing sector in India is expected to grow at roughly 8.3 per cent during the next five years, with organized retailing growing at rates anywhere between 24 per cent to 49 per cent and accounted for Rs.350 billion which is about 3.5 per cent of the total revenues.

The past three-decades have witnessed a tremendous revolution in

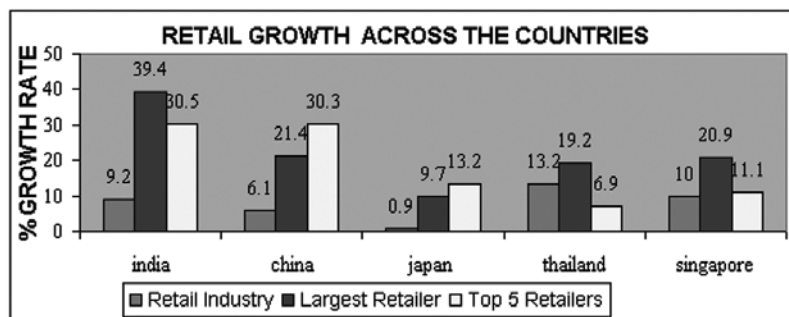
**Figure 1: Journey of Indian Retail**



the Indian Retail industries in all retail mix. Market liberalization and an increase in consumer population is now sowing the seeds of a retail change in India and it has already started through bigger Indian and multinational players. With the advent of these players, the Indian consumer is on his way to become the King of the market place as what his counterparts in the more developed countries of the world have been for decades. The Indian consumer is changing rapidly. The average consumer today is richer, younger and more aspirational in his or her needs than ever before. Consumers now value convenience and choice on a par with getting value for their hard earned money. A range of modern retailers is attempting to serve the needs of the 'new' Indian consumer. Consumers have started demanding a better shopping experience as global media

exposes them to different lifestyles. Consumer research shows supermarkets and other modern retail channels effects like a magnet for the households in metropolitan cities. The growth is likely to be driven by increasing incomes, growing exposure to overseas markets, availability of credit cards, increased lifestyle spending and higher mobility. The metropolitan cities are expected to account for 66 per cent of the organized retail market in the next few years. It is estimated that at the current rate of projected addition of retail space, an investment of INR five to seven billion annually will be made on retail real estate and supporting infrastructure. India's retail growth rate is faster than any other country in Asia.

**Figure 2: Retail Growth in Asian Countries**



Source: Retail Asia 2005, KPMG in India Analysis 2005

The various segments that make up the organized retail industry along with their size are in figure 4. Retail growth is already gathering momentum and the organized retail industry is expected to grow by

30 per cent in the next five years and had touched Rs. 45,000 crore in 2005. Thus, the growth potential for the organized retailer is enormous.

**Table 2: Market Size of the Retail Segment**

Segment	Market Size (Rs. Crore)
Textiles and clothings	4050
Jewellery	2,000-2,500
Consumer Durables	1500
Footwear	1,300-7,500
Food and personal care	1000
Non-Store retail	900
Luggage, watches and tyre	500
Books and music	390

Source: www.indiainbusiness.nic.in

The retail sector can also generate employment opportunities and can lead to job-oriented overall economic growth to any country like India. In most major economies, 'services' form the largest sector for creating employment. US alone have over 12 per cent of its employable workforce engaged in the retail sector. The retail sector in India employs nearly 21 million people, accounting for roughly 6.7 per cent of the total employment. However, employment in organized retailing is still very low, because of the small share of organized retail business in the total Indian retail trade. The share of organized retailing in India, at around two per cent, is abysmally low, compared to 80 per cent in the USA, 40 per cent in Thailand, or 20 per cent in China, thus leaving the huge market potential largely untapped. A modern retail services sector has the potential of creating over two million direct jobs within the next six years in the country assuming only eight-ten per cent share of organized retailing. A strong retail front-end can also provide the necessary fillip to agriculture and food processing, handicrafts, and small & medium manufacturing enterprises, creating millions of new jobs indirectly. Through its strong linkages with sectors like tourism and hospitality, retail has the potential of creating jobs in these sectors also.

### Factors Responsible for the Development of the Retail Sector in India

Amongst the least saturated of all major global markets in terms of

penetration of modern retailing formats, is the advantage to Indian retail industry. An AT Kearney study on global retailing trends found that India is the least competitive as well as least saturated of all major global markets. There are significantly low entry barriers for players trying to set up business here, in terms of the competitive environment. India is among the top five emerging retail market in the world and is growing like anything.

The key drivers of growth of Indian retail industry:

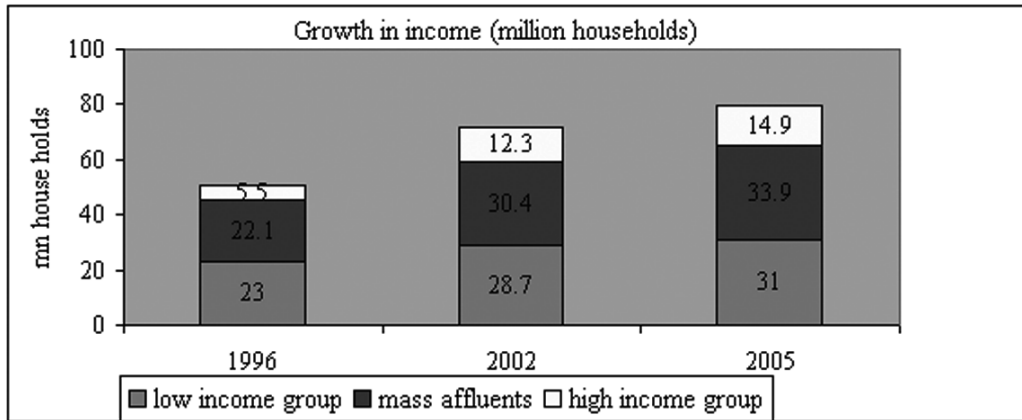
- Rising income levels
- A large segment of young population
- Nuclear family structure
- Growing literacy
- A rapidly expanding middle class
- Increasing number of working women
- Growing urbanization increasing media penetration
- Growing consumer acceptance of modern retail formats
- Changing lifestyles of the Indian households
- Better shopping experience and larger variety of goods

Rising incomes levels and improvements in infrastructure expanding consumer markets and changing consumer preferences and taste. Looking at income classification, the National Council of Applied

Economic Research (NCAER) classified approximately 50 per cent of the Indian population as low income in 1994-95; this is expected

to decline to 17.8 per cent by 2006-07. Thus the rise in earnings and better living conditions also affects on retail industry.

**Figure 3: Income Growth in India**

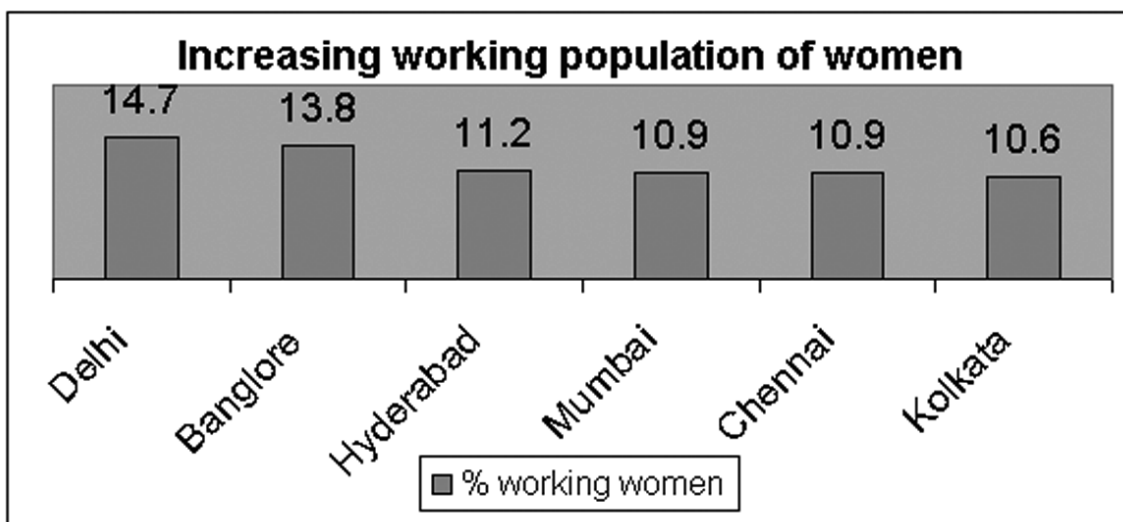


Source: NSSU; AC Nielsen; IRS-2002, KPMG in India Analysis 2006

Liberalization of the Indian economy, which has led to the opening up of the market for international consumer goods, has helped the international brands and international store players in retailing to play significant role to the vast consumer market by offering a wide range of choices and design of retail format to the Indian consumers. Shift in consumer demand to foreign brands also revolved the retail industry in India.

The positive demographics and the Indian consumer's increasing disposable income have been highlighted by several studies. Increasing double income families in cities is another positive factor. Salary hikes in India are also expected to increase at a faster pace than other developing countries. All these portend a sustained growth in discretionary spending in India.

**Figure 4: Percentage Increase in Working Women**



Source: NSSU; AC Nielsen; IRS-2002, KPMG in India Analysis 2006

The Internet revolution is making the Indian consumer more accessible to the growing influences of domestic and foreign retail chains. Reach of satellite T.V. channels is helping in creating awareness about global products for local markets. About 47 per cent of India's population is under the age of 20; and this will increase to 55 per cent by 2015. This young population, which is technology-savvy, watch more than 50 TV satellite channels, and display the highest propensity to spend, will immensely contribute to the growth of the retail sector in the country. As India continues to get strongly integrated with the world economy riding the waves of globalization, the retail sector is bound to take big leaps in the years to come.

Safety and security in the city and the various regulations and facility like opening space, parking place, operation of store, location and transportation facility will encourage the development of organized retail in the country. Infrastructure development in each city will be also the reasons for new retail development in the country.

Results from an ACNielsen global survey on consumers' attitudes towards shopping have confirmed that the world's biggest shopaholics are to be found in Asia. The recent global online survey conducted among over 22,000 Internet users in 42 countries, one in four consumers shop 'as a form of entertainment' once a month, while in Asia, one in four consumers view shopping as 'something to do' once a week. As many as 32 per cent Indians go shopping once a month where as 22 per cent of them indulge in it once a week. 71 per cent of Indian consumers describe grocery shopping

as a necessary chore, compared to 46 per cent who said that clothes shopping were a necessary chore. There is a huge opportunity for grocery retailers to exploit the situation and change the mindset and ultimately, grocery shopping experience for consumers.

### Growth of Organized Retailing in India

According to the Study undertaken by The ASSOCHAM (Associated Chambers of Commerce and Industry of India), the organized retail sector is expected to grow at six per cent by 2010 and touch a retail business of \$17 billion as against its current growth level of three per cent which at present is estimated to be \$6 billion. The Study has revealed that the overall retail sector will grow at GDP seven per cent by 2010 and enlarge its market share to \$280 billion from its present estimated level of \$200 billion. The organized sector retailing is all set to grow at much faster speed than unorganized sector and the higher growth speed will alone be responsible for its higher market share, which has been projected for \$17 billion. Cities and metropolies like Mumbai, Delhi, Chennai, Kolkata, Bangalore and Kanpur in which retailing will show booming prospects and the popular mode adopted for building shopping malls in these cities will be based on build, operate, lease and sell basis. Gurgaon district is situated in NCR of Delhi, which has initiated organized retail boom in Delhi and NCR in the form of malls as over half a dozen operational malls like MGF Metropolitan Mall, MGF Plaza, Sahara Mall, DLF Mega Malls, Gold Souk are in Gurgaon.

**Table 3: Organized Retailing in India**

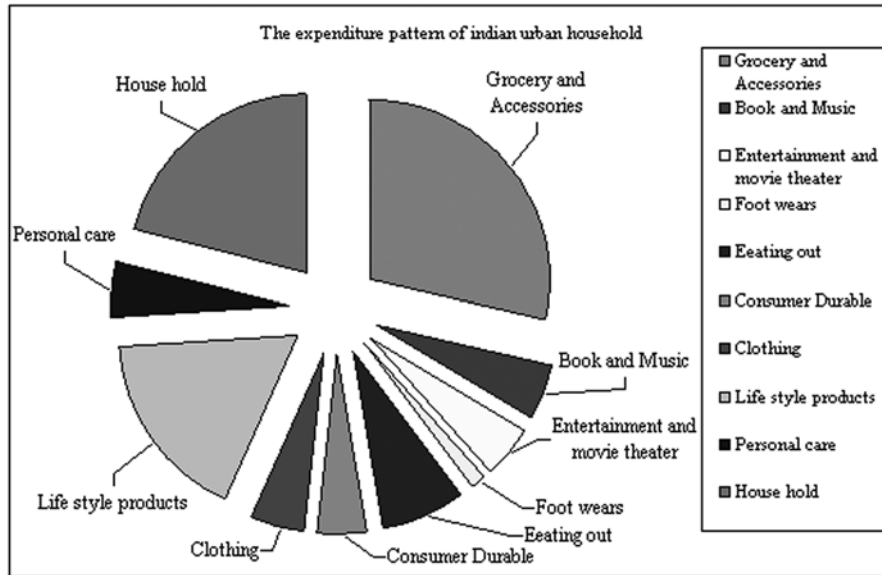
	1999	2000	2005
Total Retail Market (US \$ Billion)	150	180	225
Organized Retail Market (US \$ Billion)	1.1	3.3	7
% Share of Organized Retail from Retail Market	0.7%	1.8%	3.2%

Source: KSA technopack

With supermarkets like Apna Bazaar, Sahakari Bhandar, nine to nine, Food World, Nigam's supermarket and Margin Free shops providing easy access to goods at lowest ever prices, with few even providing a constant supply of imported goods, the organized sector does attract the actual Indian Consumer's attention who is always looking for bargaining.

Globally, it has been observed that as income levels rise, the share spent on food and grocery in the total household income declines and the proportion of income spent on lifestyle-related activities increases. Indian consumption patterns are no exception to the rule. Spending on consumer durables, apparel, entertainment, vacations and lifestyle products have increased in India.

Figure 5: Expenditure Pattern of Indian Urban household



Source: The KSA Technopak Consumer Outlook2005

At present, the organized retail activity is concentrated mainly in the apparel, food & beverages and entertainment segments. The organized apparel segment is expected to grow at a steady 9.5 per cent per annum over the next three years, driven primarily by the large domestic brands such as Westside, Wills Lifestyle, Shoppers' Stop, Pantaloons, Ebony and Globus. Of the three, the food and beverages segment is likely to see a higher growth rate. Food and clothing still account for the more than 50 per cent proportion of consumer spending. Together they estimated US \$275 billion household expenditure. Apart from the food segment, home improvement stores are the upcoming segment. Outlets like Gautier, Wonder Living, Bombay Bazaar, etc. have penetrated across metropolitan areas and leading cities of the country.

Food World and Music World are set to more than double their network, while Shoppers' Stop is gearing up for an expansion of 15 to 17 outlets all over the country. Pantaloon is expected to build about 11 super stores, moving ahead of its current store and franchise model of business. Regional retailers like Vishal megamart and Adani are planning to expand the network across their region. Players like Crossword, Nilgiris, Vitan, Kemps Chain and Landmark are also planning expansions. So, The growth in the organized segment is evident from the plans of the current players.

Households in the high-income categories account for about 53 per cent of the total household consumption expenditure. On an average the expenditure on consumables - food, clothing and consumer durables, by the lower income category is as high as 74 per cent while in the higher income category this forms only 57 per cent of their expenditure. Though the percentage contribution of consumables is relatively higher by the lower class, the purchase location is predominantly traditional outlets, as compared to the higher income category, which prefer to shop through organized outlets to a greater extent.

A rapid and dynamic change from traditional to organized retailing would occur only on account of a change in consumer expectation and behaviour. Retailing customers through various marketing strategies is one of the tactics used by retailers to tackle this change. Payment through credit card facilities is now available in most supermarkets and multi-storied shopping arcades, providing convenience and comfort to customers. Multi-brand outlets like Cross Roads, Globus and Shoppers' Stop have membership cards for frequent customers providing special offers and discounts. They also offer different concept of CRM, as today the term CRM has become a buzzword in the Indian Retail world. There are a host of reasons, which can be attributed to the changing consumer paradigm

and the role played by the organized retailers in making CRM a happening phenomenon. Every retailer in India today is looking at some or the other form of CRM or its prime constituent loyalty based programme.

The Income and consumption growth, Increasing literacy levels, Changes in family structure and women's role in the family, Growing role of children as influencers, Gradual acceptance of frozen goods as a viable alternative to fresh produce, and Growing influence of TV are key changes in consumer demographics driving organized retailing.

### Organized Retailers in India

The big Indian retail players looking to expand their operations include Shopper's Stop, Pantaloon, Lifestyle, Subhiksha, Food World, Vivek's, Nilgiris, Ebony, Crossroads, Globus, Barista, Qwiky's, Café Coffee Day, Wills Lifestyle, Raymond, Titan, Bata and Westside. India's largest organized retail chain Bata, has a turnover of \$140 million, while a single store of a retail chain like Wal Mart in the West turns in \$180 million. Super Bazaar was government's initiative into modern retailing way back in the 1960s. Started during inflationary times, it introduced the concept of self-help, controlled rates and open layout to the Indian consumer. These first-generation retailers then expanded to multiple locations, mainly metros and big cities. Now, pure retailers like Lifestyle, Ebony, Westside and Fun Republic are providing almost everything under one roof. Well-established business houses such as Wadia, Godrej, Tata, Hero, Malhotras, etc., are drawing up plans to enter the fast-growing organized retail market in India. Taking advantage of the retail boom, Himatsingka Seide, India's largest manufacturer of silk and silk-blended fabrics and a 100 per cent export oriented unit, has floated a subsidiary, Himatsingka Seide Wovens, to foray into the retail business with a series of fine furnishings stores, called Atmosphere, across the country.

Welspun, a leading manufacturer of terry towels, has entered the domestic retail business with a home textile brand, Spaces, which will offer a range of bed, bath, kitchen and table linen, specifically for the Indian market. The company currently exports to 32 countries. According to reports, Reliance Industries Ltd. plans to enter the retail business in a big way and has identified 18 cities, starting with Ahmedabad, to set up malls. It will spend Rs.30-50 crore on each mall, that are to be modelled after those in Dubai and East Asia. RPG Retail's FoodWorld has devised a procurement model by contracting directly with nearly 400 farmers in Hoskote near Bangalore for procuring fresh vegetables daily. The food chain also arranges finances, professional advice for these farmers.

The international players currently in India include McDonald's, Pizza Hut, Dominos, Levis, Lee, Nike, Adidas, TGIF, Benetton, Swarovski, Sony, Sharp, Kodak, and the Medicine Shoppe. Global players are entering India indirectly, via the licensee/franchisee route, since Foreign Direct Investment (FDI) is not allowed in the sector. International malls such as Marks and Spencer and Mango are also looking on the Indian market. Retailing in India has a very long haul ahead, as it is only later that the retailing scene will move to the other phases when the fruits of rapid growth will result in economies of scale and greater efficiency leading finally to consolidation through mergers and acquisitions.

Over the last five years, the Indian consumer market has seen a significant growth in the number of modern-day shopping malls. There is an increased demand for quality retail space from a varied segment of large-format retailers and brands, which include food and apparel chains, consumer durables and multiplex operators. Shopping Mall development has attracted real-estate developers and corporate houses across cities in India. As a result, from just three malls in 2000, India is all set to have over 220 malls by 2005. Today, the expected demand for quality retail space in 2006 is estimated to be around 40 million square feet.

The success of large malls such as Crossroads in Mumbai, Spencer Plaza in Chennai and Ansal Plaza in Delhi has encouraged a number of developers to join the retail bandwagon. However, though rentals achievable are marginally higher than high-street rentals, there are a number of challenges that these developers will face.

### Changing Trends in Retailing

Retailing in India is at a very initial stage of its evolution, but within a small period of time certain trends are clearly emerging which are in line with the global experiences. Organized retailing is witnessing a wave of players entering the industry. Organized retailers in India are trying out a variety of formats, ranging from discount stores to supermarkets to hypermarkets to speciality chains. Yet, Indian retailing has still not been able to come up with many successful formats that can be scaled up and applied across India. A common element of the expansion plans of different players appears to be the hypermarket. All leading Indian retail players are either already present or have plans for hypermarkets. Some of the notable exceptions have been garment retailers like Madura Garments & Raymonds who has scaled their exclusive showroom format across the country.

### 1) Experimentation with Retail Formats

Retailing in India is still evolving and the sector is witnessing a series of

experiments across the country with new formats being tested out; the old ones tweaked around or just discarded. Some of these are listed in Table No.4.

**Table 4: New Emerging Formats in India**

Retailer	Original Format	Experimenting Format
Shoppers' Stop	Department Store	Quasi-mall
RPG Retail	Supermarket Foodworld	Hypermarket (Spencer's), Foodworld express Specialty store (Health & Glow)
Crossword	Large bookstore	Corner shops
Piramal's	Department store (Piramyd Megastore)	Quasi-mall, food retail, Discount store (TruMart)
Pantaloon Retail	Small format outlets (Shoppe) Department store (Pantaloon)	Hypermarket, Supermarket (Food Bazaar), Hypermarket (Big Bazaar) Mall (Central)
Subhiksha	Supermarket	Self service, Discount stores
Vitan	Supermarket	Suburban discount store
Globus	Department Store	Small fashion stores
Tata/ Trent	Department store (Westside)	Hypermarket (Star India Bazaar)
Landmark Group	Department store (Lifestyle)	Hypermarket

Source: KPMG in India analysis 2005

Retailers are also trying out smaller versions of their stores in an attempt to reach a maximum number of consumers. A crossword bookstore is experimenting with Crossword Corner, to increase reach and business from their stores. Foodworld is experimenting with a format of one-fourth the normal size called Foodworld Express. Players like Subhiksha and Margin Free Markets are providing convenience with discounts on goods, while internationally convenience formats typically charge a premium over market prices. Similarly, ITC is experimenting with a model, which brings together a two-way flow of goods in the retail outlet, farmers sell their produce and purchase goods to fulfill their consumptions needs.

### 2) Technology in Retail

All department stores have spent a lot of money on state-of-the-art IT systems, covering the entire areas of operations like merchandise management, interaction with vendors, and stock planning. This has helped these stores in managing the complexities of interacting with a large number of suppliers, running various stores and warehouses

and selling a large number of products to a broad consumer base. But still Technology usage is low in India today, compared to levels achieved in advanced economies. Retailers like Wal-Mart and Metro have started experimenting with Radio Frequency Identification (RFID) technology, which is expected to provide much better inventory visibility and hence facilitate efficient management of inventory. Retailers in India are start to adopt bar coding completely. The level of bar-code usage is also largely due to retailers' initiatives of printing these codes at their warehouses, unlike in developed countries where all the suppliers print bar codes, this shows the eagerness to adopt new technology in Retailing.

### 3) Increasing Significance of Private Labels

A key strategy adopted globally and increasingly in India by retailers is the use of private labels or store brands. Globally private labels contribute to 17 per cent of retail sales and are growing at five per cent per annum. Private labels provide a higher margin to the retailers while simultaneously offering lower prices to consumers.



There is an increasing acceptance of private labels in India. A recent survey by ACNielsen has identified that 56 per cent of their survey respondents in India consider private labels to be good alternatives to manufacturer brands. In India, private label penetration is on the rise. Some of the major food and grocery retailers average between 20 and 30 per cent private label penetration with the highest penetration of about 50 per cent today. In clothing and apparel, some retailers have as much as 65 per cent of the sales coming from private labels.

While private label penetration is on the rise, it is largely in the areas of groceries, home care and clothing. Internationally, private labels are available in many more categories including healthcare, cosmetics, beverages, etc. This expansion is likely to take place in India as well.

#### 4) Loyalty Schemes

Most department stores operate loyalty schemes to promote repeat purchases and build a loyal customer base. Customers, who join such schemes are eligible for a variety of benefits such as accumulation of points against purchases for redemption on subsequent purchases, special offers, product previews, quick billing and so on. Such schemes also enable department stores to analyze customer-buying patterns, which help in formulating future strategies. Shoppers' Stop has gone a step ahead by introducing a store card in collaboration with Citibank in 2002. This co-branded credit card, known as 'The First Citizen Citibank Card' also carries all the benefits of Shoppers' Stop's loyalty scheme. Hyper markets like Big Bazaar and Adani also introduce different schemes under loyalty programs.

#### 5) Use of Concession

Several department stores are offering space in their stores to other retailers selling various products and services including music, books and coffee. This increases the range of products available in these stores, thus, enhancing their customer appeal without the problems related to direct retailing such as supply chain and stock management. These factors are particularly important in areas where there is a requirement for special expertise and experience. The new application of retailing is filled with terms like concessions and concessionaires in the global context. A concession represents a shop, restaurant, bar or car rental counter located at any space available in any Store, mall or stations like airport, Railway station and Bus depots; on a ship or at a hotel. Someone who holds or operates a concession is called a concessionaire. Shopper's stop and other retailers

like Adani start this to decrease their distribution responsibility.

#### Challenges to Retailing in India

The retailers in India have to learn both the art and science of retailing by closely following how retailers in other parts of the world are organizing, managing, and coping up with new challenges in the fastest changing consumers and marketplace. Indian retailers must use innovative retail formats to enhance shopping experience, and try to understand the regional variations in consumer attitudes to retailing. Retailing as an industry in India has still a long way to go. To achieve an extraordinary success Indian Retail industry have to fight with following obstacles.

1. One of the key impediments is the lack of FDI status. This has largely limited capital investments in supply chain infrastructure, which is a key for development and growth of food retailing and has also constrained access to world-class retail practices. Automatic approval is not allowed for foreign investment in retail but move to allow FDI up to 51 per cent has made this sector more attractive to foreign retailers as they can
2. Multiplicity and complexity of taxes; lack of proper infrastructure, cumbersome local laws, Regulations restricting real estate purchases, and relatively high cost of real estate are the other impediments to the growth of retailing.
3. The organized retail industry is realizing the importance of information technology in bringing about process improvements, which would result in greater operating efficiencies and hence increased profits. But the awareness of IT systems that are available is low, resulting in poor decision-making. Absence of developed supply chain and integrated IT management system will be the hurdle for the retailers in India and acceptance to Indian retailers is too slow.
4. The most important difference between Marketing and Retail management is marketing has the classic 4 Ps, Product, Promotion, Price and place in retailing a fifth P, people is added which is critical. They are critical to a service business like retailing both as employees who execute the business. Availability of trained personnel and retaining the human resources is a major challenge for organized big retailers. The bigwigs like Crossroads offer high compensation and create a cohesive environment that makes an employee proud to be a part of such big retail chains. But than also industry Lack the trained and skilled work force in India, which are specifically used for Retailing.

5. Highly educated class doesn't consider Retailing as a choice of profession. Very few B-schools in India are now offering Retail Management as an attractive career option to students. Low skill level for retailing management is one of the challenges to Indian retail industry. Industry Players like Pantaloon start to create skilled personals through education in management.
6. Intrinsic complexities of retailing such as rapid price changes, constant threat of product obsolescence and low margins makes it a persistent industry which shows extraordinary growth but less attractive for investment. Manufactures are still using intermediates to Retailers and so margins remain low to Retailers.

While the industry and the government are trying to remove many of these hurdles, some of the roadblocks will remain and will continue to affect the smooth growth of this industry. The market share of organized retail will grow and become significant in the next decade, this growth would, however, not be at the same rapid pace as in other emerging markets as Indian retailing faces some major hurdles (see Table 1), which have resist its growth. However, as a result of the roadblocks (mentioned in Table 1), the industry remained in a incipient stage.

### Key challenges in the Indian retail market

- Large geographic area
- Infrastructure constraints
- Distribution costs
- Fragmented market
- Lack of national Distribution networks
- Lack of distribution hubs

There are adequate opportunities for organized retailing, the unorganised sector does cash in on the tax advantage. The fragmented and unstructured segment makes it difficult to administer the tax system. This is a macro issue from the organized retailing side. The other hurdle is to change the mind block of customers, who tend to perceive organized retailers to be far more expensive than unorganised ones with no specific distinction between the two in terms of the apparent value.

### Future of Indian Retailing

India's growing middle class and its almost untapped retail industry

are key attractions for global retail giants wanting to enter newer markets. It is rated the fifth most attractive emerging retail market. India is being seen as a potential goldmine. It has been ranked second in a Global Retail Development Index of 30 developing countries drawn up by AT Kearney. The retail sector in India is witnessing a huge revamping exercise as traditional markets make way for new formats such as departmental stores, hypermarkets, supermarkets and speciality stores. Western-style malls have begun appearing in metros and second-rung cities alike introducing the Indian consumer to a shopping experience like never before.

According to KPMG report "Consumer Markets in India" The organized retail sector is expected to grow stronger than GDP growth in the next five years driven by changing lifestyles, strong income growth and favourable demographic patterns. The structure of retailing is developing rapidly with shopping malls becoming increasingly common in large cities, and development plans being projected at 150 new shopping malls by 2008.

In the next couple of years, India will see at least two Indian retail businesses attaining the magic figure of US\$ 218 million in sales. Interest of Government to this industry will create catalytic impact to the Retail industry and force to attain a critical mass as growth in the industry picks up momentum. The customer will continue to change will be far more demanding. The next few years will be most interesting than we have ever seen. Retailer needs to know the customer's needs.

### Conclusion

India remains one of the last frontiers of modern retailing. Various business houses have already planned for few investments in the coming 2-3 years. Though the retailers will have to face increasingly demanding customers and intensely competitive rivals, more investments will keep flowing in and organized retailing in India is surely poised for a takeoff and will provide many opportunities both to existing players as well as new entrants. Retail marketing efforts have to improve in the country advertising, promotions, and campaigns to attract customers, building loyalty by identifying regular shoppers and offering benefits to them, efficiently managing high-value customers, and monitoring customer needs constantly, are some of the aspects which Indian retailers need to focus upon a more proactive basis.

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# Knowledge Management

## in a Community of Practice



**Khalid Hafeez and Fathalla Alghatas**

The topic of Community of Practice (CoP) has been discussed in the management literature in the earlier part of 1980s, and since attracted a lot of attention from academics and professionals around the globe. Communities of Practice (CoP) have become a strategic approach for fostering learning and transferring knowledge. However, there are a few studies, which explain what makes a community to engage in a discussion to share their knowledge and experience. This paper discusses the anatomy of a CoP and examines a number of knowledge management tools such as Nonaka and Takeuchi's knowledge spiral model, story telling and discourse analysis to illustrate how knowledge is transferred and learning takes place in a virtual Community of Practice.

The topic of Community-of-Practice (CoP) has been discussed in the management literature in the earlier part of 1980's, and since attracted a lot of attention from academics and professionals around the globe. A recent survey by the *Institut für e-Management e. V.* (2001) proposes CoPs as one of the Top Ten topics of Knowledge Management (KM). Lave and Wenger (1997) co-founders of this concept go to the extent of considering CoPs "an intrinsic condition for the existence of knowledge" (Kimble; Barlow, 2000). The CoP has been particularly recognised as main tool for converting "implicit" knowledge into "explicit" form of knowledge (Davenport and Prusak 1998). Reports from American

Productivity and Quality Center (APQC, 2000) survey suggest that 95 per cent of the Best Practice organisations consider CoPs very important to their KM Strategy. According to the survey, firms such as Ernst & Young consider CoPs an equivalent to Knowledge Management. Almost 33 per cent participants included in the survey represented consulting firms, which demonstrate that consulting which highly knowledge-intensive industry value CoPs as a valid method knowledge acquisition and transfer.



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In this paper Wenger's and Snyder's definition is considered for co-presence of distributed groups if they can still be considered Community-of-Practice. Lave's and Wenger's (McDermott, 1999)

initial analysis relates to the groups which were exclusively co-located in non-IT-settings (e.g. tailors, quartermasters, butchers and claims processors). They suggest that the co-presence should not be seen as essential condition for forming a CoP. Since Brown's and Duguid's (1996) influential case study on CoP at Xerox, other case studies of distributed and computer-mediated Communities have been published as explained in the subsequent sections.

### Community of Practice

Brown and Duguid (1996) famous case study with Xerox PARC (Brown; Duguid, 1998) helped rejuvenating the modern notion of "Community of Practice" (CoP). They defined CoPs as "peers in the execution of real work, held together by a common sense of purpose and a real need to know what each other knows." Wenger and Snyder (2000) two of the most recognized theorists on the topic define CoP as groups of people informally bound together by shared expertise and passion for a joint enterprise" (Wenger, 2000). The key points of other CoP definitions include knowledge sharing, learning (Reinemann-Rothmeier and Mandl, 1999), a common practice or solving of common problems (McDermott, 1999) of the group and construction of a common knowledge repository (Stewart, 1996).

However, there is a close relationship of CoP topic with the notion of "Business Communities" which is defined as groups formed around a topic, which is relevant for business (Gruban, 2001). It is assumed that these groups have been working for some time together, while manifest other characteristics of being a community, such as, sharing a common meaning; identity and common language (Hildreth et al, 1998) derive from common practice and common interest(s). We, therefore agree with following working definition of CoP for the purpose of this paper:

"Group(s) of people, which have an interest in the same topic over a longer period of time and who are engaged in an activity of sharing their opinions on this topic" (Probst, 1999).

In the following subsections we would summarize a number of knowledge management tools used to analyse an on-line community of practice.

### Understanding Knowledge Dynamics

Literature provides very clear links of learning and knowledge management (Hafeez and Abdelmeguid, 2003). Also learning is an essential ingredient for developing individual and corporate competences in the knowledge society (Hafeez

et al., 2002a, 2006, 2002c). Here we would consider two specific tools for knowledge management, namely, Nonaka and Takeuchi's spiral model (1995) and story telling. We would argue these are useful tools to explain knowledge dynamics in a virtual CoP context.

### Knowledge transfer (SECI) spiral model

Nonaka and Takeuchi (1995) spiral model illustrates how knowledge is created and transferred in an organisation through interactions between tacit and explicit knowledge. More specifically they recognize these interactions as 'knowledge conversion.' There are four modes of knowledge conversion, namely, socialisation, externalisation, combination and internalization (see Figure 1) as summarized in the following:

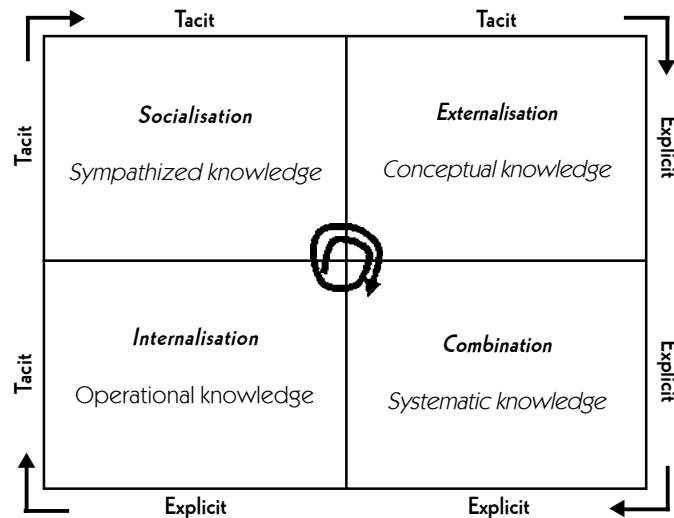
- Socialisation (from tacit to tacit): where knowledge transfer takes place in a tacit form. Here, an individual acquires tacit knowledge directly from others through shared experience, observation, imitation and so on.
- Externalisation (from tacit to explicit): through articulation of tacit knowledge into explicit concepts. This field prompted by meaningful dialogues or reflections.
- Combination (from explicit to explicit): through a systematisation of concepts drawing on different bodies of explicit knowledge present in the environment of an organisation.
- Internalisation (from explicit to tacit): through a process of "learning by doing" and through a verbalisation and documentation of experiences.

The main benefit of this model is that it provides a mechanism to provide an understanding on the epistemology and dynamism of knowledge itself, and provides a framework for management of the relevant knowledge management processes from the ontological perspective.

### Storytelling

Storytelling is the use of stories in organisations as a communication tool to share knowledge (Snowden, 1999). Stories can be used to serve a number of different purposes in an organization to meet different context, for example Denning (2000) identifies that there are eight purposes for storytelling, which all relates to expressing complicated ideas and concepts. The aim is to produce clear communication for converting knowledge into a form in which easier for others to understand.

**Figure 1: SECI Diagram representing four modes of Knowledge conversions**  
(source: Nonaka and Takeuchi, 1995)



In a CoP context, socialising in a formal or informal way provides opportunities for stories to be told as people relate their experiences and it is through the medium of storytelling that people are encouraged to share knowledge. For us storytelling is a powerful transformational tool, which if used appropriately can facilitate sharing of knowledge in a virtual CoP.

**Discourse Analysis**

Discourse analysis is a way of identifying, categories and developing relationships between exchanges, sequences, and episodes of messages (Sherry, 2000). Discourse analysis is good way of determining the relationships between the concepts that are presented and discussed in the conversation. Spradley (1980) recommends four levels of investigation in order to conduct a discourse analysis as explained in Table 1.

**Table 1: Different Investigation Levels for Discourse Analysis** (source: Spradley (1980))

Level of investigation	Description
Domain analysis	This means capturing the parts or elements of cultural meaning that occur in the conversation by identifying the discrete set of moves used by the participants.
Taxonomic analysis	This is a search for the way that the cultural domains are organized. It usually involves drawing a graphical interpretation of the ways in which the individual participants' moves form groups and patterns that structure the conversation.
Componential analysis	This means searching for the attributes of the terms in each domain, the characteristic phrases or sentences that tend to recur within each category of moves.
Theme analysis	The last and final step is to search for patterns or recurrent relationships among domains. If certain moves or language functions tend to enhance learning, then these patterns need to be identified.

In a virtual CoP context, we feel the above relationships, as well as the interaction of the moderator could construct the subsequent structure of the conversation. Such electronic dialogue could be characterized by a dynamic membership of the community members that are distributed across space and through time.

## Methodology

As mentioned earlier we are using a virtual community of practice representing System Dynamics Association as our case study. The CoP is a specialist community involving technical expertise of domain experts, teachers, consultants and students. The reason for choosing the CoP was our own interest and expertise of this subject area for the past 16 years. This allows us to have a good knowledge of the domain expert in the different categories of SD discipline. Also we have an active participant in the past discussions of this CoP. However, we have been an observant during the case study period.

## Case Studies

System Dynamics has been around for about 50 years and was conceived due to the cross-fertilization of the fields of management science, control theory and computer simulations. It aims to represent time behaviour of a "real world" system using some well-known pattern such as learning curve or S-curve. More complex models are readily developed using non-linear algebraic equations, however,

the main aim is to understand the dynamics and behavioural changes in a system over time rather focusing on actual numbers or quantitative outputs. Such analysis is therefore suitable to study medium to long-term changes such as impact of an organisations' three to five year strategy or policy.

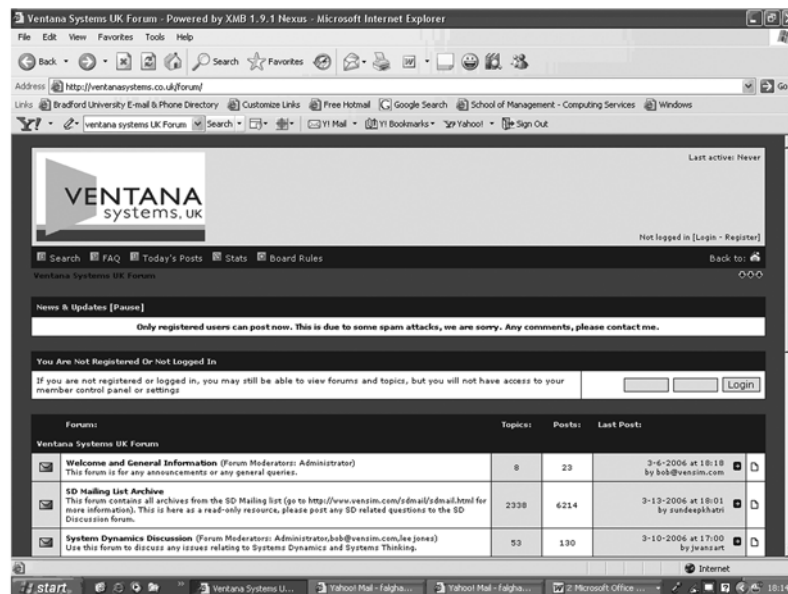
## Case Study: System Dynamic Society's Community of Practice

The System Dynamics Society was established around thirty years ago with key aim to provide a platform for researchers, educationalist and practitioners for exchange of ideas. Over the years the activities of the Society have evolved in many forms such as organizing workshops, conferences and doctoral colloquiums. The SD community of practice was such a successful initiative that subsequently two offspring communities were established to ensure a focus debate in the related fields. These include:

- (i) K-12 CoP: This is established by the educators of SD at the Pre-University Schools and colleges.
- (ii) Sustainability CoP: A dedicated forums for social scientist and economist predominantly engaged with developing SD models for sustainability at macro level.

The front end of the website is illustrated in Figure 2, (this may be viewed at: <http://www.ventanasystems.co.uk/forum/>)

Figure 2: SD CoP interface: <http://www.ventanasystems.co.uk/forum/>



The analysis in this paper concerns the main System Dynamics CoP. The analysis reveals how domain expert in the field are acting as voluntary mentors for educating the students and semi experts in the field. We also illustrate how these mentor experts bring out their subjective and tacit knowledge to act as a catalyst to generate new

ideas, and maintain the interest of the community to remain engaged in a dialogue. We further explore a number of knowledge management tools to illustrate how learning takes place in this CoP and individual as well as domain knowledge is expanded. We have selected two topics for further analysis as illustrated in Table 2.

**Table 2: A list of selected topics for analysis from SD CoP**

	Topic	No. of replies	Topic Generator	Posted on	Discussion date	Discussion period
1	Can system dynamics models learn	46	Martin F. G. Schaffernicht	17 April 2003	18/4/03 to 7/5/03	20 days (3 wks)
2	Using statistics in dynamic models	28	Jay Forrest	29 Jan 2004	29/1/04 to 6/2/04	9 days

We have classified each reply into five main categories as follows:

- Technical Dialogue: Participants apply specific knowledge from a particular field(s).
- Experiential Dialogue: Participants use anecdotes and reflections based on from their own experiences to argue their case.
- Philosophical Dialogue: Participants refer to or are guided by a particular school of thought.
- Academic Dialogue: Participants draw upon specific academic references.
- Mixed: Participants combine two or more of the above categories.

Also, we have classified the nature of discourse within discussion as follows:

- Explanation: to make something clear by giving reasons
- Storytelling: use of this technique to enhance an idea
- Support: to show one’s loyalty or approval of belief
- Inquiry: the content is inquiring specific knowledge to be clarified by other members.

An analysis of the first topic is presented in the following section.

**Topic 1- ‘Can SD models learn’**

The Query: Inspired by the development in the machine learning

field, the CoP bulletin board received a question from one member (Martin Schaffernicht) to guide him

“Is it possible to build a system dynamic model that ‘learns’?”

Developing a context to his inquiry, Martin Schaffernicht argues that this is possible only insofar as some decisions may change values of converters that are used by other decisions; but if learning means that some existing variable is replaced by a new one (second loop changes objectives and values), it seems hardly possible. His specific request worded “if anyone has an academic paper or some other written material about this theme.”

**The Nature of discourse:** Over the past twenty years many of the non-deterministic problems are modeled using some learning algorithms such as neural networks, fuzzy logic, genetic algorithm or some other kind of probabilistic reasoning method such as stochastic automata. The non-deterministic problems are those where an exact mathematical solution does not exists, and only way to achieve a near optimum solution through trial and error. This discipline is more recently evolved as “machine learning” and the underlying logic of these models is to bring the output of the model as close to target as possible. Therefore after each simulation, an error function (which is the difference between the target and actual output) is generated. If the new error function is less than the previous one, a corresponding input is generated based on a fractional association to the new error function such that overtime the error reduce to zero or as close as possible. In contrast, system dynamics generates



a non-exact solution based on complex mathematics. However, the SD algorithm does not go through any optimization runs to find a near exact solution, as explained earlier the main aim of SD study is to understand the time behaviour of a system in terms of increasing or decreasing trends such as impact of educational interventions to cut down smoking in teenagers, which would be quantifiable after a few years of implementation.

Figure 3 shows the time history of this discussion and Table 3 provide a discourse analysis how the discussion took place. We would regard the query as a mixed category as it include search for technical information as well as need for developing an academic dialogue to provide an answer to this discussion. The query initially attracted 18 responses from participants over the first five days. The first contributions expressed opinions regarding different System Dynamic approaches. The analysis suggests that members were the active participants of this debate. From our knowledge of the subject area we would regard them as domain experts. Figure 4 shows that the message sent on the 1st of May 2003 (by J. Lauble) was the last substantive contribution to the discussion. There were two further contributions made in this CoP, however, these nevertheless were general comments to support the previous arguments and to thank participants for their inputs.

The topic can be regarded highly technical that in general led too much focused discussion. However, despite of highly technical nature of the topic, most of the experts posted relatively long (250-500 words) or very long (501-1000 words). The interests from other members in terms of accepting or rejecting different opinions encouraged the experts to make further contributions. An analysis of the total dialogue reveals that, overall, academics contributions in the discussion were almost 40 per cent. Whereas around 16 per cent came from experts belonging to some professional organisation (for example Strategy Academic Solution, PA Consulting Group and Sports Business Simulation Inc.).

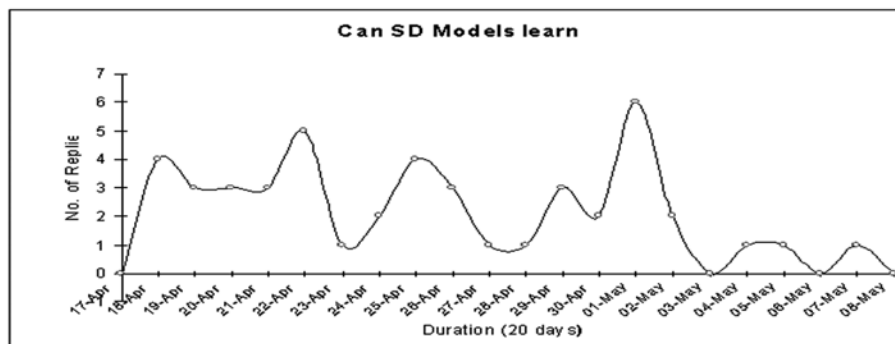
We have used life cycle term very loosely here to explain the life cycle of the topic itself rather life cycle for the community of practice as suggested by Wenger (1998). Figure 4 illustrates various fluctuations in the intensity of discussions. We would relate some of these fluctuations due to the broadness of the topic area-giving rise to related sub-questions, however not attracting much attention from wider community. However, in our view the main reason for the success of this topic as can be seen from the discussion profile (Figure 3) is that every time community started to lose interest with the topic (the "dispersed stage"), a new related question was posted, that sparked the interest of other members and domain experts were quick to jump into share their experiences and give their opinions. In total, five sub questions were raised during this discussion. These questions were as follows:

- What kinds of things could continuous aggregate models like system dynamics models learn?
- Did the system lose focus?
- Does the SD model meet all "learning" needs?
- Are there other arguments for SD being used in learning?
- Why did a correspondent make bad decisions despite possessing sufficient information to make more appropriate decisions regarding SD?

The nature of the discussion was predominantly explanation. The discussion classification was mostly academic or mixed where participants combined more than one dialogue such as technical, philosophical, or experience in their messages (see Table 3).

Figure 4 provides a percentage contribution of the key authors illustrating that the engagement of various domain experts of the discipline provided the stimulus in this debate. There were 29

**Figure 3: Discussion Profile for the Topic "Can SD models learn"**



members involved in this discussion of which we would regard fourteen (14) having substantial experience in the discipline. These experts belonged to academic institutions, businesses as well professional organizations. The analysis suggests that the domain experts overall posted 36 per cent of the total replies. The replies,

giving relevant suggestion to participants, express their own opinions, relating to their own experiences contextualise any emerging questions, and sometimes even acting as a moderator summarise the discussion in a concise way.

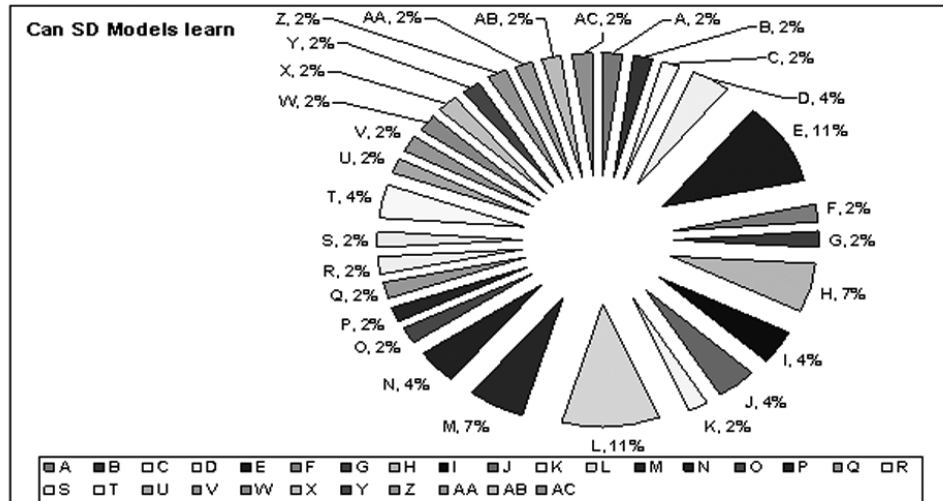
**Table 3: Discourse Analysis for the Topic: "Can SD Models Learn"**

Number of participants	Community Member	Code	Number of Messages	Message Length (in words)	Number of Discourse	Message Classification
-	M Schafernicht	-	1	S (topic generator)	Inq. (topic generator)	Mix
1	Bill Harris	A	1	VS first reply	Exp.	Ac
2	Paul Newton	B	1	VS	Exp.	Ac
3	Ignacio Mayano	C	1	VS	Exp.	Ac
4	Natarajan R. C.	D	2	M, M	ST, Exp.	E, Mix
5	Raymond Joseph	E	5	L, L, VL, M, L	Exp. Exp., Exp., Exp., Support	Mix, Ac., Tech., Mix, Mix
6	Magna Myrtveit	F	1	M	Exp.	Ph
7	George Backus	G	1	S	Support	Ph
8	John Sterman	H	3	M, VL, L	ST, Exp., Exp.	Mix, Ac, Ac
9	Alan Graham	I	2	L, M	Exp., Support	Ac, Mix
10	Yamen Barles	J	2	L, L	Exp., Cont.	Ph, Mix
11	George Lofdahl	K	1	S	Support	Ac
12	Jim Hines	L	5	S, L, M, L, L	ST, Exp., Exp., Exp., Exp.	Ac, E, Mix, Ac, Mix
13	Bill Braun	M	3	S, VL, S	Support, Con., Exp.	Ph, Mix, Ac
14	Rainer	N	2	M, L	Cont., Exp.	Ac, Mix
15	Niko Papula	O	1	M	Exp.	Ac
16	Rod Brown	P	1	VS	Cont.	Ac
17	Finn Jackson	Q	1	L	Exp.	Mix
18	Marsha Price	R	1	VL	Support	Mix
19	Cleotide Gorrzalez	S	1	S	Support	Ac
20	George Richardson	T	2	L, VL	Exp., Exp.	Ac., Mix
21	Brain Daingerfield	U	1	L	Support	Mix
22	Martens	V	1	M	Support	Ac
23	F. G. Schaffernicht	W	1	L	Exp.	Mix
24	Carlos Ariza	X	1	M	Inq.	Ac
25	Dave Paker	Y	1	M	Exp.	Mix
26	Z. Abraham	Z	1	L	Support	Ac
27	Allocar Strasbourg	AA	1	VL	Inq. & Exp.	Mix
28	Jim Thompson	AB	1	S	Support	Ph
29	David Kreutzer	AC	1	L (last reply)	Support	Mix

**Key:**

**Message Classification:** Technical (Tech); Experiential (E); Philosophical (Ph); Academic (Ac)  
**Nature of discourse:** Explanation (Exp.); Support; Contradict (Cont.); Storytelling (ST); Inquiry (Inq.)  
**Message Length (in words):** 1-50 Very Short(VS); 51-100 Short (S); 101- 250 Medium (M); 251-500 Long (L); 501-1000 Very Long (VL); +1000 extended contribution (EC)

Figure 4: Authors Relative Contribution in the Discourse: 'Can SD Models Learn'



## Topic 2- Using SD in Statistics

**The Query:** This topic was generated by the originator of system dynamics discipline Jay Forrester himself. The topic was initially springs from a previous discussion on the subject by another domain expert Jim Hines. The question worded:

"How statistics can be used in the System Dynamics Models"?

**The Nature of discourse:** The query was actually trying to give an answer to the question itself. The question was posed in an academic context and caused an initial flash of interest with five contributions being posted to the discussion on 29th January 2004. These contributions expressed opinions representing a range of positions; primarily there was a division between those who considered stories to be a valid means of understanding cultural transmission in themselves and those who suggested that the strength of such stories in transmitting cultures could be tested through statistical analysis. One contributor sought to find a middle-way between these two opposing views by emphasizing the value of using stories and statistics together. From this contributor's perspectives, anecdotes provided a picture of events while statistics could be used to explore how applicable these stories might be to other situations.

As the discourse of the discussion moved from a relatively general set of responses into more detailed consideration of analytical rigour

(for example the reliability of statistical testing), the number of responses declined significantly. This decline was reversed, however, when one respondent involved in the detailed methodological discussion included a number of additional comments on the topic in hand. The wider range of subjects for people to address seemed to stimulate renewed interest and point of entry for potential participants. As illustrated in Figure 6 that participation rate increased after such interventions. This interest was sustained up until 3rd of February 2004, although participation never reached the levels of initial interest in the topic. On 3rd of February 2004 John Gunkler tried to bring a focus to the nature of the discussion by pointing towards the original question asking the community whether the topics had become too broad (for example the almost philosophical discussions on the nature of proof occurring on 1st and 2nd February 2004) and whether the thread should be broken into separate discussions. Thereafter contributions to this discussion declined with the final entry being made on 6th February 2004 when J. Lauble usefully summarized the points raised and thereby provided a natural conclusion to this discussion.

Based on the fact that all members have knowledge about SD, nearly one third of contributions came from domain experts. The composition of the participant group may be a reason for the broad nature of the discussion, as opposed to a series of narrowly focused contributions closely related to the topic in hand. As acknowledged

by John Gunkler this does produce an interesting discussion and can stimulate creation of potential new threads but can also require the experts in the discussion to help retain the focus of discussions or bring matters back on track. The summary provided by the final contributor is a good example of how an expert can perform a “management” role in such wide-ranging discussions, the comprehensive entry posted by an expert who summarizes the previous arguments clearly and added some new material to stimulate further discussion.

Altogether eighteen members took part in this discussion. Out of those, we regard ten (about 56 per cent) are the domain experts belonging to either academia or business and consulting organizations.

The nature of the discussion took the forms of explanation and support in most replies, in spite of there being other forms that could have been utilized, such as storytelling, inquiry and

contradiction (see Table 4). Observing the general tone and language adopted by the participants, the discussion appeared to be one of friendly exchange based around developing mutual understanding around this topic. Even when participants disagreed, they either made efforts to point out where they could agree with another contributor, or were very articulate in explaining the basis for their disagreement. The extracts, which we term explanatory, had worked examples or experiential dialogue in an attempt to clarify the points what a contributor was trying to make.

Around 61 per cent of the contributions could be classified as either long (251-500 words) or very long (501 – 1000 words), whereas, 39 per cent were medium (101 – 250 words) or short (51 to 100 words) replies (see Table 4). Similar to the first topic, three domain experts lead this discussion as they posted 43 per cent of the overall contributions (12 contributions out of 28).

Figure 5: Discussion Profile for the Topic “Using Statistics in SD”

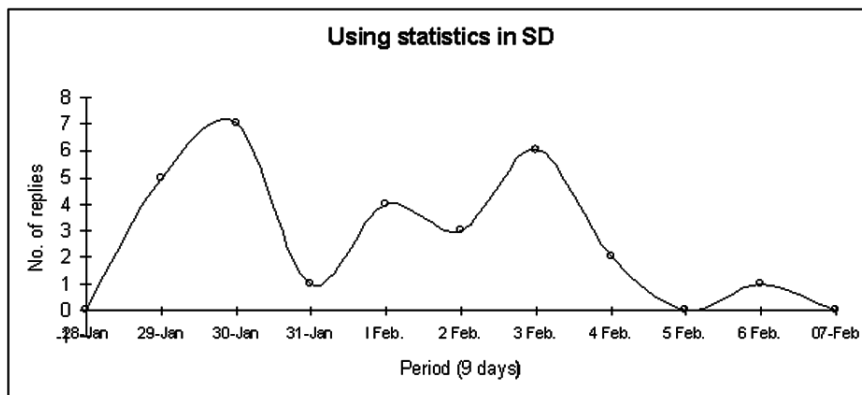


Figure 6: Authors Relative Contribution in the Discourse: “Using Statistics in Dynamic Models”

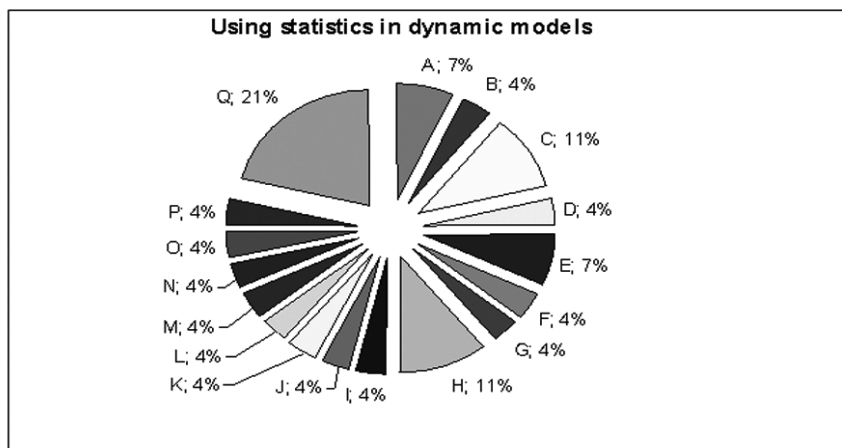


Table 4: Discourse Analysis of the Topic: Using Statistics in SD

Number of participants	Community Member	Code	Number of Messages	Message Length (in words)	Number of Discourse	Message Classification
-	Jay Forrester	-	-	L (topic generator)	Exp.	Ac
1	Joal Rahn	A	2	L (first reply), VL	Support & Exp., Cont. & Exp.	Mix, Mix
2	Kim Warren	B	1	L	Support	Mix
3	Jim Hines	C	3	M, VL, M	Exp. & ST, Exp. & Inq. Exp.	Ac, Mix, Mix
4	Finn Jackson	D	1	M	Support	Mix
5	Bill Harris	E	2	S, L	Exp., Cont.	Ac., Ac
6	Gorey Lofdahl	F	1	L	Exp.	E
7	John Voyer	G	1	L	ST	Ac
8	Alan Graham	H	3	M, EC, M	Exp., ST, Support	Ac, Mix, Mix
9	Camlo Olayo	I	1	L	Support & Exp.	Tech.
10	Enting Moxnes	J	1	L	Exp.	Ac
11	George Backus	K	1	EC*	Exp.	Mix
12	Michael Evans	L	1	M	Support & Exp.	Ac
13	Kia Arild Lohre	M	1	L	Exp.	Ac
14	Santaigo Arango	N	1	M	Exp.	Ac
15	John Gunkler	O	1	L	Support & Exp.	Ac
16	Carlous Grutters	P	1	L, M, VL, M, VL	Cont.	Ac
17	Jean Lauble	Q	6	M, VL (last reply)	Exp., Exp., Exp., Exp. Exp., Exp.	Ac, Mix, Ac, Mix, Ac, Mix

**Key:**

<b>Message Classification:</b>	Technical (Tech); Experience (E); Philosophy (Ph); Academic (Ac)
<b>Nature of discourse:</b>	Explanation (Exp.); Support; Contradict (Cont.); Storytelling (ST); Inquiry (Inq.)
<b>Message Length (in words):</b>	1-50 Very Short(VS); 51-100 Short (S); 101- 250 Medium (M); 251-500 Long (L); 501- 1000 Very Long (VL); +1000 extended contribution (EC)

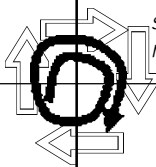
**Discussion**

One key area of our interest with this research is found out how knowledge transfer take place in virtual community of practice. As we have Figure 7 to provide a summary of the results in terms of how knowledge is, CoP would allow transfer of knowledge and learning within such as disperse and diverse community. Adapted from Nonaka and Takeuchi (1995), Figure 7 provides a summary of the results in terms of how CoP would allow transfer if knowledge and instigate learning within such as disperse and diverse community. The analyses reveal that the SD CoP under investigation facilitates the processes of socialisation, externalisation and combination. The community organises annual seminars and special chapter workshops each year that help to socialize and develop community ethos.

Thereby, it allows members to share knowledge through chat rooms in a virtual context. New knowledge is created by interacting with domain experts. The CoP practice holds a structured archive which contains all the discussions ever took place since the start of the CoP in a topic by topic structure. In the combination process, the structured archive that the CoP hold, make it possible for members to access information over a period of time, and benefited through the use of "organisation memory" if one is faced in a knowledge crises situation. Also, some of the topics, which are discussed in virtual context, become a topic for future face-to-face workshops and conferences. CoP issues its own electronic newsletter for promoting its events, course, publications and stories that helps in the internalization of knowledge within the community boundary.

**Figure 7: SECI Spiral Diagram for the System Dynamics Community of Practice  
(Adapted from Nonaka and Takeuchi, 1995)**

	To Tacit Knowledge	To Explicit Knowledge
From Tacit Knowledge	<p><b>Socialisation</b></p> <ul style="list-style-type: none"> <li>Planned expert conference and chapter meetings</li> </ul>	<p><b>Externalisation</b></p> <ul style="list-style-type: none"> <li>Sub-CoP,</li> <li>Emails and newsletters,</li> <li>detailed knowledge stores, databases and report boards.</li> </ul>
From Explicit Knowledge	<p><b>Internalisation</b></p> <ul style="list-style-type: none"> <li>Email newsletter</li> <li>Community Rules and Community stories</li> </ul>	<p><b>Combination</b></p> <ul style="list-style-type: none"> <li>Email and chat rooms.</li> <li>A structured archive (organisation memory) where general issues are stored and can be referred to when necessary, Knowledge stores.</li> </ul>



**Conclusion**

The topic of Community of Practice (CoP) has been discussed in the management literature since the earlier part of 1980s, and has attracted a lot of attention from academics and professionals around the globe. However, there are a few studies, which explain what makes a community to engage in a discussion to share their knowledge and experience. This paper discusses how knowledge transfer takes place in a virtual community of practice. Discourse analysis conducted illustrates that participating of domain experts play a crucial role to conduct a vibrant and meaningful debate. The domain experts not only provided the needed stimulus when the discussions were cooling off, and intervened to help focus on the main issues of the debate when the community was dispersing the issues into sub-threads. Also they provided a meaningful dialogue at times to sum up the debate. There was no cross over between the domain experts for the two topics. Also, our analysis suggests if a topic is initiated by a domain expert (Topic 2), it attracted relatively more domain experts for the discussion. Also the responses were relatively more personalized as these were directed to a particular domain

expert either supporting or contradicting his/her views. However, topic initiated by a well-known domain expert does not necessarily means more contents and debate, as the participation level and membership for Topic 1 initiated by non-domain expert was relatively higher. However, for the both cases, the members adopted an explanatory discourse with academic style, and relied upon Medium (100–250 words) and Long (251–500 words) messages. We find Nonaka and Takeuchi’s knowledge spiral model, story telling and discourse analysis as useful knowledge management tools to investigate and explain how knowledge is transferred and learning takes place in a virtual Community of Practice context.

The SD CoP under investigation facilitates the processes of socialisation, externalisation and combination through chat rooms where new knowledge is created by interacting with more knowledgeable participants. In the combination process, the structured archive that the CoP holds, makes it possible for members to access to all past and present discussions if needed when faced by a particular problem. Our analysis also reveals that socializing through face-to-face chapter meetings and annual conferences has

been a crucial mechanism for the community members to develop community ethos and personalization to become more enthused in virtual debates.

**Key words: Community of practice, discourse analysis, knowledge management, story telling, Nonaka and Takeuchi's knowledge spiral.**

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# Production Floor Manager

## An Online Production Floor Management Software Tool



Praveen V.S.

Production Floor Manager (PFM) is a proposed software tool that enables online management of production floors. PFM provides real time visual representations of machines progressing on the production floor; on the computer screen and has built in features for problem routing, communication and production floor monitoring. It is speculated that implementation of PFM software at a production floor can reduce the manufacturing cycle time from 10-50 per cent for various manufacturing industries. The paper starts with a narration of the problem environment for which PFM is a solution and also describes the author's experiences while trying to improve productivity at a US based Semiconductor-manufacturing Corporation.

### Problem Environment

The author got his first exposure to a production floor-working environment while working for the AIT (Automatic Inspection Tool) division of ABC Corporation<sup>1</sup> (San Jose, US) from 2000 to 2002. During this period, the company produced approximately 100 tools per quarter, which were sold at \$2million per tool. The AITs are used by chip manufacturers like Intel and AMD to detect defects on the wafers that they produce. Hundreds of 13 inch silicon wafers containing thousands of chips are fed into the AIT. Robotic arms in the AIT will pick up each wafer from the wafer stack and get it scanned by accurate laser

beams. The laser beam, reflected from the surface of the wafer impinges on dozens of optical sensors. The intensity pattern of the

reflected beam from a good wafer is known. So, if the optical sensors detect an intolerable variation in the intensity pattern of reflected laser from a particular wafer, it's rejected. Thus the deployment of dozens AITs at Intel meant that they could sell much more reliable chips to computer and electronic hardware manufacturers which in turn results in more reliable and cheaper cell phones and computers. In the absence of defect inspection, failure rate of computers and other chip containing hardware was up to 20 per cent and this translated to a higher sale price to the end customer.



Mr.Praveen V.S., Lecturer,School of Communication and Management Studies, Prathap Nagar, Aluva-683 106, Kerala. Email: praveen@scmsgroup.org / vettiyat@yahoo.com. The author worked for a major US based Semiconductor Corporation for two years with responsibility for Quality Control and Manufacturing Cycle Time Reduction. He has developed several new technologies and holds a patent for a Power Saving Technology in Street Lighting.

Before ABC developed the AIT, wafer defects were detected by manual inspection. Chip manufacturers would employ hundreds of people who would meticulously examine each wafer using a microscope. Manual inspections were laborious, more time consuming and still less reliable than the AITs. Thus the AIT added significant value to the semiconductor industry to extent that it became an inevitable machine for every chip fabrication plant. If one plant had it the other must have it to remain competitive. Since ABC had a US and international patent for the proprietary AIT technology, it had a market monopoly. This reflected in its payment and delivery terms. Customers had to pay 90 per cent of the money in advance and wait for an average of nine months for delivery. The AIT manufacturing plant was overbooked and over loaded with pressures from all sides. Being a new technology, AIT had quality issues that any non-mature technology would have. Add to this the fact that ABC did not make any component of the AIT in-house, but sourced it from different suppliers from around the globe. Thus ABC was fully dependent on supplier quality and often took orders from customers before checking with suppliers. Because of the dot com boom during 1998 - 2000, jobs were plenty and thus employee attrition was high at ABC. All these factors resulted in the manufacturing cycle time (MCT) of AIT products being delayed by more than 200 per cent. While factory manuals recommended a manufacturing cycle time of 250 man-hours, it actually took about 800 man-hours to produce an AIT.

The delay was caused by

- 1) Material shortage, component materials don't arrive on time.
- 2) Manpower shortage.
- 3) Component failure during assembly and testing. Component would have to be replaced and the machine idles till then.
- 4) Software issues. Software not initialising or not populated with accurate master data resulting in inaccurate output. Finding the fault takes time.
- 5) Poor training imparted to floor staff. The trainers were floor supervisors and in order to preserve their importance, they would ensure that the floor staff is dependent on them for advice.
- 6) Poor inter-departmental communication and co-operation. For example, if the software isn't working, people from the engineering/software division (problem owner) would have to come and solve the problem. Many times

it took several hours for the problem to reach the problem owner and still more hours for the problem owner to reach the production floor.

I joined ABC as a Process Optimization Engineer under such circumstances. For the first six months, I wasn't assigned any responsibility. My supervisors were very busy solving burning issues on the production floor. There were two 'production status' meetings every day in which about 15 people participated. One in the morning from 7-8 a.m. and the other in the evening from 3-3.30 p.m. The entire Production Management spent one and a half hours every day talking about the problems on the production floor and how to resolve it. Apart from this there were weekly meetings on 'quality control,' 'failure analysis' and other scheduled meetings. On an average, a production manager spent three hours in meetings everyday. Most meetings were convened to announce new problems and learn the status of old problems. There was no comprehensive plan to come up with permanent solutions for problems. For example, at almost every production meeting, the floor supervisor would report that the robotic arm of a particular AIT was not working. The next day he would report that it's solved. Nobody asked any questions on why the robotic arm failed every day and what could be done to resolve it permanently. Organizational inertia and institutional myopia is strong on production floors. Critical thinking is prohibited and even fail-safe experiments are prevented.

Frustrated out of not being assigned any serious responsibility even after one year, my peer, Brandon Wills<sup>9</sup>, also a productivity engineer who joined ABC along with me, quit and joined another company. When I politely expressed my anxiety of not having a real job, despite being paid well, I was assigned overall responsibility of Out of Box Quality Control (OOBQ). Installing the AIT at the chip fabrication plant takes three days of procedure, but most tools took a week for the installation to be complete. Onsite engineers at customer sites would send the breakdown of time lost during installation to me. It was my job to track the source of the problem and rectify it. For example if the laser was out of position, I would have to track the department/person accountable for it. Not an easy job.

Every week I would call an (OOBQ) meeting. Representatives from different Production Cells, Quality Control, Engineering and Software would take part in it. Every department would try to disown the

problem. "When we checked it, it was ok" was the immediate response. When all departments were supposed to reveal as much information as possible to create synergy; in reality, they revealed as less as possible to preserve their importance. Another cross-functional team that would meet fortnightly was formed to promote interdepartmental communication and camaraderie.

After lots of effort by the OOBQ team we could bring down the manufacturing cycle time in six months to about 700 hours from 800 hours and the installation time to five days from seven days. All the OOBQ team members were appreciated in the company's quarterly conference meeting and were also given a prize.

After being in the production floor environment for more than a year and a half, I developed the confidence to propose disruptive solutions that can reduce MCT. I knew that a bold and comprehensive plan would have to be implemented instead of a series of lighter initiatives to achieve any further drastic reduction in MCT. The biggest challenge was lack of transparency and communication. With 100 per cent transparency and instant communication it's impossible for the careless and protectionist floor staff to get away with his tricks and failures. I proposed implementation of a software tool by which the managers can manage the production floor online, called the Production Floor Manager (PFM), which is explained, in the next section. In the proposal I claimed that the implementation of PFM could reduce the MCT by up to 50 per cent. The proposal was initially received with excitement, but nothing happened after that. My queries for a response from the management were met with silence. The manufacturing director informed me through a peer that he was looking for a reduction in cycle time that 'doesn't involve a new idea.' I felt demoralized. How can you achieve a drastic change in MCT without a new idea? Later the same peer informed that the director is not in favour of any drastic reduction in staff on the production floor because a smaller headcount in his department could hurt his chances of being the next president of the corporation. I realized that only an incremental change in MCT is acceptable and the production management weren't confident enough to manage the temporary chaos that would result out of any major process change. I knew that my loyalty towards the corporation and my survival on the job was in conflict. To keep my job I would have to work with the forces that are actually involved in affecting a slow demise to ABC. After submission of the proposal, the informal relation I had with the manufacturing director was permanently lost. Three months after I submitted the proposal, my position was one of the thousands of positions eliminated for cost cutting in 2002. In 2002, the US semiconductor industry was in strong recession

and there were massive lay-offs throughout the semiconductor industry. Also in 2002, ABC ran out of its patent life and had to compete with other suppliers like AMD, Hitachi and LAM Research. Thus by 2003, ABC downsized its staff strength from 6000 (in 2000) to about 2500.

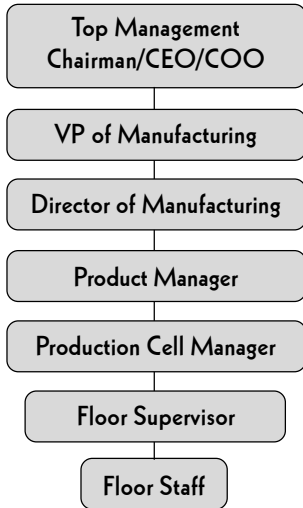
The author wrote this much to give the non-specialist reader a feel of the realities of production floor environments, the lacunae and the red tape. Many of my peers and managers had come from other fortune 500 manufacturing corporations and if they weren't surprised or troubled by these inefficiencies, it shows that other production floors have a comparable performance in terms of productivity and MCT. Old habits don't die easily. To appreciate any proposed solution, it's imperative that the reader has a thorough understanding of the problem environment. PFM can be implemented in any production floor to achieve drastic cost cutting. To maintain their competitive advantage in the increasingly cost sensitive global marketplace, it's essential for manufacturers to go for innovative manufacturing environments that are less labour intensive and requires less levels of management. Reduction of MCT presents the best opportunity for cost cutting in manufacturing intensive corporations, which spend up to 70 per cent of its yearly budget for manufacturing. A recent Aberdeen Group study<sup>3</sup> on "Manufacturing Transparency" found better performing manufacturers were leveraging real-time plant data in boardroom decisions. The reality of the gap also was highlighted. "Sixty per cent of the respondents cited the gap between ERP and the shop floor as a major barrier to achieving their performance objectives," says Mark O'Hearn, Aberdeen, Vice President.

### Technology Description

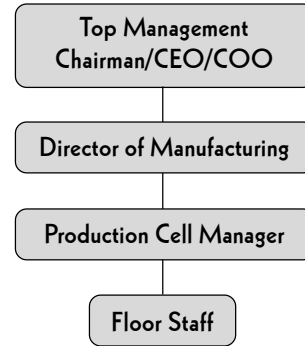
PFM when installed would have an 'input page' and an 'output page' as seen in figure 1 and figure 2 respectively. To explain the PFM concept, a production floor in a truck manufacturing plant is taken as an example. The white squares represent the trucks on the production floor that are on schedule. The white trucks would be automatically moving on the screen based on a preset speed that depends on the recommended manufacturing time for each production cell. The grey squares represent the trucks that are idling on the production floor. They don't move. If the moving white truck collides with a grey truck in front of it, the white truck stops and turns grey. This shows that in a serial production floor, if one truck is delayed all the trucks behind it can get delayed. The output page can be accessed by all those who are involved in improving productivity in the production floor, including the

Figure 1: Production Floor Manager – Input Page

Management levels in a normal manufacturing corporation



Management levels after implementing PFM



Production Floor Manager – Input Page

Start date – Jan 01 Chasis

Engine Body & Paint

Electronics Quality testing/  
Shipping

End date - Mar. 31

Drop down menu that appears on (input page)

Machine No, Customer, Ship Date

Material shortage:

Manpower shortage:

Component failure:

Problem X

Problem Y

Other :

Problem owner:

Proposed resolution:

Problem solved

Production Floor Manager – Output Page

Start date – Jan 01 Chasis

Engine Body & Paint

Electronics Quality testing/  
Shipping

End date - Mar. 31

Drop down menu that appears on (ouput page)

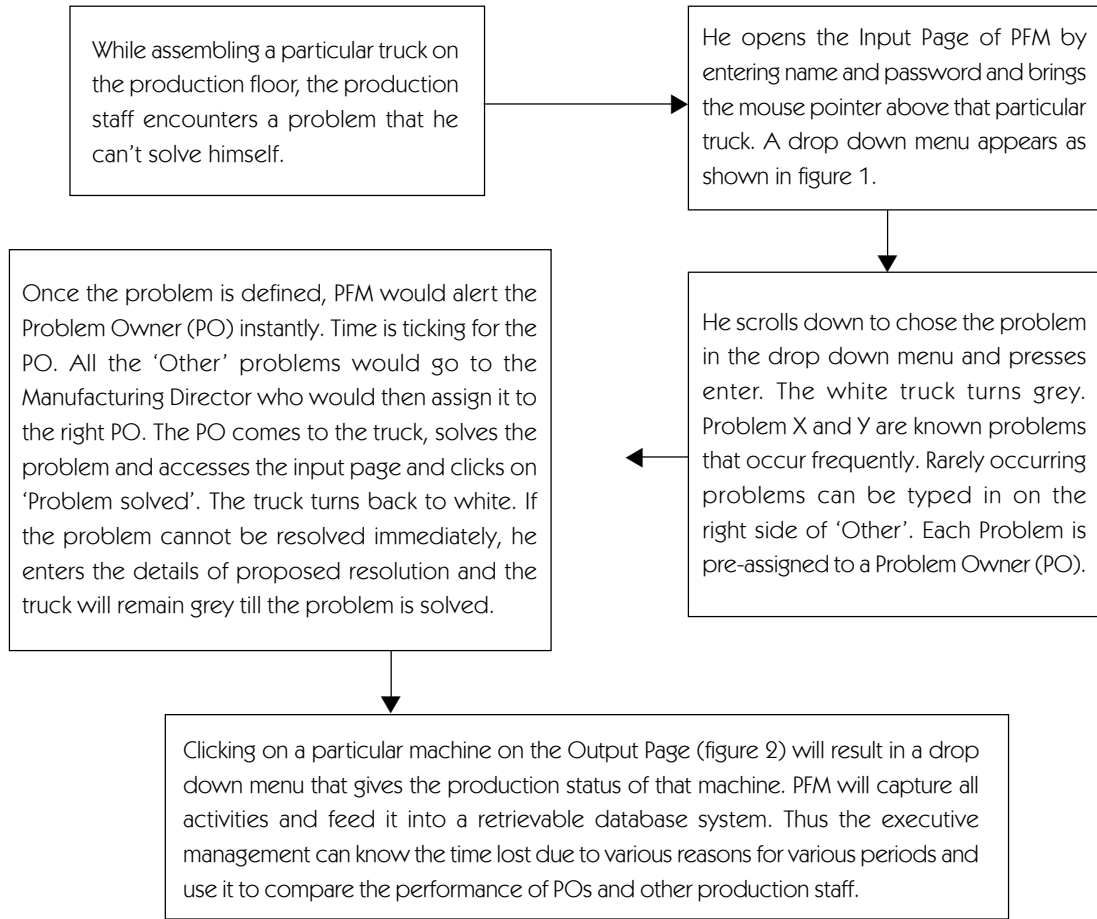
Machine No, Customer, Ship Date

Problem description:

Proposed resolution:

Problem owner:

**Figure 3: Flow Chart of working of PFM**



**Table 1: Comparison of Production Floors with and without PFM**

Without PFM	With PFM
Production Floor data doesn't reach the management in time. The CEO gets a status report once a week.	Status is known by a single look at the computer by everybody.
Problems don't reach the Problem Owners instantly. Takes from minutes to hours. Precious time is lost.	Problems reach the PO instantly. The PO is accountable for any abnormal delay in solving the problem
Requires daily production meeting to discuss production issues. Less transparency, more meetings.	Requires only one meeting per week. More transparency, less meetings.
Less quality product delivered due to confusion on the floor.	Better quality product delivered because of less confusion on the floor.
Production management doesn't get time to focus on strategic objectives because their time is consumed for putting out fire.	Production floor runs smoothly; production management can focus on strategic objectives.
Manufacturing becomes labor intensive. More problems mean more staff and more staff means more problems. It's a vicious circle that feeds on itself	Manufacturing becomes labor lean. Transparency results in a non-conducive environment for problems to breed more.

**Table 2: Speculated MCT Reduction attained after PFM Implementation**

Production floor category	MCT reduction attained after PFM implementation
High sophistication machines, costing more than \$500,000. Example: AIT, planes, ships, helicopters, high end cars/buses/trucks, earth moving equipment, high speed servers etc.	30-50%
Medium sophistication machines, costing between \$100,00 - \$500,000	20-40%
Low Sophistication machines, \$10,000 - \$100,000	15-30%
Machines costing less than \$10,000	5-20%

top-level management. The input page can be accessed only by the floor supervisor on a particular production cell. The working of PFM is given in figure 3. After implementation of PFM, production floors can be controlled in just four levels of management as shown in figure 4. Table 1 gives a comparison of production floors with and without PFM. Table 2 gives the speculated MCT reduction attained after PFM implementation in production floors in various industry segments.

#### Limitations of PFM:

- 1) PFM does not promise total cleansing of all the evils of Production floors. But a hundred per cent transparency and traceability means that it becomes much harder for individuals and departments to get away with their inefficiencies.
- 2) Like any other process innovation, successful functioning of PFM needs the cooperation of all the departments

involved, especially the production staff. Production staff should be offered generous production-based bonuses for better co-operation and contribution from their side.

- 3) PFM may not deliver significant advantage on production floors producing machines costing less than \$5000. This is because of the fact that, such production floors are more mature and has much less bottle necks when compared to high sophistication production floors.
- 4) Initiative for implementation of PFM must come from top-level management like the Chairman or President. Production management may not be that excited about the idea, unless they are offered strong production based incentives.

#### Notes and Reference

1, 2 names changed for anonymity

3 <http://www.manufacturing.net/ct/article/CA6329385.html>



# Job Satisfaction among University Teachers

Rama Devi V.

**Why your job isn't  
a bowl of cherries**



The role of universities in societal formation, nation building and scientific development, is very big and all pervasive. The present study aims at studying job satisfaction of the teaching staff in the universities. Data were collected from 200 teaching staff - 100 members from University of Hyderabad, a Central University and 100 members from Sri Krishnadevaraya University, a State University. The results showed that teaching staff in the University of Hyderabad are highly satisfied with their jobs when compared to the teaching staff in Sri Krishnadevaraya University. The teaching staff in both the universities are more satisfied with nature of their job dimension and least satisfied with the facilities provided to them. The results also revealed that average job satisfaction score and average score of needs met are significantly related in both the universities.

A nation is built to a large extent in its universities—in its classrooms, laboratories, libraries and playing fields. The universities produce highly skilled and enlightened manpower needed for the political, economic and social transformation and development of our country. Universities, ideally, are organizations devoted to development of human resources and humanism. The intellectual dynamism, resourcefulness and economic prosperity of a country is reflected in the quality of university education. The ideological climate required for a better quality of life is created by the universities and

the intelligencia nurtured by them.



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The teacher is the backbone of the educational system, the maker of the mankind and the architect of the society. A nation grows with the teachers and with the education imparted to the people. It is in this respect, the role of teachers acquires significance in shaping the society and in bringing revolutionary changes in the development of a country. He has to shape and develop the minds of his students, so that they may become well-integrated persons and good citizens. So a lot of responsibility rests on the university teachers. University teachers can do

much to raise the tone of universities. The performance of teachers largely influences the effectiveness of the organization. Teachers can perform their functions well, if they are contented and satisfied with their jobs.

Job satisfaction among teachers in the university is necessary for effectively and properly making use of the large resources poured in directly and indirectly through UGC by the State and Central Governments and for rendering maximum service to the society through building up of future human resources of the nation. Job satisfaction and dissatisfaction are functions of the perceived relationship between what one expects and obtains from one's job and how much importance or value one attributes to it. When people get what they aspire for, work will be regarded as a source of pleasure and satisfaction.

Job satisfaction is an interesting concept, which has received much attention in the past and deserves to receive more in the future. The recent interest in studying job satisfaction is particularly guided by the rising concern for improved quality of working life. There is an increasing acceptance of the view that material possessions and economic growth do not necessarily produce a high quality of life. Instead, it is partly the outcome of affective reactions that people experience, which is not always tied to economic or material accomplishments. Job satisfaction is one measure of the quality of life in organizations. It is a complex phenomenon of immense importance.

Luthans (1989) states that job satisfaction is a pleasurable, or positive, emotional state resulting from the appraisal of one's job, or job experience, and is the result of the employee's perception of how well his/her job provides those things which are viewed by them as important. Locke (1976) states that job satisfaction is really a collection of attitudes about specific facets of the job. Employees can be satisfied with some aspects of the job while simultaneously being dissatisfied with others. Overall job satisfaction is a combination of the person's feeling towards the different facets of job satisfaction.

Studies in the area of job satisfaction as an important and popular research topic started decades ago. Several studies have been made on job satisfaction and its managerial implications of industrial workers. But such studies regarding the service organizations like universities are few. Identification of the underlying sources of job satisfaction has been the subject matter of a good number of studies. A large number of research studies have established that job satisfaction is derived from and caused by a number of inter-

related factors. The present study aims at finding out the underlying sources and levels of job satisfaction of the teaching staff in the universities.

Pelz (1949) observed that the attitude towards management and supervisors exercised significant influence on job attitudes. Pestonjee (1973) found that a democratic organizational structure is conducive to higher morale and job satisfaction. Singhal (1973) concluded that the three types of factors—personal factors, organizational factors and situational factors interacted and influenced each other, and did exercise a significant influence on job satisfaction index. The study conducted by Arya (1984) revealed that education, training, worker's participation in the bipartite committees had a positive influence over work satisfaction whereas militancy had a negative influence over work satisfaction. Pritpal Kaur (1984) carried out an investigation in a university with a view to bring to the surface some of the conditions which ensure job satisfaction and place the conditions in content or context of the job categorically. The study rejected the overall importance of content factors and stressed more on context factors.

The study conducted by Dhar and Jain (1992) explored the nature of relationship between job satisfaction and job involvement. An important finding of the study was that job involvement and job satisfaction are positive correlates which implies that involvement in job increases with job satisfaction and vice-versa. Foles, Driskell, Muller and Salas (2000), by a meta-analytic integration of research evidence, revealed that there is, in general, a significant, but small, tendency for groups experiencing democratic leadership to be more satisfied than groups experiencing autocratic leadership. The findings of Jonge, Dollard, Dormann and Le Blanc (2000) provided empirical support for the view that high strain jobs (high demand, low control) are conducive to ill health (i.e. emotional exhaustion, psychosomatic health complaints, et al). Further active jobs (high demands, high control) give rise to positive outcomes (i.e. job challenge, job satisfaction). The study conducted by Deepak Srivastava, Umesh Holani, & Naval Bajpai (2005) concluded that changes in leadership and the work environment that took place in the post reform era have improved job satisfaction levels of public sector employees. Professional leadership has shifted the importance to employee performance and better performance is being rewarded thereby contributing to job satisfaction.

### Objectives of the Study

The following were the objectives of the study:



1. To study the extent and dimensions of job satisfaction of the teaching staff of the universities.
2. To examine the relation between faculty needs and job satisfaction.
3. To find out if there is a difference between the levels of job satisfaction of the teaching staff in two different universities. (One Central University and one State University).
4. To find the causes of job satisfaction and job dissatisfaction among the university teaching staff.
5. To study the impact of certain personal variables such as age, sex, marital status, length of service, designation, etc. on job satisfaction of the teaching staff.

## Hypotheses

The following hypotheses were formulated in the present study:

1. There is no relation between needs fulfillment and job satisfaction of the teaching staff.
2. There is no significant difference between the levels of job satisfaction of the teaching staff in the two universities. (One Central University and one State University).
3. Job satisfiers and dissatisfiers are common to the teaching staff in the two universities.
4. Job satisfaction is independent of personal variables such as age, sex, length of service, etc.

## Methodology

### Sampling Design

There are 16 universities in Andhra Pradesh of which one is a Central University and the remaining 15 are State Universities. Two universities were selected for the study, representing two regions within the state and are representative of different types of ownership and control. The University of Hyderabad (H.C.U) is located in Telangana region of the state and is a Central University. Sri Krishnadevaraya University (S.K.U.), Anantapur represents Rayalaseema region of the state and is a State University. It is presumed that the academic environment between a State University and a Central University differ. So in order to facilitate comparison, these two Universities were chosen. The sample consisted of 200 teaching staff – 100 teaching staff working in Sri Krishnadevaraya University (S.K.U) and 100 teaching staff working in University of Hyderabad (H.C.U). The

sample was drawn on random basis using Fisher and Yates random numbers. The sample for the study consisted of 50 lecturers in S.K.U and 38 lecturers in H.C.U, 27 Readers in S.K.U and 41 in H.C.U and 23 Professors in S.K.U and 21 in H.C.U.

### Data Collection

The required information and data were collected from the sample respondents with the aid of questionnaires designed for the purpose and through personal interviews. A five-point scale based on Likert's summated rating scale was constructed to measure the opinions of the respondents towards various factors of job satisfaction.

### Statistical Tools Used

The data collected were analyzed using the following statistical tools:

1. Correlation
2. Regression Analysis
3. Co-efficient of Reliability
4. Student's 't'- test
5. Chi-square test
6. Arithmetic mean and median.

### Results and Discussion

In the present study, job satisfaction is viewed as a summation of many attitudes. It is not a single unified entity but a summation of many attitudes possessed by an employee concerning the job and other contextual factors. After careful deliberation 26 items were selected for measuring job satisfaction; the last two items are 'overall' job satisfaction items. Of the 26 items, two items were deleted as they were observed to have the least discriminating power. The co-efficient of reliability for the remaining 22 items (excluding two overall items) was computed and it is 0.84. As the co-efficient of reliability is high, the same 22 items were used for measuring job satisfaction scores in both the Universities. The last two 'overall' items were used as a check on the composite job satisfaction score based on 22 items.

The coefficient of correlation between the 'composite' job satisfaction scores based on 22 items and 'overall' job satisfaction scores based on two items was computed. Co-efficient of correlation (r) is 0.41 for the University of Hyderabad and 0.60 for Sri Krishnadevaraya University and both r-values are significant at five per cent level. Thus the overall items of job

satisfaction lend support and validate the composite job satisfaction scores based on 22 items.

### Job Satisfaction of the Teaching Staff in the Two Universities

The teaching staff of The University of Hyderabad is highly satisfied with their job when compared to the teaching staff in Sri Krishnadevaraya University. The mean job satisfaction scores between the two universities was compared and the null hypothesis that the mean job satisfaction score of the teaching staff in University of Hyderabad (Central University) is less than or equal to the mean job satisfaction score of the teaching staff in Sri Krishnadevaraya

University (State University) was tested by using the 't' test. The results of computation revealed that the observed 't' value is 7.1 and it exceeds 2.33, the critical value of 't' at one per cent level. So the null hypothesis is rejected and the alternative hypothesis that means job satisfaction score of the teaching staff in University of Hyderabad is higher than that in Sri Krishnadevaraya University is accepted.

### Job Satisfaction Score – Factor Wise

The scores of factors of job satisfaction of the teaching staff and their ranks in two universities are presented in table1. In the University of Hyderabad, the teaching staff

**Table 1: Scores of Job Satisfaction Items**

Sl. No	Item	University of Hyderabad		Sri Krishnadevaraya University	
		Total Score	Rank	Total Score	Rank
1.	Salary	359	10.0	390	3.0
2.	Job Security	422	2.0	389	4.5
3.	Nature of work	379	7.0	351	0.9
4.	Work load	393	6.0	377	7.0
5.	Relationship with colleagues	372	9.0	379	6.0
6.	Meaningful work	418	3.0	396	2.0
7.	Freedom in doing the job	427	1.0	389	4.5
8.	Challenging job	412	4.0	373	8.0
9.	Recognition for work	341	15.0	300	14.0
10.	Management policies	284	19.5	271	19.0
11.	Management attitude towards Work	309	18.0	290	16.0
12.	Dignity and respect	407	5.0	409	1.0
13.	Promotional opportunities	268	22.0	289	17.0
14.	Work environment	373	8.0	331	10.0
15.	Library and laboratory Facilities	335	16.0	225	22.0
16.	Equipment and other Facilities	316	17.0	251	20.0
17.	Pension and other benefits	343	14.0	309	13.0
18.	Opportunities for growth And self-fulfillment	348	12.0	327	11.0
19.	Medical and educational Facilities	352	11.0	280	18.0
20.	Housing facilities	284	19.5	326	12.0
21.	Sense of achievement	344	13.0	292	15.0
22.	Transport and marketing Facilities	269	21.0	245	21.0

are the most satisfied with freedom in doing the job and least satisfied with promotional opportunities. While, the teaching staff of Sri Krishnadevaraya University are the most satisfied with dignity and respect provided by the job and least satisfied with library and laboratory facilities.

**Dimensions of Job Satisfaction**

The 22 factors are grouped into five dimensions – the nature of the

job, benefits from the job, managerial aspects, social relations and facilities. The scores of dimensions of job satisfaction are depicted in table 2. Surprisingly, the faculty in both the universities are more satisfied with nature of their job dimension and least satisfied with the facilities provided to them. But, regarding the extent of satisfaction with the five dimensions, the teaching staff in the University of Hyderabad (H.C.U) are more satisfied with each dimension in comparison with that of Sri Krishnadevaraya University (S.K.U). This could be the reason for the teaching

**Table 2: Dimensions of Job Satisfaction Scores**

Dimensions	University of Hyderabad			Sri Krishnadevaraya University		
	Total Score	Total Score	Rank	Total Score	Total Score	Rank
Nature of job	2024	404.8	1	1886	377.20	1
Benefits from the job	2069	344.83	3	2016	336.09	3
Managerial aspects	1361	340.25	4	1250	312.50	4
Social relations	745	372.50	2	710	355.00	2
Facilities	1556	311.20	5	1327	265.40	5

staff of H.C.U being more satisfied with their jobs than the teaching staff of S.K.U.

**Factors of Job Satisfaction and Job Dissatisfaction**

The factors of job satisfaction and dissatisfaction are presented in table 3 and 4. After analyzing the responses of the teaching staff,

eight important factors of job satisfaction and job dissatisfaction have been identified. The major factors causing job satisfaction to the teaching staff of HCU are freedom in doing the job and scope for self-improvement, while income and job security are the main factors causing job satisfaction to the teaching staff of SKU. The major factors causing job dissatisfaction to the teaching staff in HCU are bureaucratic rules, no recognition for work and interfering

**Table 3: Ranking of Factors of Job Satisfaction**

Factors	Ranks	
	H. C. U.	S. K. U.
Freedom in doing the job	1	3
Scope for self-improvement	2	5
Meaningful work	3	4
Recognition for work	4	—
Job security	5	2
Challenging nature of job	6	7
Favourable work environment	7	6
Helpful superiors	8	—
More income	—	1
Friendly colleagues	—	8

**Table 4: Ranking of Factors of Job Satisfaction**

Factors	Ranks	
	H. C. U.	S. K. U.
Bureaucratic rules	1	5
No recognition for work	2	1
Interfering administration	3	—
Routine work	4	3
No team work	5	4
Bad working conditions	6	2
Inadequate opportunities for self – improvement	7	6
Excessive control by superiors	8	7
High cost of living in the place	—	8

administration, whereas no recognition for work, bad working conditions and routine work are the major factors causing job dissatisfaction to the teaching staff in SKU.

#### Need Satisfaction and Job Satisfaction

Job Satisfaction depends on need satisfaction. Schaffer has proposed a hypothesis that “overall satisfaction will vary directly with the extent to which those needs of an individual which can be satisfied in a job are actually satisfied.” Using the (average) job satisfaction score as the dependant variable and the (average) score of needs met as an independent variable, a linear regression was computed.

For the University of Hyderabad

$$Y = 2.31 + 0.323x$$

(F value is 54.8 and is significant at one per cent level)

For Sri Krishnadevaraya University

$$Y = 2.47 + 0.22x$$

(F value is 26.3 and is significant at one per cent level)

The results revealed that average job satisfaction score and average score of needs met are significantly related in both the universities.

#### Correlates of Job Satisfaction

In the present study, an attempt was made to examine the

**Table 5: Chi-square Values Depicting the Relationship Between Socio-Economic, Job Related Variables and Job Satisfaction**

Variables	Chi-square values	
	H. C. U.	S. K. U.
Bureaucratic rules	1	5
Sex & Job satisfaction	1.77	0.27
Marital status & Job satisfaction	0.18	0.11
Size of the family & Job satisfaction	1.31	0.00
Family income & Job satisfaction	3.57	2.77
Age & Job satisfaction	17.92*	1.44
Designation & Job satisfaction	11.43*	5.54**
Length of service & Job satisfaction	4.58*	0.05

\* Significant at 5% level, \*\* Significant at 10% level

relationship between socio-economic and job related variables – and job satisfaction of the teaching staff. The socio-economic and job related variables selected for the purpose of the study are: age, sex, marital status, designation, length of service, family income, size of the family. The relation between each variable and job satisfaction of the teaching staff was examined using chi-square test. The chi-square values are portrayed in table 5. In case of the variables sex, marital status, family income, size of the family, there was no evidence to reject the null hypothesis of no relation between those variables and job satisfaction. But in the case of age and length of service, in relation to job satisfaction,  $X^2$  is significant for each variable in H.C.U but not for S.K.U. Only in the case of one variable, designation of staff, the relation between the variable and job satisfaction is found to be significant in both the universities.

The faculty of both the universities expressed the view that the quality of universities is going down due to the entry of regionalism, casteism and politics in the university set-up. They feel that the university should be entirely free from outside interference and should have the dignity of an autonomous self-governing institution. Some of them opined that the institutions and their working conditions had undergone many changes in the recent times. The jobs have become more demanding and workloads were thought to have increased. The pressure to conduct research and publish findings had increased over the last few years. But some of the teaching staff in S.K.U stated that they had insufficient opportunities and lacked the necessary support to conduct high quality research.

The teaching staff of both the universities were of the opinion that one of the main factors affecting job satisfaction is good environment which mainly depends upon the student community – their behaviour, regularity to the classes, their interest in studies, etc. If students show real interest in studies, then the staff will be motivated to prepare well for teaching and they can perform their job well thereby gaining satisfaction. But they felt that the students' interest in studies is not very encouraging. In addition to this there is an increase in student numbers and related decrease in staff student ratios. This in turn has implications for academic quality. These factors are demotivating the staff to teach and dissatisfied in this respect.

The role of the teacher is extremely crucial in the context of education being the best instrument of change and nation building. To play their role more effectively, the teacher faces a greater challenge today than at any time in history. As an interpreter, the

teacher has to place new knowledge and new experience within the context of what is already known and understood by the students. In order to be a good mediator, he has to understand a great deal about the way in which people at various ages and stages of development perceive the world around them. As a guide, he has to teach the student 'how to learn' rather than stuff his mind with factual information.

If service is taken as a mark of profession then teaching profession could be rated as one of the most important professions since its social value lies in its significant contribution to the betterment of people and society at large. Nothing is more important than securing a sufficient supply of high quality recruits to the teaching profession, providing them with the best possible professional preparation and creating satisfactory conditions of work in which they can be fully effective.

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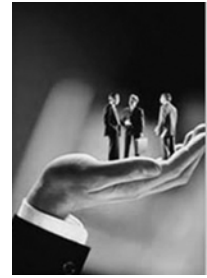
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# Quantitative Techniques

## in Human Relations

Shaikh Mohsin Rehman



The HR function was considered as a necessary evil by many organisations and line managers. It was populated by people who ran the HR department like a welfare agency without being part of the business. People are our greatest asset; this cliché is now becoming a reality. Management has now realized that it is people who are the source of competitive advantage. If HR has to be recognized and involved in strategy formulation and implementation it has to transform itself. It has to speak the language of business. It has to speak in quantitative and objective terms. The current article attempts to provide a quantitative base for the HR function by coming up with various ratios, which can help the organisation in making the HR function more effective and evaluate its contribution in terms of benefits provided and return on investment.

The HR function has always been given a step-motherly treatment in the organisation. Many have considered it a necessary evil. The HR function was originally populated by people who ran the HR department more like a welfare agency rather than being a part of the business. Today many of the professional HR managers are changing the traditional view of the HR function. In recent years the cliché that people are our greatest asset is becoming a reality. Management has now realized that it is the people that provide a source of sustainable competitive advantage to organisation in a highly competitive global market. Nothing happens without people. Money, material, machines, buildings, IT... Nothing happens until a human being acts (Jac Fitz-enz and Jack

J. Phillips, 2004). The HR function now has the opportunity to move out of the backyard and become a part of the mainstream of business and strategy formulation.



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To enter the realm of business and strategy, the HR people should talk the language of business. They must learn to talk in quantitative objective terms. Organisations are managed with quantitative data. All business people live think and talk in numbers.

Quantitative techniques in HRM are being introduced and used in many organisations. These manpower ratios provide clues to the management and the HR department in making timely interventions for the development and Utilisation of the Human Resources.

Large number of manpower ratios can be used to get an idea about the various aspects of HRM in the organisations.

**Organisation Structure Ratios**

These days the organisations are becoming lean and mean. The organisation structures are becoming flat from the typical traditional pyramidal structure, in this context the teeth to tail ratio can provide important insights. Teeth to tail ratio is the ratio of employees working in the support services like materials, stores, finance, personnel etc. to the employees working in operational areas, or number of employees working in the staff functions to the number of employees working in the line functions, or the number of employees working in offices to the number of employees working in plants or shop floor.

$$\text{Teeth to Tail Ratio} = \frac{\text{Number of Employees working in support services}}{\text{Number of Employees working in Operational areas}}$$

If the teeth to tail ratio is too large, it indicates that there is a need to reduce support staff.

$$\text{Executive to Non Executive Ratio} = \frac{\text{No. of Executive in the organization}}{\text{No. of Non Executives}}$$

If this ratio is too high, it indicates a shortage of working heads, or a presence of too many hierarchical levels in an organisation very low value indicates a shortage of executives and a high span of control.

**Training Ratios**

$$\text{Training Cycle ratio} = \frac{\text{Number of Employees in the organisation}}{\text{No. of Employees imparted training in a year}}$$

This ratio can give an idea about the average number of years after which an average employee will again get an opportunity to undergo training after attending training once.

$$\text{Training commitment Ratio} = \frac{\text{Total Expenditure on training in a year}}{\text{Total No of employees}}$$

$$\text{OR} = \frac{\text{Total Expenditure on training}}{\text{Annual Sales Turnover}}$$

These ratios give an idea about the importance the organisation attaches to the training function. The organisation can benchmark it against the industry standards or with the benchmarks provided by the American Society for Training and development (ASTD).

$$\text{Skill Maintenance Ratio} = \frac{\text{No. of Employees provided refresher training}}{\text{Total No. of employees}}$$

$$\text{Skill Upgradation Ratio} = \frac{\text{No. of Employees provided training in recent Developments in their field}}{\text{Total No. of employees}}$$

$$\text{Skill Ratio} = \frac{\text{No. of Executive possessing professional qualifications}}{\text{Total No. of executives}}$$

These ratios provide an idea about the employability of the employees in the organisation. A high value of the above ratios ensures that the employee's skills are enhanced and the problem of skill obsolescence can be avoided.

**Turnover Ratios**

$$\text{Employee Turnover Ratio} = \frac{\text{No. of Resignations in a year (Exe/ Dept /Exp/)}}{\text{Total No. of employees}}$$

This ratio can provide many clues about the effectiveness of the organisations HR practices like recruitment and selection, placement, training and development etc. A high turnover ratio results in hiring and training costs to the organisation.

**Promotion & Transfers Ratio**

$$\text{Career Growth Ratio} = \frac{\text{Total No. of promotions in a year}}{\text{Total No. of employees}}$$

A very low career ratio indicates lack of growth avenues in the organisation leading to stagnation. This may result in frustration and dissatisfaction in the employees and may lead to high turnover. A



very high ratio may also be a cause of concern for an organization. It may be ok for a rapidly growing and expanding organization, but for a normal organisation it may lead to problems in the future. Organisation pyramid may take strange shapes and the span of control may become very low. It also indicates the average number of years it will take for an employee to get promoted.

$$\text{Movement Ratio} = \frac{\text{No. of Transfers in a year}}{\text{Total No. of employees in transferable grade}}$$

This ratio indicates the average number of years it will take for the employee to get transferred.

$$\text{Succession Ratio} = \frac{\text{No. of Sr. Mgt, Positions lying vacant}}{\text{Total No. of Sr. Mgt positions in the company}}$$

This ratio indicates the availability of managerial talent in the organisation. A high value indicates a shortage of managerial talent and inadequacy of a sound career planning system.

$$\text{Volatility Ratio} = \frac{\text{No. of Executives who have done job hopping in the past}}{\text{Total No. of executives in the company}}$$

A high ratio indicates the possibility of the employees leaving the organisation.

### Organisational Climate Ratios

$$\text{IR Climate Ratio} = \frac{\text{No. of Grievances generated in a year}}{\text{Total No. of employees}}$$

$$\text{Creativity Climate Ratio} = \frac{\text{No of Ideas generated by employees for improvement in a year}}{\text{Total No of employees}}$$

These ratios provide an idea about the general organisation culture and climate prevailing in the organisation.

### Making best use of Ratios

1) Select or device ratios relevant to the company depending upon the needs of the company and conditions prevailing within and outside the company.

- 2) Make correct and proper interpretations.
- 3) Analyse the trends over a period of time.
- 4) Compare ratios with other companies in same industry.
- 5) Ensure accuracy of the data used for computing of these ratios.
- 6) Highlight abnormal ratios to the top management.

Thus the proper use of these ratios will help the organisation to enhance the quality of the HR function and improve effectiveness of the organisation.

### Aligning HR with Business

The above ratios helps the HR managers in managing the HR Junction like a business enterprise and take timely decisions in the best interest of the organisation. However as stated earlier if the HR function wants to be a business partner it must understand the goals and objectives of business. The goal of business is generally to achieve certain profit objectives. There is a growing shift in measuring the profitability of business in terms of Economic Value Added (EVA).

$$\text{EVA is calculated as: } \frac{\text{Net Operating Profit After Tax}}{\text{Cost of Capital}}$$

Another important parameter employed by the organisations is ROI (Return on Investment).

If the HR function is to become a business partner it should move from being a cost centre to a profit centre. It should move from performing activity to adding value to the business. The effectiveness of the HR investments can be evaluated in terms of the benefit / cost ratio (BCR).

$$\text{BCR} = \frac{\text{Benefits of HR Programme}}{\text{Cost of HR Programme}}$$

In simple words the BCR compares the annual economic benefits of the programme to the cost of the programme. For example a BCR of two written as 2:1, indicates that for each rupee spend on the programme two rupees were returned as benefits.

Another important formula for evaluating the HR investments is the ROI, usually expressed in percentage.

$$\text{ROI \%} = \frac{\text{Net HR Programme Benefits}}{\text{HR Programme cost}} \times 100$$

Net programme benefits are programme benefits minus programme cost. For example a chemical organisation conducted a one-week safety awareness programme for its operating personnel. The total expenditure for the programme incurred was Rs.50000. The annual saving for the company due to decrease in accidents was Rs.250000. Thus the return on investment becomes

$$\text{ROI} = \frac{250000-50000}{50000} \times 100 = 500\%.$$

Using the ROI formula places HR investments on a level playing field with other investments. The ROI calculations are easily understood by key management and financial executives. While there is no universally acceptable standard for a minimum ROI on HR investments an ROI of minimum 25 per cent can be set by the organisations.

### Conclusion

Many people are talking about the importance of the HR function and the importance it is being given by the top management. But

what equally true is that there are only a handful of HR professionals who are at the top management level. Many HR managers are coming from the production, finance and marketing function. The message is clear that if the HR function and the HR professionals are to be at the centre stage they should talk in numbers and become thorough business professionals.

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# Impact of Privatisation on Human Resource Management Practices



Srimannarayana M.

Based on the responses of 125 employees who have had experience in the same organisation before and after its privatisation, the study found that privatisation did not make any difference on issues such as salaries, performance based benefits, skill requirements, welfare and autonomy in the job. However, trade union situation became weak and a feeling of job insecurity existed with their increased workload. On the positive side, privatisation brought discipline among the work force. The employees visualized opportunities for advancement and they felt that good work done by them was recognized.

Public sector did have an important role as an “Engine of Growth” during the early phase of development when capital was scarce and enterprise was shy, but over a period of time, it lost much of its rationale because it tried to proliferate in too many areas regardless of costs and returns (Datt & Sundharam, 1995, p.207). Privatisation of public sector undertakings has emerged as an important tool of fiscal policy in India. Increasing budgetary deficits, rapid growth of government consumption expenditure and continuous loss-incurring process force the government towards privatisation (Jagadish Prakash & Shukla, 1994, pp.

460-464). The 2000-2001 Economic survey called for total privatisation of public sector.



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The term ‘privatisation’ connotes a wide range of ideas. In a narrow sense, privatisation implies the induction of private ownership in publicly owned enterprises, but in a broader sense it connotes besides private ownership (or even without change of ownership), the induction of private management and control in the public sector enterprises (Datt & Sundharam, 1995, p.196). Privatisation became an important tool of fiscal policy in developing countries especially in India. Government of India and some of the state governments started privatisation

of public sector units keeping in view the economic goals. There are criticisms that privatisation is taking place at a substantial social and economic cost to the nation. Critics often claim that the government is handing over state owned enterprises to private sector owners at throw away prices in the name of privatisation. Opposition parties and trade unions agitate against privatisation because it results in large-scale retrenchment and displacement of labour. The workers in the organizations feel that privatisation leads to job insecurity and reduction in various benefits.

## The Study

In this background, an attempt is made to examine the views of employees of a privatised company on the impact of privatisation on the human resource management practices. The study was conducted in a privatised company. The organization selected for this study was a state public sector that was privatised in 1993. The new management identified brand image, technology absorption, technical skills and loyalty of the workers as the strengths of the unit and lack of financial and commercial controls, laxity in administrative and managerial controls and weak marketing set up as weaknesses. It took actions to discontinue certain undesirable work practices, reviewed operations, strengthened the market set up and started paying salaries on seventh day of every month.

The management prepared a manpower inventory with regularization of daily waged workers and redeployment of manpower. There were 2578 employees in the company after privatisation. Out of them 125 employees were taken as sample to find out the impact of privatisation on human resource management practices. Care was taken to include proportionately workers, supervisors and executives. A schedule was prepared and administered among the sampled employees and the data were collected about their perception on human resource management practices.

## Results and Analysis

The average age of the sampled employees was 43 years and their average years with 17 years of experience in the present organization. Interestingly, 62.40 per cent of the respondents preferred privatisation. According to them privatisation is necessary to increase production, to produce customer oriented products at competitive prices, to diversify the company business, to reduce political interference and to maintain a healthy environment in the organization.

However, they also mentioned some specific problems faced by them because of privatisation. They include transfer of employees to far away cities, forcible voluntary retirement, wage freeze and minimization of funds for welfare activities. They further felt that there was a status gulf now between the employees and the higher ups.

Some items relating to human resource management issues were included in the schedule to find out the employee opinions on the impact of privatisation. The results are as follows:

### 1. Autonomy

It is a common belief that privatisation reduces autonomy to plan and perform the tasks assigned. The autonomy required to perform the jobs might not be provided after privatisation. The data revealed that more than half of the respondents felt that there was no impact of privatisation on the autonomy they enjoyed with public ownership. About ten per cent felt that they were given more autonomy in planning and performing their jobs after privatisation. The remaining 38.4 per cent perceived that the privatisation reduced autonomy in their jobs.

### 2. Job Security

The top most concern of employees working in a privatised company is job security. The major reason for opposing privatisation is fear of losing jobs. This is confirmed in the study because 58.4 per cent of the employees felt negatively on this item, where as 36.8 per cent were neutral. This means that there is no impact of privatisation on job security. The remaining 4.8 per cent perceived that their jobs were more secure now. The reason behind this was that they believed that as long as they perform well as expected by the management and their effective performance in the present job makes their jobs secure.

### 3. Challenge in the job

A common belief among the rank and file is that, when compared to public sector, private sector employment is challenging. Regarding this issue about every alternative respondent (50.4 per cent) of the study was neutral. They perceived that there is no change in terms of challenge in their jobs. However, 40 per cent of the respondents expressed that privatisation resulted in providing

the jobs that are challenging the remainder (9.6 per cent) was negative on the item.

#### 4. Recognition

Recognition for the good work done is a motivating factor for the employees. This helps employees to fulfil their esteem needs. The study found that there was recognition for the good work done for a simple majority (52.8 per cent) of employees. In case of 27.2 per cent, there was no impact of privatisation on this item where as another 20 per cent were negative.

#### 5. Workload

Workload is viewed as a major concern for employees. It is believed that privatisation increases the workload. The study confirmed this as a great majority (86.4 per cent) of the employee respondents felt that their workload was increased after privatisation. The reason behind this is that the casual employment system was abolished and the workload of casuals was entrusted to regular employees. The executives were also given specific targets with tight dead lines.

#### 6. Skill Requirement

So far as skill requirements are concerned, about two thirds of the employee respondents expressed that there was no impact of

privatisation on the skills required to perform their jobs. However, 23.20 per cent of them felt that the additional skills are needed to meet the job demands that are the added to perform after privatisation.

#### 7. Generation of Employment

The general belief among employees is that privatisation adversely affects future employment opportunities. Surprisingly, nearly half of the respondents (48 per cent) asserted that privatisation creates job opportunities for people. The remaining 21.6 per cent were neutral in this regard.

#### 8. Opportunities for Advancement

Coming to the impact of privatisation on opportunities for advancement, a majority (57.6 per cent) of the employee respondents, especially executives viewed that privatisation increases opportunities for advancement. Nearly one fourth of them felt no impact of privatisation on this item where as the remainder, 30.4 per cent were negative.

#### 9. Salaries & Performance based benefits

As far as salaries are concerned, employees viewed that privatisation had no impact on this item. The reason might be

**Appendix 1: Employee views on Impact of Privatisation on HR Issues**

Sl.No	Items	Positive	Neutral	Negative
1	Autonomy in the job	10.4	51.2	38.4
2	Job Security	4.8	36.8	58.4
3	Challenge in the job	40	50.4	9.6
4	Recognition for the good work done	52.8	27.2	20
5	Work load	86.4	12.8	0.8
6	Skill requirement	23.2	75.2	1.6
7	Generation of employment	48	21.6	30.4
8	Opportunities for advancement	57.6	23.2	19.2
9	Need for skill upgradation	31.2	68	0.8
10	Salaries	5.6	87.2	7.2
11	Performance based benefits	9.6	85.6	4.8
12	Welfare	8.8	54.4	36.8
13	Grievance handling	17.6	17.6	28.8
14	Discipline management	81.6	17.6	0.8
15	Trade union situation	2.4	13.6	84
16	Union management relation	40	1.6	38.4
17	Overall Industrial relations climate	18.4	50.4	31.2

the fact that wage freeze was accepted in the process of privatisation. However, half-of the executive respondents were expecting increase in their monetary benefits. With regard to performance-based benefits, the respondents expressed the similar opinion.

### 10. Welfare

On this item, a simple majority (54.4 per cent) of the respondents viewed that there was no impact of privatisation. 36.8 per cent felt that the welfare facilities were rather low. This might be because of privatisation agreement, which included withdrawal of some of the welfare facilities provided to the employees when the company was in public sector.

### 11. Industrial Relations

Privatisation influences industrial relations prevailing in the organizations. This study found that the number of grievances of the employees after privatisation was low and the handling of the grievances, according to a majority (53.6 per cent) of the respondents was very effective. With respect to incidents of misconducts committed by the employees in the work place, the situation remained the same even after privatisation. But, the management of discipline became very effective. As perceived by a single largest group (40 per cent) of employees, union management relations were improved after privatisation. However, about half-of the respondents viewed the overall industrial relations climate remained the same even after privatisation.

### Conclusion

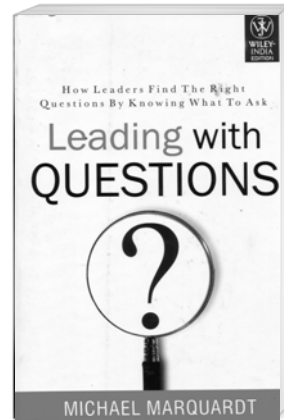
Based on the analysis presented in the preceding paragraphs, it can be concluded that the respondents of the study perceived that privatisation did not make any difference on issues like salaries, performance based benefits, skill requirements, welfare and autonomy in the job. However, they felt trade union situation was weak, a feeling of job insecurity existed among them and they felt privatisation increased their workload. Interestingly, the sampled respondents asserted that privatisation brought discipline among the work force. They also visualized opportunities for advancement and they started feeling that good work done by them was recognized. Finally, it can be stated that whatever might be the problems employees perceive or face during the process of privatisation, those who were retained in the organizations after the privatisation adjusted with the changing environment and made an attempt to integrate their goals with the organizational goals.

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# Skimming and Scanning



<b>Book Title</b>	:	<b><i>Leading with QUESTIONS</i></b> <i>How Leaders Find The Right Questions</i> <i>By Knowing What To Ask</i>
<b>Author</b>	:	<b>Michael Marquardt</b>
<b>Edition</b>	:	<b>2006</b>
<b>ISBN</b>	:	<b>81 - 265 - 0749 - 7</b>
<b>Price</b>	:	<b>Rs.299/-</b>
<b>Pages</b>	:	<b>216</b>
<b>Publisher</b>	:	<b>Wiley India Pvt.Ltd., New Delhi.</b>

Leadership is not about knowing all the answers. It's about knowing what great questions to ask. For old timers like me the early warning came from the famous strategist cum writer Peter Drucker who once said "the leader of the future will be a person who asks." The book *Leading with Questions* written by Michael Marquardt an internationally acclaimed management consultant and noted educator, is an indispensable guide for the leaders of the future.

The book, composed in three parts, gives a thematic presentation of the importance and power of leading with questions. Part one explains the power of questions and how a questioning culture benefits and strengthens individuals and organizations. Part two made in three chapters offers a practical guide to asking questions effectively. It gives a thorough analysis of different types of questions and enables the reader to discover the amazing true power of various types of questions. The "Why" questions are identified as the most powerful ones. Part three gives the guidelines for becoming a questioning leader. The narrations on how questions become very useful and effective for managing people, building teams, strengthening relationships and shaping strategy etc., are really motivating.

According to the author, effective questioning can improve the morale of the team and also can impact the functioning of the leader. Right questions can liberate the stress and strain and facilitate sharing of responsibility. Questions like 'how well are we doing?'

'Are we listening to each other carefully,' etc would go a long way in building group cohesiveness and improving morale. Right questions create vitality, generate dialogues between the stakeholders inside and outside the organization, release energy and prompt new ideas which can even reshape the organizational goals from improving today's business to building tomorrow's business. The author presents a questioning technique that works and will enable leaders to grow from being good to being great. The reader is taken, step-by-step, through the process of learning the art of asking the right questions that will generate short-term results and long-term learning.

The book is enriched by the narrations of the experiences of great organizational leaders who led by questions and who can indeed serve as a real guide for understanding when, how, why and where to lead with questions. The reader would undoubtedly get convinced that 'questioning is the ultimate leadership tool' especially after reading through the inspiring quotes from famous leaders of Du Pont, Ford Motors, etc.

A highly recommended book to the leaders of the twenty first century both the experienced and the new ones in the making.

**Prof.Filomina P.George**

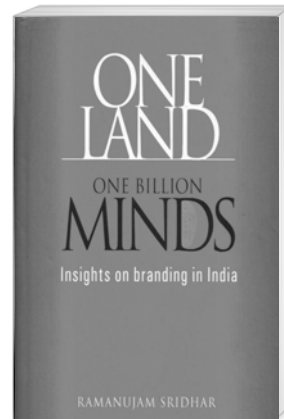
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<b>Title</b>	:	<b>ONE LAND ONE BILLION MINDS</b> <i>Insights on branding in India</i>
<b>Author</b>	:	<b>Ramanujam Sridhar</b>
<b>Edition</b>	:	<b>2006</b>
<b>ISBN</b>	:	<b>81-85984-17-4</b>
<b>Price</b>	:	<b>Rs. 850/-</b>
<b>Pages</b>	:	<b>400</b>
<b>Publisher</b>	:	<b>Productivity and Quality Publishing Pvt.Ltd., Madras.</b>

The book by Ramanujam Sridhar talks about his journey from the world of finance to the universe of marketing and branding. Starting a career in Banking and moving over to the world of advertising, Mr.Ramanujam is known for his advertising acumen.

The book is an autobiographical insight into the Indian marketing and Advertising. Spread in 13 chapters, the book is rich with examples and case studies that make it an interesting reading.

The book starts with a peep into the travel of the author from banking to advertising and moves over to the most important topic of understanding Indian consumers. Moving over, the author covers the concept of brands and brand management. Then towards the end of the book, the author explains his views on the role of advertising and public relations.

The book emphasizes on the importance of brands and more importantly on the strategy that should drive the brands. He cites many prominent Indian brands that succeeded because of careful planning. While criticizing on the over use of celebrity endorsements, the author gives certain guidelines on using celebrity to the brand's advantage. The author also gives an effort to give the readers an insight to the future of brands in India.

The experience of the author is shared to the readers when he deals with the Advertising part of the book. He reminds the Brand Owners about the power of advertising and how advertising builds brands. The case of Advertising agency's position in the Client –Agency relationship is dealt within the chapter aptly titled

“Is Your Ad Agency Truly Your Partner? The author says, “Truly great work happens when the agency feels electrically charged about the client and his brand.”

The topic selections, the name of the book and the profile of the author, build up lot of expectations about the book for a reader. The readers who would expect a highly insightful commentary on Indian brands will be little disappointed after reading the entire book. The reason is that although there are lot of examples and consumer insights, the author has been saying the obvious. For an uninitiated to the world of advertising and branding, this book will prove to be a storehouse of information. But for a management graduate of a marketing practitioner, the concepts are not new and the examples already discussed in various forums. The author often repeats lot of points again and again on various occasions sometimes gives a feeling of boredom. For example, TVS Victor and Titan feature in different chapters more than once. Although the book starts with an autobiographical note, somewhere the personal touch is lost in the book that leaves the reader craving for more of his personal experience than the oft-repeated theories.

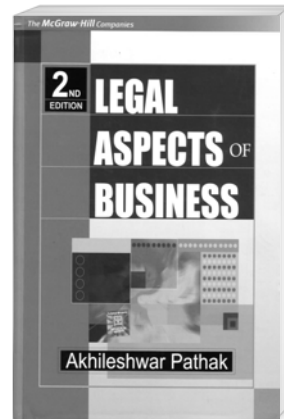
Neat layout and impressive presentation make this book easy to read but at the end of the book, messages fail to get imprinted in the mind.

**Harish B.**  
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# Skimming and Scanning



<b>Title</b>	:	<b>LEGAL ASPECTS OF BUSINESS</b>
<b>Author</b>	:	<b>Akhileshwar Pathak</b>
<b>Edition</b>	:	<b>Second</b>
<b>ISBN</b>	:	<b>0-07-061633-7</b>
<b>Pages</b>	:	<b>548</b>
<b>Publisher</b>	:	<b>Tata McGraw- Hill Publishing Company Ltd., New Delhi.</b>

The author, an Associate Professor at Indian Institute of Management, Ahmedabad, has been teaching students of management & training executives for the past 15 years, which has come handy to the creation of difference about the subject. He has authored two other books titled "*Law, Strategies, Ideologies: Legislating Forests in Colonial India*" and "*Contested Domains: State, Peasants and Forests in Contemporary India*."

This book is a difference.

At least for a start, the presentation treatment of "Legal Aspects Of Business" by the author is a different one on three aspects:

- the focus of coverage of the legal aspects is based on relevance
- introduction of concepts is done in two steps
- explanation of concepts with the aid of detailed cases

As the author rightly points out, this book is not about detailed information on law. It's an effort to bring out the linkages of law to the environment of business enterprise. Books available in the field of Business Law, for that matter with the same title, gives a detailed account of law explained with the help of case lets, illustrations, etc or at least the provisions of the specific Act, if it is of recent origin, without explanations, cases, illustrations.

And this is the first point of difference. The author has consciously put his efforts to offer meanings to the selected concepts in a lighter vein, using more of a story method, which specifically is clear in the case of Negotiable Instruments in Part 6.

The second prominent difference is in the treatment of explanation of concepts. There are two levels of understanding the concepts:

- an introductory chapter on the specific area of law narrating the links of law using reality bases situations/cases, whereby some questions on legal status of such questions are poised to the reader.
- To find answers to those questions a reading of the rest of the part is necessary. While narrating the development of the law, the author, with the help of judgments of some decided cases, explains the concepts that were introduced in the introductory chapter of the Part.

The explanation of concepts too is markedly presented in a better style. The concepts are being described using the explanations as is found in the judgments itself, though more than often the highlight of the word "The Judgment" in the text is not that appealing.

The book is divided into 9 parts.

Part one deals with contracts, where the introductory chapter highlights some reality based legal situations related to contracts in practice. Then there is a chapter on the development of contract law with a focused portion on Indian scenario. As to the relevance of concepts to any reader, it is restricted to formation, compensation & damages in Indian perspective.

In part two, another advanced form of contract the sale, there is an introductory chapter on cases & illustrations. Here the important concepts are ownership & quality, transfer of rights & property.

Part three deals with special kinds of contract like bailment, guarantee, agency & partnership.

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Part four is about consumer protection. There is a brief mention of law related to the field. In chapters on cases falling under the category of consumer protection, what was the need for a legislation. Unfair trade practices and developments in that area follow the introduction.

Next is company law. The chapters in this part deal with incorporation, raising of capital, meetings, mergers and acquisitions, and finally on regulations related to securities, besides the introductory chapter on what is company.

Part six deals with IPR (Intellectual Property Rights). Introductory chapter narrates the development of law in its early stages through the liberalization-globalization phase.

Apart from the chapter on what is IPR, the developments in field of law relating to IPR and its effects, the part deals separately on patents, copyrights, and trademarks.

The easiest to comprehend for any layman, is the part on banking law which comprises a brief chapter dealing with the Banking Regulation and RBI Acts and another on negotiable instruments, without going into the intricacies of the instruments.

The part on tax is an added feature of this book which deals in a general manner the income tax provisions on heads of income, capital gains, set off and indirect tax areas like excise, VAT, and service tax.

The last part is a miscellaneous section, which deals on topics like Fundamental Rights, laws relating to IT and environment protection, Indian legal system, business and criminal liability.

Thus a reading of the book, if the reader sustains through, would be a mere understanding of some but indeed a variety of basic concepts. Perhaps, the comprehensiveness of the linkages is too wide and varied, thus exhausting the reader's ability to feel the book as exciting and stimulating. Though innovative in the pedagogic approach, an analytic way of understanding, especially the legal issues and the subject itself, would "skimmed" through only by people with a legal background. Positive aspect of the book to be mentioned is its simple language, which makes understanding of concepts easier and the analytic pedagogy.

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# SCMS JOURNAL OF INDIAN MANAGEMENT

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