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Message

Editor in Chief / Managing Editor



Dear Academicians & Research Scholars,

Journal of Management Value & Ethics now become a choice research scholars to publish their research papers in this streamed International Journal. Because, it is moving fast towards their target groups day by day. Our International Journal is publishing many research papers from across the world in the field of management. Many academicians, research scholars & students approached from outside countries like USA, Thailand, Indonesia, Saudi Arabia, Spain, Iran etc. for publication their research papers. Most of them, we have published. We are also publishing many research papers from different state of our country. The academicians & research scholars, who have seen our profile on LinkedIn, They are approaching for association with our editorial & advisory board. Many had sent their biodata for reviewers team. Some of them, we have selected from USA, Uzbekistan, Sri Lanka etc. The quality of research papers like empirical, conceptual, book review and case study are increasing popularity of the Journal day by day. Our strong and renowned editorial & advisory board taking interest in the favour of our Journal. I thanks to our board members, because they are expert from different fields and contributing their valuable time and experience with us, not only for Journal but also for academicians and research scholars. Today, without research nothing is possible. Research based study always support academicians & scholars to upgrade their knowledge as well as academic profile that will support in the API score as per UGC and AICT norms. We have decided earlier, GMA will publish the story of our top management Gurus, who are world famous. So, in this series, we are bringing another name of world fame management guru **Professor C K Prahalad**. He had published many books on the management and best seller among the students. Those who are interested to publish their research papers in the field of Retail, Tourism, Hospitality, Event Management, Import and export, HRM, Finance, Marketing, Advertising, Accounting, Economics, Aviation, IT etc. They can send their research papers through email to our Journal.

With best wishes to all

Dr. P. S. Bhadouria



C K PRAHALAD: World Famous Management Guru

Born	8 August 1942 Coimbatore, Tamil Nadu, India
Died	16 April 2010 (aged 67) San Diego, California, U.S.
Nationality	Indian American
Citizenship	India
Alma mater	Loyola College, Chennai
Education	IIM Ahmedabad Harvard Business School
Occupation	Professor
Religion	Hindu

Coimbatore Krishnarao Prahalad (8 August 1942 – 16 April 2010) was the Paul and Ruth McCracken Distinguished University Professor of Corporate Strategy at the Stephen M. Ross School of Business in the University of Michigan.

He was renowned as the co-author of "Core Competence of the Corporation" (with Gary Hamel) and "The Fortune at the Bottom of the Pyramid" (with Stuart L. Hart).

On April 16, 2010, Prahalad died of a previously undiagnosed lung illness in San Diego, California. He was sixty-seven at the time of his death, but he left a large body of work behind.

Prahalad was the ninth of eleven children born in 1942 in to a Kannada speaking family in Coimbatore, Tamil Nadu. His father was a well-known Sanskrit scholar and judge in Chennai. At 19, he joined Union Carbide, he was recruited by the manager of the local Union Carbide battery plant after completing his B.Sc degree in Physics from Loyola College, Chennai, part of the University of Madras. He worked there for four years. Prahalad called his Union Carbide experience a major inflection point in his life. Four years later, he did his post graduate work in management at the Indian Institute of Management Ahmedabad.

At Harvard Business School, Prahalad wrote a doctoral thesis on multinational management in just two and a half years, graduating with a D.B.A. degree in 1975.

Professorship and teaching

After graduating from Harvard, Prahalad returned to his master's degree alma mater, the Indian Institute of Management Ahmedabad. But he soon returned to the United States, when in 1977, he was hired by the University of Michigan's School of Business Administration, where he advanced to the top tenured appointment as a full professor. In 2005, Prahalad earned the university's highest distinction, Distinguished University Professor.

Achievements

Writings, interests, and business experience. In the earlier days of Prahalad's fame as established management guru, in the beginning of the 90's, he advised Philips' Jan Timmer on the restructuring of this electronic corporation, then on the brink of collapse. With the resulting, successful, 2–3 year long Operation Centurion he also frequently stood for the Philips management troops.

C. K. Prahalad is the co-author of a number of well known works in corporate strategy, including The Core Competence of the Corporation (with Gary Hamel, Harvard Business Review, May–June 1990) which continues to be one of the most frequently reprinted articles published by the Harvard Business Review. He authored or co-authored several international bestsellers, including: Competing for the Future (with Gary Hamel, 1994), The Future of Competition (with VenkatRamaswamy, 2004), and The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits (Wharton School Publishing, 2004). His last book, co-authored by M. S. Krishnan and published in April 2008, is called The New Age of Innovation.

EVIDENCE-BASED MANAGEMENT VANTAGE POINT

Navid Mollaei¹, Vahid Ashrafi²

1. INTRODUCTION

Evidence-based management (EBM) means translating principles based on best evidence into organizational practices. Through evidence-based management, practicing managers develop into experts who make organizational decisions informed by social science and organizational research— part of the zeitgeist moving professional decisions away from personal preference and unsystematic experience toward those based on the best available scientific evidence. Evidence-based management derives principles from research evidence and translates them into practices that solve organizational problems. This isn't always easy. Principles are credible only where the evidence is clear, and research findings can be tough for both researchers and practitioners to interpret. Moreover, practices that capitalize on a principle's insights must suit the setting (e.g., who is to say that the particular performance indicators the executive director uses are pertinent to all units?), (Rousseau, 2006).

2. BACKGROUND

Evidence-based management is not a new idea. Chester Barnard (1938) promoted the development of a natural science of organization to better understand the unanticipated problems associated with authority and consent. Since Barnard's time, however, we have struggled to connect science and practice without a vision or model to do so. Evidence-based management, in our opinion, provides the needed model to guide the closing of the research-practice gap.

Since the 1980s British Central Government has placed an increasing emphasis on ensuring that policy and practice are informed through a more rigorous and challenging evidence base. The 'three E' initiatives (economy, efficiency and effectiveness) have focused attention on the delivery of public services and led to the development of detailed guidance and best practice manuals in many disciplines. This orientation has attracted considerable attention, and has attempted to base policy and practice on the best evidence available. Effectiveness in this context is concerned both with appropriateness and validity of the methods used by professionals in their day to day work to achieve their basic aims and also

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the overall ability of agencies to deliver the services they are required to provide (Davies et al., 2000). The movement has continued under New Labor and in May 1997 Tony Blair announced that 'what counts is what works', the intention being to signal a new 'post-ideological' approach to public policy where evidence would take centre stage in the decision-making process (Davies et al., 2000).

The evidence-based movement has had a major impact in certain disciplines. Pre-eminent have been applications in medical science, where the pace of knowledge production has meant that making sense of an often contradictory mass of evidence has become increasingly difficult. Specifically in the late 1980s, attention was drawn to the comparative lack of rigor in secondary research. Critics argued that the preparation of reviews of secondary sources were dependent on implicit, idiosyncratic methods of data collection and interpretation (Cook et al., 1997b; Greenhalgh, 1997). In addition, practice based on poor quality evaluations of the literature sometimes had led to inappropriate recommendations (Cook et al., 1997a). In 1991 Smith questioned the overall wisdom of much of medical science, arguing that only 15 to 20% of medical interventions were supported by solid medical evidence (Smith, 1991). The result, it was argued, was that patients were being regularly subjected to ineffective treatments and interventions, and for many practices there was little or no understanding of whether or not the benefits outweighed the potential harm (Davies et al., 1999). In fact, Evidence-based medicine is the integration of individual clinical expertise and the best external evidence. The attributes of evidence based medicine provide a useful reference point for exploring what its counterpart in management might look like.

The movement to base practice on the best available evidence has migrated from medicine to other disciplines. In the UK, the Department of Education and Skills (DES) has established a Centre for Evidence-Informed Policy and Practice in Education. Furthermore, a 'What Works Programme' was introduced in the probation service following the Crime Reduction Strategy published by the Home Office in July 1998. The aim of the programme was to develop successful intervention programmes based on hard evidence so that they could be used as models for day-to-day probation practice (HM Inspectorate of Probation (HMIP), 1998; Home Office, 1998). An Effective Practice Initiative has also sought to address the difficult problem of ensuring that offender supervision changes in line with research evidence on what works (Furniss and Nutley, 2000). In 1999 the Department for the Environment, Transport and the Regions (DETR) commissioned a review of the evidence base as it relates to regeneration policy and practice (DETR, 1999; Nutley and Davies, 2000). Other disciplines such as nursing (Evans and Pearson, 2001), housing policy (Davies et al., 1999; MacLennan and More, 1999), social care (Macdonald, 1999) and criminal justice (Laycock, 2000) have also adjusted the approach with varying degrees of success. In 2001, the Economic and Social Research Council (ESRC), funded the establishment of a network (the Evidence Network) of multi-disciplinary centers dedicated to the improvement of the evidence base for policy and practice in social sciences (ESRC, 1999). This national

coordination centre, the 'Evidence Network', aims to use systematic review to inform and improve decision making in Government, business and the voluntary sector.

3. EBM Characteristics

In sum, features characterizing evidence based practice include (Pfeffer & Sutton, 2006):

- Learning about *cause-effect* connections in professional practices;
- Isolating the variations that measurably affect desired outcomes;
- Creating a culture of evidence-based decision making and research participation;
- Using information-sharing communities to reduce overuse, underuse, and misuse of specific practices;
- Building decision supports to promote practices the evidence validates, along with techniques and artifacts that make the decision easier to execute or perform (e.g., checklists, protocols, or standing orders); and
- Having individual, organizational, and institutional factors promote access to knowledge and its use.

Also, six evidence-based guidelines for evaluating management ideas and knowledge include:

- (1) Treat old ideas like old ideas.
- (2) Be suspicious of break through ideas and studies;
- (3) Celebrate and develop collective brilliance, not lone geniuses or gurus;
- (4) Emphasize both virtues and drawbacks;
- (5) Use success and failure stories to illustrate sound practices, not as a valid research method; and
- (6) Take a neutral, dispassionate approach to ideologies and theories.
- (7) To learn what *teaching* evidence-based practice entails we begin by identifying its features in the fields of medicine and education and contrast these with contemporary management education (Table 1).

Also, Rousseau and McCarthy explain six principles for evidence-based teaching, including:

Principle 1: Focus on principles where the science is clear;

Principle 2: Develop decision awareness in professional practice;

Principle 3: Diagnose underlying factors related to decisions;

Principle 4: Contextualize knowledge related to evidence use;

Principle 5: Develop evidence-based decision supports;

Principle 6: Prepare to access new evidence

Features	Management	Medicine	Education
Principles of cause/effect identified through research	Research is fragmented, and highly specialized; many teachers lack behavioral science training.	Syntheses available; teachers educated in clinical processes.	Syntheses available; teachers educated in teaching practices.
Make decisions explicit	Numerous decisions are implicit, made without managerial awareness.	Trained to recognize decision demands. Many decisions are discrete.	
Diagnosists	Formal training varies, often limited to case analysis.	Explicit formal training basis of educational process.	Formal training varies.
Reported practice opportunities	Education often limited to classroom instruction. Some programs, especially for executives offer opportunities for practice, feedback, reflection, and renewed practice.	Formal practice opportunities, e.g., internships and residencies.	Formal practice opportunities, e.g., internships.
Contextualizing findings to particular situations	Requires experience to adjust applications to circumstances. Learners often have little experience. Field projects useful.	Problem-solving sessions led by experienced practitioners (e.g., rounds); internships, residencies provide exposure to context.	Student teaching provides experience with different settings and students.
Decision supports	Few.	Numerous. Patient care protocols, elaborate expert systems to gauge patient prognosis, handbooks of drug interactions, on-line information, etc.	Practice guidelines in several teaching domains.

Table 1: Features of evidence-based teaching across different disciplines, (Rousseau et al, 2007).

4. SYSTEMATIC RESEARCH SYNTHESSES

To derive reliable evidence, we need to review management researches and then synthesis research findings .Therefore; we must know how systematic syntheses have been conducted across various fields. Syntheses constitute a family of methods for accumulating, organizing, and interpreting research (Dixon-Woods, Agarwall, Young, Jones & Sutton, 2004). As a

quaint essential human creation, science requires not only methods to represent phenomena that cannot be observed directly but also on-going *critiques* of methods and interpretation to achieve authenticity and value. Systematic synthesis is such a critique: it evaluates both data and the interpretations made of them. Existing methods fall into four categories: *aggregation, integration, interpretation and explanation.*

4.1. Synthesis by aggregation

The characteristic method of aggregative synthesis is statistical meta-analysis. Aggregative syntheses extract and combine findings from separate studies to increase the effective sample size (Schmidt & Hunter, 1990). They undertake to provide evidence of “what is true” or ‘what works’ by summarizing an overall net effect (e.g. Kluger & DeNisi, 1996). This effect may be a correlation or a treatment effect, including measures of the performance or effectiveness for a given class of interventions. The synthesis’s starting point is a narrow, focused question, such as ‘does X lead to outcome Y’, with ‘X’ and ‘Y’ and the ‘outcome’ being defined as tightly as possible. Since the validity of a meta-analysis is depends on the quality and homogeneity of the primary studies on which it is based, its synthesis process is structured with the aim of reducing bias. Prior to actual synthesis, the researcher is encouraged to set a priori criteria specifying the types of studies will be included. Next extensive searches of published and unpublished studies are conducted and their methodological quality assessed to distinguish between reliable and unreliable research. In several fields regularly employing aggregated syntheses, the process has been formalized with the goal of producing rigorous and replicable reviews (Greenhalgh, 1997). See for example, the Cochrane Collaboration (www.Cochranecollaboration.org) in medicine and the Campbell Collaboration (www.campbellcolloboration.org) in education and criminal justice.

Promoters of aggregative synthesis stress the importance of controlling for bias, which includes use of a hierarchy of evidence to rank research designs according to their internal and external validity. Within this synthesis tradition, randomized controlled trials are often regarded as the ‘gold standard’ for judging ‘what works’ (Evans, 2003).

Acknowledging the problems of observational (non-manipulated) studies, critics stress the limited scope of RCT methods for studying important social and organizational issues (Pawson, 2002a,b), noting the progress made in statistics and social science in working with observational data.

A key problem in aggregative synthesis is that primary studies are rarely homogeneous. Studies can be pooled despite widely ranging effects reflecting unmeasured complexity (e.g., differences in quality of implementation, measured outcomes, or contextual factors that influence observed effects). Unless primary studies carefully report implementation processes and context, aggregated results can mask the mechanisms underlying effects (Pawson,

2002a). Meta-analysis advocates (e.g. Schmidt & Hunter, 1990) suggest that such differences can be accounted for by identifying mediators and moderators. However, the aggregated synthesis's design must anticipate the presence of mediators and moderators, and the relevant information must be available from the primary studies.

Pooling effect sizes, the additive model of evidence aggregated syntheses rely upon, can fail to provide insights into the mechanisms and contextual factors relevant to organizations and related human behavior. A meta-analysis on the other hand can inform both theory and practice when undertaken in a manner that allows tests of causality or makes use of supplemental information regarding context or nature of the intervention. The basic approach to meta-analysis may itself be adaptable to the addition of more diverse sorts of information, including the inclusion of supplementary information from relevant qualitative work and expert practice (Gregson, Rodger, Neal & Avis, 2002).

4.2. Synthesis by Integration

Integrative synthesis involves the collection and comparison of evidence containing two or more data collection methods to investigate patterns across primary research studies. It can compensate for weaknesses in any single research design to improve the internal and external validity of findings. Data from one study design can be triangulated to corroborate findings from others or to investigate different aspects of a problem. One important use of integrative syntheses is to capture procedural knowledge related to how interventions or treatments might best be carried out in a particular context. Recognition is growing recognition that including qualitative data in syntheses can provide 'situation-specific wisdom' (Campbell, 1984). This is particularly useful where treatments or practices involve some improvisation (e.g., care givers, teachers or managers adapting a practice to local conditions). Qualitative data can help capture local ways of doing things as well as the subjective human experience, often excluded from more arms' length studies (Dingwall et al, 1998). Integrative synthesis typically employs predetermined questions and selection criteria. This approach often asks multiple questions at the same time so that a review of diverse research studies addresses issues no single study can. First, typical questions framing an integrative synthesis relate to effectiveness and cause-effect relationships (e.g., Does the intervention work? What cause-effect relationships are supported across studies? What are the benefits and harm? Who will benefit from application of these findings?). Second, the review queries the appropriateness of the intervention or causal relationship with regard to affected parties (e.g., what is the experience of the consumer, manager, or worker? What issues are important to them? Do the parties view the outcomes as beneficial?). Third, questions address the feasibility of applying the findings and in particular any procedural knowledge that might aid its implementation (e.g., what resources are required for the effects to occur or intervention success? Will the intervention be accepted and used? How should it be implemented? What are its economic implications?).

Integrative syntheses can address a broad range of questions and accommodate heterogeneous sources of data (Dixon-Woods et al., 2004). Judgment and interpretation are crucial to this synthesis and cannot be eliminated by proceduralization, making it "...a sense-making exercise and not a *mechanical* one" (Pawson, 2002a).

4.3. Synthesis by interpretation

Interpretive approaches to synthesis are associated with relativist epistemologies (e.g., phenomenology or social construction). They are typically limited to published findings, rather than primary data in part because qualitative data are not as readily shared unless in a published form. The central focus of qualitative studies is often different from that of quantitative ones (e.g., experiences of participants versus assessments of effects). As such the motives for integrative syntheses often differ from those of aggregated reviews, driven more by interests in human experience and social phenomena rather than interventions or mechanisms. Their purpose is often to translate key interpretations from one study to another.

One approach in the interpretive synthesis family is meta-ethnography (Noblit & Hare, 1988: 5-6). It involves a flexible or open coding system developed by coders reviewing the data to identify categories that emerge. Coders compare the imagery and themes that surface across studies. Advocates argue that this approach is a unique form of synthesis because it preserves the interpretive qualities of the original data by, "carefully peeling away the surface layers of studies to find their hearts and souls in a way that does least damage to them" (Sandelowski, et al., 1997: p. 370). In meta-ethnography (see for example, Campbell, et al., 2003), reviewers also identify higher order concepts not evident in the primary studies. The product is the construction of larger narratives and more generalizable theory (Sandelowski et al., 1997). Interpretive synthesis compiles descriptive data and exemplars from individual studies, building them into a mosaic or map (Hammersley, 2001). The process is one of conceptual innovation and reinterpretation (Campbell et al. (2003), while attempting to preserve the original study's integrity or wholeness (Pawson, 2006).

Another method of interpretive synthesis is described by Popay, Roberts, Sowden, Petticrew, Arai, Rodgers, and Britten (2005). It focuses on understanding treatments or practices and involves four steps: 1) developing a theoretical model of how the interventions work, why and for whom; 2) deriving a preliminary synthesis; 3) exploring relationships in the data; and 4) assessing the robustness of the synthesized output.

Primarily, this narrative approach relies on words and text to capture and explain synthesis findings. Its goal is to 'tell the story' of studies included in the review (Popay, al. 2005: 5). In healthcare, qualitative reviews have proven useful in providing more complete understanding of how patients initiate strategic changes in their own regimens, such as diabetics who vary the timing of insulin administration in response to job demands, not as a form of deviance, but a form of more effective coping (Campbell et al, 2003). Interpretive syntheses are useful

where there is a relatively comparable body of qualitative data. There is no reason why quantitative data cannot be incorporated in an interpretative synthesis as a means of identifying a common explanation across bodies of data, but few examples of this exist (Dixon-Woods, et al. 2004). Unlike aggregative synthesis which seeks to avoid or mitigate bias, the reviewer is central to the process of interpretative synthesis. As such the synthesis provides a feasible explanation of the study's findings rather than a replicable explanation (Noblit & Hare, 1988). Because qualitative research tends to emphasize the richness and depth of contextual analysis (Fielding & Fielding, 2000), critics of this approach argue that interpretive synthesis is 'context-stripping,' not an interpretive act.

Another controversy within the community of qualitative researchers is use of structured methods such as purposive sampling, grounded theory, multiple coders, and respondent validation and triangulation as a means for demonstrating rigor. Such practices do not appear to be widely accepted.

4.4. Synthesis by explanation

The explanatory approach to synthesis focuses on identifying causal mechanisms and how they operate. It seeks to discover if they have been activated in a body of research and under what conditions (Sayer, 1992: 14). Explanatory synthesis starts by articulating likely (alternative) underlying mechanisms and then interrogates available evidence to find out whether and where these mechanisms are applicable. Primary studies are then used "to test, revise and refine the preliminary theory" (Pawson & Tilley, 1997: 74). Each relevant published article is described and discussed in terms of its contribution to the emerging theory,

".... the reviewer's basic task is to sift through the mixed fortunes of a programmed attempting to discover those contexts (C+) that have produced solid and successful outcomes (O) from those contexts (C) that induce failure (O-). The review process is then repeated across a number of additional studies featuring the same underlying mechanism, with the aim of gathering together the various permutations of success and failure... the aim is to differentiate and accumulate evidence of positive and negative CMO configurations" (Pawson 2002b: 345).

Explanatory synthesis recognizes no hierarchy of evidence. The worth of the study can only be determined in synthesis, by each study's contribution to pattern-building (Pawson, 2006). However, unlike the traditional narrative review an explanatory approach is comprehensive in its accumulation of relevant evidence. Representing the array of approaches to tackling a specific research question is critical to this form of synthesis. It treats the vital evidence from primary studies to include the original researchers' interpretations and explanations, not just the results. The scope of the review includes a wide range of studies, research types and data forms to promote a full understanding of the

phenomenon of interest. Its product is a revised model intended to explain for whom, in what circumstances, in what respect and why, certain causes or interventions produce preferred outcomes (Pawson, 2002b). The explanatory approach is useful for synthesis in fragmented and methodologically diverse fields and where little consensus exists regarding what constitutes quality research. Advocates of interpretive Synthesis view the explanatory approach as merely a form of interpretive synthesis and the quality of the review is heavily reliant on the appraisal and interpretation skills of the analyst (Boaz, et al. 2006).

	Aggregation	Integration	Interpretation	Explanation
Goal	Combine effect sizes to increase sample size and reduce bias.	Synthesize research from different methodologies.	Synthesize and interpret research to build higher-order theoretical constructs. Create tentative theories of phenomena including patterns of social construction.	Synthesize for explanation-building.
	Answer specific questions.	Answer specific questions.		Generate theory to explain how the world operates and under what circumstances.
	Predict intervention results by generating a more exact estimate than achievable by a single study.	To explore when interventions are more likely to be appropriate.		
Method	Quantitative combination of results of primary studies	Triangulation across multiple studies and methods.	Compilation of descriptive data and exemplars.	Theories refined in the light of confirmatory and contradictory findings. Discern patterns behind multiple explanatory claims.
	Calculation of the mean effect for a group of intervention	Different methods can investigate various aspects of problem.	Concepts across studies are identified and translated into new categories	
	Statistical meta-analysis.	Mixed method synthesis; Bayesian meta-analysis.	Narrative review; meta-ethnography.	Realist synthesis; explanatory synthesis.
Data	Evidence hierarchy. Favors randomized controlled trials where possible.	Evidence hierarchy, somewhat contested.	No evidence hierarchy.	Multiple forms of evidence accepted.
	Published and unpublished studies and data sets	Typically published studies.	Typically published articles with qualitative data on highly comparable subject matter. Includes primary researcher interpretations.	Typically from published studies. Qualitative and quantitative data, including primary research's theory and interpretations.
Strengths	Minimal method bias.	Allows multi-	Synthesizes	Identifies boundary

Table 2: Summary of different research syntheses methods (continued)

Weakness	Answers precise question.	method analysis.	multiple qualitative studies.	conditions and contextual factors.
	Systematic, replicable process.	Combines statistical and qualitative synthesis.	Allows reviewer to be reflexive and critical.	Focuses on why and where interventions lead to certain outcomes.
	Reputable method within the natural sciences.	Highlights promising interventions to develop and test.	Takes into account the nature of the context (its circumstances and the subjects involved)	Takes into account the nature of the context (circumstances and the subjects involved)
				Data can be gathered from fragmented or methodologically diverse fields.
				Highly pragmatic; focused on informing decisions
	Useful only for studies with homogeneous statistical methods.	No standardization of methodology for review.	Combining studies using diverse methodologies is contested. Meta-ethnographic approach under development.	Methodology is under development.
	Social systems often too complex for controlled intervention.	Contested definitions of quality.		Difficulties ensuring transparency and reproducibility
	Only quantitative data can be combined using statistical meta-analysis.	Replication difficult.	Yields many possible explanations.	Requires detail about the context and implementation of interventions which might not be available in primary studies.
	Only narrow range of studies suitable for inclusion.	Skills in both statistical meta-analysis and qualitative analysis required.	Replication difficult. Information from quantitative data can be lost.	Highly dependent on skills of reviewer
			Coding relies on reviewer skills; method requires reflexivity.	

(Continue of Table 2) Summary of different research syntheses methods.

EVIDENCE	SYNTHESIS METHOD			
	Aggregation	Integration	Interpretation	Explanation
Construct Validity	?	✓	✓	✓
Internal Validity				
Covariation	✓	✓	✓	✓
Temporal Precedence	✓	?	?	✓
Non Spuriousness	✓	O	O	✓
Effect Size	✓	O	O	?
Cost/Benefit	?	O	O	?
Generalizability	✓	✓	✓	✓
Intervention Compliance	?	?	?	?
Contextualization	O	✓	✓	✓

✓ – Yes ? – Unclear or inconsistent O – No

Table 3: Comparison of different synthesis methods.

No single consensus exists regarding what is ‘best evidence,’ as the above four approaches to systematic synthesis demonstrate. Nonetheless, the four approaches have certain similarities. They all have a goal of optimizing use of primary studies. Putting together the findings of individual studies can demonstrate insights not otherwise evident.

All are question-driven. Each approach yields what can be considered complete studies in themselves by virtue of their formal methods. They differ from primary studies by the fact that they make use, at least in part, of published material. Lastly, though they display no consensus regarding what constitutes *quality* evidence, all use “tough but necessary tests for evidence” (Solesbury 2004): How relevant is this to what we are seeking to understand or decide? How representative is this of the population that concerns us? How reliable, how well-founded theoretically, empirically is it?

5. EVIDENCE EVALUATION

The quality of information accepted as evidence in a discipline is dependent on a number of criteria. These include the broad intellectual approach, the value system adopted by researchers and commissioning bodies and the usual research methods employed (Davies et al., 1999). Medical science has traditionally adopted a ‘normal science’ approach within which double-blinded randomized controlled trials (RCTs) have been widely accepted as the most rigorous methods for testing interventions before use.

Evaluating evidence involves six basic criteria. The first requirement of evidence is *Construct Validity*. To establish that a phenomenon is potentially real and meaningful basically means that the regularities scientists use to identify it can be consistently

demonstrated. For example, organizational commitment on the part of employees has been conceptualized lots of different ways, but primarily as a psychological attachment to the organization. To establish it as a real and meaningful phenomenon, purported observations of commitment must be consistent with its conceptualization as a psychological attachment (displaying attachment features like goal acceptance and desire to remain). The potential reality of commitment is supported when employee reports of their commitment coincide with their support for and continued employment in the organization. Concomitantly, the meaningfulness of commitment as a phenomenon in its own right requires that its characteristics be distinct from other potentially related phenomena, such as work ethic or values. Construct validity is an evidentiary requirement for all scientific constructs. Any test of cause-effect relationship must establish the construct validity of both the presumptive cause and effect. Second, *Internal Validity* is the extent to which a study properly demonstrates a causal relationship between a presumed cause and effect. Many causal factors play a role in a given bit of data, including the phenomenon itself, the instrumentation used and other factors impossible to fully account for (e.g., respondent mood, order effects of items or measures). Internal validity is actually an amalgam of features required of an informative body of evidence. *Covariation* means that indicators of cause and effect are inter-related. *Temporal Precedence* means that studies are designed such that the "cause" precedes the "effect" in time. *Non-Spuriousness* means that no plausible alternative explanations exist for their observed covariation. Measurement quality is particularly important to reducing spuriousness. Poor measurement quality creates alternative explanations for observed covariation where measures are unreliable (i.e. contain substantial error, as when respondents have difficulty answering complicated questions) or invalid (i.e. lacking construct validity, as in the case of a general intelligence test that taps cultural knowledge but not mental abilities per se). Careful design of primary studies promotes these three conditions of internal validity, but seldom eliminates them. Threats to internal validity are overcome when accumulated studies with different designs yield comparable findings.

The third criterion, *Effect Size* is a measure of the strength of the relationship observed between two variables (Hedges & Okin, 1985). In research on causal relationships, the key indicator is an effect judged significant according to the decision rule established in advance (e.g., statistical significance). It is less apparent whether its *size* is important given the host of factors that can constrain it including the observed variance in variables (Fichman, 1999). Moreover, some effects can be so easily induced that their effect size is less important than the fact that they are likely to be relatively pervasive. Other difficult-to-influence dependent variables such as successful organizational change can have cumulative effects over time (e.g., where initial small effects escalate as the change develops; Goodman & Rousseau, 2004). However, effect sizes are the common currency of meta-analyses summarizing statistical findings across multiple studies (Hedges & Okin, 1985). The *significance* of the effect size is essential information in a meta-analysis. Relative size of the effect may be less

critical depending upon the research's purpose. However, studies combining effect sizes with cost/benefit information, indicating for example whether great benefit can be attained at low cost or with little effort, can have important evidentiary value.

Fourth, *Generalizability* or external validity refers to the extent to which a result holds across populations, settings, procedures, and times. Some results are idiosyncratic to particular research contexts and don't occur outside them. Most experimental settings never occur naturally, providing instead special "pure" conditions. A study has evidentiary value when it provides information (qualitative or quantitative) regarding the conditions to which a treatment effect or phenomenon is generalizable. Robust causal relationships are those that are stable across situations, such as trust's impact on cooperation (Fichman, 2003) and in-group/out-group effects on liking. Less robust effects may depend on context, such as how leadership styles impact follower behaviors (e.g., Porter & McLaughlin, 2006). Generalizability is a matter of judgment based upon information a set of studies provide about participants, treatments, and settings (Steckler & McLeroy, 2008). Unfortunately, research reports often fail to include in sufficient detail the facts needed to assess generalizability (e.g., participant background, the study's time frame or circumstances; Rousseau & Fried, 2000).

Generalizability is particularly threatened when only findings from published studies are considered. A purpose of traditional literature reviews is to identify whether findings are stable across researchers, methods, measures and times to provide a firm foundation for advancing knowledge (Webster & Watson, 2002).

However, identifying the stability of findings requires that relevant unpublished as well as published studies be reviewed, to overcome the bias many journals have against publishing non-significant results. Statistical meta-analyses that make special effort to overcome the "file drawer problem" provide more generalizable results than reviews limited to published materials (Schmidt & Hunter, 1990). A review that effectively identifies the generalizability of findings "facilitates theory development, closes areas where a plethora of research exists, and uncovers areas where research is needed" (Webster & Watson, 2002, p. xiii).

Fifth, *Intervention Compliance* refers to the occurrence of all conditions required to induce a particular cause or apply a specific treatment. "Treatment" non-compliance by care givers and patients is a source of inconsistency in the findings of medical research.

Attention to compliance raises questions regarding whether all practices specified in the protocol were followed. It questions how well-trained, skilled or competent were those responsible for implementation. Generally speaking there is widespread variation in how organizations implement routines (e.g., performance appraisal) or interventions (e.g., quality programs). A study providing information regarding differences in actual implementation, and the sensitivity of outcomes to it, has considerable evidentiary value.

Sixth, *Contextualization* is empirical evidence regarding how context influences the phenomenon under study. It goes beyond generalizability in that contextualization identifies the limits of a phenomenon or cause-effect relationship by providing information regarding *why* it is limited. One important form of evidence to identify contextual supports, that is, co-occurring conditions not part of the phenomenon itself, which influence its occurrence or consequences. Such is the case where the effects of high involvement work systems depend upon organizational supports such as workforce training and appropriate rewards (cf. MacDuffie, 1995). In contrast, absence of contextual support is indicated when an organizational setting is inhospitable to a new management practice or other intervention. Prior events or historical factors, such as a previously failed change, can lead an otherwise constructive management practice to fail. Investigations into conditions of failure as well as success can contextualize the occurrence and operation of a given practice or intervention.

In addition, context can impact generalizability by altering the meanings associated with the phenomena studied. Such factors are commonly noted with respect to location (e.g., industry or country) and time frame (e.g., pre-internet, cf. Rousseau & Fried, 2000). In interpreting studies of employee-employer relationships, time frame must be factored in as in the case where unionism (greater in the 1970s than the 90s) and globalization (the reverse) may influence the perspectives of actors and the roles institutions play (e.g., government, stock market participation).

Primary studies have some evidentiary value along the above criteria. However, only in synthesizing an accumulated body of studies can the full meaning and quality of evidence be gauged.

6. EBM BARRIERS

The research-practice gap among managers results from several factors. First and foremost, managers typically do not know the evidence.

Less than 1 percent of HR managers read the academic literature regularly, and the consultants who advise them are unlikely to do so either. Despite the explosion of research on decision making, individual and group performance, business strategy, and other domains directly tied to organizational practices, few practicing managers access this work (Rousseau et al, 2007).

Evidence-based management can threaten managers' personal freedom to run their organizations as they see fit. A similar resistance characterized supervisory responses to scientific management nearly 100 years ago, when Frederick Taylor's structured methods for improving efficiency were discarded because they were believed to interfere with management's prerogatives in supervising employees. Part of this pushback stems from the belief that good management is an art—the "romance of leadership" school of thought, where

a shift to evidence and analysis connotes loss of creativity and autonomy. Such concerns are not unique: physicians have wrestled with similar dilemmas, expressed in the aptly titled article “False Dichotomies: EBM, Clinical Freedom and the Art of Medicine” (Parker, 2005). Managerial work itself differs from clinical work and other fields engaged in evidence based practice in important ways. First, managerial decisions often involve long time lags and little feedback, as in the case of a recruiter hiring someone to eventually take over a senior position in the firm. Years may pass before the true quality of that decision can be discerned, and, by then, the recruiter and others involved are likely to have moved on. Managerial decisions often are influenced by other stakeholders who impose constraints. Obtaining stakeholder support can involve politicking and compromise, altering the decision made, or even whether it is made at all. Incentives tied to managerial decisions are subject to contradictory pressures from senior executives, stockholders, customers, and employees (Rousseau et al, 2007).

Last, it's not always obvious that a decision is being made, given the array of interactions that compose managerial work (Rousseau et al, 2007). A manager who declines to train a subordinate, for example, may not realize that particular act ultimately may lead the employee to quit.

Evidence-based management can be a tough sell to many managers, because management, in contrast to medicine or nursing, is not a profession. With no formally mandated education or credentials (and even an MBA is no guarantee), practicing managers have no body of shared knowledge. Lacking shared scientific knowledge to add weight to an evidence-based decision, managers commonly rely on other bases (e.g., experience, formal power, incentives, and threats) when making decisions acceptable to their superiors and constituents (Rousseau et al, 2007).

Firms themselves—particularly those in the private sector—contribute to the limited value placed on science-based management practice. Although pharmaceutical firms advertise their investment in biotechnology and basic research, the typical business does not have the advancement of managerial knowledge in its mission (Rousseau et al, 2007).

In contrast to more evidence-oriented domains, such as policing and education, management is most often a private sector activity. It is less influenced by public policy pressures promoting similar practices while creating comparative advantage via distinctiveness. Businesses are characterized by the belief that the particulars of the organization, its practices, and its problems are special and unique—a widespread phenomenon termed the *uniqueness paradox*. Observed among clinical care givers and law enforcement practitioners too, the uniqueness paradox can interfere with transfer of research findings across settings—unless dispelled by better education and experience with evidence based practice (Rousseau et al, 2007).

Yet, despite all these factors, the most important reason evidence-based management is still a hope and not a reality is not due to managers themselves or their organizations. Professors and educators of management disciplines must accept a large measure of blame. *They typically do not educate managers to know or use scientific evidence.* Research evidence is not the central focus of study for undergraduate business students, MBAs, or executives in continuing education programs, where case examples and popular concepts from non research-oriented magazines such as the *Harvard Business Review* take center stage. Consistent with the diminution of research in behavioral course work, business students and practicing managers have no ready access to research. No communities of experts vet research regarding effective management practice (in contrast to the collaboratives that vet health care, criminal justice, and educational research [e.g., Campbell Collaboration,2009; Cochrane Collaboration, 2009]). Few MBAs encounter a peer-reviewed journal during their student days, let alone later (Rousseau et al, 2007).

7. CONCLUSION

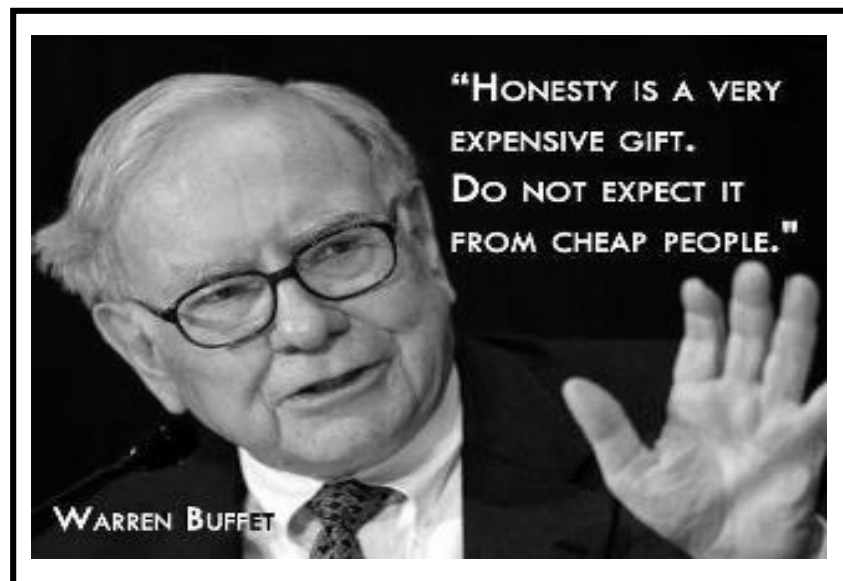
The broad and deep evidence base available to aid in managerial decisions offers a reliable basis for managers to act upon every day. Evidence-based management in established fields highlights the design features critical in using EBM. Nonetheless, the ways in which behavioral science research can best contribute to management education and practice would need to be informed by the distinctive features of our research and our teaching settings, and the specific needs of end users. Doing so is essential to overcoming the barriers we face in using EBM.

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ECONOMICS OF B & B SCHEME OF DELHI

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ABSTRACT

A detailed study is made on the working of B&B units in Delhi. A common questionnaire was prepared and 48 units were surveyed on aspects such as (a) numbers of foreign & domestic tourist, (b) room tariff, (c) number of employees, (d) location of units, (e) renovations carried out by the owner, (f) Problems faced by owners & tourists, and (g) suggestion made by owners.

The survey revealed that there is huge gap of economics between actual earnings and possible earnings from B&B units. This study leads to the inference that without (i) professionalism in running the B&B units, (ii) adequate publicity through internet, tour operators, corporate world, agency like Trip Advisor etc, (iii) online booking facility. (iv) good locations of the units, the B&B scheme of Delhi may not be a success. However, if these problems are overcome, the scheme will not only flourish but also attract a niche segment of foreign and domestic tourist especially the middle class, who is in search of special care and hospitality by host during stay and exchange of cultural practices between locals and the tourists.

Key Words: *B&B Unit, DTTDC, Foreign Tourists, Domestic Tourists, Delhi*

INTRODUCTION

The concept of bed and breakfast scheme (B&B scheme) is not new in India. In many states including Rajasthan and Delhi, the Paying Guest arrangement was in vogue in the past. This system was, however, meant for renting out part of the house with provision of providing meals to the guests who stay for a relatively longer period than a tourist. In western countries, the B&B scheme has been functioning since very long in order to attract more tourists. In the year **2006**, Government of India initiated the scheme for providing alternate accommodation at cheaper rates for foreign as well as domestic tourists under the “Incredible India” Campaign. Delhi Government also followed suit and started B&B scheme in December, 2007^[4] to cope up with the demand, during Commonwealth Games, 2010.

There was always a shortage of budget accommodation in India. In Commercial establishments like Hotels, Inns, Guest Houses etc. the taxation tariff is quite high world over

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and in India it reaches to the extent of 25%. The concept of Bed and Breakfast scheme was developed to provide budget accommodation at reasonable rates. As per B&B scheme of Delhi, the owner of B&B provides maximum two third rooms of his house subject to maximum six rooms to accommodate guests. Though the owner is undertaking commercial activity for such two third accommodations, he is not required to pay property tax, water and electricity bills at commercial rates, which are relatively higher than domestic rates. Besides this, B&B owners are also exempted from paying service tax, luxury tax for providing guest accommodation. As a result of such concessions provided by local Government, a room which is available at the tariff rate of, say, Rs.4,000/- per day in a regular hotel could be made available in around, say, Rs. 2,500/- per day under B&B scheme with almost similar facilities. However, the concept of B&B scheme was not based only as an alternative to budget hotel but also to arrange for dissemination of information for the incoming guests who can get intermingled with family members of owners and local people, watch and enjoy cultural activities around that area, go to suggested eatable joints for various local cuisines and get a glimpse of “Atithi Devo Bhava”:

Prior to the start of Commonwealth Games, 2010 in Delhi, it was estimated that approximately one lakh domestic and foreign tourist will watch Commonwealth Games in Delhi. At that time, the availability of rooms in Delhi was around 30,000 rooms while the requirement as per the expected number of guest was almost 40,000 rooms.

Since the number of guests who visited Delhi to watch Commonwealth Games were only 50% of expected numbers, there was not much pressure on accommodation sector during the Games. However, Bed and Breakfast Scheme of Delhi saw registration of 361 units as on 1.4.2010 as per Table No-I

Table No-I
Details Of Registered Bed And Breakfast Units In Delhi

Regd As On	Premises			Number of Rooms		
	GOLD	SILVER	TOTAL	GOLD	SILVER	TOTAL
1.4.2010	45	316	361	208	955	1163
1.4.2011	70	429	499	259	1357	1616
1.1.2012	62	400	462	233	1335	1568
1.1.2012	65	411	476	245	1382	1627
1.1.2013	46	314	360	171	1018	1185
1.4.2013	48	282	330	178	967	1145
30.4.2013	49	277	326	188	958	1146
Updated list available on website www.delhitourism.gov.in (Source DELHI TOURISM DEPTT. GOVT.OF NCT OF DELHI)						

Since there was no requirement of additional rooms during Commonwealth Games, the Bed and Breakfast scheme could not pick up to the expectations.

In view of unexpected poor demand of B&B accommodation, Department of Delhi Tourism, Government of Delhi was expected to study the reasons for such poor show of B&B scheme and what measures need to be taken and marketing strategy be developed to ensure that the B&B scheme serves the purpose as budget accommodation in addition to regular commercial ventures in future.

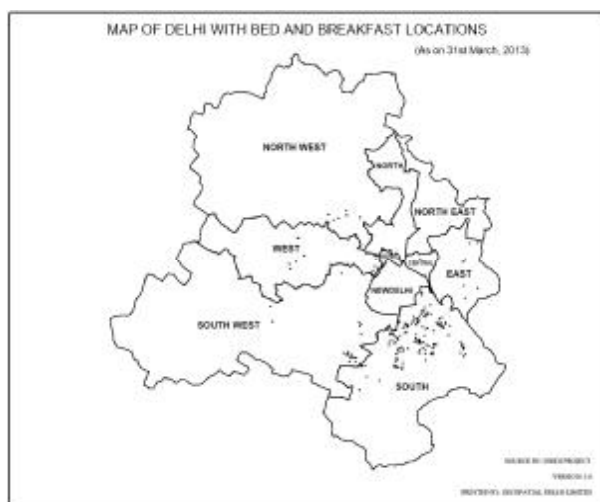
Research Objectives

It is observed that B&B scheme of Delhi has not been a success since its inception in year 2007-08. The reasons are attributed to non-availability of online booking, absence of designated website, inadequate publicity non-professional approach, hygiene conditions, non renovation of units etc.

The purpose of this study is to analyze the factors such as location of the B&B unit, room tariff, staff employed, etc. for its unsatisfactory success and to arrive at the conclusion as to what are the possible factors on the basis of which the scheme may be made successful.

Research Methodology

In view to study reasons for poor response to B&B scheme and to find the way forward some field surveys were planned by Delhi Tourism and Transportation Development Corporation (DTTDC). A sample of 48 B&B units i.e. more than 10% of total 462 registered B&B owners as on 1.1.2012 was made by DTTDC from January 2012 to June, 2012 after preparing a detailed questionnaire containing 17 columns^[6]. The map given below shows location of B&B units in Delhi which is available in Delhi Tourism and Geospatial website of Delhi Government^[7]



Columns were so designed that overall assessment of B&B scenario could be made. These queries mainly included location of unit, number of employees engaged in the unit, number of incoming foreign and domestic tourists since start of unit, name of the countries and States from where these tourists had come, the tariff range of B&B units. Other columns for field surveys were whether B&B owner has taken into account infrastructure development as per the requirement of expected incoming guests, marketing strategy adopted to promote business, nature of the problems faced by owners as well as by guests and suggestions made by B&B owners in response to Delhi Tourism questionnaire.

A Master Sheet was prepared on the basis of surveyed B&B units, as shown in Table No-II. The break up of 48 units is that 11 units fall in gold category while 37 units fall in silver category with total number of 123 rooms in both categories.

Table No- II

Master Sheet of 48 B&B Units (2008-11)

(Field survey of 48 B&B Units conducted by DTTDC between Jan 2012 to June 2012).

Category of 48 B&B units					
	Gold		11		
	Silver		37		
	Total				48
Total of Rooms in 48 B&B Estab					123
Total No.of FT stayed in 48 B&B					6815
No.of DT stayed in 48 B&B					16389
Total No.of Employees engaged by 48 B&B					137
Average number of employees engaged by B&B owner					3
Total remuneration paid by 48 B&B owners (P.M.)					717900
Average remuneration paid by 48 B&B owners (P.M.) for 3 empl.					5240
Average duration of working of 48 B&B units					32.5 months

The Master Sheet shows important figures of category of rooms, total number of rooms, total foreign and domestic tourists stayed since year 2008 till date of survey, total number of employees in B&B Units, total remuneration paid to employees, average remuneration paid to them and average duration of working of surveyed units.

Room Tariff Slab and Number of Tourists

The Queries related to number of Foreign Tourists (FTs) and Domestic Tourists (DTs) who have stayed since inception of units in year 2008, tariff range in Rupees (₹) and number of B&B units in that range are studied together as shown in Table No-III.


Table No-III
Range of Tariff and Number of Foreign Tourists
and Domestic Tourists stayed in B&B Units in period (2008 to 2011)

Range of Tariff per room	No.of B&B Units	No.of FTs stayed in period 2008 to 2011	No.of DTs stayed in period 2008 to 2011	Average in the range per B&B	
				FTs	DTs
1000-1500	5	120	878	24	176
1501-2000	9	622	4736	69	526
2001-2500	10	326	1990	32.6	199
2501-3000	8	260	270	32.5	33.8
3001-3500	7	1328	2525	289.7	360.7
3501-4000	4	2741	3068	685.3	767
4001-4500	1	415	1074	415	1074
4501-5000	2	737	1753	368.5	876.5
5001 -above	2	266	95	133	47.5
Total	48	6815	16389		

Source : Primary Data [6]

An attempt is made to have 09 slabs of tariff range with Rs. 500/- difference i.e. from Rs. 1,000/- to 1,500/-, second slab from Rs. 1,501/- to 2,001/- and so on with maximum range of Rs. 5001/- to and above.

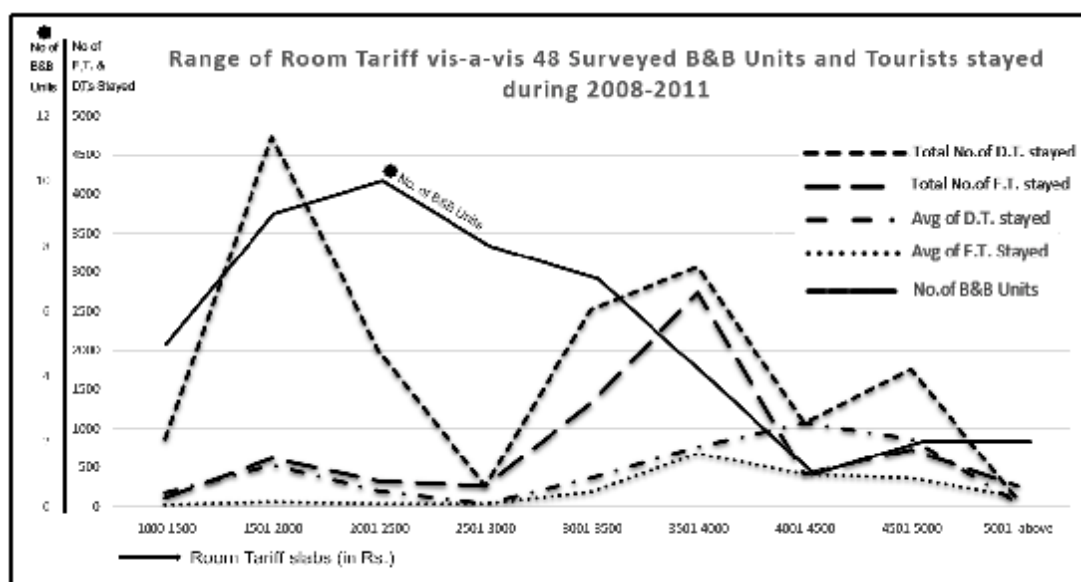
Table No-III shows number of B&B units falling in each category of these tariff slabs with number of FTs and DTs stayed in each tariff slab. Five graphs are drawn as shown in Graph with tariff slabs of Rs. 500/- at X-axis with various other parameters like “number of B&B units falling in that slab on Y-axis etc. Five graphs drawn on the basis of data in Table No-III indicate :-

a) Total number of B&B units falling in each tariff slab ( line with Y axis showing units from 0 to 12).

b) Average no. of FTs per B&B unit stayed in each of 09 tariff slabs ( line)

- c) Average number of DTs per B&B units stayed in each of 09 tariff slabs (— • — line)
- d) Total number of FTs stayed in all such B&B units falling in that slab (— — line)
- e) Total number of DTs stayed in all such B&B units falling in that slab (— — — line)

Graph-1



It may be seen that most of the FTs as well as DTs stayed in the tariff range of Rs. 1,501/- to Rs. 3,500/- which is 71% of total 48 surveyed units. Maximum number of foreign tourists opted for those B&B units which have tariff range of Rs. 3,501- Rs. 4,000/- per day followed by the slab of Rs. 3,001 to 3,500/- The same observation is true for domestic tourists where maximum number of domestic units stayed in B&B units falling in the range of Rs. 3,001/- - Rs. 3,500/- and Rs. 35,001 – Rs. 4,000/-.

However, 9 B&B units falling in the tariff range of Rs. 1501/- to Rs. 2000/- attracted maximum domestic tourists numbering 4736. It is interpreted that these tourists belong to lower middle class having less budget on accommodation. These B&B units mostly belong to South Delhi locations mainly of Vasant Kunj (3), Chitranjan Park (2) and East of Kailash as shown in Table No-IV.

Table No – IV										
Popular locations surveyed of B&B units in Delhi with various room tariff										
Room Tariff range (Rs)										
location of B&B Unit	1000-1500	1501-2000	2001-2500	2501-3000	3001-3500	3501-4000	4001-4500	4501-5000	5001-above	Total
Vasant kunj		3	2	1		3				9
C.R. Park	2	2	2					1		7
Hauz Khas encl			1	4						5
Green park extn			1		3					4
Sarv priya vihar	1			1	1					3
Safdarjung encl		1			1	1				3
East of kailsah		2	1							3
GK-II			1	1						2
saket			1	1						2
Jasola	1									1
Defence colony	1									1
Pamposh encl		1								1
Model town			1							1
Karol Bagh					1					1
South Ext-II					1					1
South Extn							1			1
Mehrauli								1		1
Connuaght Place									1	1
Neb Sarai									1	1
TOTAL	5	9	10	8	7	4	1	2	2	48

An interesting analysis can be seen that the most attractive range of tariff out of the survey of 48 B&B units were in the range of Rs. 3,001/- to Rs. 3,500/- and Rs. 3,501/- to Rs. 4,000/-. It covered 11 B&B units which is 23% of the B&B units surveyed. These 11 B&B units alone attracted 60% of total 6815 foreign tourists stayed in all 48 units. Similarly the total number of domestic tourists who stayed in these two slabs of 11 B&B units was 5593 out of total 16389 domestic tourists, which is 34% of total domestic tourists who stayed in 48 Units.

On the basis of average it can be inferred that most popular or affordable tariff range of B&B Units may be Rs. 3,001/- to 4,000/- per day. Locations of most B&B units in these two slabs covering tariff of Rs. 3,001 to Rs.4,000/- are Vasant Kunj (3), Green Park Extn, (3) and Safdarjung Enclave (2) etc. all falling in South Delhi as shown in Table No-IV. This could be a good assessment from the point of view of new B&B owners who may keep the tariff in this range if their units are located in these areas. It is only a suggestive idea because tariff also depends upon size of rooms, other facilities in B&B units like parking space, vicinity to markets, Railway stations, Airport, important monuments etc.

Employment Generation & Remuneration

The questionnaire also contained number of employees engaged in B&B units. As regard to employment generation through B&B scheme, it is found that 48 B&B units surveyed by DTTDC have generated direct employment to 137 employees during last four years. The average number of employees therefore comes out to be around 03 employees per unit as shown in Master Sheet at Table No-II. Average remuneration paid on the basis of data collected from 48 B&B Units comes out to be Rs. 5,240/- per month per employee as total salary per month computed for all 48 units comes out to be Rs.7,17,900/-. So, 462 registered B&B units in Delhi may have generated direct employment to minimum 1319 persons.

Other statistics are also interesting as seen for the comparison of field survey of 48 B&B Units vis-à-vis India Tourism statistics 2011 on approved hotels^[8]. Average employees per room on an all India basis for all categories of hotels taken together is 1.6 while in respect of 48 field surveyed B&B units, the average employees per room comes out to be 1.1. This figure is based on total number of 123 rooms employing total 137 persons. Average number of employees in B&B units is less than the commercial hotel but B&B Scheme too generates significant employment in hospitality sector in Delhi. Incidentally in Delhi, total number of classified hotels with 1 star Deluxe and Apartment Hotel comes out to be 288 hotels with 13,715 number of rooms^[1]. According to this, the percentage of B&B rooms i.e. 1568 as on 1.1.2012 as compared to rooms of all Hotels taken together comes out to be 11.4% of total available rooms for guests and this percentage of rooms in B&B units registered as on 1.1.2012 cannot be ignored because these units play an important role in Delhi in providing budget accommodation.

Earnings through B&B units

The questionnaire helps to find out approximate income per B&B unit earned by the owners and how much maximum monthly income may be generated. Such income can be estimated with the help of data on number of rooms, number of FTs and DTs stayed in a year, slab of tariff range and average period of stay.

Accordingly, an analysis was also made to assess the maximum potential in earnings by each B&B unit. For this purpose average tariff of each slab i.e. Rs. 1,250/- for 05 units. Rs. 1,750/- for 09 units. Rs.2,250/- for 10 units, Rs. 2,750/- for 08 units, Rs. 3,250/- for 07 units, Rs.3,750/- for 04 units, Rs. 4,250/- for 01 unit, Rs. 4,750/- for 02 units and Rs. 5,250/- for 02 units as shown in Table No - III was calculated and summed up for all surveyed units. This amount was divided by 48 units which comes out to be Rs. 2,680/- and same is the average tariff per room of the surveyed units. To arrive at monthly income, the average tariff per room is multiplied by number of month days (30) and by average number of rooms i.e. $123/48 (=2.56)$ per B&B units surveyed. This income for a B&B unit is arrived at when all rooms are occupied throughout the month. Now keeping in view various factors like 50% occupancy or 60% occupancy or 80% occupancy throughout the year the total income of each B&B unit per month is calculated.

Now the expenditure from this total income is to be deducted to arrive at net income for a B&B Unit. The expenditure is mainly for providing breakfast to each guest, salary paid to employees and payment made towards the electricity, water and other expenses in the unit. However, the fixed assets cost is not taken into account as the accommodation made available to guests exists otherwise also. Practically, professional B&B owners spend some amount on interior design and decoration before converting it into a B&B Unit. In that case expenditure incurred on fixed assets is also to be deducted depending upon other factors.

It is considered that the room, being in double occupancy, is occupied by two persons and if the average amount spent on each person's breakfast is taken as Rs. 200/-, the amount spent on breakfast for 123 rooms multiplied by 30 days in a month and then multiplied by 0.6 being occupancy rate and divided by 48 i.e. number of B&B units, the total expenditure per B&B unit comes out to be Rs. 18,450/-. Similarly total expenditure incurred on average 3 employees per unit on an average monthly remuneration at Rs. 5,240/- comes out to be Rs. 15,720/-. Adding electricity, water and other charges at a rate of 10% of the total income i.e. Rs. 12,3615/- @ 60% occupancy, then expenditure comes out to be Rs. 12,360/-. All such expenditures per month come out to be Rs. 46,530/- which is deducted from total income. So, net monthly income of a B&B unit at average 2.56 rooms per unit at occupancy rate at 60% is estimated at Rs.77,085/- per month. This is a very significant income for a family.

An analysis was also done as to what is the actual income as on date in these B&B units.

Now average income earned by B&B units based on total guests stayed in all B&B units since start of functioning of these units in 2008 till 1st January 2012 can be calculated on the basis of available data in Table No-II and Table No-III. Factors involved in such calculations are average tariff per room, i.e. Rs.2680/- number of days of stay of guests, actual number of FTs and DTs, number of rooms in B&B units (123), factor of double occupancy for each room and number of months of working of units. Number of months has been taken as 32.5 by calculating period of working of each unit since inception till January 2012 as shown in Master Sheet, Table No-II. Now, average stay period of 3.4 days for FTs and 2.8 days for DTs respectively has been taken on the basis of all India average stay of FTs and DTs in hotels and B&B units etc.^[8]. Monthly income earned by a B&B owner can be calculated as average tariff x (total number of FTs x 3.4 + total number of DTs x 2.8) x average months of the working of 48 B&B units x 2 x 123. Therefore, monthly income would come out to be Rs.(2680x69060)÷(32.5x123x2) i.e. Rs.23150/- per month per B&B unit.

It can be inferred from the actual income of Rs.23150/- per month made by each B&B unit per month as against the potential of each B&B unit of earning Rs.77,085/- that there is a huge gap in actual and maximum possible income. Owner can realize that these units need to promote their business. However, individual cannot alone spend on such promotions. Owners have to form an association so that there is a common platform to chalk out a strategy to achieve common goal of getting more clients. Department of Tourism, Government of Delhi may also help in promoting B&B units through internet and various other platforms like advertisements on Railway stations, Airport, Inter State Bus Terminals, Embassies in Delhi, Indian Missions abroad or other for a available for such promotions.

Guests from States and Countries of origin opting for B & B Units

In one of the queries about the name of the State from where domestic tourists come in the B&B units, it is found that a few number of tourists from neighboring state Bihar prefer to stay in Delhi's B&B Units. Maximum number of domestic tourists who prefer B&B facility in Delhi come from Maharashtra. As per the response received during survey of B&B units about incoming Domestic Tourists from States it may be seen from Table No-V that out of 48 units surveyed, 21 B&B units attracted tourists from Maharashtra, 16 from Tamil Nadu, 13 from Karnataka, 11 units attracted guests from Punjab & Haryana while 10 units attracted guests from West Bengal. So it is a very important analysis that aspiring B&B owners may prepare themselves for attracting domestic guests from Maharashtra then Tamil Nadu then Karnataka etc. So trend can be determined on the basis of types of tourists coming. So if they decorate their houses with Maharashtrian culture, Maharashtrian background then more and more guests from Maharashtra may stay in their B&B Units.

Table No-V**Number of B&B units where maximum domestic tourists from States stayed**

SN	Name of Countries	No.of B&B
1	Maharashtra	21
2	Tamil Nadu	16
3	Karnataka	13
4	Punjab & Haryana	11
5	West Bengal	10
6	North East	7
7	Gujarat	6
8	UP	5
9	Kashmir	4
10	Andhra Pradesh	4
11	Rajasthan	3
12	Other States (MP & Bihar)	3
13	Did Not respond	5

Similarly a perusal of Table No-VI shows that in these 48 units, maximum number of foreign guests came from U.S.A who stayed in 21 number of B&B units followed by guests coming from U.K who preferred 13 B&B units followed by foreign tourists from Germany, France, Australia preferring to stay in 8, 12 and 9 B&B units respectively.

Table No-VI**Number of B&B units where maximum foreign tourists from a country stayed**

SN	Name of Countries	No.of B&B
1	USA	21
2	UK	13
3	Germany	12
4	France	9
5	Australia	9
6	Afgansitan	3
7	Japan	2
8	Bangladesh	2
9	Canada	1
10	Rest of Europe	7
11	Did not respond	11

Besides analyzing the number of B&B units who attracted more tourists from a particular country or particular State the analysis has also been done in number of foreign tourists and domestic tourists coming to these B&B units. It is observed from Table No-VII that most of the foreign tourists from U.S.A numbering 1630 (i.e. 24%) preferred to stay in B&B units followed by 1594 from UK (i.e. 23%), 872 from Australia, 730 from Germany / France to stay in these surveyed B&B units. Similarly, share of total foreign tourists arrival in India is highest from U.S.A at 15.97% followed by share of 12.57% from U.K. with other European countries like France and Germany having share of 12.5% and 7.78% respectively. As per distribution of Hotel guests by country of origin in year 2011, the percentage from USA, U.K. and France / Germany are 11.7%, 11.2% and 12.3% respectively. In representative figure of 48 field surveys of B&B units it may be seen that approximate percentage of foreign travelers from USA, UK and France / Germany are 24%, 23% and 14% respectively. The analysis shows that foreign guests from USA, UK and France / Germany equally prefer B&B units of Delhi, if available, at par with commercial hotels.

Table No-VII

Name of Country from where maximum number of foreign tourists stayed in B&B units

SN	Name of State	No.of FT
1	USA	1630
2	UK	1594
4	Australia	872
5	Canada	775
3	Germany, France	730
6	Japan	570
7	Rest of Europe	435
8	South Africa and Asia	209
	Total	6815

In view to promote the business and attract more clients, B&B owners may focus on foreign tourists from particular countries like USA, UK, France/Germany, Australia etc. Websites could be so developed that there are special packages for tourists coming from a particular country. Similar analysis may be done for number of DTs coming from a particular state and staying in B&B units.

As per Table No-VIII the surveyed B&B units attracted maximum DTs from West Bengal numbering 3205 (19.5%) followed by 2844, 2838, 2312 and 1978 from Maharashtra (17.35%), U.P. (17.31%), Karnataka (14.1%), Gujarat (12%) respectively.

Table No-VIII**Name of State from where maximum domestic tourists stayed in sureyed B&B units**

SN	Name of State	No.of DT
1	West Bengal	3205
2	Maharashtra	2844
3	UP	2838
4	Karnataka	2312
5	Gujarat	1978
6	Andhra Pradesh	1116
7	Assam	1073
8	Punjab	578
9	Tamil Nadu	306
10	Madhya pradesh	105
11	Kashmir	34
	Total	16389

Development of Infrastructure Undertaken By B&B Owners

In one query, the B&B owners were asked whether they carried out further development of infrastructure like renovation, increase in accommodation, parking facility etc. after getting registration as a B&B unit. The response was analyzed in Table No-IX and it was found that 28 B&B owners out of 48 surveyed have done renovation like furnishing the whole premise with paint, adding new furniture, providing gym and internet facility replacing old mattress and crockery etc. In some units parking space was also arranged in view of more arrival of guests. Depending upon the requirement of the guests, power back up and other facilities were also provided. However, in cases of 09 B&B units, no renovation was done while 11 B&B owners did not respond. On reviewing the overall picture of development of infrastructure or renovation, it is gathered that hardly any significant development was made by B&B owners after getting the unit registered with the Department of Tourism.

Table No-IX
Infrastructure developed by B&B owners

SN	Details of Infrastructure	No. of B&B units
1	Renovated entire premises of B&B	8
2	Did not specify the renovation carried out	5
3	Changed furnitures & fixtures	5
4	Provided Internet facilities	3
5	Added Parking facility	3
6	B&B units have added rooms	2
7	Provided Gym facility	2
8	No renovation done	9
9	Did not respond	11
* 23 B&B owners out of 28 responded to have also carried out miscellaneous renovation like painting, power backup system, new crockery etc. bath rooms etc.		

Problems faced by B&B owners

In response of the query as to what type of problems owners themselves are facing during stay of guests, most of the owners (71%) replied that they did not face any problem during the stay of guests. Four owners felt that B&B scheme has poor market strategy resulting in less response of clients. Two responses each were received from owners that (i) it is difficult to get employees to work in B&B units, (ii) guests want cooked food other than breakfast too. One response each from owners was that (i) sometimes guests are troublesome, (ii) owner's privacy is compromised as guests stay in the same house, (iii) In B&B business life is disturbed as guests check-in at odd hours, (iv) there is too much paper work including reporting to FRRO in case of foreign guests. However, out of 48 B&B units surveyed, there was no response from two owners. Owner's problems seem to be genuine but they have to be prepared for most of the above mentioned difficulties in undertaking such a venture.

Some of the problems faced by owners need to be seriously considered. Delhi, being capital of India faces terrorist threats from time to time and therefore, it is necessary to have credentials of incoming foreign clients to be verified by Police. Information of all guests is to be reported to FRRO daily by B&B owners and, therefore, Police has an important role to play to ensure safety of the owners. This is an important aspect and Delhi Government including Delhi Police need to give due care so that owners as well as clients do not feel insecure in their units.

One query in the field survey format was related to the nature of grievances lodged by tourists with the owners. As per data in Table No-I most of the guests (83%) have not made any complaint about their stay as per the record received from the owners. In other responses, one owner reported that guests complaint about loss of privacy when they choose B&B for stay. One B&B owner mentioned that some guests complained about noise and disturbance by street vendors during day time. This is the problem related to the area where B&B is located. Two B&B owners reported that the guests some times complaint about the safety in the area. This is to be considered by Local Authority and for this purpose B&B owners have to ensure that they have a dialogue on security issues with Local Police and Local Authority so that the guests feel secure when they stay in B&B units.

On the basis of analysis of query on suggestions made by B&B owners, it is seen from Table No-X that as many as 21 owners have suggested that there should be proper publicity by the forum of B&B units and large scale publicity should be taken up by Department of Tourism, Government of Delhi on behalf of B&B units only then there will be success in the B&B profession.

Table No-X
Response of B&B owners on suggestions for further improvement

SN	Suggestions	No.of B&B owners responded
1	Marketing and promotion to be done	21
2	Permission for more rooms	05
3	Paper work of FRRO etc to be reduced	04
4	Local authority to cooperate	01
5	Internet/website for each B&B unit	01
6	Registration period to be valid for 5 years	01
7	B&B is an excellent scheme	01
8	B&B guests to be given incentive by DTTDC	01
9	No specification suggestion	13
	Total	48

13 owners have refrained from giving suggestions. Five owners have requested that they are entertaining more and more foreign and domestic guests and hence the limit on 2/3rd of maximum rooms or cap on maximum 06 rooms may be taken away so that they can entertain more and more guests in their units.

Four owners have pointed out that there should be a standard procedure for registration and also easy rules for FRRO reporting. This needs to be attended by Tourism Department, Delhi Government and also FRRO under Delhi Police. In other cases, one owner each has mentioned that there should be better coordination between B&B owners, Delhi Government,

Local Authority and Police. One owner has mentioned that validity of registration should be increased from 3 years to 5 years to avoid hassle during renewal of registration.

One owner has mentioned that it is an excellent scheme for small scale business running from the house. One owner has mentioned that the guests staying in B&B units should be given some privilege discount by Tourism Department, Delhi Government.

Effects of Location of B&B Units

Out of 48 surveyed units it is noticed that 45 units belong to South Delhi while one unit each belongs to Connaught Place (New Delhi), Karol Bagh (Central Delhi) and Model Town (North Delhi), as may be seen from Table No-IV. In this context location of B&B units is spread all over Delhi with large cluster of units located in South Delhi, as may be seen from given Delhi Map^[7].

It is observed that the B&B units falling in the area like Karol Bagh and Connaught Place have high tariff rates between Rs.3,000/- to Rs.5,000/- and above per day. The Connaught Place is a well reputed business place of Delhi. Some units in Green Park Extn. (3), Vasant Kunj (3), Safdarjung Enclave (1), South Extn, Mehrauli and Neb Sarai fall in posh areas and have higher tariff rate as could be seen from Table No-IV.

Tariff range varies from Rs.1,000/- to Rs. 4,000/- with 9 units in Vasant Kunj, 7 units in C R Park, 5 units in Hauz Khas Enclave, 4 units in Green Park Extension and 3 units each in East of Kailash, Sarvapriya Vihar and Safdarjung Enclave. Such tariff range in South Delhi also depends upon connectivity of B&B locations to tourist places, Airport, Railway Stations, markets, Inter State Bus Terminals and Metro rail therefore there is a mixed response on tariff range in this area.

Conclusion

Various parameters are studied as mentioned above. It may be inferred that there will be enhancement of number of foreign and domestic tourists belonging to middle class to avail the facility in B&B units. The reason for choosing a B&B accommodation in Delhi by such budget tourists will be based on reasonably low tariff with facilities at par with that of a regular hotel available in Delhi. Besides accommodation factor, such tourists who are keen to learn about the city, its monuments, eating places, markets, and other aspects related to culture and heritage will prefer staying in a B&B unit. However, publicity of each B&B unit is to be ensured and the units are to be maintained in a professional manner so that there is proper attention paid to factors such as decorating the B&B unit keeping in mind the guest's taste & choice, providing a conducive and congenial environment ensuring proper hygienic conditions, dissemination of information about city through owner and other similar facilities which determine a tourist's preference of a B&B unit

Another aspect which is important from the point of view of guest is that there should be a sense of protection of tourists when they stay in B&B units. This aspect perhaps lacks in the present scenario. In USA and European countries, B&B accommodation is very popular because of these factors. For this purpose, local government and local police have to play an important role to ensure that the guests have reassurance about their security as they would feel in regular hotels.

As regards maintaining cleanliness and hygiene conditions, B&B owners have to resort to professionalism in their approach regarding getting their employees trained, getting the help of interior decorators to have rooms decorated according to the choice of forthcoming guests etc.

Location also plays a very important role. The survey indicates that majority of the tourist prefer to stay in South Delhi based B&B units, because of which most of the B&B unit are clustered in South Delhi. This observation further indicates that location of a B&B unit in terms of its proximity with the market places, malls, historical places etc. is an added advantage for tourist before choosing a B&B accommodation.

Also, tourist are now technologically savvy & the B&B scheme does not have a designated website or a system of online booking by individual owners, which is also major loophole that hinders the success of this scheme. Immediate steps need to be taken in this direction to ensure more accessibility and ease to prospective tourists.

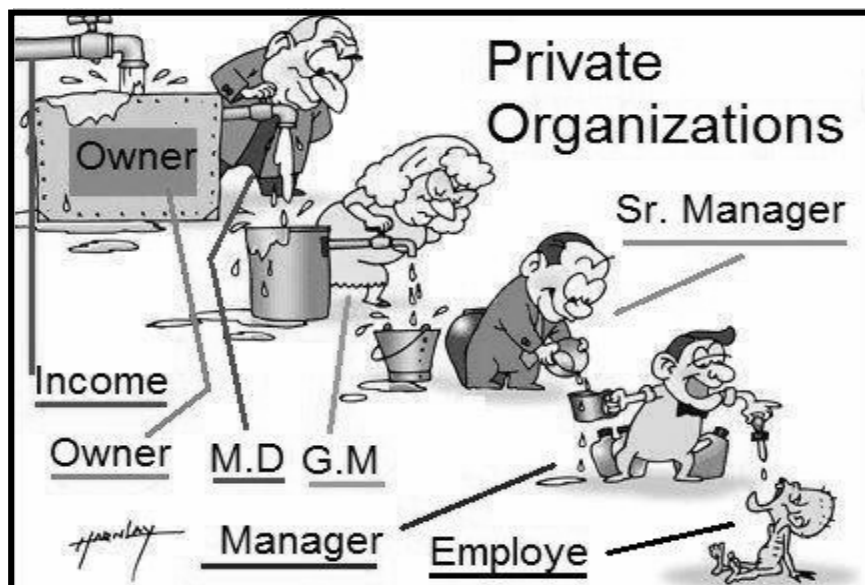
Another noticeable observation is that a section of domestic tourist also prefers to stay in a low tariff range B&B unit as seen in Table No-III which indicates that lower income group individuals prefer to spend less amount on accommodation.

Shortage of budget accommodation in Delhi is not going to be taken care of in near future because it requires a long drawn process by the Government. On the other hand, un-occupied rooms in B&B units can fill the gap and this will bring good results in the earnings of B&B owner and also to the economy of Local Government. As per India Tourism data 2011^[9], foreign exchange earnings due to foreign tourists are 16564 million US dollars while number of days of stay of foreign tourists in India is about 22 days. Number of foreign tourists arrival in 2011 was 6.29 million so one foreign tourists brings a foreign exchange of about 120 US dollars per day. If 2.36 million foreign tourists come to Delhi which is 1/3rd of the total foreign tourists' arrival, one can imagine that annual foreign exchange earning due to these foreign tourists staying in Delhi for an average of 3.4 days will be 963 million US dollars. If B&B owners and regular hotels together create an atmosphere that a foreign tourist stays for one more day in Delhi i.e., instead of 3.4 days, he stays here for 4.4 days then one day extra stay of all foreign tourists in a year will earn 276 million US dollars additional foreign exchange earning for Delhi, which is a good foreign exchange. If B&B scheme succeeds,

there will be good additional income in a family to the extent of Rs.77,000/- per month on an average.

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TRADE CREDITS AND CORPORATE PROFITABILITY: SOME EMPIRICAL FINDINGS IN INDIAN CONTEXT

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ABSTRACT

Trade credit in the form of both accounts payable and receivable is an important item in sources and uses of funds. Efficient trade credit management could improve firm profitability significantly and the impact of trade credit policy on profitability is highly important. We consider sample of balanced panel of 1016 companies over the period 2001-02 to 2010-11 and empirical findings presented here suggest that strong evidence exists in support of influence of trade credit on profitability and we find a positive linear relationship between the Return on asset (ROA), a measure of profitability, and trade receivables and inverse relation between trade payables and ROA for small size companies. Further the results also indicate that the profitability was influenced by other factors like Asset size, investment in gross fixed asset, debt, bank borrowings, current ratios and GDP (as a measure of economic condition of the country).

1. Introduction

Trade credit (in the form of account payables and account receivables) is an important sources and uses of funds for firms. It is not always easy to obtain external funding from credit institutions, as institutional funding depends on collateral, reputation, income generation capacity of the firms, etc. Trade credit is easier to fund as compared to institutional credit. It is an arrangement that allows the firm to buy goods or services without making an immediate payment. The early trade credit theories relate the use of trade credit to the presence of information asymmetries and the monitoring advantage that suppliers have over banks. Recent analysis focus on the importance of trade credit (also in the form of accounts receivables) as a cash management tool. The trade credit usage of a firm is having

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two aspects and is related with the need to finance production. Hence, a firm can be seen as a supplier and customer together and therefore its trade credit receivables (TC) are a proxy for how much it lends its customers, and its trade credit payables (TP) are its borrowing from its suppliers. Moreover, it is often observed that firms that receive trade credit from their own suppliers are more likely to extend trade credit to their customers and thus leading to match maturity between their payables and receivables.

Mian and Smith (1992) proposed that trade credit is an arrangement between buyer and seller by which the seller allows delayed payment for its products instead of cash payment. According to Lee and Stowe (1993), it is part of a joint commodity and financial transaction in which a firm sells goods or services and simultaneously extends credit for the purchase to the customer. Trade credit plays an important role in firm financing policy. For the buyer, it is a source of financing through accounts payable, while for the seller, trade credit is an investment in accounts receivable. Emery (1984), Mian and Smith (1992) and Schwartz (1974) argues that firms able to obtain funds at a low cost will offer trade credit to firms facing higher financing costs. There exist three motives in the trade credit systems the operational motive, the commercial motive and product quality motive. Emery (1987) and Ferris (1981) stresses the role of operational motive of trade credit in smoothing demand and reducing cash uncertainty in the payments. According to the commercial motive, trade credit improves product marketability (Nadiri, 1969) by making it easier for firms to sell. Finally, according to the product quality motive (Smith, 1987), firms extend trade credit to guarantee product quality, by alleviating information asymmetry between buyers and sellers. The choice of credit management policies could have important implications for firm profitability.

This study obtains empirical evidence of a linear relationship between trade receivables and profitability of Indian Firms, which implies that the benefits of investment in Trade receivables overcome the costs associated with it. This relationship is maintained when firms are classified according to their industry group. Findings also suggests that trade payables reduces the profitability of the small size firm as it is having inbuilt interest mechanism. In the next section, we review previous trade credit literature and discuss the possible relations between the supply of trade credit and firm profitability. Section 3 describes the data and variables. Section 4 explains the summary statistics. Section 5 explains the trade credit and firm profitability relationship by initial findings. Section 6 is devoted on panel regression analysis to estimate the relationship between ROA and receivables/ payables and section 7 concludes.

2. Literature Review

On comparison with trade credit and other financial sources, Emery (1984) and Smith (1987) showed that firms with better access to financial credit will prefer it instead of the more expensive trade credit. Burkart and Ellingsen (2003) suggest that suppliers increase trade credit financing to their clients because the goods they sell, being less deployable than

cash, constitute better collateral. Petersen and Rajan (1997), Fisman and Love (2003), and Wilner (2000) suggest that trade credit can serve as a substitute to bank credit. Du et al (2008) used World Bank data of Chinese firms and investigated the relative importance of bank loans and trade credit in promoting firm performance. They found that access to bank loans is central to improving firm performance and growth, while availability of trade credit is much less important. Love and Zaidi (2010) examined trade credit behaviour for a sample of small and medium enterprises of four East Asian countries before and after the financial crisis of 1998 and concluded that trade credit does not fully substitute the bank credit. Burkart and Ellingsen (2004) argued that bank and trade credit may be compliments or substitutes depending on the borrower's wealth, which is likely to be correlated with size. Firms with a level of wealth below a certain critical level exhaust both their bank and trade credit and invest less than the optimal level. For these firms trade credit availability follows the bank credit. They also showed that profitable but finance constrained firms would prefer not to offer trade credit. Bougheas et.al. (2009) found that profitability is positively related to both accounts receivable and accounts payable. Daisuke Tsuruta (2009) investigated the effect of close customer relationships on small firms' provision of trade credit during the 2001–2003 recessions in Japan and found that first, small businesses offer less trade credit, even if the proportion of sales to their main customers is high. Second, suppliers offer less trade credit if they are in financial distress and charged higher interest rates by banks, even when they are dependent on their main customers. Third, highly leveraged dependent suppliers reduce trade credit, unlike highly leveraged independent suppliers.

Molina and Preve (2009) studied the use of supplier's trade credit by firms in financial distress and found firms in financial distress use a significantly larger amount of trade credit to substitute alternative sources of financing. He also found that the firms which are smaller, with less market power, and with more unique products tend to use more trade credit financing when in distress. They further studied that the trade receivables policy of distressed firms as the trade-off between the firm's willingness to gain sales and the firm's need for cash. They found that firms increase trade receivables when they have profitability problems, but reduce trade receivables when they have cash flow problems. Love and Zaidi (2010) examined trade credit behaviour in a sample of small and medium enterprises in four East Asian countries before and after the financial crisis of 1998 and concluded that trade credit does not fully substitute for bank credit and cannot sustain operations of firms constrained by banks. In the empirical work on Indian manufacturing firms Vaidya (2011) found that highly profitable firms are found to be both extending (on both net and gross basis) and receiving less trade credit. Ferrando and Mulier (2013) examined firms from 9 euro countries to find whether firms actively use trade payables and trade receivables to manage their growth and showed that firms use the trade credit channel to finance growth. Olusola and Olusola (2012)

examined the determinants of trade credit use in Nigeria and indicated that trade credit use is influenced by depreciation provision, sales value, institutional loan, tangibility and current assets of non financial firms. Sola, Teruel and Solano (2012) examined the profitability implications of providing finance to customers for a sample of Spanish listed firms during the period 2000-2007. They found a positive relation between firm value and trade credit at low levels of receivables and a negative one at high levels.

In the study we will try to answer whether trade credit increases profitability and how it affects the Return on asset of the firm. Some motivations for trade credit includes mitigating customers' financial frictions (Meltzer, 1960), reductions in transaction costs (Ferris, 1981; Emery, 1987), stimulation of sales in slack demand periods by relaxing the credit terms (Emery, 1984), reductions in information asymmetry between buyer and seller (Smith, 1987), a signal for product quality (Lee and Stowe, 1993), a mechanism of price discrimination between cash and credit customers (Brennan, Maksimovic and Zechner, 1988; Petersen and Rajan, 1997). Finally, credit provision might improve the supplier-customer relation (Ng, Smith and Smith, 1999; Cunat, 2007).

However, trade credit is costly and involves an opportunity cost (Nadiri, 1969; Oh, 1976). Moreover, trade credit increases the level of investment in current assets and, therefore, may affect the profitability and liquidity of the firm. Despite the high cost of trade credit and the credit risk involved, due to the exposure to payment default, still many firms choose it as their short-term financing, therefore granting trade credit may have negative effects on profitability and liquidity because of debt defaults (Cheng and Pike, 2003). Also, extending trade credit results in some additional administrative costs for the seller due to costly credit management activity (Mian and Smith, 1992).

Trade credit payable is typically more expensive than bank credit, especially because customers do not use the early payment discount (Petersen and Rajan, 1997). More recently, however, Miwa and Ramseyer (2008) estimate that the price of trade credit lies much more in range with the rates that banks would charge. Profitable firms appear to use less trade credit payables than unprofitable firms. Biais and Gollier (1997) argue that profitability is positively related to trade credit receivables since profitable firms should have a higher capacity to grant funds to their customers. However, many authors have found a puzzling negative relationship between profitability and trade receivables.

Furthermore Nilsen (2002) argues that the use of trade credit is related to monetary policy. The smaller firms receive more trade credit during the monetary constrains, as trade credit is the only alternative to raise money as against bank credit and larger firms with more channels of getting financing supports will avoid trade credit.

3. Data and Variables

Data

The data used in this study were obtained from the Company Finances Division, RBI database on corporate sector. This database contains annual report/balance sheet data of Non-Government Non-Financial Public limited companies. The final sample consists of balanced panel of 10160 observations for all companies over the periods 2001-02 to 2010-2011 (10 years) and classified by industry groups also.

Variables

Return on assets (ROA) is used as the dependent variable to analyse the effect of trade credit (receivable and payable) on a firm's profitability. This variable is defined as the ratio of operating income to total assets, or EBIT to total assets (Titman and Wessels, 1988). The key independent variable are the investment in accounts receivable and trade payable i.e. Tr_asset which is the ratio of trade receivable to total assets (Boissay and Gropp, 2007) and Tp_asset is the ratio of trade payable to total assets. All regressions include control variables as suggested in literature to explain either trade credit or firm profitability (Deloof, 2003). Variable Debt_asset is the ratio of debt to total Asset. Theory points in different directions with respect to the impact of debt on firm profitability (Harris and Ravid, 1991). Firms can use debt to create taxshields (Modigliani and Miller, 1963). However, firms may use less debt to avoid external finance costs (Myers and Majluf, 1984). Therefore, we expect a negative effect of debt on profitability. GDP_GR is the GDP growth rate. Since good economic conditions tend to be reflected in a firm's profitability, controls were applied using the variable GDP, which measures annual GDP growth. Size is the logarithm of total assets. There is no consensus about the relation between ROA and size of the firm. For instance, Lang and Stulz (1994) found a negative relation between firm size and performance for U.S. companies, whereas Berger and Ofek (1995) found a positive relation. The size of the firm is a common proxy for financial constraints (Faulkender and Wang, 2006) or creditworthiness (Petersen and Rajan, 1997). From another point of view, firm size is often a proxy for reputation for product quality (Long et al., 1993). In this sense, smaller firms are less likely to have established reputations (Berger and Udell, 1998). As stated in the previous section, we expect the significant contribution of firms to achieve optimum profitability at aggregate and industry level. Bk_ratio is the share of banks borrowing to total borrowing. Gr_gfa is the growth in gross fixed assets. Ca_cl is the ratio of current asset and current liability.

The approximate assumptions regarding the relation between variables are as in the next few lines. The firm size represent the creditworthiness of a firm, thus large firm have ability to obtain trade credits also. Thus it is expected that Size of the firm may affect profitability positively profitability. Since Trade receivables is a type of investment and companies grant trade credits to enhance sales. Thus trade receivables may increase profitability of the firm

through sales growth. The Trade payable is a kind of debt and bear interest burden also therefore, we except the negative relation with profitability and trade payables, financial debt and bank borrowing. The Investment in fixed asset also increases the profitability of the firm. The short term liquid asset can meet the day to day funds requirements of the companies thus it is expected that current ratios can affect the profitability in positive way. Finally, the economic conditions of the country also help the firm to enhance sales and make the firms more profitable, profitability of the firms can be affected by GDP.

4. Summary Statistics

Table 1 contains descriptive statistics of the variables employed in this paper. The average return on asset is 8.3 per cent. The average firm Tr_asset and Tp_asset ratios are 17.4 and 17.9 per cent respectively.

Table 1: Descriptive Statistics- All companies				
Variable	Mean	Std. Dev.	Min	Max
ROA	8.3	10.7	-201.7	196.7
Size	14.1	1.7	7.6	21.8
Tr_asset	17.4	13.3	0.0	99.0
Tp_asset	17.9	13.9	0.0	90.3
Debt_asset	16.4	19.0	0.0	325.9
Gr_gfa	12.4	32.5	-99.6	959.4
Bk_ratio	58.1	34.2	0.0	100.0
Gr_gdp	13.8	3.7	7.7	20.2
Ca_cl	169.1	236.0	1.0	1024.0

Table 2 shows the correlation matrix for the variables defined above. There is a positive correlation between the ROA and trade receivable and negative correlation between the ROA and trade payable. As regards control variables, size and GDP growth are positively related to ROA, while debt to asset and bank borrowing is negatively related to ROA.

Table 2: Correlation Matrix

	ROA	Size	Tr asset	Tp_ asset	Debt_ asset	Gr_ gfa	Bk_ ratio	Gr_ gdp	Ca_cl
ROA	1.0000								
Size	0.1859	1.0000							
Tr_as	0.0814	-0.1769	1.0000						
Tp_a	-0.0492	-0.0131	0.3299	1.0000					
Debt	-0.2244	0.1673	-0.2575	-	1.0000				
Gr_g	0.1077	0.1411	-0.0006	0.0027	0.0304	1.0000			
Bk_r	-0.0710	0.0270	0.1432	0.0212	-0.0088	0.0892	1.0000		
Gr_g	0.0942	0.1630	-0.0154	0.0501	-0.0549	0.0549	0.0928	1.000	
Ca_cl	0.0356	-0.0339	0.0092	-	-0.0935	-0.0291	-	0.018	1.000

The chart 1 shows the average flows of trade credits as a percentage of assets and return on assets of all firms from the sample period 2001-02 to 2010-11. Over time, the flows of trade credit (as a percentage of assets) have remained a stable source of finance, as evident from chart below. The profitability of the firms is showing linear relation with trade receivable.

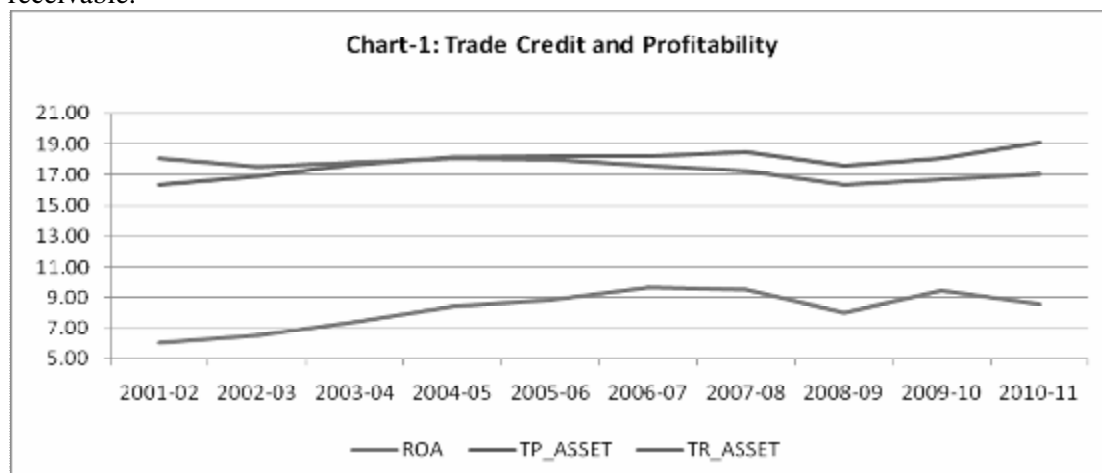
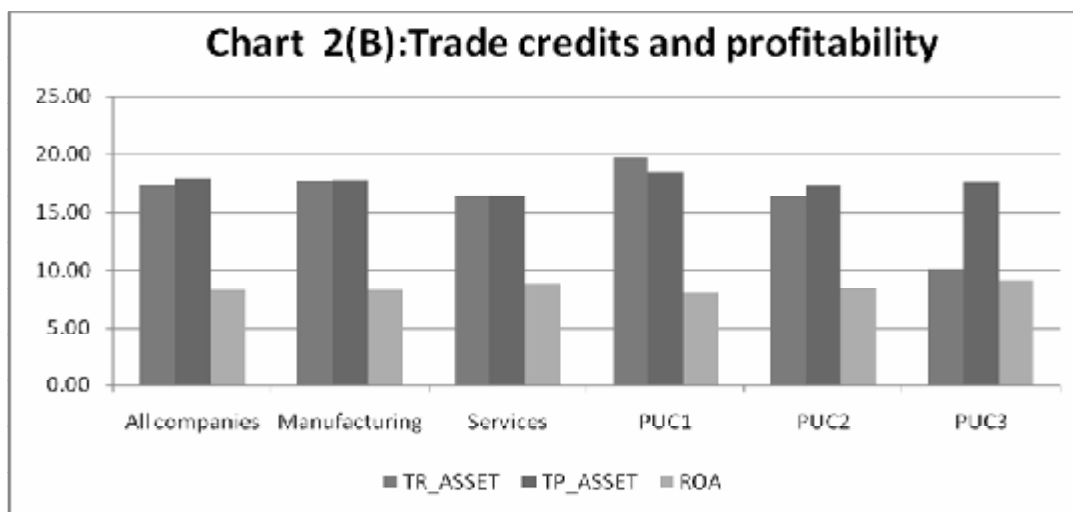
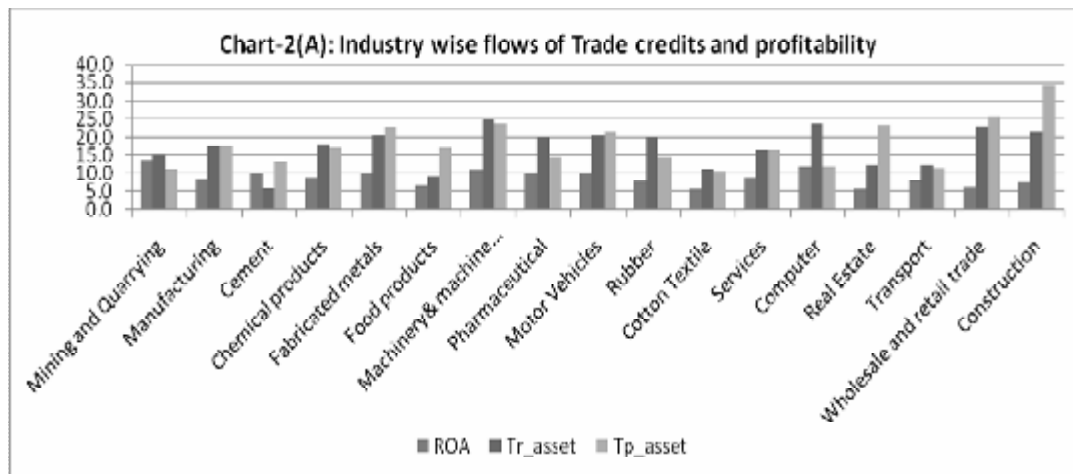


Table 3 reports return on assets and trade receivable and payable by industry. Ng et al. (1999) found that trade credit practice is likely to show wide variation across industries in credit terms, but little variation within industries. Thus, we classified the sample according to NIC three digits code and studied 15 major industries. Manufacturing of cement is the industry with lowest trade receivable to asset ratio (at 5.8 per cent), followed by manufacturing of food product industry. In contrast companies involved in manufacturing of machinery and machine tools are having the highest trade receivable to asset ratio (at 25.2 per cent), followed by Computer. Cotton Textiles is having lowest trade payable to asset ratio at 10.4 percent. Construction industry is having highest trade payable to assets ratio (at 34.2 per cent). The Mining & Quarrying is having the highest profitability at 13.6 percent followed by computer and related activities. The overall movements of the variables under consideration during 2001-02 to 2010-11 are given below. The graph shows the industry wise and combined variations of the variables below.

Table 3: Trade receivable and payable and ROA by Major industry groups- Averages

Sr	Industry	Observations	ROA	Tr_asset	Tp_asset
1	Mining and Quarrying	70	13.6	15.0	11.1
2	Manufacturing	8340	8.2	17.7	17.8
2.1	Cement	250	9.8	5.8	13.2
2.2	Chemical products	1800	8.7	17.9	16.9
2.3	Fabricated metals	270	10.0	20.4	22.7
2.4	Food products	760	6.5	9.3	17.2
2.5	Machinery & machine tools	720	10.9	25.2	23.6
2.6	Pharmaceutical	530	10.3	20.3	14.5
2.7	Motor Vehicles	680	10.1	20.4	21.5
2.8	Rubber	550	7.8	20.2	14.6
2.9	Cotton Textile	670	5.5	11.3	10.4
3	Services	1300	8.8	16.5	16.4
3.1	Computer	200	11.7	23.6	11.8
3.2	Real Estate	60	5.7	12.4	23.2
3.3	Transport	210	8.0	12.5	11.6
3.4	Wholesale	330	6.1	22.9	25.6
4	Construction	230	7.4	21.5	34.2

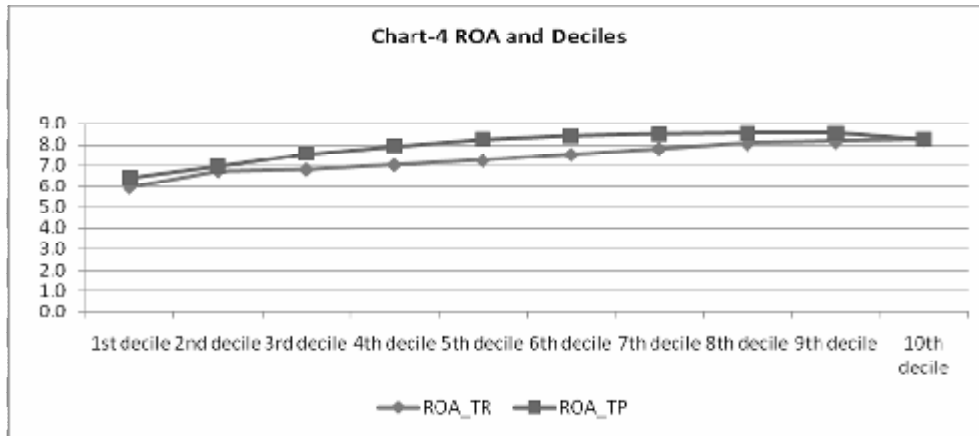
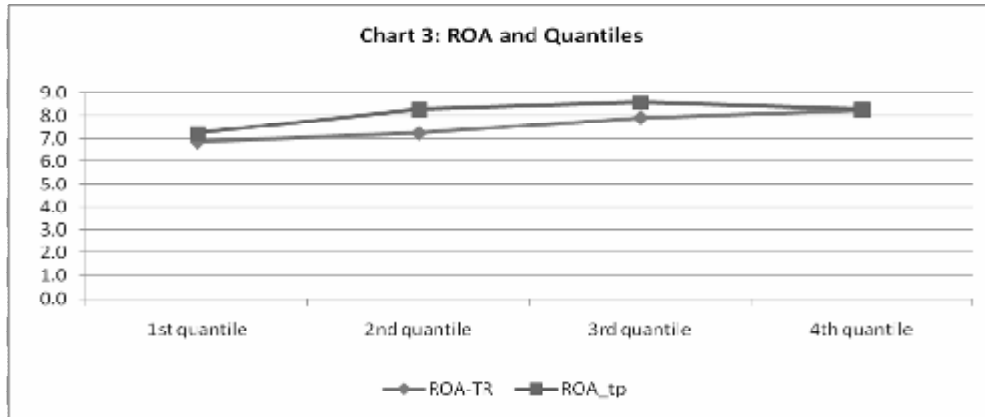


5. Trade credit and firm profitability

In order to analyse the dependence of firm profitability on trade receivables / payable univariate analysis is performed. In table 4 and Chart 3, the mean values of ROA variable for each quantiles of the variable Tr_asset and Tp_asset is presented. The firms with more trade receivables are having higher profitability. It suggests linear relationship between trade receivable and profitability, as higher investment in trade receivable is related to higher profitability. The profitability increases with increase in trade payables up to 3rd quantiles after that it falls down.

Table 4: Mean values of ROA by Trade credits quantiles				
Quantile	Tr_asset	ROA_tr	Tp_asset	ROA_tp
1st quantile	6.94	6.86	7.86	7.23
2nd quantile	14.88	7.23	14.35	8.25
3rd quantile	24.98	7.92	24.45	8.56
4th quantile	98.97	8.25	90.32	8.25
Table 5: Mean values or ROA by Trade Credits deciles				
Decile	Tr_asset	ROA_Tr	Tp_asset	ROA_tp
1st decile	2.87	5.91	3.88	6.38
2nd decile	5.47	6.71	6.38	6.94
3rd decile	8.32	6.79	8.87	7.56
4th decile	11.38	7.01	11.39	7.93
5th decile	14.86	7.23	14.35	8.25
6th decile	18.72	7.52	17.51	8.40
7th decile	22.66	7.80	21.87	8.51
8th decile	27.79	8.05	27.70	8.56
9th decile	35.82	8.14	37.06	8.55
10th decile	98.97	8.25	90.32	8.25

The fact that the firms with more trade receivables are having higher profitability is further reinforced with the deciles distribution of Tr_asset with ROA. The profitability is also increasing with trade payable but after 8th deciles the profitability is decreasing as trade payable increases and in case of trade receivables profitability increases consistently.



However, the results are not sufficient to describe the relation between trade receivable / payable and firm profitability, so we conduct further analysis.

6. Model Specification and Panel Data Analysis

In order to check for a linear relation among trade receivables/ payables and measure of profitability (ROA), we estimate the model (1) and (2). The first model studies the firm performance during the period 2001-02 to 2010-11 which is expressed in terms of ROA and constitute the dependent variables in the regression. The set of explanatory variables includes firm specific characteristics, debt behaviours, other sources of financing and GDP as a measure of economic condition of the country.

$$\begin{aligned}
 (ROA)_{it} = & \beta_1 + \beta_2 (Size)_{it} + \beta_3 (Tr_asset)_{it} + \beta_4 (Debt_asset)_{it} + \beta_5 (Gr_gfa)_{it} \\
 & + \beta_6 (Bk_ratio)_{it} \\
 & + \beta_7 (Bk_ratio (-1))_{it} + \beta_8 Gr_gdp + \beta_9 (CA_CL) + (Error)_{it} \dots (1)
 \end{aligned}$$

$$\begin{aligned}
 (ROA)_{it} = & \beta_1 + \beta_2 (Size)_{it} + \beta_3 (Tp_asset)_{it} + \beta_4 (Debt_asset)_{it} + \beta_5 (Gr_gfa)_{it} \\
 & + \beta_6 (Bk_ratio)_{it} \\
 & + \beta_7 (Bk_ratio (-1))_{it} + \beta_8 Gr_gdp + \beta_9 (CA_CL) + (Error)_{it} \dots (2)
 \end{aligned}$$

Where ROA is firm profitability, Tr_asset is trade receivables to assets ratio, Size is firm asset size, Debt_asset is debt to asset ratio, Gdp_gr is annual GDP growth. Gr_gfa is the growth in gross fixed assets. Ca_cl is the ratio of current asset and current liability. Further $(.)_{it}$ represents the i^{th} firm at the t^{th} period. **(Error)** is the usual stochastic disturbance term following normal distribution with mean 0 and variance σ^2 . Hausman Statistics suggests a test for choice between the fixed effects and random effects model for estimation purpose. The test is based on comparing the difference between the two estimates of the coefficient vectors, where the random effects estimator is efficient and consistent under the null hypothesis and inconsistent under the alternative hypothesis, and the fixed effects estimator is consistent under both the null and the alternative hypothesis. If the null hypothesis is true, the difference between the estimators should be close to zero. The computed Hausman statistic in our model is 146.94 indicated that the null hypothesis is rejected at the 5 per cent level of significance. Hence, fixed effects model has been used in our empirical analysis. The regression results displaying the marginal contribution (coefficients) of the independent variable to profitability is shown in the tables below.

From Table 6 (A), it is observed that trade receivable have positive and highly significant relation for all companies, manufacturing, services and small and medium size companies. The coefficient is high for small sized companies (Table 6 A). The relation between trade receivable and profitability is not significant for large companies. Hence, we may conclude that small and medium companies' profitability depends on the ability to accommodate trade credit receivable. Small and medium size companies sell goods on credit to enhance the sales, which in turn increases the profitability. On the other hand, large companies are able to sell the goods in cash and do not depend on credit sale for increasing the profitability. Growth in GFA is also having positive and significant relation for all, manufacturing, small and medium sized companies, whereas debt to asset ratio and share of banks' borrowing to total borrowings are having negative and significant relation with profitability for all companies as well as for manufacturing companies. The share of banks borrowings shows negative and significant relation with one lag also for all, manufacturing, small size and medium size. The current ratios required for short term need of finance affect the profitability also in positive direction significantly in case of the companies belonging to Manufacturing sector and others. For small sized companies, results suggested that GDP, a measure of economic condition of country does not play much role while for others it is significant with positive impact. Industry wise panel regression results displaying the effect of Trade receivables on the profitability of Whole sales, Chemical products, Motor Vehicle, Mining and Quarrying are in positive direction. For others selected industries relation is insignificant.

Table 6 (A): Panel Regression results

Dep. Variables	All companies	Manufacturing Sector	Services Sector	PUC-Size-1 (< 10 Cr.)	PUC-Size-2 (10 Cr. to 100 Cr.)	PUC-Size-3 (>100 Cr.)
Size	0.7787& (0.4464)	0.6434 (0.5231)	1.1692 (1.0502)	2.7038# (1.0904)	0.0763 (0.4231)	-1.6039* (0.5352)
Tr_asset	0.1946 * (0.0291)	0.1791 * (0.0333)	0.2492 * (0.0803)	0.2213 * (0.0480)	0.1741* (0.0373)	0.0702 (0.0718)
Debt_asset	-0.0895* (0.0122)	-0.0959* (0.0130)	-0.0694& (0.0413)	-0.0754* (0.0200)	-0.0981* (0.0166)	-0.0999* (0.0363)
Gr_gfa	0.0145* (0.0044)	0.0166* (0.0061)	0.0099 (0.0075)	0.0191# (0.0093)	0.0109# (0.0048)	0.0163 (0.0114)
Bk_ratio	-0.0147* (0.0054)	-0.0193* (0.0058)	-0.0064 (0.0149)	-0.0218# (0.0085)	-0.0087 (0.0077)	-0.0221& (0.0136)
Bk_ratio (-1)	-0.0159 * (0.0048)	-0.0162* (0.0052)	0.0001 (0.0128)	-0.0125& (0.0071)	- 0.02131* (0.0071)	0.0016 (0.0131)
Gr_gdp	0.1724* (0.0462)	0.1612* (0.0540)	0.2469# (0.1234)	0.0800 (0.0913)	0.2215* (0.0472)	0.2622* (0.0844)
Ca_cl	0.0009& (0.0005)	0.0012& (0.0006)	-0.0009 (0.0013)	0.0008 (0.0007)	0.0011 (0.0010)	-0.0006 (0.0020)
Constant	-5.4993 (5.9249)	-2.7339 (6.8796)	-13.3076 (14.3925)	-29.8742# (13.1776)	4.7233 (6.1076)	34.9597* (8.3430)
R-Square	0.0815	0.0951	0.0400	0.0728	0.0751	0.0541

(* 1 percent level of significant i.e highly significant, # 5 percent level of significant, & 10 percent level of significant, figure in brackets represents Robust Standard Error.)

From Table 6 (B), it is observed that trade payable is having negative and significant influence on small companies only, whereas for all companies, manufacturing, medium and large companies, it is not having any significant influence. Hence, we may conclude that small companies' profitability decline with increase in trade payable. Small companies have limited sources of finance as compared to medium and large companies and increase in trade payable further worsens the funds availability affecting the profitability adversely. Industry wise analysis suggests that Trade payable influences on firm's profitability for Transport, Rubber and plastic products, Real estate industry are in inverse direction. Finally the high level of trade payable indicates financial distress of the firm, resulting in lower profitability.

Table6 B: Panel Regression results

Dep. Variables	All companies	Manufacturing Sector	Services Sector	PUC-Size-1 (< 10 Cr.)	PUC-Size-2 (10 Cr. to 100 Cr.)	PUC-Size-3 (>100 Cr.)
Size	0.3950 (0.4450)	0.2150 (0.5213)	0.6972 (1.0362)	2.3174# (1.0744)	-0.1965 (0.4504)	-1.8788* (0.5358)
Tp_asset	-0.0221 (0.0220)	-0.0262 (0.0268)	-0.0080 (0.0596)	-0.0599& (0.0342)	-0.0002 (0.0319)	-0.0217 (0.0495)
Debt_asset	-0.1025* (0.0122)	-0.1070* (0.0132)	-0.0913# (0.03822)	-0.0929* (0.0213)	-0.1095* (0.0162)	-0.1029& (0.0365)
Gr_gfa	0.0132* (0.0042)	0.0140& (0.0060)	0.01250 (0.0078)	0.0191 # (0.0088)	0.0094# (0.0046)	0.0151 (0.0116)
Bk_ratio	-0.0119# (0.0054)	-0.0168335 * (0.0057)	-0.0015 (0.0159)	-0.0198 (0.0087)	-0.0059 (0.0078)	-0.0218 (0.0139)
Bk_ratio (-1)	-0.01473* (0.0047)	-0.0150* (0.0052)	0.0030 (0.0122)	-0.01060# (0.0072)	-0.0209* (0.0069)	0.0038 (0.0129)
Gr_gdp	0.1921* (0.0470)	0.1845* (0.0551)	0.2748# (.1226)	0.1189 (0.0890)	0.2283* (0.0513)	0.2611* (0.0884)
Ca_cl	0.0006 (0.0005)	0.0010 (0.0006)	-0.0012 (.0013)	0.0001 (0.0007)	0.0012 (0.0010)	-0.0007 (0.0021)
Constant	3.4678 (5.7943)	6.7130 (6.6931)	-3.0035 (14.0259)	-19.8089 (12.6053)	11.5390& (6.4281)	40.6975* (8.4966)
R-Square	0.1038	0.1007	0.0664	0.0807	0.0914	0.0905

**** Industry wise results are presented in Appendix**

(* 1 percent level of significant i.e highly significant, # 5 percent level of significant, & 10 percent level of significant, figure in brackets represents Robust Standard Error.)

7. Concluding Remarks

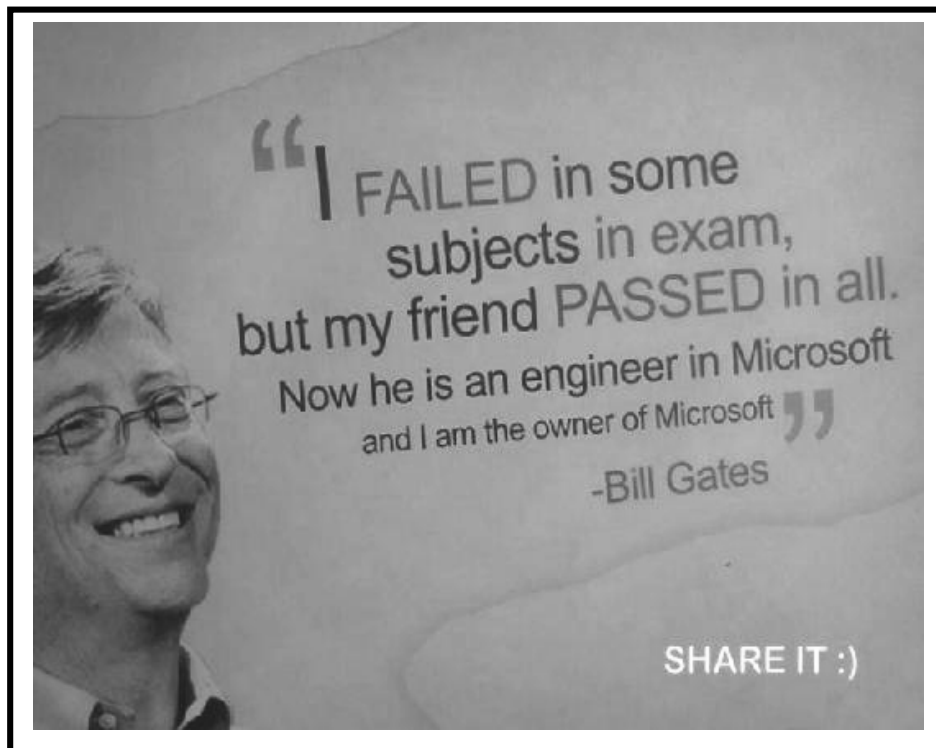
Efficient trade credit management could improve firm profitability significantly. Therefore, the trade credit policy is quite important due to its impact on profitability. We find return on assets (ROA) to have a significant positive linear relationship with trade receivables except for large size companies and an inverse relation, in expected lines, with trade payables for small size companies. At industry level, the impact of trade receivables on the profitability of Wholesales and retail trade, Chemical products, Motor Vehicle and Mining and Quarrying industries is in positive direction. Trade payable, on the other hand, influences the small size companies and Transport, Rubber and plastic products and Real estate industries in inverse direction. Investment in gross fixed assets enhances the firm profitability while high debt decreases it. The economic condition (measured by GDP) influences the firm profitability except for small size companies. Thus we may conclude that the trade receivables may increase the firm profitability significantly except for large size companies whereas trade payables significantly reduce the firm profitability for small size companies. This indicates that the supply of trade credit is beneficial despite the costs involved in credit management as well as late payment and risk of payment default.

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HR ISSUES IN MERGER AND ACQUISITION

Rajesh Meena¹

ABSTRACT

The fast changing global environment has made today's business environment highly uncertain, complex and challenging. Global competitiveness is increasing. Many new themes have emerged in business and management. New thinking and philosophies are taking place thus, the management of human resources has never been more important than it is today. 'People-ther skills, beliefs, attitudes and philosophies have become centrifugal force in every organization. Today, HRM is intimately intertwined with business success and strategy. HRM has become a culture of higher productivity and industrial progress.

In this highly volatile and testing global economy, Mergers & Acquisitions have become the preferred route for expansion and consolidation. Mergers & Acquisition represents the convergence of two mind sets that may give rise to many challenges. Ineffective handling of those issues can not only trigger crisis, but also derail the whole M&A process. This report deals with the crucial role of HR in resolving these challenges to make M&A a spectacular success.

Keywords: *Merger and Acquisition, Stages, Challenges, GE Capital, Due Diligence.*

1. INTRODUCTION

Companies today need to be fast growing, efficient, profitable flexible, adaptable, future-ready and have a dominant market position. Without these qualities, firms believe that it is virtually impossible to be competitive in today's global economy. In some industries such as insurance or banking, firms may move into new markets. In others such as pharmaceuticals or software technology, firms may work with smaller firms that have developed or are developing new products that they can manufacture and/or distribute more efficiently, while other firms focus on their own internal growth, leadership and development.

Regardless of industry, however, it appears that it has become all but impossible in our global environment for firms to compete with others without growing and expanding through deals that result in mergers or acquisitions.

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As the wave of globalization blows with fierce speed, the business climate is increasingly becoming highly volatile and tough. Organizations around the globe pursue merger & acquisition as a means to strengthen their competitive position. The unshakable and rock solid companies aspiring to emerge as a significant players on the global stage ,are scouting to acquire prospective and attractive companies, gasping for survival due the mounting competitive pressures. Be it Mittal Steel's acquisition of Arcelor or Tata's of Corus, Videocon's Daewoo, merger & acquisition {M & A} are preferred as a popular route for global expansion and market consolidation.

On an average, in the last five years we have witnessed over 25000 such deals a year. In addition, the value of the deals struck has steadily increased. Experience consistently shows that not all M&A succeed. Research conducted by the Mercer Human Resource Consulting Group indicates that 80% of merger and acquisition results in failure. According to Mc Kinsey and Company, almost 70% of these deals fail to realize any synergy. The role of HR professionals assumes importance in the context of an increasing number of Indian companies restoring to global acquisition.

2. REASONS FOR MERGER AND ACQUISITION FAILURE

Failure of merger and acquisition is due to strategic elements and human capital elements. Strategic elements that contribute to deal failure include lack of strategic rationale, poor integration, ineffective risk management and flawed resource allocation.

On the other hand, human capital element has a greater impact on deal failure. Surveys conducted by various human resource consulting firms point toward the following as the most common human capital elements that lead to deal failure:-

- the core business;
- Financial drain; Expectation are unrealistic;
- Poor cultural integration;
- Ineffective organization structure;
- Lack of senior leadership;

3. STAGES FOR MERGER & ACQUISITION

3.1. The pre-deal stage: In this stage, acquirers search for compatible companies with similar views, complementary in terms of what they are like, values, and business philosophies. This involves developing a growth strategy that defines the role of M&A; setting criteria for screening and appraising the company, identifying the potential that is the best fit for acquisition and developing an action plan for executing the deal.

3.2. Due diligence: Having made an offer to merger or acquire companies ensure that the proposed deal makes win – win sense from strategic, economic, and implementation perspectives. This is the time acquiring companies try to find out whether a proposed acquisition meets its needs and standard.

3.3. Integration planning: Acquirers or merger create a comprehensive blueprint for integrating businesses and organizations. This stage begins when both sides are reasonably optimistic about the deal.

3.4. Implementation: In the final stage, the company translates the proposed plan into concrete action. Maintaining business continuity and momentum during this stage is an important factor in the ultimate success of M&A.

4. CHALLENGES TO THE COMPANY INVOLVED IN M&A

4.1 Cultural Shock: Bhavin Chedda, Head, Pioneer Intermediaries while referring to Tata's acquisition of corus says, "cultural differences have the tendency to negate all benefits accruing from synergy of operations." Each Organization is rooted in different set of beliefs and value systems, which may be in conflict with the other partner. Merging of two companies involves merging of its employees, which will have serious internal ramifications. All plans can go futile when people can not work together due internal rifts arising from cultural differences.

A perfect integration is possible when the new culture includes the best elements from both organizations. Reality often looks different. We can distinguish the following types of cultural integration:

Perceived Attractiveness of Other Culture	HIGH	Assimilation (potentially smooth transition)	Integration (culture collision or satisfactory integration)
	LOW	Enculturation (alienation)	Separation (culture collision or multi-culturalism)
		LOW	HIGH
Perceived Attractiveness of Own Culture			

The organizational culture plays an important role in determining the organizational practices, managerial style and structure too. The two companies are likely to have different work styles. Hence, cultures must be understood and respected while chalking out new plans

for the new company. Thus, involvement of HR right from the beginning stage, i.e., pre-deal stage itself can have a positive impact on the process of M&A.

4.2 Human resource management issues: The mergers often prove to be traumatic for the employees of both acquiring and especially for the acquired firms. The menacing signals like the unions raising questions about job security and protection of pay scales become evident due to fear, anger, and resistance about such plans. Several questions about human resource planning, career development and relations crop up in the minds of the employees.

4.3 Job security: Tata steel, while declaring the acquisition of Corus announced that it would downsize almost 15,000 employees. Such announcement during the M&A activity diverts the employees attention from productive work to issue like job security, designation, career path, etc. As the M&A activity leads to duplication of certain departments, getting rid of such redundancies saves huge sums of money. No matter how high the pay-off is, such terminations always create negative feelings in the employees. Such employees can at times hurt and harm the company's fortune in the short run. Even among those who survive, the loyalty and trust they have towards the company is affected.

4.4 Turnover: "There will almost inevitably be employee turnover associated with a merger," suggests Daniel Naftalin, a Partner of the Employment Team at Law firm Mishcon de Rey. Employee turnover might be because of duplication or underperformance, also the merger acts as a catalyst for the employees who were thinking of leaving anyway to depart, or because parts of the business might be divested. This is likely to lead to a deep sense of insecurity that needs to be appreciated and properly managed.

4.5 Compensations: The human resource systems vary across organizations owing to the differences in the organizational culture, sectoral differences and national cultural differences. For example if the compensation in the acquired firm is lesser compared to the acquiring firm, the acquisition will raise employee expectations (for the employees of acquired firm) of a possible hike in compensation which may not be realistic. On the other hand if the compensation level of employees in acquiring firm is lower the employees may press to have equal compensation across all the divisions of the firm. The pay differential can act as a de-motivator for the employees of acquiring firm and may have long term consequences. The compensation issues may also involve legal angle. Two cases in the Indian context are important which underline the importance of legal issues related to compensation in M&A activity.

The first case involving Hindustan Lever Limited acquiring TOMCO, the employees in TOMCO enjoyed better terms and services compared to the HLL employees. The HLL employees argued that if TOMCO employees are allowed to work on their original terms and conditions, two classes of employees will come in existence. Since both the set of employees

now belong to same firm, a case of discrimination will arise against the employees of HLL. However the court supported TOMCO employees in the process.

The second case involves merger of Glaxo and Wellcome-Burroughs who decided to merge in 1996. The Indian arms however couldn't merge in the last seven years because of high pay differential between workers of Glaxo and Wellcome in India. The workers of Wellcome were offered a one time compensation of Rs. 2 lakhs in 1998, which they refused. Further the VRS scheme launched by the firm evoked very tepid response. Since 1997 the firms have been working as independent subsidiaries in India

5. IMPACT OF M&A ON EMPLOYEES

The impact on the employees can be divided into categories of psychological trauma, increased workload, survivor guilt and stress. The reaction of the employees can vary from anger to dejection and depression. The process of merger can have inbuilt psychological and social threats which should be identified like exodus of managers due to the perceived job insecurity. There is also fall in the morale, commitment and loyalty. The merger can lead to depression and impaired performance. The dissimilarity in the cultures can produce the feelings of hostility and significant discomfort, which impact on the commitment and cooperation on the part of employees. The cultural difference also leads to counterculture feelings where employees tend to completely reject the dominant culture of the organization. The impact of cultural shock is significant and long lasting on the employees. The initial shock is followed by employees making their own perceptions based on values and past experiences. The more dissimilar the culture is higher will be the cultural shock. The likely reactions as noted by studies are anger fear, denial frustration and depression which leads to altered behavior, reduced productivity, stress, illness, accidents, conflicts and a total lack of commitment to make merger work. The feeling of political back stabbing adds to the psychological trauma.

6. MANAGING MERGER AND ACQUISITION

Clearly defined communication strategy during M&A plays an important role in removing the employee fears and kill rumors floating around in the organization. The organizations need to reach their employees before the press as the employees will have feelings of getting cheated. Studies show that communication strategy that involves senior managers of the acquired organizations work well. Involving other employees who are trusted by the employees for instance trade union leaders are also helpful. The employees meeting in small groups so as to discuss their concerns, fears and positive feelings also helps to lessen the stress on employees of acquired firm. The group meetings seem to help because many-a-times employees are reluctant to come out and speak their concerns, whereas in groups where everyone shares same set of feelings to an extent, it becomes easier to come out with the common set of concerns and fears. This also provides confidence to employees that the new

management is willing to listen to their concerns and feelings, building an atmosphere of mutual trust.

HR takes control

- Train managers on the nature of change
- Technical retraining
- Family assistance programs
- Stress reduction program
- Meeting between the counter parts
- Etc.

7. ACQUISITION STRATEGY OF GE CAPITAL

The GE Capital uses a successful model called “Pathfinder” for acquiring firms. The model disintegrates the process of M&A into four categories which are further divided into subcategories. The Three stages incorporate some of the best practices for optimum results.

The pre-acquisition phase of the model involves due diligence, negotiations and closing of deals. This involves the cultural assessments, devising communication strategies and evaluation of strengths and weaknesses of the business leaders. An integration manager is also chosen at this stage.

The second phase is the foundation building. At this phase the integration plan is prepared. A team of executives from the GE Capital and the acquiring company is formed. Also a 100 day communication strategy is evolved and the senior management involvement and support is made clear. The needed resources are pooled and accountability is ensured.

The third is the integration phase. Here the actual implementation and correction measures are taken. The processes like assessing the work flow, assignment of roles etc are done at this stage. This stage also involves continuous feedbacks and making necessary corrections in the implementation. The last phase involves assimilation process where integration efforts are reassessed. This stage involves long term adjustment and looking for avenues for improving the integration. This is also the period when the organization actual starts reaping the benefits of the acquisition. The model is dynamic in the sense that company constantly improves it through internal discussions between the teams that share their experiences, effective tools and refine best practices.

8. ACQUISITION STRATEGY OF CISCO

The acquisition strategy of Cisco is an excellent example of how thorough planning can help in successful acquisitions. After experiencing some failures in acquiring companies, Cisco devised a three step process of acquisition. This involved, analyzing the benefits of acquiring, understanding how the two organizations will fit together – how the employees from the organization can match with Cisco culture and then the integration process. In the

evaluation process, Cisco looked whether there is compatibility in terms of long term goals of the organization, work culture, geographical proximity etc. For example Cisco believes in an organizational culture which is risk taking and adventurous. If this is lacking in the working style of the target company, Cisco is not convinced about the acquisition. No forced acquisitions are done and the critical element is in convincing the various stakeholders of the target company about the future benefits. The company insists on no layoffs and job security is guaranteed to all the employees of the acquired company. The acquisition team of Cisco evaluates the working style of the management of the target company, the caliber of the employees, the technology systems and the relationship style with the employees. Once the acquisition team is convinced, an integration strategy is rolled out. A top level integration team visits the target company and gives clear cut information regarding Cisco and the future roles of the employees of the acquired firm. After the acquisition, employees of the acquired firm are given 30 days orientation training to fit into the new organizational environment. The planned process of communication and integration has resulted in high rate of success in acquisitions for Cisco.

9. HR'S ROLE IN MERGERS AND ACQUISITIONS - HUMAN RESOURCE MANAGEMENT

In June 1999, Shaw's Supermarkets acquired Star Markets for roughly \$500 million. Shaw's at that time had 126 stores and about \$3 billion in volume; Star had 54 stores and \$1 billion in sales. That acquisition was Shaw's largest to date, growing revenue by roughly 50 percent and increasing its workforce from 20,000 to 32,000. It took eight months from signing the agreement to Federal Trade Commission approval. To bless the deal, the FIC required that 10 stores be divested. Shaw's anticipates achieving roughly \$50 million in synergies, with about \$10 million in the first year.

Completion of the acquisition and integration--operationally and culturally--of the two companies have required human resources to play a major role. The work is still going on: Although most of the integration plan has been implemented, the human side of the integration continues to evolve.

9.1 The key HR initiatives have included

- Development of preliminary organizational designs and identification of the top three levels of management
- Assessment of critical players and deployment of appropriate resources in the new company
- Retention of key people and separation of redundant staff
- Development of a total rewards strategy for the combined companies

9.2 The guiding principles:

- Take definitive action and make decisions quickly--the secret for holding onto good people.
- Be can did with employees, and treat them with respect. Let them know that the combined entity will be a more valuable organization.
- Whenever possible, use ownership of the company as represented by stock options and stock grants to get everyone pulling in the same direction.
- Be honest about the people decisions that must be made.

9.3 Due Diligence

Beginning at the start of the process, HR must orchestrate its role in due diligence. Due diligence is more than a financial evaluation. It's essential to assess the valued human assets that never show up on a balance sheet, in order to determine the true value of the deal and its likelihood of success.

Job number 1 is identifying the key people and taking immediate steps to keep them from walking out of the door the moment the deal is announced. When the right questions are asked before a merger, HR isn't left to play catch-up for the first six months.

9.4 Integration Planning

Without a clear plan and timetable, a merger or acquisition can fail. The plan should be broken down by function: What needs to be done? Who's going to do it? When will it be complete?

Fill your integration team with flexible, creative, and enthusiastic people. Take them completely away from their usual jobs so they can devote themselves to the team effort. Pick the best people, not just the available people. Integration leadership should be invested in the continued development of the new organization and be in for the long hauled.

1. The primary roles of HR during this phase are to
2. Communications
3. The goal of communications
4. Growths

10. CONCLUSION

To conclude, though the role of HR is significant in the whole process of initiating, implementing, and managing M&A, many organizations, however, still do not consider

human resources as being critical to the M&A strategy. But by looking at the success stories one can believe that there is a critical need for HR to be involved in all the stages of M&A. The responsibility of HR department is to facilitate a successful M&A transition by removing the biggest stumbling blocks of cultural incompatibility, poor communication and loss of key talent.

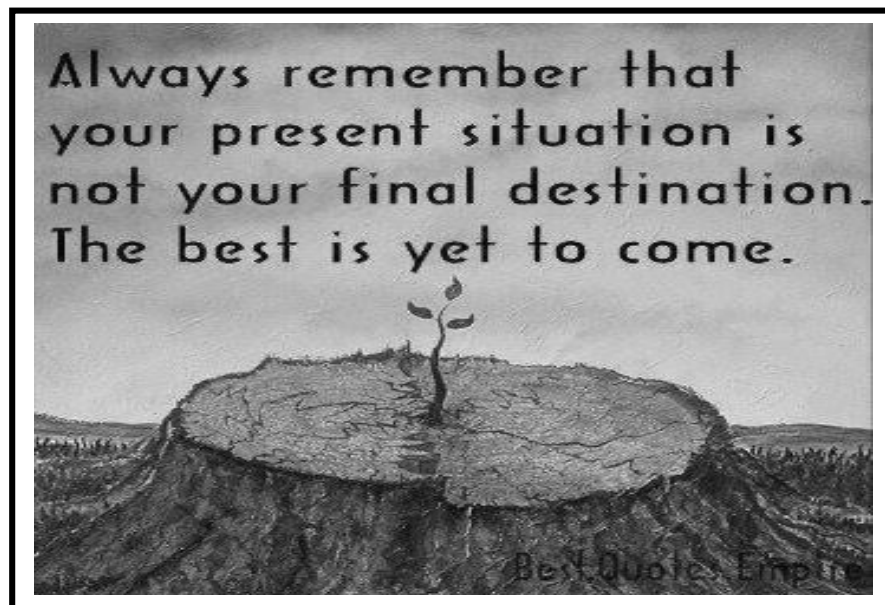
HR Involvement Critical to M&A Success: Leadership assessment, cultural fit, and employee communication are the key challenges in Merger and Acquisition (M&A). In M&A, due diligence forms the base upon which virtually all key decisions including strategic and operational are made. Those involved in such transactions understand the importance of due diligence in identifying potential “deal breakers” and any other issue that may have a material impact on the negotiations or price. However, once this has been accomplished, it is not uncommon for due diligence activity and intensity to decline. This cuts short a process that could be beneficial in other ways and leaves much important information that could influence integration decisions and pave the way for a smooth integration process.

M&A activity continues to step up globally. Companies involved in these transactions have the opportunity to take a different approach to entire due diligence process, including the increased involvement of HR professionals. If they do, they will achieve a much better outcome and increase the odds that the overall deal will succeed.

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IMPACT OF REMITTANCES ON REAL EXCHANGE RATE APPRECIATION: A STUDY OF FOUR EMERGING ECONOMIES

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ABSTRACT

In this era of globalization remittances have been rising fairly rapidly around the world and are becoming growing source of foreign exchange earnings for developing nations. This paper aims to examine the relationship between remittance and real exchange rate appreciation in context to developing nations of the world and its effect on economies of these countries.

The study was conducted in context to four developing nations of the world i.e. India, China, Brazil and Japan. Under the study exchange rate was taken as a dependent variable whereas remittances as independent variable and to check the effect of remittances on exchange rate linear regression was applied. The result showed that exchange rate does not vary according to the change in remittances in case of China & Japan but in case of India & Brazil remittances affected exchange rate positively.

Keywords: Remittance, Real Exchange Rate, Purchasing power Parity, real exchange rate appreciation.

CONCEPTUAL FRAMEWORK

Remittance is a term that refers to the transfer of money by the foreign migrant workers to their family and friends in their home countries. Remittances assist the economic growth throughout the world. The money sent home by the migrants makes up second biggest financial inflow to numerous developing countries and it exceeds even the international aids.

Remittances received by the country led to its economic growth and contribute to the livelihoods of people across the world. In addition to it, the remittance transfers also leads to promotion of financial services for the sender and recipient. It leads to enhanced financial and social inclusion. These remittances also create economic dependency on the global economy rather than creating sustainable local economies. There are a huge number of people that go to foreign location in search for better education, job or lifestyle. Remittance helps these migrants in doing money transaction to their home locations.

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According to IMF studies, apart from improving the standard of living, remittances generate employment opportunities and thereby influence private consumption. Influence on consumption could also lead to economic growth as consumption creates investment demand through its multiplier effect. It has been observed that while a very large proportion of remittances are spent on consumption, a very small proportion is also saved or used for productive investments. The migrant earns income and decides how to allocate his savings between host country and home country assets, interest rate incentives offered on home, country deposits, the return on real estate in the home country, inflation rates, political risk uncertainty and other factors.

Remittance Transfer can be either domestic or International. If the money gets remitted within the same country then it is termed as Domestic. In fact, ten percent of the world's population makes a part of the remittance procedure. Most of the remittance receivers are economically poor people, and it leads to better economic conditions for them. For making the secure remittances, it is compulsory to mention the following conditions such as amount disbursed to the receiver, the amount to be sent, the date of receiving the remittance will be made available to by receiver, the fees paid by the receiver and sender, and the place for receiving the remittance.

Exchange Rate

Exchange Rate or foreign exchange according to the Federal Reserve Bank (FRB) New York, is money denominated in the currency of another nation. The foreign exchange rate is the price of a currency. More specifically it is the number of units of one currency that buys one unit of another currency. This number can change daily. The U.S dollar is considered the base currency or the "fixed" currency. So an exchange rate quote of 100 yen/ \$1 would indicate that \$1 USD can purchase 100 Japanese yen.

An exchange rate is usually quoted in terms of the number of units of one currency that can be exchanged for one unit of another currency - e.g., in the form: 1.2290 EUR/USD. In this example, the US\$ is referred to as the "quote currency" (price currency, payment currency) and the Euro is the "base currency" (unit currency, transaction currency).

Quotes using a country's home currency as the price currency (e.g., EUR 0.735342 = USD 1.00 in the euro zone) are known as direct quotation or price quotation (from that country's perspective) and are used by most countries.

Quotes using a country's home currency as the unit currency (e.g., EUR 1.00 = USD 1.35991 in the euro zone) are known as indirect quotation or quantity quotation and are used in British newspapers and are also common in Australia, New Zealand and the Eurozone.

- Direct quotation : 1 foreign currency unit = x home currency units
- Indirect quotation : 1 home currency unit = x foreign currency units

The exchange rates as noted by the FRB New York are affected by a wide range of factors such as: political turmoil, central bank and government policy, inflation, stock market, investment patterns and business cycles. The basic premise of supply and demand however still plays the most important role. The demand for a country's currency is a function of the demand for that country's goods and services as well as financial assets. The governments and central banks constantly monitor and modify the supply in order to achieve desired exchange rates for their currency.

Exchange rates have significant impact on the economy of the country. When the currency of a country weakens, the purchasing power reduces therefore imports suffer, while exports increase. A stronger currency would translate to reduced exports and increase in imports. Companies find it cheaper to invest in countries with weaker currencies because the operational costs are lower. Thus there is an indirect effect on employment. Tourism increases to countries that have weaker currencies because they are more affordable.

Exchange rate regime

The exchange-rate regime is the way a country manages its currency in relation to other currencies and the foreign exchange market. Each country, through varying mechanisms, manages the value of its currency. As part of this function, it determines the exchange rate regime that will apply to its currency. For example, the currency may be free-floating, pegged or fixed, or a hybrid.

If a currency is free-floating, its exchange rate is allowed to vary against that of other currencies and is determined by the market forces of supply and demand. Exchange rates for such currencies are likely to change almost constantly as quoted on financial markets, mainly by banks, around the world. Some governments keep their currency within a narrow range. As a result currencies become over-valued or under-valued, causing trade deficits or surpluses.

Purchasing Power of Currency

The "real exchange rate" (RER) is the purchasing power of a currency relative to another. It is based on the GDP deflator measurement of the price level in the domestic and foreign countries (P , P^f), which is arbitrarily set equal to 1 in a given base year. Therefore, the level of the RER is arbitrarily set depending on which year is chosen as the base year for the GDP deflator of two countries. The changes of the RER are instead informative on the evolution over time of the relative price of a unit of GDP in the foreign country in terms of GDP units of the domestic country. If all goods were freely tradable, and foreign and domestic residents purchased identical baskets of goods, purchasing power parity (PPP) would hold for the GDP deflators of the two countries, and the RER would be constant and equal to one.

It has been found that countries may gain an advantage in international trade if they manipulate the value of their currency by artificially keeping its value low, typically by the

national central bank engaging in open-market operations. It had been argued that the People's Republic of China has succeeded in doing this over a long period of time. However, in a real-world situation, a 2005 appreciation of the Yuan by 22% was followed by a 38.7% increase in Chinese imports to the US.

Relationship between Remittances and Real Exchange Rate

Remittances are becoming increasingly important as a source of foreign income in terms of both magnitude and growth rate, exceeding the inflow of foreign aid and private capital in many countries. They currently represent about one-third of total financial flows to the developing world.

The challenge that lies before the developing nations is to explore ways of channelizing remittances towards more productive use for individuals and communities through inclusive financial mechanisms and ensure sustained and equitable economic growth and sustainable development. Attention is increasingly focusing on policies that can enhance the impact of remittances on poverty reduction and development.

Given a significant reliance on informal sources of money transfers throughout the continent, a critical intervention in the remittance market would be the reduction of transfer costs by encouraging the use of formal channels and linking remittances to financial services. To facilitate this transition, the need for improved financial literacy and targeted capacity development for all stakeholders cannot be overstated. Creating innovative financial products that encourage recipients to save, invest and engage in remunerative employment through savings accounts, insurance and pension schemes, mortgages and loans for SMEs, among others, can also have an enormous impact on low-income families and their livelihoods. They can lead to better nutrition, housing, health, education and employment for communities and help poor people to plan for the future.

PURPOSE OF THE STUDY

1. To find out remittances flows as a share of GDP.
2. To find out the relationship between remittances and real exchange rate appreciation.
3. To open new vistas for further research.

LITERATURE REVIEW

King and Levine (1993) explained that high-remittance recipient countries with comparatively better developed financial systems can more effectively direct remittance flows toward investment activities. They predicted, therefore, that upward pressure on the real exchange rate is weaker in countries with comparatively better developed financial sectors.

El-Sakka, and McNabb Robert (1999) In contrast to some previous analyses, they found, using data for Egypt, that both exchange rate and interest rate differentials are important in attracting remittance flows through official channels. They also found that imports financed through remittance earnings have a very high income elasticity which suggests either that these imports are consumer durables and luxury goods or that they are undertaken by higher income groups.

Desai, Mihir, Kapur and McHale (2003) estimated the fiscal losses associated with the emigrants, they first estimated what these emigrants would have earned in India, and then integrated the resulting counterfactual distributions with details of the Indian fiscal system to estimate fiscal impacts. Depending on the method for estimating expenditures saved by the absence of these emigrants, the net fiscal loss associated with the U.S. Indian-born resident population ranges from 0.24% to 0.58% of Indian GDP in 2001.

Lartey Emmanuel K.K., Mandelman Federico S. and Acosta Pablo A. (2008) showed that rising levels of remittances have spending effects that lead to real exchange rate appreciation and resource movement effects that favour the non-tradable sector at the expense of tradable goods production. These are two characteristic of the phenomenon known as Dutch Disease. The results further indicate that these effects operate stronger under fixed nominal exchange rate regimes.

Laurent, Ritha and Daniel (2008) analyzed empirically the role of financial sector development (FSD) in the stimulating effect of remittances on home country investment. They used longitudinal data that cover over 70 countries over the 1970-2005 periods. Their results indicated the presence of a robust quadratic effect: When FSD is low; more FSD leads to a higher (positive) effect of remittances on investment. With further increases of FSD, the effect of remittances on investment, although still positive, decreased.

Solomon Blen (2009) investigated the effects of exchange rate uncertainty and political risk, after controlling for the conventional macroeconomic determinants, on remittances transfers into eight Latin American countries during the period of 1990-2006. The results suggested that an increase in exchange rate uncertainty reduces remittances flows into these countries. Furthermore, an increase in political risk seems to have a negative but statistically insignificant impact on remittances transfers. Based on the findings of this paper, they said that governments of the remittance receiving countries can influence the inflow of remittances by means of adopting appropriate macroeconomic policies to reduce exchange rate uncertainty and also by improving their political environments.

RESEARCH METHODOLOGY

The Study: The study will be descriptive in nature.

The Sample Design:

Population: The population of the study will be all the countries around the world.

Sample Frame: The period of the study will be from 1992 to 2012.

Sample Size: The sample size will be the 4 emerging countries of the world.

Sample Element: The study include the 2 sampling element-

- Remittances as a share of GDP
- Exchange rates of individual country

Sampling Technique: Purposive sampling technique will be used.

Tools used for Data Collection: The data will be collected from secondary sources like the different websites of individual countries.

Tools used for Data Analysis: Study includes the exchange rate as a dependent variable and remittances as an independent variable. To check the effect of remittances on the exchange rate the linear regression (SPSS 16.0) had been applied and the Hypothesis had been formulated as follows:

Null Hypothesis (H_0): There is no relationship between remittances and real exchange rate appreciation.

Alternative Hypothesis (H_a): There is relationship between remittances and real exchange rate appreciation.

RESULTS AND DISCUSSION**1. India**

Regression is a statistical technique used to estimate causal effect and identifies cause and effect relationship between two or more quantitative variables. Here under linear regression the data of dependent variable and independent variable of different countries for twenty years has been averaged and considered for the study.

The adjusted R square value (0.710), as shown in Table 1.1, of the linear regression with exchange rate as dependent variable shows that the model can predict 70% of variance in the dependent variable. Result of the linear regression also shows that at 5% level of significance the independent variable effected significantly to the dependent variable.

Table 1.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.843 ^a	.710	.694	4.80581	.710	44.173	1	18	.000

a. Predictors: (constant), Remittances

Table 1.2: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1020.207	1	1020.207	44.173	.000 ^a
	Residual	415.724	18	23.096		
	Total	1435.930	19			

a. Predictors: (Constant), Remittances

b. Dependent Variable: Exchange rate

Table 1.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20.888	2.926		7.138	.000
	Remittances	7.043	1.060	.843	6.646	.000

H₀: There is no relationship between remittances and real exchange rate appreciation.

H_a: There is relationship between remittances and real exchange rate appreciation.

The findings indicate that at 5 percent level of significance ($t = 6.646$, significant at 00%) the null hypothesis is rejected (Table 1.3). The beta value (.843) indicates significant positive relationship between remittances and real exchange rate appreciation. It shows the relationship between remittances and real exchange rate appreciation.

2) China

The adjusted R square value (0.083), as shown in Table 2.1, of the linear regression with exchange rate as dependent variable shows that the model can predict 8.3% of variance in the dependent variable. Result of the linear regression shows that at 5% level of significance the independent variable does not affect dependent variable.

Table 2.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.288 ^a	.083	.032	1.20886	.083	1.631	1	18	.218

a. Predictors: (Constant), remittances

Table 2.2: ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.383	1	2.383	1.631	.218 ^a
	Residual	26.304	18	1.461		
	Total	28.688	19			

a. Predictors: (Constant), Remittances

b. Dependent Variable: Exchange rate

Table 2.3: Coefficients

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.059	.458		15.404	.000
	Remittances	.804	.630	.288	1.277	.218

a. Dependent Variable: Exchange rate

H₀: There is no relationship between remittances and real exchange rate appreciation.

H_a: There is relationship between remittances and real exchange rate appreciation.

The findings indicate that at 5 percent level of significance ($t = 1.277$, significant at .218) the null hypothesis is accepted (Table 2.3). It shows that no relationship exist between remittances and real exchange rate appreciation.

3) Brazil

The adjusted R square value (0.439), as shown in Table 3.1, of the linear regression with exchange rate as dependent variable shows that the model can predict 43.9% of variance in the dependent variable. Result of the linear regression also shows that at 5% level of significance the independent variable effected significantly to the dependent variable.

Table 3.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.663 ^a	.439	.408	.57700	.439	14.107	1	18	.001

a. Predictors: (Constant), remittances

Table 3.2: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.697	1	4.697	14.107	.001 ^a
	Residual	5.993	18	.333		
	Total	10.689	19			

a. Predictors: (Constant), Remittances

b. Dependent Variable: Exchange rate

Table 3.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.127	.439		.290	.775
	Remittances	4.596	1.224	.663	3.756	.001

a. Dependent Variable: Exchange rate

H₀: There is no relationship between remittances and real exchange rate appreciation.

Ha: There is relationship between remittances and real exchange rate appreciation.

The findings indicate that at 5 percent level of significance ($t = 3.756$, significant at .001 or 00%) the null hypothesis is rejected. The beta value (.663) indicates significant positive relationship between remittances and real exchange rate appreciation. It shows the relationship between remittances and real exchange rate appreciation.

4) Japan

The adjusted R square value (.021), as shown in Table 4.1, of the linear regression with exchange rate as dependent variable shows that the model can predict 2.1% of variance in the dependent variable. Result of the linear regression shows that at 5% level of significance the independent variable does not affect dependent variable.

Table 4.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.146	.021	-.033	10.04359	.021	.390	1	18	.540

a. Predictors: (Constant),
Remittances

Table 4.2: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	39.380	1	39.380	.390	.540 ^a
	Residual	1815.725	18	100.874		
	Total	1855.106	19			

a. Predictors: (Constant), Remittances

b. Dependent Variable: Exchange rate

Table 4.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	109.364	6.643		16.463	.000
	Remittances	139.411	223.124	.146	.625	.540

a. Dependent Variable: Exchange rate

H₀: There is no relationship between remittances and real exchange rate appreciation.

Ha: There is relationship between remittances and real exchange rate appreciation.

The findings indicate that at 5 percent level of significance ($t = .625$, significant at .540) the null hypothesis is accepted (Table 4.3). It shows that no relationship exist between remittances and real exchange rate appreciation.

The above study reveals, that in India and Brazil there is positive relationship between remittances and real exchange rate appreciation while there is no such relationship in case of China and Japan. Here in the study only two variables has been taken into consideration whereas there are other factors which affect remittances like interest rate differentiation, inflation rate, growth, employee compensation workers' remittances, home & host country income level etc. and for the study sample size of just four countries of 20 years has been

taken into account, thus if the scope of the same would have been enhanced the results would have differed.

CONCLUSION

Remittances are emerging as an important source of external development finance. They have been growing in both absolute volumes, as well as relative to other sources of external finance. The RER (Real Exchange Rate) refers to the purchasing power of two currencies relative to one another.

This research investigated that in case of India and Brazil, relationship exists between remittances and real exchange rate appreciation but in case of China and Japan, no relationship exists between remittances and real exchange rate appreciation.

The other previous studies had stated that there is no impact of remittances on exchange rate appreciation, whereas some stated that there is inverse relationship between these variables and some cited that there is positive relationship between these variables therefore, it is not true that all the countries follow same trend. As had already been stated earlier that under the current study only two variables has been taken into account, data of just 20 years have been analysed and that too in context of four emerging countries of the world, so the study may be narrow.

On the basis of findings of the research, it can be concluded that exchange rate does not vary according to the change in the remittances in case of China and Japan but in case of India and Brazil remittances affected exchange rate positively which directly exerted effect on the economy.

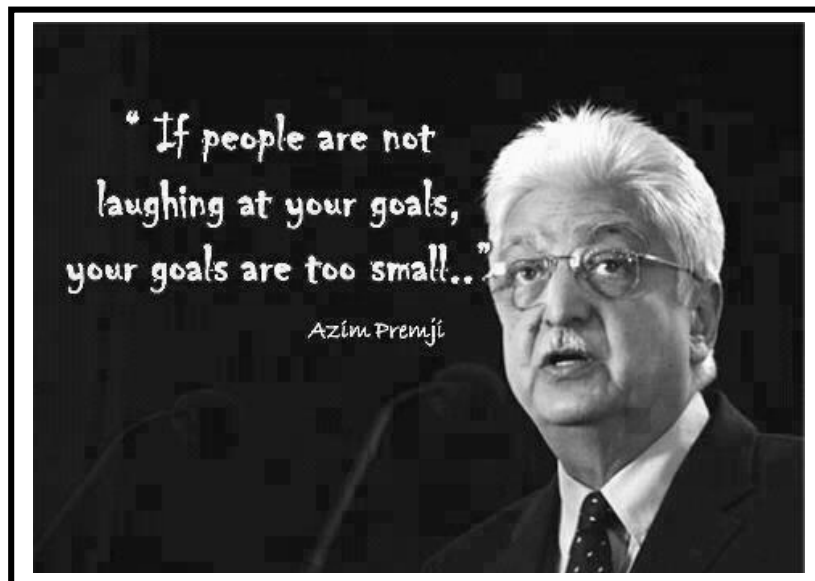
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WEB LINKS

- <http://stats.unctad.org/Handbook/TableView/tableView.aspx?ReportId=2123>
- <http://www.x-rates.com/cgi-bin/hlookup.cgi>
- <http://www.federalreserve.gov/econresdata/releases/statisticsdata.htm>
- <http://www.remittanceprices.worldbank.org/>



NEW LOCATION MANAGEMENT SCHEME IN MOBILE AD HOC NETWORK

Dr. Deepika Upadhyaya¹, Sanjana Bhatnagar²

ABSTRACT

Ad hoc network are networks in which there is no need of any infrastructure support. Mobile ad hoc network is highly suited for use in situations where fixed infrastructure is not available, not trusted, too expensive or unreliable. In MANET, users accomplishing their task, accessing information and communicating anytime, anywhere and from any device or node.

Due to the infrastructure-less mode of operation the mobile ad hoc networks have received significant research attention in recent years. They can be of immense use in case of emergency situations such as in relief operation, battlefield etc. Due to the highly dynamic nature, constantly changing topology and limited transmission range of the mobile nodes, routing in these networks is considered a critical research challenge. Mobile ad hoc network is a self-organizing and self-configuring network in which mobile host moved freely. In mobile ad hoc network location of mobile nodes are frequently changed. Location management is a crucial issue in mobile ad hoc network due to dynamic topologies.

There are various Location management approaches have been developed. Each approach has its own advantages and disadvantages. In this paper, I proposed new design architecture for location management using quadrant routing scheme and also implemented this design architecture in Network Simulator version 2. In this scheme, I assumed that the whole network area as a circular and this circular area is divided into four quadrants that's why it is called quadrant routing scheme. In this scheme, I am using a proxy node for location update and also determining some parameters related to node such as x-coordinate of node, y-coordinate of node, quadrant number, distance and angle of a node from proxy node. Proxy node is a node which is located at center position of the whole network area.

In this scheme, I am using a Reactive Protocol also called on demand routing protocol. In Reactive protocols, nodes only discover routes to destinations on-demand basis. In other words, reactive protocols adopt the opposite approach as compared to proactive schemes by finding a route to a destination only when needed. Reactive protocols often consume much less bandwidth than proactive protocols, but the delay in determining a route can be substantially large. Proactive protocol is suitable for small network not for larger network because protocol need to maintains node entries for each and every node in the routing table. Here, I am using AODV (Ad hoc on-demand distance vector) Protocol. AODV is a reactive protocol. In this project, I am also analyzing TCP and UDP packet transformation in Mobile ad hoc network.

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1. INTRODUCTION

Ad hoc networks are an exciting approach to network design. Not relying on complex and expensive infrastructure, which is required by their counterparts, ad hoc network can operate in scenarios where traditional networks fails [1], such as disaster relief and military applications. Ad hoc networks are also particularly well suited for sensor networks and small scale temporary solutions (e.g., Conferences). Much research is also taking place in an effort to extend ad hoc networks to more general purpose applications, such as wireless local area networks (WLANs).

Ad hoc networks can be sub-divided into two classes: static and mobile. In static ad hoc networks the position of a node may not change once it has become part of the network. Typical examples are rooftop networks [1]. For the remainder of this work we will solely focus on mobile ad hoc networks. In mobile ad hoc networks, systems may move arbitrarily. Since mobile ad hoc networks change their topology frequently and without prior notice, routing in such networks is a challenging task. We distinguish two different approaches: topology-based and position-based routing.

Topology-based routing protocols use the information about the links that exist in the network to perform packet forwarding. They can be further divided into proactive, reactive, and hybrid approaches. Proactive algorithms employ classical routing strategies such as distance-vector routing (e.g., DSDV [2]) or link-state routing (e.g., OLSR [3] and TBRPF [4]). They maintain routing information about the available paths in the network even if these paths are not currently used. The main drawback of these approaches is that the maintenance of unused paths may occupy a significant part of the available bandwidth if the topology of the network changes frequently [5]. In response to this observation, reactive routing protocols were developed (e.g., DSR [6], TORA [7], and AODV [8]). Reactive routing protocols maintain only the routes that are currently in use, thereby reducing the burden on the network when only a small subset of all available routes is in use at any time. However, they still have some inherent limitations. First, since routes are only maintained while in use, it is typically required to perform a route discovery before packets can be exchanged between communication peers. This leads to a delay for the first packet to be transmitted. Second, even though route maintenance for reactive algorithms is restricted to the routes currently in use, it may still generate a significant amount of network traffic when the topology of the network changes frequently. Finally, packets route to the destination are likely to be lost if the route to the destination changes.

Hybrid ad hoc routing protocols such as ZRP [9] combine local proactive routing and global reactive routing in order to achieve a higher level of efficiency and scalability. However, even a combination of both strategies still needs to maintain at least those network paths that are currently in use, limiting the amount of topological changes that can be tolerated within a given amount of time.

A survey and comparison of topology- based approaches can be found in [10, 11]. In the following we will focus exclusively on position-based routing. Position-based routing algorithms eliminate some of the limitations of topology-based routing by using additional information. They require that information about the physical position of the participating nodes be available.

Commonly, each node determines its own position through the use of GPS or some other type of positioning service [12, 13], a survey of these methods can be found in [14]. A location service is used by the sender of a packet to determine the position of the destination and to include it in the packet's destination address. The routing decision at each node is then based on the destination's position contained in the packet and the position of the forwarding node's neighbors. Position-based routing thus does not require the establishment or maintenance of routes. The nodes have neither to store routing tables nor to transmit messages to keep routing tables up to date. As a further advantage, position-based routing supports the delivery of packets to all nodes in a given geographic region in a natural way. This type of service is called geocasting [15].

2. PROBLEM STATEMENT

Before a packet can be sent, it is necessary to determine the position of its destination. Typically, a location service is responsible for this task. Existing location services can be classified according to how many nodes host the service. This can be either some specific nodes or all nodes of the network. Furthermore, each location server may maintain the position of some specific or all nodes in the network. We abbreviate the four possible combinations as some-for-some, some-for-all, all-for-some, and all-for-all in the discussion of location services. In position-based routing, the forwarding decision by a node is primarily based on the position of a packet's destination and the position of the node's immediate one-hop neighbors. The position of the destination is contained in the header of the packet. If a node happens to know a more accurate position of the destination, it may choose to update the position in the packet before forwarding it. The position of the neighbors is typically learned through one-hop broadcasts. These beacons are sent periodically by all nodes and contain the position of the sending node.

We can distinguish three main packet forwarding strategies for position-based routing: greedy forwarding, restricted directional flooding, and hierarchical approaches. For the first two, a node forwards a given packet to one (greedy forwarding) or more (restricted directional flooding) one-hop neighbors that are located closer to the destination than the forwarding node itself. The selection of the neighbor in the greedy case depends on the optimization criteria of the algorithm. We will present the diverse strategies that existing algorithms use to make this selection. It is fairly obvious that both forwarding strategies may fail if there is no one-hop neighbor that is closer to the destination than the forwarding node itself. Recovery strategies that cope with this kind of failure are also discussed in a later

section. The third forwarding strategy is to form a hierarchy in order to scale to a large number of mobile nodes.

Due to the mobility of nodes and continuously changing network topologies pose several challenges. So location management task is slightly difficult in mobile ad hoc network. In order to learn the current position of a specific node, the help of a location service is needed. Mobile nodes register their current position with the service. When a node does not know the position of a desired communication partner, it contacts the location service and requests that information.

In mobile ad hoc networks, such a centralized approach is viable only as an external service that can be reached via non ad-hoc means. There are two main reasons for this. First, it would be difficult to obtain the position of a position server if the server were part of the ad hoc network itself. This would represent a chicken-and-egg problem: without a position server, it is not possible to get position information, but without the position information the server cannot be reached. Second, since an ad hoc network is dynamic, it might be difficult to guarantee that at least one position server will be present in a given ad hoc network. Mobile ad hoc network uses asymmetric links, so that nodes are frequently changing their position within network. There are many problems with routing like Routing overhead, Interference, Asymmetric links, Dynamic topology.

In MANET, nodes are free to join or leave the network and they may move randomly. So, in MANET, the location management task is a critical issue and here I am concerning the problem of location management and also I am proposing Design Architecture for location management scheme along with the simulation result.

3. SURVEY EXTRACTION

Kausik Majumdar and Subir Kumar Sarkar in [22] “A novel Position based Routing Scheme for Mobile ad hoc network” proposed to give the idea for management of the location of nodes in mobile ad hoc network. This concept was implemented to solve the location management problem. In this concept, there was four location server region is used to manage the location. Through this concept I proposed a new design architecture for location management using quadrant routing scheme. C. Perkins and E.Royer in [23], proposed to give the idea of the usage of routing protocol. There are two types of protocol proposed: Proactive protocols and Reactive protocols. In my project, I used AODV (Ad hoc on-demand distance vector) protocol. AODV is a reactive.

4. EXISTING SYSTEM

CQRS (Circular Quadrant Routing Scheme) is a location management scheme, in which the whole area network is assumed as a circular in nature. Each node is capable of determining its own position using digital compass, which provides the angle of motion of the mobile device hosting it. Thus mobile nodes are capable of knowing the distance traveled by

them. Each mobile node is equipped with radios having their transmission range as R_t . Circular area having radius R . This scheme divides the entire area into four equal quadrants. Each quadrant has been assigned a unique number from 1 to 4 as shown in figure.

At the startup, each node is aware of the network being partitioned into 4 equal Quadrants. Each Quadrant contains a small circular area acting as a home region (R_i , $1 \leq i \leq 4$) whose center is the intersection of lines emerging from the centers of two radius lines creating that Quadrant. In this scheme, due to the circular nature of the network architecture, we keep track of the location information using (r, θ) coordinate system. The advantage of this scheme is that, when a node moves in the same direction, only one parameter changes, i.e., r . There is no need to change θ . Thus instead of processing two parameters we need to process only one parameter. In mobile ad hoc networks, where there is a scarcity of resources, such reduction is very significant.

This protocol uses some-for-all location service, i.e. some nodes (nodes in home regions) are acting as location servers for all the nodes in the network. Instead of storing the exact location at every home region, it uses two level location information strategies. CQRP defines “home region near a node” as the home region which is in the quadrant in which the node is currently present and the location servers in that home region will be storing the complete location information about that node. The remaining three home regions are acting as “far by home regions” and the location servers in these home regions will be storing the relative location information about that node.

Complete location information consists of node ID, Quadrant number, and exact location. Relative location information consists of only node ID and Quadrant number. Using this approach, as a node moves within the same Quadrant, only closer servers need to be updated frequently, whereas remote servers (nodes in far by home region) require only infrequent updates, i.e. they need to be updated only when a node changes its Quadrant.

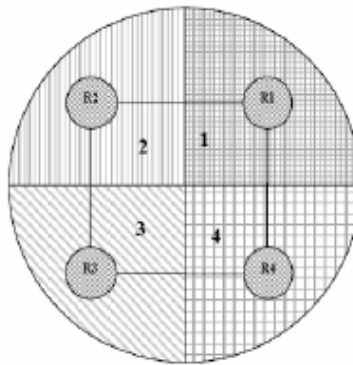


Figure 4.1 : Existing Circular Quadrant Architecture

4.1 CQRS applied to Intra quadrant Location update:

Whenever node 'U' moves from one location to other location within the same quadrant. In this situation, after movement node 'U' informs to location server region. Location server region updates the existing location information related to node U as shown fig.

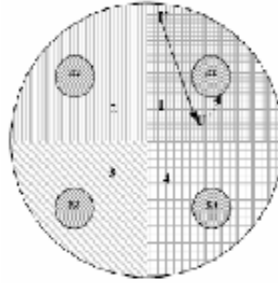


Figure 4.2 : Intra quadrant Location update

4.2 CQRS applied to Inter quadrant Location update:

Whenever node 'U' moves from one location to other location between the quadrants (i.e. different quadrant). In this situation, after movement node 'U' informs to location server which exist in other quadrant. Location server updates the existing location information related to node U as shown in fig.

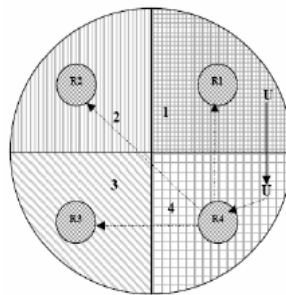


Figure 4.3 : Inter quadrant Location update

5. PROBLEM WITH EXISTING SYSTEM

There are many location management schemes have been proposed in mobile ad hoc network. I am solving some problems of existing **CQRS** location management scheme. In this scheme, there are four location server regions. Each server region has nodes act as a location servers. Existing system maintains four server regions. The management of four regions is

difficult and complicated and in existing system uses few parameters of nodes (radius and angle) for location management.

6. PROPOSED SOLUTION

We proposed a new Circular Quadrant Routing Scheme which offers location management. For Location management, network area is divided into four quadrants. Each quadrant has mobile nodes, which is frequently moved from one place to another place. Here, I am using a proxy node which is act as a reference point. The proxy node is located at center of the whole network area.

In whole network area, there are two types of movement of nodes. First, movement within the region (Quadrant) and Second, movement across the region (Quadrant). After movement, the **location information (quadrant number, x-coordinate, y-coordinate, distance and angle)** of movable nodes will be updated. This location information is stored into the log files. There are four log files will be created for four quadrants.

In this scheme, I am using a Reactive Protocol also called on demand routing protocol. In Reactive protocols, nodes only discover routes to destinations on-demand. Reactive protocols often consume much less bandwidth than proactive protocols, but the delay in determining a route can be substantially large. Proactive protocol is suitable for small network not for larger network because protocol need to maintains node entries for each and every node in the routing table. Here, I am using AODV (Ad hoc on-demand distance vector) Protocol. AODV is a reactive protocol.

7. DESCRIPTION OF PROPOSED SYSTEM

In my proposed solution, I am using a proxy node rather than four location servers. I am using and also calculating parameters like quadrant no., value of x-coordinate, value of y-coordinate, distance and angle. I am also including simulation results for distance and angle.

A position based routing scheme “Quadrant Routing Scheme (QRS)” is used for location update. In this scheme I have assumed that whole network area as a circular. In this scheme a proxy node is used, which is the reference point for the determination of complete location information of each nodes in the network. This complete location information will be changed due to mobility of mobile nodes. The mobile nodes will be changed their location with respect to simulation. The circular area is divided into four quadrants. Each mobile node in four quadrants uses proxy node for location update. Updated location information will be stored into the log files.

This scheme uses “**one for all location service**”, i.e. one proxy node act as a reference point is used for all location update in each quadrant.

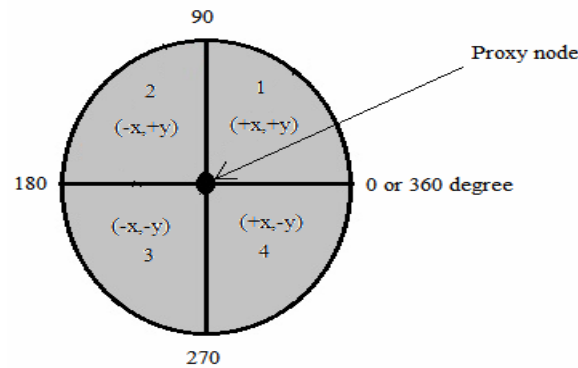
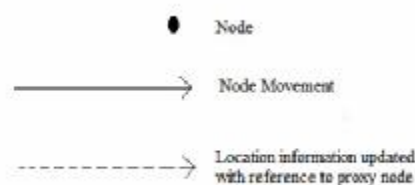


Figure 7.1 Proposed Design Architecture for location management

Complete location information of a node will be determined with the reference of proxy node. Complete location information consists of quadrant number, x-coordinate, y-coordinate, distance and angle from location server node.

CONSTRAINTS AND ASSUMPTION

- Proxy Node is placed at the central position of whole network area.
- Inbuilt AODV protocol is used for communication.
- For TCP and UDP transformation we make TCP and UDP connection between some of the mobile nodes.



8. SIMULATOR USED

A simulator named NS-2.0 [24] is used in order to apply the proposed Location Management Scheme. NS (version 2) is an object-oriented, discrete event driven network simulator developed at UC Berkely written in C++ and OTcl. Following are the capabilities and features of NS2:

- It simulates network quickly.

(ii) It directly uses the real life Linux TCP/IP protocol stacks to generate high-fidelity simulation results. It can also run on windows platform with the help of Cygwin software.

(iii) Protocol: TCP, UDP, HTTP, MAC etc.

(iv) Traffic Model: CBR, VBR etc.

(v) Error Models: Uniform, bursty etc.

(vi) Visualization Tools (NAM), Tracing

DESIGN ARCHITECTURE OF PROPOSED SCHEME: Let' P' be a node in the network. There are two movement of P:

Movement within the region (Quadrant)

Movement between the region(Quadrant).

8.1 Movement within the region(Quadrant):-

Whenever node 'P' will be move from one location to other location within the same quadrant. In this situation

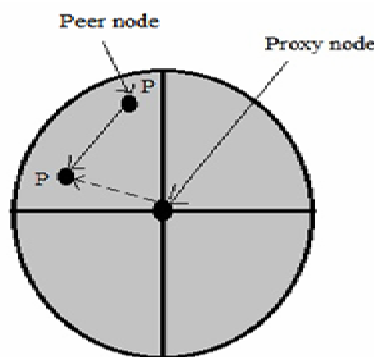


Figure 8.1: movement within the quadrant

after movement of mobile nodes, the complete location information will be updated with reference to the proxy node and the information is stored into the log files. The log files will be created with the help of awk utility of ns2 as shown fig 8.2.

Proxy node is a node which is relatively fixed in mobile ad hoc network and Peer node is a node which is frequently moved from one location to other location. Complete location

information consists x-coordinate, y-coordinate, quadrant number, distance and angle from proxy node.

With the help of angle and value of coordinate, we can obtain which nodes belong to which quadrant. For example if the value of x & y coordinate is negative and angle is lie between 180 to 270 degree that means nodes are lie in third quadrant.

8.2 Movement between the region (Quadrant):-

Whenever node 'P' will be move from one location to other location between the quadrants (i.e. different quadrant). In this situation after movement of mobile nodes, the complete location information will be updated with reference to the proxy node and the information is stored into the log files as shown in fig.

If the mobile nodes will be move within the quadrant, then the complete location information will be changed except quadrant number and if mobile nodes will be move across the quadrant, then the complete location information will be changed including quadrant number.

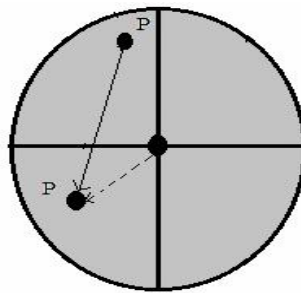


Figure 8.2: Movement between the quadrants

9. CONCLUSION

Proposed system has focused finely on the network performance in terms of through put and fairness. This system involves the implementation of a new location management scheme. We believe that network quality parameters are directly related to the real world for commercial purpose. With the implementation of the CQRS, we have determined some parameters related to particular node such as x-coordinate, y-coordinate, distance and angle. As an additional work, with the help of simulator it has been shown practically that the proposed scheme is fine for location management and also we have analyzed TCP and UDP packets transformation. An algorithm is also designed for location management. With the help of algorithm, it is easy to design proposed system.

10. FUTURE WORK

In future with the help of Distance and Angle of a node, we can identify the node which perform warm activity within the network. For this, we can place IDS (Intrusion Detection System) in central node position. We also embed source code of our proposed scheme in NS2. In our proposed scheme, I am simulating following network parameter: x-coordinate, y-coordinate, distance, angle. In future we can also simulate some other network parameters such as network diameter, radius etc. In future we can also identify those nodes which have gone out of network area with the help of distance and angle.

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E-ACCOUNTING PRACTICES AMONG SMEs: A STUDY OF M.P. REGION

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ABSTRACT

Information technology or Internet-enabled environment helps in fast and accurate decision-making by the SMEs due to increased mobility. The critical components before SMEs are speed of services, access to information, empowering employees in terms of skill and delivering highest valued services at competitive cost. SMEs need IT-based solutions in terms of multi-tasking, expanding customer base, raising productivity, controlling cost, working remotely, fast and accurate decision-making and facilitating collaboration. SMEs have various needs to function in an aggregative manner in order to reach out for value addition by keeping in mind the variable cost model. IT usage by the SMEs raises productivity of the sector in particular and the economy in general.

This study explores the e-accounting practices among SMEs in Madhya Pradesh. The study also looks at the expectations, realities and barriers in adopting e-accounting. The research design is based on a survey methodology using a sample of systematically selected SMEs throughout the state. The findings reveal that SMEs put in place accounting software to generate their financial information. The main value of this paper is the discussion of e-accounting practices of SMEs in Madhya Pradesh.

Key words: SMEs , E-Accounting , Firm, Accounting, MP

INTRODUCTION

Accounting plays a critical role in the success or failure of contemporary business institutions. Accounting systems are responsible for recording, analysing, monitoring and evaluating the financial condition of companies, preparation of documents necessary for tax purposes, providing information support to many other organizational functions, and so on. Prior to the advent of personal computers, businesses were limited to manual methods for keeping track of financial data. the manual accounting systems consisted of paper ledgers,

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typewriters and calculators. Typewriters were used to type invoices and cheques, and all calculations were performed using calculators. However, with this system it was possible for errors to be introduced into the data since they could go undetected for quite some time. Like many other industries, the accounting industry changed with the arrival of personal computers. A computerized accounting system is able to handle financial data efficiently, but the true value of an accounting system was that it was able to generate immediate reports regarding the company. What is therefore e- accounting practice?

E -Accounting refers to Electronic Accounting, a term used to describe an accounting system that relies on computer technology for capturing and processing financial data in organizations. In the literature, two more terms have been used to describe E- accounting: computer-based Accounting System and Accounting Information System (AIS). the computerisation of the accounting function, the term AIS is used primarily to denote the computer-based AIS. In this study the terms E-Accounting and financial information system are used to refer to any accounting system that depends on Information and Communication Technology (ICT) for performing its information system function. Unlike other information systems, Accounting was one of the first functional areas to benefit from computerization when computers were initially introduced to organizations. It should not be a surprise because Accounting plays a very significant role in the performance of organizations. According to Stefanou (2011) the primary purpose of an accounting information system (AIS) is the collection and recording of data and information regarding events that have an economic impact on organisations and the maintenance, processing and communication of such information to internal and external stakeholders. The information is used for the evaluation of the financial position of the organization and for decision-making purposes.

Despite the significance of E-Accounting and its widespread use, there has been relatively little research in the area. Stefanou (2011) noted that a number of authors in various countries share similar views on the lack of research in the area of AIS. This study therefore contributes to filling the gap by exploring the adoption and use of E-Accounting in M.P.'s companies. The specific objectives are to assess the state of the art of e-accounting systems use among Small and Medium Enterprises (SMEs) in, M.P. and to examine the benefits and obstacles facing SMEs in the adoption of e-accounting systems.

The rest of the paper is structured as follows: Section two discusses the extant literature. Section three describes the methodology used. Section four discusses the results of the study and finally section five concludes the study.

LITERATURE REVIEW

Small businesses remain an important part of the business environment (Holmes & Nicholls, 2009; Norwell, 2009; Mitchell, Reid & Smith, 2009). Mitchell, Reid & Smith (2009), underscoring the strategic importance of accounting to firms, noted that the use of

management accounting information could be linked to the success or failure of an SME.

In order to survive, SME owners and managers need updated, accurate and timely accounting information (Lohman, 2010; Amidu and Abor, 2012). Accounting systems are responsible for analysing and monitoring the financial condition of firms, preparation of documents necessary for tax purposes, providing information to support the many other organizational functions such as production, marketing, human resource management, and strategic planning. Without such a system it will be very difficult for SMEs to determine performance, identify customer and supplier account balances and forecast future performance of the organisation. The primary purpose of an accounting information system (AIS) is the collection and recording of data and information regarding events that have an economic impact upon organisations and the maintenance, processing and communication of such information to internal and external stakeholders (Stefanou, 2011). When organizations adopt e-accounting, they usually discover that even though computerized accounting systems handle financial data efficiently, their true value is that they are able to generate immediate reports regarding the organization (Hotch, 2012).

Prior to the advent of personal computers, businesses were limited to two methods for keeping track of financial data (Tavakolian, 2005). One method was to install a mainframe computer and set up a data processing department. This approach had its own difficulties: the mainframe computer was expensive and many qualified ICT personnel were required to handle the various tasks involved in processing the accounting data. In most cases, large corporations were the only organizations that could afford such an expensive system.

The other option was to have a manual accounting system. Such a system consisted of paper ledgers, typewriters and calculators. Each customer or vendor was on a separate ledger card which contained all the transactions for that company. Typewriters were used to type invoices and cheques, and all calculations were performed using calculators. The key drawback of the manual system was that it was possible for errors to be introduced into the system and that the error could go undetected for quite some time.

Initially SMEs had no option but to adopt manual systems since the mainframe accounting system was not within their means. However, with the introduction of PC-based Accounting Systems, both the computer hardware and the accounting software have become cheaper, creating an opportunity for SMEs to adopt e-accounting. Nevertheless, there are several factors that determine whether an organization adopts e-accounting or not. Such factors have created a division between e-accounting adopters and non-adopters.

Although the proliferation of accounting software and PC has created an opportunity for SMEs to adopt e-accounting, it also creates problems for innovation adoption. Accounting is a critical application in companies of all sizes, computer managers are hence caught in a no-win situation. They are encouraged to embrace new technologies or face obsolescence. On

the other hand, experimenting with new technologies at the expense of the accounting data can be a risky proposition (Preston, 2009). Changing accounting systems to fit new technology can be a very difficult task: data needs to be converted from the existing system to new system; accounting staff and all users need to be retrained and sometimes source documents and reports need to be redesigned.

Studying the factors that influence computer adoption, internet adoption and accounting software adoption, Taragolaetal (2011) concluded that the probability of computer adoption is significantly influenced by business size, importance of creativity and innovation, education level and computer training of the firm manager and the partner. However, internet adoption is positively related to computer training of the firm manager, creativity and innovation, growth, stabilization and negatively related to intrinsic objectives (being independent). Nevertheless, the intention to adopt accounting software is positively related to a favourable attitude towards accountancy and 'intrinsic objectives'. The conclusion of the study shows that factors determining e-accounting adoption are actually different from those determining ICT adoption in general.

The theory of diffusion of innovations (Rogers, 1995) offers a conceptual framework for analysing the adoption of ICT by firms. According to the theory, besides external variables, personal characteristics of the firm manager and firm characteristics do have an impact on the adoption of innovations.

One issue that remains is whether adopters of e-accounting make maximum use of the system. Marriott and Marriott (2010) noted that companies used computers for the preparation of management accounting information, but usually not to their full potential. It is therefore important that the research in e-accounting adoption is not limited to adopters and non-adopters, but that for even adopters the extent to which e-accounting is used to the maximum be studied.

RESEARCH METHODOLOGY

This study relied on a sample of systematically selected SMEs throughout the M.P.state. We sampled 30 SMEs. SMEs in M.P. state are defined as firms employing less than 50 workers. Out of the 100 questionnaire sent out, 48 were received, representing 48%. The resulting response rate was expected for a survey of this type considering that empirical studies involving SMEs have been known to generate far lesser percentage response rates. The sample included both users and non users of e-accounting systems. The survey instruments included open ended and closed ended questionnaires. We also followed up with personal or telephone interviews with managers of these firms. In order to ascertain the benefits of e-accounting, we focused on SMEs that adopt accounting software in their operations. Users of accounting software were selected from the cliental lists of some

accounting software application providers. The benefits of e-accounting adoption were also measured with a five point Likert-type rating scale. Data obtained from respondents was entered into an SPSS database application for analysis. The findings are presented by the use of descriptive statistics.

Characteristics of the Sampled Firms

Table 1 presents the characteristics of the firms based on, size, form, ownership, gender and industry classifications. On the size classifications, the firms were grouped as: micro representing 10% of valid respondents, small (31%) and medium (59%). The form of business organisation was also identified: Sole proprietorships were made up of 17% of the total respondent firms, 7% of the valid respondent firms were organised as partnership and the remaining 76% were organised as limited liability companies. In terms of ownership, majority (85%) of the firms were localites owned. Other state firms were made up of 10% of respondents and 5% of total valid respondent firms were owned by both local and other states. Majority (79%) of the firms were male owned. Eight industries were identified and they are agriculture, representing 15% of valid respondents, manufacturing (40%), mining and construction (5%), wholesale and retail trade (16%), hotel and hospitality (9%), information technology (5%), medical service (7%) and general services (3%).

TABLE 1
CHARACTERISTICS OF SAMPLED FIRMS

	Frequency	Percentage
<i>Size</i>		
Micro	6	10
Small	18	31
Medium	34	59
<i>Form</i>		
Sole-proprietor	10	17
Partnership	4	7
Limited Liability Company	44	76
<i>Ownership</i>		
Local	49	85
Other state	6	10

Both	3	5
Gender		
Male	38	79
Female	4	8
Both	6	13
Industry		
Manufacturing	23	40
Agriculture	9	15
Construction & Mining	3	5.
Hotel & Hospitality	5	9
Information Technology	3	5
Medical Services	4	7
Wholesale & Retail Trade	9	16
General Services	2	3

Table 2 illustrates the background and training of the CEOs of respondent firms. As shown in Table 2, 76% of the CEOs have degrees or higher education and 17% have a diploma. CEOs of the respondent firms also have professional training in diverse disciplines: accounting and finance (22%), Economics (12%), management (26%), engineering (17%), law (7%), I.T (7%) and human resource (7%).

TABLE 2
BACKGROUND AND TRAINING OF CEO

	Frequency	Percentage
<i>Education of CEO</i>		
Primary	1	2
Secondary	3	5
Diploma	10	17
Degree or Higher	44	76

Professional Training of CEO

Accounting & Finance	13	22
Economics	7	12
Marketing	15	26
Human Resources	4	7
Law	5	9
Engineering	10	17
Information Technology	4	7

Survey results 2012

Table 3 gives a breakdown of the educational level of the accounting head and accounting staff of the firms. Accounting heads with professional qualification make up 26% of valid respondents. Those with a degree are 19%. Accounting heads with both degrees and professional qualifications are 24% and only 2% of accounting heads have secondary education. The accounting heads have the following professional designation: ACCA (29%), CA (21%) and CIMA (6%).

TABLE 3
BACKGROUND AND TRAINING OF ACCOUNTING HEAD

	Frequency	Percentage
<i>Education of Accounting Head</i>		
Secondary	1	2
Diploma	7	12
Degree	11	19
Professional Qualification	15	26
Professional Qualification plus Degree	14	24
<i>Professional Qualification</i>		
CA(MP)	12	21
ACCA	15	26
CIMA	2	4
Others	29	50

Survey results 2012

Table 4 below gives a detailed summary of the accounting staff strength of the firms. Out of the valid respondents firms, 78% of the firms have a dedicated accounting staff. About 22% of the firms do not have dedicated accounting staff. Majority of the firms have accounting staff strength of about 1-5 making up 64% of valid respondent, this is followed by about 6 -10 (24%), 11-20 (10%) and above 20 (2%). In addition to the number of accounting staff, the education level of the staff was analysed. Accounting staff who have degree make up 14% of the firms. PGDFA holders are 26%, 19% are Chartered Accountants; those with postgraduate degree are 16%.

TABLE 4
ACCOUNTING STAFF

	Frequency	Percentage
<i>Have a Dedicated Accounting Staff</i>		
Yes	45	78
No	13	22
<i>Number of Accounting Staff</i>		
1-5	37	64
6-10	14	24
11-20	6	10
Above 21	1	2
<i>Qualification</i>		
RSA	6	10
DBS	3	5
GCE/SSCE	6	10
PGDFA	15	26
Degree	8	14
Postgraduate Degree	9	16
Chartered Accountant	11	19

Survey results 2012

Corollary to the above is to assess the state of the art of e-accounting systems use among SMEs in MP.

The results as indicated in Table 5 suggest that almost all the respondents use computers in their operations and that all SMEs contacted use accounting softwares in their operations. This implies that majority of SMEs in MP have adopted e-accounting systems. The result of this study showed that, Tally, Sage, Excel and QuickBooks are the kinds of accounting softwares that SMEs have adopted. The result revealed that majority of the SMEs (25%) are interested in excel based accounting system while 9% preferred the use of Sage accounting software. However, a study is needed to investigate how firm-level characteristics influence the adoption of e-accounting system. On platform of the accounting usage, majority of the respondents have some form of network. While 59% use network, 13% adopt peer-to-peer platform. Sixteen, representing 28% adopt standalone system.

TABLE 5
STATUS OF COMPUTER USAGE

Use of computers in operations	Respondents	Percentage
Yes	56	97
No	2	3
Total	58	100
Use of accounting softwares in operation		
Yes	56	100
No	0	0
Total	56	100
Kinds of accounting softwares		
Tally	26	47
Sage	5	8
Excel	14	25
QuickBooks	4	7
Others	7	13
Total	56	100
Platform		
Network	33	59
Standalone	16	28
Peer-to-peer	7	13
Total	56	100

Survey results 2012

Table 6 shows the goals for implementing computerised accounting systems among SMEs in MP. Out of 56 SMEs who use computers in their operations, 44 representing 79% of the respondents reiterated that the use of computer enables them to reduce cost, enhance clerical works, provide sufficient space to store data and process information for management decision. Two (4%) indicate that the use of computer has enabled them to effectively manage their cost of operation, 5% mentioned that their computer usage reduces clerical works, 4% use computer to facilitate storage of data while 8% of the respondents use computers to provide timely management information for decision making.

With regard to accounting and finance functions of accounting software, almost all the respondents indicated that they use the software for accounts receivables functions as well as accounts payables, inventory management, payroll, general ledger, fixed assets management, bank reconciliation and cash management. Eighty four percent of the SMEs are satisfied with the performance of their accounting software. It is only small number of the firms selected who were not very satisfied with the results of their accounting software.

TABLE 6
GOALS OF IMPLEMENTING COMPUTERISED SYSTEMS

Benefits	Respondents	Percentage
Timely information management	5	8
Large storage capacity	2	4
Reduction of clerical works	3	5
Cost effectiveness	2	4
All the above	44	79
Total	56	100
Functionality		
Account receivables	2	4
Account payables	2	4
Inventory management	2	4
Pay roll	2	4
General ledger	3	5
Fixed assets management	1	2
Bank reconciliation and cash management	2	4
All the above	42	75
Total	56	100
Performance		
Very satisfied	22	39
Somewhat satisfied	25	45

Somewhat dissatisfied	6	11
Very dissatisfied	3	5
Total	56	100

With the issue of the benefits of computerized accounting information in mind, a question was designed to explore the significance, prevalence and potential problems and challenges inherent in most SMEs in MP. The survey result shows that majority of the respondents encounter problems in supply of electricity as 38% of the respondents say they have problems in accessing uninterrupted supply of power. The result shows that 25% of the SMEs contacted indicated that frequent breakdown of their accounting system is their next biggest problem. However, only 5 firms representing 8% indicated that they face all the problems listed. These include, inaccurate reports generated by the accounting systems, frequent breakdown of the system, inability of the system to support large volumes of data, lack of constant supply of power, inability to import or / and export data, and inability to fully comprehend and interpret the results from the system.

TABLE 7
PROBLEMS AND CHALLENGES OF IMPLEMENTING COMPUTERISED SYSTEMS

Problems	Respondents	Percentage
Inaccuracy of reports	1	2
Frequent breakdown of the system	14	25
Inability of the system to support large volume of data	6	11
Lack of constant supply of electricity	21	38
Inability to import or / and export data	5	9
Inability to fully comprehend and interpret the results	4	7
All the above	5	8
Total	56	100

Table 8 shows how SMEs can manage and improve upon their accounting systems. Almost all the respondents contacted suggest that the system should be easier to up-date, the use of multiple window operations at the same time should be encouraged and the need to use the firm logo on the invoice within the system should be included in the package. In addition, customization of report will solve the problem of the inability of the SMEs to fully comprehend and interpret the results generated from the system.

TABLE 8
WAYS OF IMPROVING THE SYSTEM

Ways of improving the system	Respondents	Percentage
The needs to be easier for updates	2	4
Multiple window operations at the same time	2	4
The need to use the firm logo on the invoice within the system	2	4
Customization of report	1	2
All the above	49	87
Total	56	100

CONCLUSION

The study examined the e-accounting practices among SMEs in MP. The study revealed that almost all the SMEs sampled attach a lot of importance to financial information by employing at least degree holders and Chartered Accountants to handle their accounting information. The study also showed that majority of the firms put in place accounting softwares to generate their financial information. This has the tendency to reduce cost, enhance clerical works, and provide sufficient space to store data and process information for management decision in a timely manner. In terms of functionality, the results of the study showed that almost all the SMEs use the software for accounts receivables functions as well as accounts payables, inventory management, payroll, fixed assets management, bank reconciliation and cash management. The results of the study also revealed that majority of the SMEs encounter problems in supply of electricity with the frequent breakdown of their accounting system. We found that almost all the SMEs are generally satisfied with the performance of their accounting software.

It is recommended that SMEs in MP adhere to good and standard accounting principles in their operations. The adoption of e-accounting would ensure proper accounting practices as good accounting practices have several implications for entrepreneurs and SME managers. Good accounting and control systems could assist in evaluating the performance of the organisation and its managers. SMEs with proper books of accounts are often capable of attracting external financing easily than those with no good.

Records. SMEs that maintain good accounting and management information tend to be viewed favourably by finance providers. Following from these findings, it would be useful to also consider the following directions for future research:

- What determines the decision to adopt e-accounting system by SMEs in MP?
- Examining the benefits and obstacles facing hospitals in the adoption of e-accounting systems; and
- Looking at future plans that SMEs of MP have regarding e-accounting systems

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RETENTION OF EMPLOYEE IN INDIAN EDUCATION SECTOR - A STUDY OF NORTHERN INDIA

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ABSTRACT

Employee Retention involves taking measures to encourage employees to remain in the organization for the maximum period of time. Education sector is facing lot of problems in employee retention these days. Hiring knowledgeable people for the job is essential for an employer. But retention is even more important than hiring. There is no dearth of opportunities for a talented person. There are many organizations which are looking for such employees. If people are not satisfied with their job, they may switch over to some other more suitable job. In today's environment it becomes very important for organizations to retain their employees. This paper aims to study the retention strategy which will show the way to victory in the modern era of education sector.

Keywords: Retention, switchover, Northern India

LITERATURE REVIEW

INDIAN EDUCATION SECTOR

The Indian education sector has been recognized as a “Sunrise Sector” for investment in the recent past. This recognition stems from the fact that the sector offers a huge untapped market in regulated and non-regulated segments due to low literacy rate, high concentration in urban areas and growing per capita income. The Government has also been proactively playing the role of facilitator in this sector.

The higher education sector, outstanding to its enormous prospective, keep its prospects. With an estimated 150 million people in the age group of 18-23 years, the sector offers one of the most attractive yet highly complex markets for the private/foreign players.¹

Despite some inherent concerns with respect to choice of entity, not for profit character and foreign investment in formal education space; the industry does offer various innovative business opportunities, which can be explored for establishing a presence.

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The Government of India has recently reignited its reforms agenda by opening up certain sensitive sectors to foreign investment such as retail and civil aviation, which should ideally result in increased economic activity and employment generation. In order to capitalize on this huge employment opportunity, in the higher education sector also by reducing the complexities governing foreign investment. This should also help the Government in achieving its aggressive goals of access, equity and excellence in higher education.

The Planning Commission in its approach paper to 12th Five Year Plan had suggested that the current “not-for-profit” approach in the education sector should be re-examined in a pragmatic manner so as to ensure quality without losing focus on equity – we believe that the Government should seriously consider this suggestion to attract private/foreign investment in this sector.

This Report provides an overview of the higher education sector in terms of sub-segments, market size and latest trends, regulatory framework, sectoral challenges and present/future opportunities for investment. The primary finding of our analysis is that the opportunity for investment and capital appreciation being offered by the Indian higher education sector is unparalleled. However, one needs to be wary about the various complexities in terms of structuring of investment, market offering, entity options and tax implications.

Employability in education sector increase day by day and same ratio of retention will move downwards there is two major factor firstly, opportunities and secondly, growth rate this will lead to employee move one organization to another for that educational institution has to think seriously for retention rate.

Current higher education sector in India:

- India has a total of 610 universities. 43 central universities, 299 state universities, 140 private Universities, 128 deemed universities and 5 institutions established through state legislation, 30 Institutions of National Importance.
- There are 45 technical institutes, 13 management institutes, 4 information technology institutes, 6 science and research institutes and 3 planning and architecture institutes
- Currently, the Government spends around 3.8% of its GDP on education
- Less than 1% of the \$38 bn of the Government spend on education was towards Capex (2008-09)
- According to the 2011 census, the total literacy rate in India is 74.04% compared to the world average of 83.4% (2008)
- The female literacy rate is 65.46 % and male literacy rate is 82.14 %
- FDI inflows in the education sector during May 2012 stood at \$31.22 mn

Source: UGC Annual Report 2010-2011- DGET; Ministry of Human Resource Development (HRD) Annual Report 2011-2012; Planning Commission: Midterm Review of XI Plan.

RESEARCH METHODOLOGY

The study was made in descriptive research design. The study was carried out with the objectives of finding out the importance of employees retention and their opinion. The method of distributing a Questionnaire to the employees was carried out, on the bases of primary data. The universe of the study comprises of about employees in different Educational institutions of Deharadun city. 150 samples were distributed and 109 samples were collected and out of those 100 samples were useful for my study. To extract meaningful information from data collected, analysis of data and interpretation was carried out by using statistical tools. Here the sampling technique adopted is non- probability sampling. The sample design used here is convenience sampling.

ANALYSIS AND INTERPRETATIONS

TABLE 1: MARITAL STATUS OF EMPLOYEES

S.No	Marital status	No. of respondents	Percentage
1	Single	68	68%
2	Married	32	32%

Interpretation:

The table clearly shows that most number of the employees is unmarried in the organization. 68% of the employees are unmarried whereas 32% are married.

TABLE 2: WORKING EXPERIENCE OF EMPLOYEES

S.No	Experience range	No. of respondents	Percentage
1	Less than 2 years	38	38%
2	2 years – 5 years	46	46%
3	5 years and above	16	16%

Interpretation:

As it is clear from the table, most number of respondents worked for period ranging from 2 years to 5 years. The respondents in this category were 46. 16 employees have been working for more than 5 years and 38 employees have been working for less than 2 years.

TABLE 3: THE RESPONDENTS OPINION OF THE ISSUE RELATING TO THE IMPORTANCE OF RETENTION OF EMPLOYEES IS CONSIDERED

S.No	Retention of employees is considered	No. of respondents	Percentage
1	Yes	72	72%
2	No	28	28%

Interpretation:

The above table shows how important the respondents thought the issue of employee retention was. Respondent who felt that retention of employees was important issues were 72 in number. However, 28 of them felt that it was not an important issue

TABLE 4: THE OPINION OF RESPONDENTS ABOUT THE LEVEL OF STRESS ON WORKING AND NON WORKING

S.No	Working Facing stress > Non-working	No. of respondents	Percentage
1	Yes	48	48%
2	Stress is equal	40	40%
3	No	12	12%

Interpretation:

From the above table it can be understood that most feel that working are under more stress than non-working. 48 respondents felt that working have more stress than non-working. 40 respondents are of the view that the stress is equal on working and non-working.

However, 12 respondents are of the opinion that working does not face greater stress than non-working.

CORRELATION

H₀: There is no significant difference between the existing organizational culture and the role played in the retention on employees.

H₁: There is a significant difference between the existing organizational culture and the role played in the retention on employees.

		Organizational culture's role in retention of employees	View about the organizational culture
Organizational culture's role in retention of employees	Pearson Correlation	1.000	.702
	Sig. (1- tailed)	.	.000
	N	100	100
View about the organizational culture	Pearson Correlation	.702	1.000
	Sig. (1- tailed)	.000	.
	N	100	100

**Correlation is significant at the 0.01 level (1-tailed).

Interpretation:

The Sig value .000 is less than .05, therefore H₀ is rejected.

Therefore, there is a significant difference between the existing organizational culture and it plays a major role in the retention of employees.

RECOMMENDATIONS

- The organization should arrange a monthly meet where the employees can share their problems and issues to the management.
- The organization can organize counseling program where the employees eliminate their stress and boredom.
- The organization can have a place on weekends where the children of

employees can spend their time. Otherwise, it becomes difficult for the employees to leave their small children at home and attend office on weekends.

- The Organization should enrich their employees by providing optimum trainings regularly.
- The organization should provide regular social and community development program.
- The organization must keep personal attention to every employee.

CONCLUSION

The first important thing would be to try to find out the reasons for the attrition. The reasons can be low compensation, low motivation, less challenging work etc. After finding the reasons, the organization needs to work on it as soon as possible.

The employees work efficiency increases when he is feels satisfied. Satisfaction comes only when he is ensured of his basics needs of food, shelter and job security. When he is deprived of any of these basic physiological needs he losses faith in the organisation and as a result his/her efficiency deteriorates thereby causing an ultimate loss to the organisation.

Thus employee retention is mandatory since the employee with a secured job can contribute whole heartedly with out fear towards the upliftment of the organization than a temporary employee. In case of incompetencies in employees suitable training may be provided in their field by the organization than firing the employees off their job.

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FUTURE PROSPECTS OF GREEN MARKETING

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ABSTRACT

Green marketing is a concept of imbalance in the eco system. Green, environmental and eco-marketing are part of the new marketing approaches which do not just refocus, adjust or enhance existing marketing thinking and practice, but seek to challenge those approaches and provide a substantially different perspective. Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. This concept has enabled for there-marketing and packaging of existing products which already adhere to such guidelines. Additionally, the development of green marketing has opened the door of opportunity for companies to co-brand their products into separate line, lauding the green-friendliness of some while ignoring that of others. Such marketing techniques will be explained as a direct result of movement in the minds of the consumer market. This paper discusses the three particular segments of green consumers and explains out its effectiveness challenges and opportunities businesses have with green marketing. The paper also examines the present trends of green marketing in India and gives a brief look at the future of green marketing and concludes that green marketing is something that is still continuously growing in both practice and demand.

Keywords: *Green marketing, Environmental, Ecosystem, Product, Consumer*

INTRODUCTION

The green marketing was first introduced in the late 1970s when the American Marketing Association (AMA) organized the first ever workshop on ecological marketing in 1975 which resulted in the first book on the subject, entitled 'Ecological Marketing' by Henion and Kinnear in 1976. The first definition of green marketing was according to Henion as follows:

"The implementation of marketing programmes directed at the environmentally

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conscious market segment" (Banerjee 1999). Henion's definition of green marketing has evolving and many more definitions of green marketing have arisen throughout the years. Fuller (1999) defined the green marketing as follows: "The process of planning, implementing, and controlling the development, pricing, promotion and distribution of products in a manner that satisfies the following three criteria: (1) Customer needs are met, (2) Organizational goods are attained and (3) The process is compatible with the ecosystem.

According to Ottman (1999) green marketing serves two key objectives as follows:

- To develop the products that incorporate consumers' needs for convenience, affordable pricing and performance while having a minimal impact on the environment.
- To project an image of high quality, including environmental aspects, both in regards to product attributes and in regards to product attributes and manufactures tracks record of environment fulfillment.

It is worth noting that green marketing is actually related to another topic which is gaining visibility in corporate circles and corporate social responsibility (CSR). A company can provide fewer napkins, using less ink and paper, encouraging customers to use online billing for offices which are all green initiatives that can quickly reduce costs of the company. Green marketing is very important item for a company because it offers business bottom line incentives and top line growth possibilities. Companies can develop new and improved products and services with environmental impacts which help access to new markets, substantially increase profits and enjoy competitive advantages. The term *Green marketing* refers to the planning, development and promotion of products or services that satisfy the needs of consumers for quality, output, needs of consumers for quality, output, however a negative effect on the environment, with regard to the use of raw material, the consumption of energy etc (Peattie and Crane 2005, Grant 2008, Pride and Fecrell) In the USA the *green market* counts about \$250 billion, while 63 million of consumers are directed towards product that either protect the environment contrary to the conventional ones, or have been produced with processes that respect the society and the environment. The same consumers are prone to spend an additional 7-20% in order to buy pure *green* products and reject the non-viable alternatives, offered to them by the conventional market (Reitman's 1992, According to a recent research, at a world level, the positive fame of a company about its environmental responsibility is determined by the 5'3% of consumers (about 1 billion) as a decisive reason that makes them buy and' -use its products (Spanos 2008, Papadopoulos et al. 2012).

OBJECTIVES OF STUDY

- (1) To define the future prospects of green marketing in India
- (2) To describe the importance of green product marketing.

IMPORTANCE OF GREEN MARKETING

Economy of the world faces serious difficulties due to global warming, greenhouse gas (GHG) (Mohajan 2012). Green marketing is in due to the pressure that comes from inclined environmental awareness in the global climate change. Therefore, the marketers need to include a green approach in framing the marketing programmes. There are several suggested reasons for firms increased use of green marketing and some of them are as follows (Singh 2008):

- Organizations perceive environmental marketing to be an opportunity which can be used to achieve its objectives,
- Organizations believe that they have a moral obligation to be more socially responsible,
- Cost factors associated with waste disposal or reductions in material usage. Forces firms to modify their behavior.
- Competitors' environmental activities pressure firms to change their environmental marketing activities, pressure firms to change their environmental marketing activities, and
- Governmental bodies are forcing firms to become more responsible.

The customers always want to buy eco-friendly and environment harmless commodities for their daily lives. In 2007 *green marketing* came in main stream of global business and it has captured the public consciousness. The best example of green marketing issues that helping to make environment safe and eco-friendly is from printing machines industries which are trying to be greener by reducing emissions of Volatile Organic Compounds (VOCs), handling of contaminated water and toxic waste as well as tracking of inks, solvents and other chemicals (Chaudhary et al. 2011). The McDonald's company replaced its clam shell packaging with waxed paper because of increased consumer concern relating to polystyrene production and ozone depletion (Singh 2008). The government of a country can stress to produce green marketing commodities to reduce production of harmful goods or by-products, to modify consumer consumption of harmful goods. These governmental regulations are designed to control the amount of hazardous wastes produced by firms. Government can impose a tax on production or use of non-green marketing products. For example, in Australia there is a higher gas tax associated with leaded petrol. A company can produce green marketing product to teach other companies the importance and demand of it.

GREEN MARKETING PRODUCTS

The customers always prefer environmental household products which must benefit them such as, safe to use around children, no toxic ingredients, no chemical residues, and no strong

fumes commodities. At present most of the daily newspapers are in online and seminars, conferences and publications as well as on-going webinars on how to become a green company or community. School kids have environmentally related projects at schools or eco-friendly programs that they are implementing at home or in their communities (Chaudhary et al. 2011). Most of the companies practicing green marketing in their products and some of them are as follows:

- Coca-Cola Company of the USA pumped syrup directly from tank instead of plastic which saved 68 million pound/year.
- Xerox introduced a high quality recycled photocopier paper in an attempt to satisfy the demands of firms for less environmentally harmful products.
- In 1994, Philips launched the *Earthlight*, a super energy-efficient compact fluorescent light (CFL) bulb designed to be an environmentally preferable substitute for the traditional energy intensive incandescent bulb.
- In India, Badarpur Thermal Power station of NT PC in Delhi is devising ways to utilize coal-ash that has been a major source of air and water pollution.
- In India, Barauni refinery of IOC is taken steps for restricting air and water pollutants.

CONSTRAINTS TO IMPLEMENT GREEN MARKETING

Implementation of green marketing in the industrial and manufacturing sectors is not an easy job. The firm has to face many problems while treading the way of green marketing. In any country to product materials for green marketing the manufacturers have to face various challenges. Some of these challenges are being as follows.

- To supply green marketing products first the manufacturers need to create public consciousness about the usefulness of the use of these types of products. The consumers must know that green marketing encourages the manufacturers to product green products, to use green technology and green energy which-are environmentally less harmful.
- It need a lot of money has to be spent on R&D (research and development) programmes, so that initially it will be a costly matter.
- Initially the profits of the company will be very low because renewable and recyclable products and green technologies are more expensive but in the long run if will be profitable since consumers will want to spend extra amount for green products.
- At the starting many customers may not be willing to pay a higher price for green products which may affect the sales of the company. Initially the

environment conscious people will be the buyers of green product

THE FUTURE OF GREEN MARKETING

There are many lessons to be learned to avoid green marketing myopia, the short version of all this is that effective green marketing requires applying good marketing principles to make green products desirable for consumers. The question that remains, however, is, what is green Marketing's future? Business scholars have viewed it as a "fringe" topic, given that environmentalism's acceptance of limits and conservation does not mesh well with marketing's traditional axioms of "give customer what they want" and "sell as much as you can". Evidence indicates that successful green products have avoided green marketing myopia by following three important principles:

CONSUMER VALUE POSITIONING

- (1) Design environmental products to perform as well as (or Better than) alternatives.
- (2) Promote and deliver the consumer desired value of Environmental products and target relevant consumer market segment.
- (3) Broaden mainstream appeal by bundling consumer Desired value into environmental products.

CALIBRATION OF CONSUMER KNOWLEDGE

- (1) Educate consumers with marketing messages that connect environmental attributes with desired consumer value.
- (2) Frame environmental product attributes as "solutions" For consumer needs.
- (3) Create engaging and educational internet sites about Environmental products desired consumer value.

CREDIBILITY OF PRODUCT CLAIM

- (1) Employ environmental product and consumer benefit claims that are specific and meaningful.
- (2) Procure product endorsements or eco-certifications from trustworthy third parties and educate consumers about the meaning behind those endorsements and eco certifications.
- (3) Encourage consumer evangelism via consumers social and internet communication network with compelling, interesting .and entertaining information about environmental products.

CONCLUDING REMARKS

In this paper we have studied that Green marketing is a very good concept in today's world. Due to increase of global warming the firms have to produce green marketing commodities. Adoption of green marketing in the society may not be easy in the short run, but in the long run surely it will be profitable. Government and various social organizations may compel all the organizations to practice green marketing for sustainable development. We have tried to give a guideline to encourage the Indian manufacturers to produce harmless green marketing products. To initiate green marketing products all the supports of the government must be needed. Also the consumers will be conscious to buy green marketing products, although these products are comparatively costly but less harmful and very useful for future generation. In future green marketing will be a wider concept and it is helpful in various prospect to our society and people more research study is needed to be done in the field of green marketing.

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WEB SITES

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XX CHROMOSOME: FIGHTING GENDER DIVIDE

Prof. Silpy Gupta¹

‘To succeed you have to believe in something with such a passion that it becomes a reality’.

Anita Roddick

Middle class background was never hindrance for Preeti Lochan to transcend (aim) high in her career. She had a focused vision to climb up the corporate ladder, attain high position to reach the very top in the business world. She had an uncanny clarity of mind for her plans to achieve her desired goals. Her family was her pillar of support emotionally. They extended all moral and material help to Preeti to realize her dreams. Her strong will power, self confidence, positive attitude and high integrity assisted her to stand out different from others to fulfill her personal and professional aspirations.

Preeti was sincere, worked hard as a student and completed her post-graduation from a good Business School with high aspirations. She was determined for a career in management. She knew of the difficult path a woman had to traverse to succeed in a male dominated business world. She was aware of the stereotypes for a working woman, the outdated antiquated accepted wisdom of following the beaten path of tradition in the corporate culture. She kept herself updated with the unfolding events of the business world in the country and abroad. She also faced subtle, covert and overt forms of discriminatory gender practices that is common in society as well as organizations and kept in touch with similar instances through her class room and additional readings. She became aware of the discrete challenges women faced at workplace. The challenges were from unwarranted treatment of a person due to her gender. Distinct forms of gender discrimination at workplace even include physical and mental harassment, primarily disguised to seek sexual attention and favors, unwanted sexual advances that leave a woman irritated and exasperated. Other form of discrimination is when a male employee earns more money with the same expertise, skill set, experience that is equivalent to a female employee. Organization policies and practices tend to be discriminative too, and these affect employees of a certain gender. These incidents have been

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constantly highlighted and conferred in different forums to draw people's attention for a long time. Fortunately by design or default, through the pressure of statutory provisions many companies are exploring and responding to such issues robustly and vigorously of late. Increasing number of companies now focus on taking many initiatives for acquiring, engaging, and retaining women talents in the workplace. Organizations now do not wish to lose talented and educated women. However, such attempts are more symbolic that substantial resulting in increasing number of women who opt to leave the workforce as a consequence of such gender discriminatory practices with no effective remedies.

All this did not deter Preeti and she kept all thoughts and apprehensions of future is-happenings aside. She prepared and resolved hard to find her rightful place to fit in the competitive and complex corporate world. Her preparation and talent worked for her and she got her first job offer through campus placement. She joined manufacturing firm at an entry level position. This was an important mile stone in her life. She stepped into a new role that she always desired. Preeti was elated and excited initially. She celebrated this big moment of her life with family and friends.

Preeti always kept a positive outlook during this entire transition to a new life. She went through mixed emotion of excitement, joy, stress and tension on the first day of her job, all at the same time. She was understandably nervous, apprehensive and anxious about her new role and responsibilities, new corporate culture, the new people with whom she looked forward to work. Preeti attended a structured induction cum orientation programme of two weeks that started from the very first day of her joining. This programme helped her immensely to understand and get used to her new life more effectively than if she had not attended it. She became aware of the organization culture, best work practices, different layers of functions within the departments in the organization. She was introduced to the group she would work and was made aware of her job description, duties and responsibilities. Preeti felt lucky enough to start her career under the able guidance of a senior like Mr. Anuj Srivastav. Anuj realized the immense potential of Preeti, constantly guided her throughout her stay in the company and played the role of a mentor. Preeti proved to be a hard working, dedicated, passionate and determined employee.

Preeti's journey was not at all smooth as she had imagined. She identified herself in the position of maximum business women whose story she used to read during college times. She started relating her career ride with the stories of difficult and slippery career journey of women, shared and discussed by the world outside. She too received a lower pay package than her male counterparts in the similar position/s. Even while she was competent to give her best delivery of outcomes, she was denied more challenging tasks, responsibilities and authority/power compared to her male colleagues in similar positions. Her career growth was slower and tougher compared to others. She got transferred more frequently than other male counterparts and this denied her fresh opportunities to grow as fast as desired while other male colleagues over took her in every known parameter of career growth. She suffered by

way of missed learning opportunities of new and fresh challenges in career. Even while the transfers meant relocation every time, she accepted the offers willingly, happily, readily without any manifestation of discomfort or unease. This rather helped her to gain a thorough knowledge about different operations in the organization. Another concern of subtle gender discrimination is the stereotyping that occurs in the organization for women employees. As women bear most of the responsibility for family care and house work, they are assumed to be less productive and less dedicated towards their profession which is entirely untrue. International Labour Organization (ILO) has repeatedly estimated that every dollar spent on women employees rewards the organization 40% more than her male counterparts because of increased focused, better quality and consistency. This is a false assumption about women's abilities.

Preeti had an uncovered complain that her male co-workers do not listen to her properly, do not extend helping hand and occasionally behave as if she is an ineffective worker. Male ego is insatiable hungry. The more it is fed, the more it demands. At the back of mind, they believe in 'all or nothing' approach. The subtle hints are either to succumb or suffer. As such Preeti was not considered for tougher jobs and not included in crucial decision making process that denied her so many missed learning opportunities. Preeti took all such everyday challenges in her stride, pursued her own self set goals of excelling but had to fight against irrational prejudices of her colleagues to prove her capability and competency.

Despite making great strides in workplace equality worldwide, gender discrimination is still a real problem. In an ideal world, everyone should be able to compete on a level playing field. Preeti took a while to find her own unique method to respond to workplace gender discrimination without ruffling anyone's feathers. Nevertheless dealing with this issue can be done if a person knows the steps to take.

Many times she thought to quit it all. However she was aware that doing this would reinforce the prevailing prejudices of her male colleagues. It was a classic 'catch 22' situation. She continued her efforts to fulfill her aspiration despite all odds as she was never given the due credit for her accomplishments. Preeti was fortunate enough to have the support and attention of her mentor Mr. Srivastav. Not every woman is that lucky as Preeti to get a sincere, well meaning mentor at their workplace. Srivastav was a constant support to her as her mentor, coach, trainer, counselor and educator throughout her career. She could walk in any time of the work day in Srivastav's cabin to seek some guidance on any immediate issue. He always convinced her that any problem is never a problem. It is the ways we react and respond to a situation. Preeti therefore resolved to continue her struggle to overcome the barriers put by males at her work place, without taking recourse to legal remedies, keeping in view the social expectations from female employees.

All this while, though there was a slow progress in her career but it was steady which helped her to reach the level of Vice President in the same company.

This dedication towards her profession saw Preeti rise above difficulties and fulfill her aspirations of career.

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