CHAPTER 2

REVIEW OF LITERATURE

A comprehensive study about the review of literature made by the researcher is accessible in this chapter. Besides, the theoretical backgrounds of the concepts are also discussed and the research gap is identified at the end of this chapter.

2.1 INTRODUCTION

The literature review provides valuable background information to understand the technology mapping in ERP for business management. This review of materials has been collected through the published materials covering the facts, concepts and models related to the research area. The extensive literature review paved the way to understand the various critical success factors identified in the post ERP implementation. This literature analysis and review makes the researcher to find out the research gap for the research work. A comparative study of the models to implement ERP in the organization assisted to frame a new conceptual framework for the researcher to reduce the implications of the critical success factors further. The technology mapping in ERP is elaborately discussed for business management in Indian Publishing Industry through the strong foundations laid by the literature review to carry the research further.

2.2 ENTERPRISE RESOURCE PLANNING (ERP)

ERP (Enterprise Resource Planning) is a set of applications for core business operations and back-office management that was originally developed for manufacturing companies. Introduction of an ERP system involves the creation of a working information system from standard software package. ERP is often used in confusion with the term of software tools and implementation. it is actually a management system for continuous improvement. It is obvious that implementing an
ERP system is an opportunity for the company to bring out the best practice of successful companies (Sondoss 2008). (Barker & Frolick 2003) classified the definition of success / failure in two categories: factors related to the project itself: cost and time and success is measured by the achievement of the objectives related to the project: informational integration organization, decision making, improving inter-organizational communication.

The article by Yahia Zare Mehrjerdi (2010) provides a brief review of current literature on ERP and its implementation in industries. Due to the fact that a better management of a system is related to the full understanding of the technologies implemented and the system under consideration, sufficient background on the Enterprise resource planning is provided. Provides a background on Enterprise resource planning implementation, key elements of ERP, and review four important cases from the literature in that regard. He pointed out the key benefits and risks of Enterprise resource systems software and studied four cases from the literature related to the ERP implementation. Development of an End-to-End business solution mandates utilization of methodology that does not focus on departmental solutions or system (product) implementation. It needs to have a user-centric focus on implementing a manageable number of complementary technologies that support appropriate segments of the various key End-to-End business processes.

The Key Business Processes need to focus on adding value to the customers and incorporate a business strategy to expose required processes and information to customers and business partners. This information needs to come from the effective planned operational systems. The ratio of business solution and the business is the success factor of ERP rather than the integration of the entire department in an organization.
2.3 ERP IMPLEMENTATION AND ORGANIZATIONAL PERFORMANCE

(Hooshang M. et al 2014) are tried to investigate factors that underwrite the efficacious implementation of Enterprise Resource Planning (ERP) systems in the manufacturing firms. They have adopted the qualitative research method to study six assorted manufacturing firms in Virginia. For analysis, they have utilized a semi-structure method of data collection. The authors pointed out in their research that the ERP software has developed as a key supporter of system assimilation in organizations to minimize redundancy, increase efficiency, productivity and performance and the firms apply ERP in the concern both improving its operational efficiency and also the global customer needs satisfaction. The findings of this research provide discernments on the factors that these six manufacturing firms ponder to be essential to the success of ERP implementation and utilization. The authors estimated that a substantial amount of time and capital are necessary for the acquirement and implementation of ERP systems. The results of this research are pinpointing the factors that are highly helpful to managers of manufacturing companies in utilizing and upgrading an ERP system. This paper provides an in-depth study on system acquiring, factors considered implementing and cultural adjustments backed up with implementation.

(Igor Grubisic 2014) investigated the readiness of the market to adopt Cloud as the future platform for ERP by using methodology of Analytic Hierarchy Process (AHP) decision support. The research has been done by collecting data by interviewing method through expert telephonic interview & self-administered questionnaire. Data are analyzed using AHP and Expert Choice. The results of this research focused on two major things exhibiting the data privacy and availability. Large Enterprises want their data on local servers while the smaller companies want to become the first adopters. The vendors tend to follow a multiple approach to reduce the impact of the cloud in their client’s organizations. This research gives a general approach to find out an adequate solution to compute cloud for ERP solution in the
business for SMEs. It is also analyzed by the author that irrespective of the industry in which the SMEs are belonging, they are interested to go for cloud. This research summarizes the impact of cloud and its pros and cons in vendors view point and also in companies view point. This paper takes an initial step in analyzing the adoptability and willingness of cloud technology by SMEs and integrated frame cloud-ERP solution.

The ERP Implementation of the companies may have an impact in the stock market. (Ajit.D et al 2014) investigate the stock market reaction on ERP adopters and ERP vendor firms in the USA during 1990-2010. The study explores firm- and non-firm-specific factors including the role of the financial analyst in explaining the determinants of the cumulative abnormal returns surrounding ERP announcements of 112 US adopting firms that were collected from LexisNexis academics. The authors estimate abnormal returns using an event study methodology for each of the ERP announcements based on the Fama–French three-factor and Fama–French-momentum four-factor models for ERP adopters and for vendors. Subsequently, the authors explain the determinants of abnormal returns in terms of firm and non-firm behavioral variables using cross-section regression methodology. The empirical results of the study explains that the ERP implementation announcements give a positive impact in the stock market and has abnormal returns to the companies. The impact of specific factors – performance, size and Leverage are analyzed and their implications are valued in the stock market. The study gives an insight about the ERP investment and stock market reactions.

The exploratory study done by (Pairin Katerattanakul et al 2014) is aimed to explore the issues related to the business outcomes of manufacturing firms with same business characteristics could exhibit the same outcomes regarding ERP implementation. The Cluster analysis is used to collect data from manufacturing firms and data is collected from 256 Korean companies. Company size and production approaches are the variables for grouping and large manufacturing firms with make-to-order production approach perceived with higher benefits from implementing ERP
systems concerning external coordination and competitive impact. This study contributes to the literatures on benefits obtained from implementing ERP systems as none of the previous studies has focused on the relationship among business characteristics, ERP implementation approaches, and business outcomes from ERP implementation.

(Ying Xie et al 2014), in their paper, "An integrated decision support system for ERP implementation in small and medium sized Enterprises", spot out that ERP Implementation is a challenging task. The purpose of this paper is to give an integrated decision support system (DSS) for ERP implementation (DSS_ERP) to facilitate resource allocations and risk analysis. The survey is conducted on 400 SMEs having ERP systems already. The resource allocations are examined in the study by cost and time factors. The priorities for the CSF is given as project management (highest), top management, information technology, users and vendor support (lowest). Validated analytical regression models are used to construct the method of resources allocation optimally in SMEs. DSS_ERP serves as a useful tool for SMEs to predict required resources and allocate them prior to ERP implementation, which maximizes the probability of achieving predetermined targets. It also enables SMEs to analyze risk caused by changes to resources during ERP implementation, and helps them to be better prepared for the risks. This study has examined the challenges of resource allocation in SMEs by taking Cost and Timings as factors under consideration.

(Azadeh Pishdad & Abrar Haider 2013) enumerated the external and internal factors that contribute to assimilation of Enterprise Resource Planning (ERP) system in the organization through the processes of adapting, routinizing and institutionalization of technology by using qualitative interpretive approach. The results produced in this paper are based on thematic analysis of responses from open-ended interviews with ERP stakeholders in large size Australian organizations. The research findings have been further triangulated with surveys and content analysis. This research assimilated the integrated structure of technology as ERP with
organizational, social, cultural, economic, technical, and other organizational environmental institutions. The research framework developed in this study may be mastered as a decision-making tool by business manager to guide the organization through various stages of ERP institutionalization.

The study of (Dimitrios Maditinos et al 2012) pursued to acquaint with a conceptual framework that analyses the method in which the human inputs (top management, users, external consultants) are linked to communication effectiveness, conflict resolution and knowledge transfer in the ERP consulting process and the effects of these factors on ERP system implementation. The study has been conducted in 361 Greek companies by taking IT managers as respondents by taking the research period of four months (September to December 2008), 108 usable questionnaires were returned (response rate=31 percent approximately). The empirical data were analyzed using the structural equation modelling technique. The main findings of this research is summarized in the following categories: the assistance provided by external consultants during the ERP implementation process is essential; knowledge transfer is an extremely significant factor for ERP system success; knowledge transfer concerning technical aspects of ERP systems is more important than effective handling of communication, as well as conflict resolution among organizational members; the role of top management support seems to be of less importance that the one provided by users. This study paved a way for further research in future in the area of conceptual framework to implement the ERP system in Business.

(Hassan et al 2012) examined whether the implementation of ERP on business strategy and organizational capabilities. Specifically, the paper investigates the mediating effect of business strategy and organizational capabilities on the relationship between ERP implementation and firm performance. Using secondary data collected from more than 400 firms, this study tests the relationships among these variables. This paper reports the mediating effect of business strategy and organizational capabilities on the relationship between ERP implementation and firm
performance. This study uses cybernetic control, resource-based view of firm, and dynamic capabilities theories to develop and integrate this research.

(Shahin Dezdar & Sulaiman Ainin 2011) identified factors that are crucial for the successful implementation of Enterprise resource planning (ERP) systems. Although there are many factors that influence the success, this study focuses on factors related to the ERP project environment, namely, project management, team composition and competence, and business process reengineering. The study was conducted using a survey questionnaire distributed to ERP users in Iranian organizations. In total, 384 responses were collected and analyzed. The authors explained that the ERP implementation success is vested in the hands of project management team and the coordination between the ERP team members and also described ERP adopting organizations and managers could gain an understanding of the complexities inherent in ERP installations to avoid barriers and increase the likelihood of achieving desired results. The outcomes of this study are also useful to ERP vendors and consultants to prepare some strategies to overcome the misfit between their ERP products and ERP adopting organizations in developing countries. The findings may be useful to ERP vendors and other organizations in other countries, as they could be used as a guideline for future ERP adoption and implementation.

(Simona Sternad et al 2011) studied the influence of external factors on ERP users in the operation phase, comprising stabilization and routine phases as subsets, of ERP lifecycle and also investigated the impact of those factors on usage of ERP system, in this paper. The authors considered the factors proposed by the model TAM (Davis), a widely accepted model. In addition to TAM, the authors aim to make further analysis on the influence of external factors in addition to TAM and to identify that the authors taken the companies with mature use of ERP system that has more than one year of its usage in the organization. The second-order factors of TAM is tested using the data collected from 161 ERP Users in National Telecom sector since 1999 using survey method since 1999. The research analyzed the collected data using PLS approach. It is found from the research that the second-order factors influence the
most on usefulness and handling way of the ERP in the routine phase. This research also reveals that the attitudes of the ERP users also influenced the ERP adoption in the routine stage of it.

(Shahin Dezdar & Sulaiman Ainin 2011) aimed to examine organizational factors that may influence the Enterprise resource planning system implementation success in Iran. Empirical data were collected via a survey questionnaire. The questionnaires were distributed to selected managers of companies adopting ERP systems in Iran. The results indicate that the companies' top management must provide full support and commitment to the project if the system is to be successful. In addition, management must also ensure the plans are communicated and understood by the entire company. Finally it is also illustrated that adequate training and education pertaining to the systems must be given to all users to ensure that they are able to use the system effectively and efficiently thus contributing to their satisfaction which will subsequently influence the implementation success. The results paved a way to implement ERP and strategize the company process and efforts in attaining successful ERP implementation.

Enterprise Resource Planning (ERP) systems, if successfully implemented bring about competitive advantages. Mapping of ERP success factors is very important in this new scenario and (Stuart Maguire et al 2010) examined environmental factors that impacted on the adoption of ERP by The Oman Telecommunication Company (Omantel) by using case study methodology by highlighting the problems in large Organizations desperate legacy systems. This study provided an opportunity to test the factors for their environmental impact in ERP implementation.

(Princely Ifinedo & Nazmun Nahar 2009) examined the impact of some organizational information technology (IT) factors (i.e. IT assets, employees' IT skills, IT resources, and satisfaction with legacy IT systems) and their interacting effects with two contingency factors (i.e. organization's size and structure) on Enterprise resource planning (ERP) system success. The analysis supported – partially or fully –
six of the eight hypotheses formulated. For example, the data indicated strong positive relationships between IT assets and IT resources, on the one hand, and ERP success, on the other. Organization's size and structure were also found to be moderators in some of the relationships. Also, the analysis revealed that satisfaction with legacy IT systems increased with ERP success, which was an unexpected finding. Surveys were conducted in two European countries. Respondents came from diverse, private, and industrial organizations. Relevant hypotheses were developed and tested using a structural equation modeling technique. Methodologically, the study utilized a “non-deterministic” model to facilitate deeper insights into the effects of variables.

(Lee E. 2008) identified and examined the concerns of administrative and clerical employees towards a web-based business system and associated training which were not identified either before or during an Enterprise resource planning (ERP) implementation. Post-implementation analyses revealed that while an implementation can be deemed a success immediately following go-live dates, long-term planning is essential to maintain change management continuity for administrators and employees. The stages of concern component of the concerns-based adoption model offered a method of analysis of the Dallas, Texas, Independent School District's employees to identify the perceptions and levels of acceptance of the users in regards to the implementation of an ERP system in a public school district. The findings for the research questions assisted in interpreting and categorizing the responses to the open-ended portion of the stages of concern questionnaire; and providing recommended guidelines for future ERP implementations in similar environments. Based on the findings, a summary, conclusion, and recommendations for further research are provided to assist K-12 districts in planning for ERP implementations.

(Piotr Soja 2008) set out the research to examine the conditions of Enterprise resource planning (ERP) implementations on the basis of research conducted among practitioners dealing with ERP projects. This paper builds on the research conducted among a few dozen practitioners dealing with ERP projects. The
queried respondents include both ERP adopters and experts representing system suppliers. The study discusses how the researched projects were linked with Enterprise strategy, how their efficiency was measured and to what extent they defined implementation goals. The analysis takes into consideration various types of projects and success levels achieved. The results show that adopters experience different conditions depending on the project type. The findings suggest that practitioners should be more focused on the business benefits. The outcome shows that implementers from very complicated projects are more aware of the overwhelming challenge at large, while, on the other hand, the relatively simpler projects seem to be underestimated. This paper investigates the conditions that surround the different projects and how they relate to successful performance. These findings will then in turn shed light on the mechanisms that determine the results of ERP.

The research paper of (Vidyaranya B. & Cydnee Brady 2005) investigated the situations that are commonly present elsewhere which determines the key areas of success and failures. This study adopts the content analysis method by considering 44 companies with SAP implementations. This research revealed that six factors are considered common which tend to make the SAP implementations successful or unsuccessful. The lack of suitable culture and organizational (internal) readiness are considered one among the six as important factors that lead to failure of SAP implementations in 15 companies.

(Michael D. & Robert J. 2004) discusses the six core business processes and supporting technology that are impacted by an Enterprise resource planning (ERP) implementation. It begins with a brief history of the evolution of ERP and the information systems technology that enabled its development. A discussion of project implementation team preparations is followed by a description of process mapping and its significance to the success of an ERP implementation. Highlights of “As-Is” and “To-Be” process mapping and change management conclude the paper.
(T. Hillman & Ann Hillary 2002) identified two distinct phases of ERP. In that, the first phase refers to the changes that an organization undergoes in transforming from the old system and “going live” with the ERP system. The second phase refers to the actions subsequent to ERP implementation, which makes the organization to accomplish the optimum usage of capabilities and attain the full benefits of ERP. The paper examines the problems organizations frequently experience with ERP implementations, and suggests strategies for extending the value of ERP systems.

(Kenneth J. et al 2002) discussed Enterprise resource planning (ERP) systems provide organizations with the opportunity to integrate individual, functionally-oriented information systems. Although much of the focus in the popular press has been placed on ERP systems in large for-profit organizations, small hospitals and clinics are candidates for ERP systems. Focusing information systems on critical success factors (CSFs) allows the organization to address a limited number of areas associated with performance. This limited number of factors can provide management with an insight into dimensions of information that must be addressed by a system. It focuses on CSFs for small health-care organizations. In addition, it also considers the factors critical to the implementation of health-care information systems and presents two cases. The results indicate support for the continuing use of CSFs to help focus on the benefits of ERPs. Focusing on groups of tangible and intangible benefits can also assist the rural health-care organization in the use of ERPs.

(Fawzy Soliman et al 2001), in their research, explore the integration problems of computer-aided design (CAD) /computer-aided manufacturing (CAM) with ERP systems. This paper emphasizes the importance of CAD/CAM and ERP systems for the Organizations. The huge money is locked as capital investment on these advances of information technology. The authors highlighted the importance of information technology and its advances in the pace of gaining competitive advantage, risks reduction, increase the productivity, and business viability. This paper needs the organizations to pay attention on integrating the CAD/CAM with ERP systems.
Accordingly, this paper paid more attention on the issues of integration of CAD/CAM systems with ERP systems. The study examined the extent of impact created by this integration in the organizations and also insists the problems relates to CAD/CAM integration success by proposing a customized set of critical success factors (CSF) for the integration of CAD/CAM with ERP systems. This paper demonstrates the importance of successful integration of CAD/CAM systems with other applications for next generation manufacturers. These findings suggest that integration of CAD/CAM systems with ERP systems is complex, involving many factors.

2.4 CRITICAL SUCSSSESS FACTORS OF POST ERP IMPLEMENTATION

(Jiwat Ram & David Corkindale 2014) intended to analyze the Critical Success Factors of ERP implementation are empirically viewed as critical or not. The authors examined using the systematic approach, 627 refereed papers published within the time bound to 1998 and 2010 on the area of ERP. Out of 627, 236 papers pertinent in examining CSFs. The authors engaged various techniques from both qualitative and interpretive research methodologies, to examine and construe the refereed papers by means of five-step procedure which includes gathering, categorizing, coding, analyzing and comparing the data. Erstwhile studies have notorious number of CSFs for the success of ERP implementation or value-added performance upshots. The authors have taken only a limited number of CSFs for their studies and empirically examined their part in, and impact on post ERP implementation performance upshots. The authors estimated the cogency of most of the sued CSFs and planned to utilize carefully the reliability of the sued CSFs before taking place. The findings of this research can support the top managers to focus their consideration, primacies, means and governance on dealing the sued CSFs that have been time-honored to be critical for achieving post-implementation of ERP performance upshots. The results of this research afford new acumens into the efficacy of CSFs and signpost that simply detecting probable CSFs is not satisfactory.
to aid with ERP success. Further analysis is required to establish the criticality of the planned CSFs before spending more time on executive intervention on it.

In this paper, (Poonam Garg & Divya Agarwal 2014) examined the hypothetical relationship between five critical success items i.e. User involvement, Top management commitment, business process re-engineering, ERP teamwork and composition and project management, and, the success of Enterprise Resource Planning (ERP) implementation at Fortis hospital, Bangalore, India, using empirical data collected through survey method and structured interview technique. The structured interview was conducted by a panel of experts and the progress of ERP implementation is monitored using company documents as per the details given in literature. The findings of this research are narrowed down to the hospital industry which in other hand, very much helpful in supportive actions and made the hospital sector as a healthy sector.

(Poonam Garg & Atul Garg 2014) explored the factors that are influencing the success of Enterprise resource planning (ERP) implementation in Indian retail sector. Empirically the Strategic, Technological, People and Project management factors are examined by data, collected through survey questionnaire from practitioner like project sponsors, project managers, implementation consultants and team members who were involved in ERP implementation in retail sector and the result indicated that these factors are having positive influence over the success of ERP implementation. The study provided valuable insights to researchers, practicing managers and those who are planning to implement ERP in retail organization. The relationship between all the factors is considered and the extent of impact created by the factors also determined in this research and it gives useful contribution in ERP field.

There are many theories that have been exhibited to know about the ERP implementation and critical success factors that occur during implementation without giving much explanation about the way how should be dealt in the companies. (Janet Williams et al 2013) framed the teleological process with the purpose to illustrate the
usefulness of the theory and contend planned behavior execution, events are adaptive and learned and emerge though social construction of actors in organizations. An in-depth interpretive study of eight public-sector organizations by using, two primary methods of data collection: survey questionnaires (2) and in-depth interviews (38), factors associated with teleological design. The article highlights how the central role of an agent or entity, and its interaction with eight key attributes, is critical to the success of the change process. The article proposes benefits of applying teleological theory to the context of designing the change, pre and post project implementation. The data are based in the UK, the framework also provides a useful starting point for further research in ERP implementation in which it is problematic.

(Dara Schniederjans & Surya Yadav 2013) aimed to present a conceptual model that better defines critical success factors to ERP implementation organized with the technology, organization and environment (TOE) framework. The paper also adds to current literature the critical success factor of trust with the vendor, system and consultant which have largely been ignored in the past. The paper uses past literature and theoretical and conceptual framework development to illustrate a new conceptual model that incorporates critical success factors that have both been empirically tied to ERP implementation success in the past and new insights into how trust impacts ERP implementation success. The paper finds a lack of research depicted in how trust impacts ERP implementation success and likewise a lack of a greater conceptual model organized to provide insight into ERP implementation success. The paper proposes a holistic conceptual framework for ERP implementation success and discusses the impact that trust with the vendor, system and consultant has on ERP implementation success.

The quality of communication is listed as very important and it is very useful to determine the success factor of ERP implementation. A case study has been conducted by (Benoit Aubert et al 2013) to know about the impact of communication on ERP project implementation. Some dimensions of project success did not seem influenced by communication quality. Results also show that, for the dimensions of
project success that are influenced by communication quality, the form might be as important as the content of communication. The communication process and the content of the project need to be analyzed to find out the success of the ERP and emphasized more importance of the openness of the communication.

(Shashank Saini et al 2013) identified the success factors for implementation of Enterprise resource planning (ERP) at Indian small to medium-sized Enterprises (SMEs) by providing a comparative study with the trend in Indian large organizations and the global trend. The authors proposed a hypothetical success factors model to address the research questions and validated the hypotheses using survey method. In this research the authors evaluated the success factors for implementation of ERP in Indian SMEs and then compared them with large Indian organizations and the global trends. It was found that four of the five hypothesized technological factors are significantly related to the success of ERP implementation. They are: comprehensiveness of software development/process integration plan; significance of age of IT infrastructure; comprehensiveness of data migration plan; and extensiveness of system testing. Also, four of the nine hypotheses/sub-hypotheses amongst the people factors are significantly related to the success of ERP implementation. They are: blend of cross-functional employees in the team; extent of empowerment of decision-making team; significance of morale of the implementation team; and exhaustiveness of user training. The authors have found that ten of the 11 hypothesized organizational factors are significantly related to the success of ERP implementation. They are: organization’s adaptability to changes; involvement of top management; degree of customization; efficiency of business process re-engineering; exhaustiveness of contingency plans; clarity in definition of milestones; clarity in evaluation of milestones; alignment of ERP package with business processes; comprehensiveness of implementation strategy; involvement of consultant in implementation strategy; clarity of project status disclosure; and appraisal of clients about ERP strategy.
(Goparaju Purna 2012) developed a conceptual model of critical success factors (CSFs) for software development projects by categorizing the factor based upon the product, team, project management and communication factors as important categories of success factors for software projects. 80 factors are collected based on their importance to software projects and their repeated occurrence in the literature related to CSFs and a conceptual model has been created. Based on the occurrence of the success factor in the literature, each category comprising top five success factors are identified as critical success factors for software projects. Based on these seven categories of success factors a conceptual model was developed. The factors are identified based on planning and executing software projects. The factors are identified and are not tested for their level of implications on Organizations.

(Parijat Upadhyay et al 2011) presented the results of a comprehensive compilation of literature and subsequent analysis of ERP implementation success factors in the context of Indian micro, small and medium-scale Enterprises (MSMEs). The paper attempts to assess empirically which factors are most critical in the ERP implementation process from the perspective of the Indian MSMEs. This research is potentially aimed at being useful to MSMEs as a guideline, so as to ensure a positive outcome of the implementation process. The paper tries to explore the factors affecting implementation across the stages of ERP implementations using the responses from 98 MSMEs engaged in manufacturing activities. The minimum number of factors explaining the maximum variance in data is determined using Confirmatory Factor Analysis (CFA). The factor analysis is performed on SPSS with the principal component method using the Varimax rotation technique. The results of this study highlight four crucial factors that influence the ERP implementation process in the Indian MSME segment. Broadly, they may be summed up under the following heads: project execution competency; product and vendor perspective; organizational climate; and technical perspective. The findings will be beneficial for MSMEs for proper utilization of their limited resources and to pay adequate attention to those factors that are most likely to have an impact on the implementation of the ERP system.
In their paper, (Claude Doom et al 2010) examined the critical success factors of ERP implementations in Belgian SMEs along with the finding of success factors bound with ERP implementation in SME environment. The authors surveyed the literature to identify and divide the critical success factors that are hypothetically pertinent to small and medium-sized Enterprises. With the help of a survey and a multiple case analysis method within four Belgian companies, the authors examine the critical success factors applicable to SMEs. The results of this study show that many of the success factors found in the literature review are all having applicability to SMEs. The authors examined only very few differences in the CSFs found in the application of SMEs and all the other factors are common for SMEs and others. Distinct differences were found as well. Some factors, such as a clear scope definition and a standardized infrastructure, are not regarded as critical success factors for SMEs. Moreover, SMEs tend to rely relatively heavily on the input of consultants, who they use as a source of knowledge and experience. Moreover, SMEs need to be able to adjust their businesses quickly to be able to exploit their niche to the fullest extent. This paper investigates the critical success factors of ERP implementations in small and medium-sized Enterprises.

The study conducted by (Pascal Ravestein & Ronald Batenburg 2010) explored the common broken up for the definition of business process management (BPM) and BPM-systems along with the critical success Factors (CSFs) for BPM-system implementation. This study tried to validate a BPM-system implementation framework that classifies the CSFs in distinctive domains which is used for BPM project management and organization. This study had been taken with meta-analysis of literature that helped to develop a set of declarations related to definition, benefits, CSF of BPM and implementation. The result of this research, conducted through a web questionnaire with 39 respondents belonging to Dutch consultants, end-users and developers of BPM experience, indicated that there is a consensus on the CSFs of BPM-system implementation. This research brought some of the critical factors as communication, involvement of stakeholders and governance. This paper shows, by empirical validation, if these CSFs from literature
are supported by different groups of professionals. Furthermore, the CSFs for implementing BPM are modeled and classified in a framework build up from five areas. This study has been done in the midst of Dutch Organizations and the BPM – systems are considered to be implemented with an intention of not just as an IT project, which in turn requires the initiation from the top management. Analysis of the internal coherence of different survey items sets, supports that the authors can define the goals and CSFs when implementing BPM-systems.

(Brent Snide et al 2009) explored the critical success factors (CSFs) of Enterprise resource planning (ERP) system implementation in small and medium-sized Enterprises (SMEs) of five case studies of Canadian SMEs. They included interviewing individuals from five roles at each organization and gathering project documents. Following an evaluation of each project’s success (within-case analysis), cross-case analysis was conducted to elicit influential and distinctive factors. Factors were identified that appeared to explain variation between successful and unsuccessful implementations at SMEs, besides factors that appeared to be innovative or counter-intuitive in light of the established literature. This research focused on the identification of CSFs separately for SMEs and paved a way for further research in this area.

(Shahin Dezdar & Ainin Sulaiman 2009) investigated the taxonomy of CSFs towards ERP implementation by making in-depth literature review using content analysis method applied by four stages as data collection, open coding, axial coding, and selective coding. Totally 17 CSFs are found out and categorized into five main areas. The relationships among the CSFs grouped in these categories are examined and the result lead a path for future research to have intensive study about CSFs.

The purpose of the paper of (Olivier Françoise et al 2009) is to identify practical activities that are indispensable for managing Enterprise resource planning (ERP) implementation projects which elucidates the expectations of the recognized critical success factors (CSFs). This work is based on an all-encompassing literature
review on CSF, followed by a Delphi survey with a panel of ERP experts. For each CSF, it is substantiated by a range, corroborated by experts, of practical schedules to perform, reinforced by the resolution of the usually encountered problems in these areas. This research ultimately gives the result on the practical principles framed by using a proposed method which affect immediately all the indicators of ERP projects. This paper suggests a better oversight on the actions required of each area of expertise. As this research did not target any industrial sector, the results are indicated as interlinking the theoretical way of ERP implementation with practical actions by reducing the inherent uncertainties.

The paper on "A quantitative model to predict the Egyptian ERP implementation success index", by (Sondoss 2008) is aimed to develop a quantitative model which helps Enterprise resource planning (ERP) implementers in Egypt to predict their implementation success as a function of achieved critical success Factors and the organizational culture. For this research, a cross-sectional survey involving 45 ERP users in Egypt is conducted and a part of it exhibited that ERP implementations are considered failures while for the rest the Egyptian organizational culture hinders its progress. This study has given a detailed description about the off-shelf ERP system and the cultural factors carefully considered for successful ERP Implementation.

(Sherry Finney & Martin Corbett 2007), in their study explored the arena based upon literature review of critical success factors of ERP implementation and created a compilation used to identify the gaps that exist. For their compilation, the authors used 45 selected articles using content analysis method and inductive coding process with subsequent estimation of gaps in the literature base. The most noteworthy finding is that the researches are not considering the CSFs in Stakeholders point of view. The next significant gap identified is the change management which is having little detail about the specific implementation strategies. The major needs identified by the research are there must be a stakeholder approach with comprehensive coverage of all CSFs and an in-depth research about the change
management concept. This research provided a comprehensive compilation of all the CSFs using secondary research through structured methodological approach.

(Ulrich Remus 2007), in this paper, discusses the critical success factors for Enterprise portals implementations by paralleling them with ERP implementations. To find out and also to rank the CSFs, the researcher followed a two-stage approach with initial one as state –of-the-art portal through interview method by interviewing the portal integrators in Germany and the final one is identifying and examining the CSFs with general and across stages of projects. The findings of this research indicated that there are some similarities and differences existing between the CSFs for portals with respect to support of top management, project management, software package selection, communication and BPRE (Business Process Re-engineering). Till date, there are neither detailed studies focusing on the identification and evaluation of CSF for portal projects nor studies that try to compare portal and ERP projects. The paper tries to fill this gap.

(Hong Seng 2007) examines the experiences faced by a Chinese Enterprise while Enterprise resource planning (ERP) implementation. This research attempts to give an idea to the Chinese Enterprises to have knowledge about CSFs at the time of implementing ERP in their concerns. The Author used semi-structured interview method along with a literature review of the company records and documents. This paper gives an idea about the CSFs in different way by stressing the point of impact of the company’s western counterparts with an additional underlying theme of cultural characteristics. The author identified that being it as a Chinese company, if they follow the Chinese culture, style and management, then the ERP implementation is successful one to them. The researcher found from this research that if once the CSFs are understand properly by the Enterprises, vendors and consultants then it will give rise to successful ERP implementation with a smoother path.

(Piotr Soja 2006) revealed in his research the mechanisms defining the success of ERP implementations led among practitioners performing business activities with ERP projects. The author collected the influential ERP implementation
success factors and measures the impact of those factors on the implementation project success through opinions of the respondents. From that, the greatest influencing factors are recognized and the opinion differences of the respondents with relevant to their perceptions and attitudes in project implementation are also revealed by this research. Even though the limitation of lacking verification of Success factors with the project type, this research outcome is highly applicable for the professionals dealing with implementation projects with first time on ERP system. This research is also used by the practitioners while managing the projects after implementation and handling the people’s attitudes. This paper gives an insight into the genuine mechanisms of ERP projects.

It is under discussion that the critical success factors (CSF) affect the acquisition process for Enterprise Resource Planning (ERP) software in the companies. (Jacques Verville et al 2005) found the importance of CSFs in ERP acquisition process and the extent of impact created by those factors in the Organizations. A multiple-case design with three organizations that had recently completed the acquisition of an ERP solution are taken for the research. The multiple case designs focused and directed to understand the dynamics and complexities present within each case. This study identified ten factors critical to the successful outcome of acquiring an ERP solution. The highly commendable elements are clear and unambiguous authority, a structured, rigorous and user-driven process, its planning, the establishment of criteria, and the sense of partnership with the vendors.

(Chian-Son Yu 2005) found a chain of causal relations affecting the operating effectiveness of the implemented Enterprise resource planning (ERP) system instead of focusing on either the evaluation of software/vendors/consultants or critical successful factors (CSF) identification for ERP implementation, a course followed by the dominant ERP literature. This research used process-oriented approach and aims to give a moving picture of how one step affects another step from pre-implementation stage, to during-implementation stage, and to post-implementation stage. The major finding of this research is the user need to be
trained properly to have ongoing process of ERP as a successful one in the organizations.

(Fiona Fui-Hoon et al. 2001) investigated the Critical factors on ERP Implementation and through extensive review, they identified 11 critical factors for initial and ongoing ERP implementation success – ERP teamwork and composition; change management program and culture; top management support; business plan and vision; business process reengineering with minimum customization; project management; monitoring and evaluation of performance; effective communication; software development, testing and troubleshooting; project champion; appropriate business and IT legacy systems. The classification of these factors into the five phases of ERP Life cycle-chartering, project, shakedown, onward and upward and the importance of each factor is discussed elaborately in this research. This research paved a way for future research indicating the measurement of criticality of identified Critical factors in implementing the ERP successfully.

(Yongbeom Kim 2005) established the impediments in ERP implementations and the extent to which these impact the success of ERP projects. This study aims to identify the critical impediments that large organizations face in the implementation of ERP systems, and the impact of these impediments on overall success of ERP projects by a survey of Fortune 500 organizations. A survey was prepared based on 47 impediments identified from previous ERP implementation studies. This study finds that most of the critical impediments are from functional coordination problems related to inadequate support from functional units and coordination among functional units, the project management related to business process change, and change management related to resistance of users. In this study, impediments are categorized based on project phases, and differences in the impediments the organizations faced between less successful and more successful organizations are found. The authors specified that understanding new requirements for ERP implementation such as functional coordination is more critical issues than understanding technical features of ERP system.
(Hongjiang Xu et al 2002) explained that data quality is a critical issue during the implementation of an Enterprise resource planning (ERP) system. Hongjiang Xu, Jeretta Horn Nord, Noel Brown, G. Daryl Nord, (2002) showed that data quality problems can have a significant impact on an Organization’s information system. Therefore, it is essential to understand data quality issues to ensure success in implementing ERP systems. This paper uses SAP as an example of an ERP system and describes a study, which explores data quality problems with existing systems, and identifies critical success factors that impact data quality. The study resulted in the development of a framework for understanding data quality issues in implementing an ERP, and application of this framework in a case study in two large Australian organizations. The findings of the study suggest that the importance of data quality needs to be widely understood in implementing an ERP, as well as providing recommendations that may be useful to practitioners.

2.5 RESEARCH GAP

Literature review enumerated above reveals the vast majority of research dealt from the perspective of ERP implementation and Critical success factors that need to be considered at the time of implementing the ERP in the organization. Different studies have covered various aspects of CSFs and its impact in ERP adoption in the organizations. However, gaps have been found in the area of in depth analysis of each CSF with the Post ERP implementation and organizational performance. Almost many of the studies have been conducted outside India. Hence, there was a need to focus on Indian companies. There is a lack of ERP implementation study in Publishing Industry in India that need to be defined further and hence it is needed to focus on Indian Publishing Industry. Most of the reviews are explaining about the ERP implementation and after implementation performance is not measured consistently and hence there is a need to frame a new conceptual framework by mapping the technology for business management in ERP. The further research can be done by emphasizing the following areas individually to increase the ERP Success rate:
1. Technology Perspective

2. Micro Analysis of Business Process Separately

3. Other Industrial Application

Further, the studies have also suggested the future research in considering the CSFs separately on Post ERP implementation and also business management considering Industrial type and size. However, it needs to be focused to find out the technology mapping in ERP for business management in Indian Publishing Industry.

2.6 CONCLUSION

Literature review enumerated above reveals that vast majority of research dealt from the perspective of CSFs in ERP implementation and organizational performance. The researcher found the gap existing in the literature on Technology mapping in ERP for business management in Indian publishing industry. The present study focusing on this point and also aims in framing a new conceptual framework to implement ERP by reducing the impact of CSFs considerably in the highly dynamic environment.