Impact of absorptive capacity and dominant logic on ERP assimilation in Chinese firms

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Abstract:

Firms belong to social communities that are experts in creation of new knowledge from environment. Knowledge that is generated from past experience and from environment can affect firm’s process positively. Processing knowledge assimilation in a better way, strong leadership abilities are needed. That can recognize knowledge from environment in the sense of opportunities and threats. In this article, we discuss the effect of absorptive capacity (ACAP) and dominant logic (DL) on enterprise resource planning (ERP). Dynamic capabilities (DC) of top managers to absorb the knowledge from the environment and assimilate it according to their needs that improve firm’s enterprise resource planning (ERP). Our main focus in this article is knowledge and how top-level managers routine that knowledge to get the future benefits for their respective firms. The model was adopted from past literature that shows the effect of absorptive capacity its subsets and dominant logic and its dimensions on ERP assimilation. For this study we examined the Chinese firms located in Hefei city (Anhui province) China. Hefei is one of the fastest developing and emerging economic hub in China. Employees from top level are the target group in this study. The results prove our hypotheses that absorptive capacity and dominant logic have a positive influence on ERP in Chinese firms, that not only increases the productivity and performance of the firm, but also helps in the allocation of resources and decision making processes to stand in the dynamic market and oppose any kind of threats. Our results showed positive correlation between all the variables.

Keywords: absorptive capacity; dominant logic; ERP assimilation; top management; dynamic capabilities

JEL codes: M11
1. INTRODUCTION

In the recent years, managers of the organizations are one of the hot topics in organizational learning research perspective. Manager’s personal abilities, their interactions outside the organizations, and knowledge absorption are under constant discussion. Cohen & Levinthal (1990) mentioned that “The capacity of absorption which is the ability of a company to recognize the external knowledge, assimilate it and routine that knowledge in the market”. Day by day the competition in the market is becoming stronger and not only do the new companies have to be innovative, but also the well-established companies have to keep focusing on their company learning activities. For that the companies need to be more knowledgeable and have abilities to absorb more knowledge generated outside the firm. The role of absorptive capacity (ACAP) is very important in leaning perspective which deals with acquisition, assimilation, transformation, and exploitation (Zahra & George, 2002 and Szulanski, 1996). There are two subsets of ACAP which help the firm to improve the firm’s ability to increase their performance; the subsets of the ACAP are potential absorptive capacity (PACAP) and realized absorptive capacity (RACAP). “PACAP deals with acquisition of knowledge and assimilation whereas, RACAP deals with transformation and exploitation of knowledge”. ACAP and dynamic capabilities for the effective business through action management redefines and implements these activities on the basis of knowledge (Floyd and Lane, 2000). Cohen and Levinthal describe, absorptive capacity as the knack of an organizational associate “to value, learn, and pertain new knowledge”. Mowery and Oxley, 1995 define ACAP as a broader sense of organization limb “Skills which are needed to deal with the transferred knowledge and that are also desired to alter that knowledge”. Furthermore, Zahra and George conceptualized ACAP as “a process and a set of organizational routine which obtain, understand, alter, and utilize knowledge that turn out dynamic capabilities of the organization”. Cohen and Levinthal argued that ACAP is not only the ability to develop and routine but also the capability in which to understand and learn about the external knowledge. On the other hand researchers with managerial perspective argue that a few simple rules and simple knowledge structure have great characteristics in complex, rapid paced environments (Eisenhardt & Martin, 2000; Wirtz, Mathieu, & Schilke, 2007).

This study focused on the information that has been absorbed from the environment through absorptive capacity which later on transforms for the better performance of the firm and for ERP assimilation. In this context dominant logic plays an important role. Dominant logic is a key construct of this study, as dominant logic enables top management to learn from their past experience and from current information available in the work environment.

Competitive advantages support rapid and straight proceedings which are essential for the improvement Baum and Wally (2003), that focus on the top management interests towards essential issues. Regularly searching for prospects, proactive
testing, and supple organizational design which enable managers as well as entrepreneurs towards keeping open the firms for various possibilities, adapting quick transformation, also through examination diverse resources develop (March, 1996). Organizations change in their technical and administrative knowledge, industry contest, constituent hope, or top management aspirations in order to get innovation, unique capabilities and develop their intensity of recital (Damanpour, Walker, & Avellaneda, 2009). Organizations may be further innovated by getting benefits from learning in all areas instead of focusing in one area or unit. Knowledge exchange with consumers, and different units allow managers to opt and manage plans, resources, external units that ensure adaptive behaviour (Damanpour et al., 2009).

To gain the market shares Enterprise Resource Planning (ERP) giants focusing on the Small firms. But working models developed to big business the only solution to all business processes and best practices in the industry verticals. Firms are different, separate, and distinct, varied, and gain much more competitive by adjusting programs to the needs of its customers. Which means the requirements cannot be standardized. The ability to effectively deliver basic functionality in ERP software for business processes and organizations to notes transmitted effectively participate by which users can assimilate easily and unobtrusively the system in their daily work important for the implementation of ERP and the results achieved. We propose ERP innovation assimilation like dynamic capability that the comprehension which is regenerated in and outside the firm, how to utilize that knowledge to improve the firm performance? Research says that the dynamic capabilities are built into the organization and processes aimed at facilitating firms to alter and reform (Zott, 2000). To arrange company’s resource base these capabilities enable them to adapt the conditions of the market towards competition to achieve (Zahra, 2002).

On the other hand dominant logic is to be called the DNA of organization, different, and hard to impersonate capital for the organization (Barney, 1991). Obloj (2010a) argued that in emerging economy dominant logic plays an important role. In particular, socialist economic system transferred to market economies to examine the values as intangible resource of dominant logic, on other hand there is not well developed support for tangible resources (Bruton, Ahlstrom, & Obloj, 2008; Kolvereid & Obloj, 1994; Meyer & Peng, 2005). We propose the effect of dominant logic and absorptive capacity on ERP assimilation.

For this study we collect data from Chinese firms located in Hefei (Anhui), China. Furthermore, we used SPSS for data analysis and correlation and regression analysis of the data sample are presented in result section. Hypothesis and literature review presents the theoretical support of this study and the relationship between the variables of the conceptual model. Followed by the methodology section that describes the targeted group and method of analysis. The result section provides the empirical result for the variables through SPSS and a brief discussion regarding result. And at the end, discussion and conclusion of the study is provided.
2. LITERATURE REVIEW HYPOTHESES DEVELOPMENT

Absorptive capacity and ERP assimilation

In order to find out if acquiring and assimilating external knowledge potential absorptive capacities (PACAP) plays an important role that could possibly enable the firm to acquire external knowledge. Cohen and Levinthal’s (1990) depiction of the firms so they can get exterior information, which does not assure the use of that information. In the same way, firms can obtain and understand information but to alter and utilize the information for the benefit of the firm that is a capability that the firm may not possess. Thus, it does not mean that high PACAP improves the organizational performance (Zahra, 2002).

The ability of firm’s to manage information Tripsas and Gavetti (2000) examine that experience significant related to the managerial cognition. Therefore, PACAP of the firm is Path- dependent capability which depends on the past experiences which is to be called organizational memory. Firm’s successes and failures depend on the past experiences Nelson and Winter (1982), it also shows that how a firm acquire and assimilate new knowledge, and maintain their focus on future (Zahra, 2002). Managers combine two different type of frames to refer fresh data which may be used in creating income by the process of bisociation (Zahra, 2002). Hitt, Bierman, Shimizu and Kochhar (2000), the significance of human capital that is important for the firm’s knowledge base process which helps the firm to improve performance. For the ERP system a user is required to understand the external information concerning ERP systems as well as ERP consulting firms. Following, the ability of the individual and how they assimilate that knowledge in his or her task (Park, Suh, & Yang, 2007). This shows the positive relationship of PACAP with ERP. Zahra and George (2002) recommended that PACAP integrated acquisition and assimilation exaggerated RACAP. Zahra, 2002 mentioned that RACAP is the capacity of the firm’s which strengthens information that has been engrossed. Firm’s operations RACAP includes alter and develop the absorbed data, which improves the firm’s performance. Prior knowledge of the resource Gianmario Verona (1999), required unit to develop capabilities of the organizations mentioned as combinative capabilities Kogut & Zander (1992), which allow to assimilate the new knowledge (Eisenhart & Martin, 2000; Kogut & Zander, 1992).” Combinative capabilities in their emergence and idiosyncratic are path- dependent; nevertheless they show same features” said by (Eisenhardt & Martin, 2000).

These commonalities include in different organizational activities like in decision-making processes and in cross-functional teams, in this each one deals with different dimensions of absorptive capacity. G Verona (1999) mentioned that engrossing outer information linked with managerial structures, scheme, and the social associations (Bosch, Jansen, Volberda, 2005). Zahra & George (2002) argued that (RACAP) deals with origination’s exploitation capabilities and therefore setoff PACAP as RACAP inside focused. Whereas, the division was proposed as “some
firms have very strong ingenuity towards understanding the multifarious problems but they are not able to covert knowledge into useful productive advance strategies” (Zahra & George, 2002, p. 191). Hage and Aiken (1967) said that “contribution in decision making point out the level in which inferior take part in high-level assessment making process”. They play their role as sift and facilitator while acquisitioning information (Aldrich & Herker, 1977; Bosch, 2005). The above discussion supports our statement, and we hypothesize that:

**H1:** ACAP has positive influence on ERP assimilation.

### Dominant logic and ERP assimilation

Venkatraman (1989) defined pro-activeness as opportunity-seeking and a forward-looking perspective. Pro-activeness in firms acts as an agent towards experimenting with change and looking forward for opportunities of future demand (Miles & Snow, 1978). Some of the studies seeing this as a ‘step-ahead’ towards activities that report significant performance relationships (Wright, 1995; Talke, 2007).

Talke (2007) argues that pro-activeness is not only seeking the opportunity, but also expectation of future requirements, and ‘exploiting emerging opportunities’ (Obloj, 2010b). Obloj (2010) argued that pro-activeness in capitalist firms in transition economies should be important for at least two reasons. First, limited and unevenly distributed resources in those economies Meyer and Peng (2005), and Garry D. Bruton and Rubanik (2002), pro-activeness is the good method to find, appraise, and obtain such limited resources even those resources which might not be direct linked or one’s current plans (Talke, 2007; Venkatraman, 1989b). Next, being pro-active guides to sense making Miles and Snow (1978), and experimenting viewpoint, that is linked with their environment should not only “expert” in multifarious cognitive maps Dane and Pratt (2007), nevertheless also effective enact their environments (Weick, 1995). In emerging economies organizational capacity of acquisition and exploitation is important for the firm’s performance Lyles (2007), Uhlenbruck, Meyer and Hitt (2003) because these firms face stiff challenges from the market place and the turbulence in the developing economy also possess challenges (Peng, 2003). Research suggests that within a particular domain a “kind” learning structure has to exist to lead complex cognition for the experiences (Hogarth, 2001). Whereas, “kind” learning structure means that fast response presented and the outcome for errors must be noteworthy. Moreover, strong relations between actions and consequences should be made which enable the firms to learn from their failures. In the result, of that firms become “expert,” in strategic management, more multifarious, and more effective in proceedings (Dane & Pratt, 2007). Through organizational context, it seems that capitalist managers can evoke failures, and effectively learn from them, these managers more effectively develop mind-set which leads to effective decision making (Obloj, 2010b). For successful adaption of opportunities, threats, and changes in the environment firms have to look towards their environment (Jackson & Dutton,
Evaluating and biases entrepreneurs can appreciably affect the perception of opportunities and threats and accordingly, the selection and (re)actions of the firms is one of the danger in carrying out this out (Daniel Kahneman & Tversky, 1979). In particular, it might be a inconsistency between the firms’ look their surroundings and certainty of setting (D. Kahneman & Lovallo, 1993). Whereas, the entire heuristics and biases have no effect on examining efforts in a negative aspect (Dane & Pratt, 2007). For instance “positive delusion” can be a useful sense making tool that allows teams to produce a own fulfilling prophecy, which force them in changing environment that fits in their beliefs (Weick, 1995). Jackson and Dutton (1988) found that the managers of mature economies tend to be more sensitive to risks. Traditionally, they follow the formal rules concerning the production of the socialist system. The socialist system of dominant logic has been alert on the results of assembling and, consequently, the main problem was a threat to change in governmental policies or introduction of new policy to any firm, which had a greater support between government officials. Another attribute, of dominant logic is whether the firms look towards the environment as an opportunity or threat in transitional economy. On the contrary, the orientation of threats may guide to a more self-protective, stiff responses Staw, Sandelands, & Dutton (1981), in the result that actor’s abilities to ratify their flexible surroundings is limited, it can result in damage to the performance (Obloj, 2010b). Improvement of routines and normal working process involved in organizational learning and adaptation (Van De Ven & Poole, 1995). And in this way leads to allotment of assets, originate and organize business strategy, and supervising performance goals in organizational development (Grant, 1988). The organizational well-structured actions provide for the good practices created proper contingency in inner or outer that improves that organizational performance March (1994), learning needs flexibility in Organizational design. In emerging economies successful entrepreneurial firms should be able to twist the rules according to their needs in the formation of routines. However, in limited formalization and standardization successful firms will form flexible organizations. That is why firms organize the routines in the manner of “patch-to-patch” than “thin-to-thin” (Siggelkow, 2002). Obloj and Pratt (2005) argued that for pragmatic reasons the routines will also be principally codified by successful managers (e.g., legal environmental change). Managerial decisions as “strategic decisions regarding innovations are typically made by senior managers of the organization”. Chief Executive Officers (CEOs) and top management team (TMT) members engage in ongoing processes of interpreting strategic developments, making strategic decisions, and taking action in response to a wide array of issues that have implications for organizational performance” (Damanpour & Aravind, 2012). According to Hambrick and Mason (1984) “beside strategic development and strategic decisions TMT and CEOs have the ability to absorb the knowledge that originates outside the organization. Top management is responsible for the adoption of important policies which manage the firm’s activities” (Hambrick
and Mason, 1984). Hambrick and Mason (1984) proposed the demographic attributes of manager’s tendency to espouse innovation. “A demographic characteristic are those attributes which enable manages to make decisions on the bases of experiences, ideas, values and way of think”. For the formation and alternation of routines learning has been found critical (Zander & Kogut, 1995). Furthermore, March (1996) mentioned that individuals learning forms the firm’s own experience and learning from others might also be vicarious. The relationship between learning and routine of the firm is imagined as normal learning which becomes codified of the firm through regulations as well as routines argued by (Huff, 1982; Nelson & Winter, 2002). Bettis & Prahalad (1995) defined DL as a information structure based on a time period (1) core business experiences, (2) goals which are important to success, (3) measurements of performance, and (4) values and median evolution. This information arrangement work as perceptual and intangible filters that “shifts” information from the atmosphere mentioned by (von Krogh, Erat, & Macus, 2000). Amos, Tversky and Kahneman (1974) in psychology of cognitive biases people make decisions (and often severe) errors, for an introduction and survey. To simplify the decision process most of the people depend on the specific principles. The most attractive principle is call heuristic (Tversky & Kahneman, 1973). Which leads the people to create decision by the use of knowledge that can easily be learnt and kept in mind. For the analytical approaches decision-makers do not need to calculate the information or look for sufficient information mentioned by (Nisbett & Ross, 1980). The above discussion shows that dominant logic and ERP assimilation have a positive relation.

**H2:** Dominant logic is positively related to ERP assimilation.

### Absorptive capacity and dominant logic

Focusing on acquiring knowledge firms in all areas may be more innovative from learning. It can effect exchanges with clients and customers, allow the management to select strategies, and handle resources which depends on external sources to ensure adaptive behavior maintain the flow of resources (Pfeffer & Salancik, 1978; Damanpour, Walker, & Avellaneda, 2009). Through various forms of instruction, inculcation, and demonstration organizational knowledge and faith are diffused to individuals. Practices, languages and beliefs that consist of the organizational code when an organization socializes recruits (Peter Moskos, 1973; Van Maanen, 1973). Similarly, the organizational code alters to individual beliefs. Individually and as a whole organization forms mutual learning that has influence on both of them (March, 1991). Firms may brace up to the new combination of existing knowledge, which results to more numbers of possible knowledge configurations Kortum and Lerner (2000) and a greater innovation performance (Dushnitsky & Lenox, 2005; Kogut, B., 1992). Moreover, business tasks and restoration exposure of new technologies and practices that boost’s the firm’s ACAP, and the ability to absorb external
knowledge Cohen and Levinthal (1990), that is in interest of innovation (Zahra, 1993b; Dushnitsky and Lenox, 2005; Chen, Tang, Jin, Xie, & Li, 2014).

For setting the firm’s direction, TMT has been defined as the dominant coalition of individuals (Cyert & March, 1963). Which has a positive impact on strategic decision making (Hambrick & Mason, 1984) and on organizational transformation. Managerial values and cognition has an important impact on the ability of organizations to adapt (Tripsas & Gavetti, 2000). Managers depend on simplified processes for information and have bounded logically (Simon, 1955). To adapt mental models they may have difficulty (Barr & Huff, 1992). Based on shared history for the organization they often develop a system of beliefs or a “dominant logic” (Prahalad & Bettis, 1986). This shared history for organizations in a transition economy is entwined with the administrative heritage of the processes, norms and values associated with the socialist planned economy. Managerial single-loop learning extend to double-loop learning and redefine the tasks, goals and values that they reflect (Child & Czegledy, 1996). In the managerial cognition perspective, managers are considered to be information workers who absorb, process and disseminate information about issues, opportunities and problems to others (Walsh, 1995). Scholars on managerial cognition argued that managers grasp the information through their own cognitive lenses. Thus, managers can be considered as “cognizes” Calori, Johnson, & Sarnin (1994) who develop a mental map and reduce the complexity if things which in the result of dominant management logic (Bettls, 1995). More diversity in a firm’s activities increases the comprehensiveness and complexity of the manager’s mental map of the environment. The dominant logic directly influences the organizational form, learning processes and indirectly the level of absorptive capacity argued by (Van den Bosch, Volberda, & de Boer, 1999). For example, managers with classical management logic Volberda, Foss and Lyles (2010) are in favor of traditional functional forms of organization and do not consider the external environment as a source of knowledge that can help their firm (Van den Bosch et al., 1999). Such management logic portrays the organizations as a tool to achieve present ends and causes neglecting attitude towards opportunities posed by a wider environment. In this way, inter-organizational learning and potential absorptive capacity would be low which in turn is a reduction in innovation (Anatoliivna, 2013). This discussion shows the positive influence of absorptive capacity over dominant logic.

H3: Absorptive capacity is positively related to dominant logic.

3. RESEARCH METHODOLOGY

Sampling and data collection

To test the model we conducted survey in China and collected data from 300 companies involved in various sector i.e. telecommunication, electronics, information
technology, manufacturing, semiconductor, pharmaceutical, and scientific instruments. However, collecting data through a questionnaire survey for the research purpose in China is difficult (Huang, Davison, Liu, & Gu, 2008). In order to make our survey feasible, we worked with a Chinese local service center for small and medium-sized enterprises. This service center is a non-profit institution, and well known for its excellent services for the private sector firms.

With help from this service center, 500 questionnaires were distributed, 420 questionnaires were returned and 330 questionnaires were completed and were finalized for data analysis. These informants are members of the senior management team, including CEOs and the vice general manager who are considered as strategic managers or rather decision makers of the various firms. Then, we randomly divided the sample into four parts and assessed the potential non-response bias. Comparing the chi-squares of the responses from two parts of the four, from which we get that between these two groups there were no significant differences. Which suggested that non-response bias in this study was not a problem.

**Measures**

We designed the questionnaire from a literature review to identify and validate previous measures suitable for our study. The questionnaire we translated from English into Chinese for this purpose, and we invited two native Chinese speakers for translation. Later on we again translated the questionnaire into English so we can ensure there was no difference in meaning between Chinese and English questionnaire. Each of the measures were reviewed with 7-point Likert scale from strongly agree to strongly disagree.

**Absorptive capacity**

From past research, ACAP is a second-order construct which has four dimensions acquisition, assimilation, transformation, and exploitation. In which acquisition is a focal point towards identifying new knowledge, that is important for the operations; assimilation deals with the understanding of that knowledge which has been absorbed; transformation deals with the ability in which combining the existing and newly obtained knowledge; whereas exploitation deals with the ability to use that knowledge in the firm’s objectives (Liu, Ke, Wei, & Hua, 2013). To measure the four dimensions we adopted the items from Zahra and George (2002) and Szulanski (1996), we used 7-point Likert scales from smaller to higher.

**Dominant logic**

DL (dominant logic) including “mind-sets” Nadkarni & Perez (2007), “interconnected choices” Nicolaj Siggelkow (2002), and “strategic frames” (Huff, 1982; Bolton & Harris, 1999). The ability of a top management group (a group of key individuals), to manage a diversified firm is limited by the dominant general management logic(s) that they are used to. In other words, the range of tools that top managers use to identify, define, and make strategic decisions,
and their view of the world (mind sets), is determined by their experience. To measure the dimensions for dominant logic we adopted the items from Obloj (2010), we used seven point likert scale from smaller to higher.

**ERP assimilation**

ERP assimilation has been defined as the extent to which the use of the technology diffuses across the organizational projects or work processes and becomes a routine in the activities of those projects and processes (Fichman, R.G., and Kemerer, 1997; Purvis, Sambamurthy, & Zmud, 2001). Researchers, adopted a macro stance, that has proved a positive linkage between meta-structuring activities, e.g., top management support, strategic rationale and coordination, and web assimilation (Chatterjee et al. 2002; Shen, 2008). We also used 7-point Likert scale from smaller to higher to measure the ERP assimilation.

### 4. RESULTS

The descriptive analysis and correlation matrix of the research are illustrated in Table 1 the correlation coefficients between the independent variables absorptive capacity (ACAP) and dominant logic (DL). Table 1 shows that dominant logic is positively and significantly correlated with ERP (r = 0.628, p<0.01) positively and significantly correlated with ACAP (r= 0.676 p<0.01). A series of regression analysis were further performed to examine the strength of relationships among these variables. Dominant logic has positive and significant influence on ERP ($\beta = 0.628$, p<0.01) which support our statement that is dominant logic is positively related to ERP assimilation. Whereas, absorptive capacity is also positively correlated with ERP ($\beta = 0.676$ p<0.001). Table 1 shows that there is a significant correlation between the variables in the conceptual model.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>DL</th>
<th>ACAP</th>
<th>ERP</th>
</tr>
</thead>
<tbody>
<tr>
<td>DL</td>
<td>4.81</td>
<td>1.05</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACAP</td>
<td>5.02</td>
<td>1.29</td>
<td>0.628**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ERP</td>
<td>4.94</td>
<td>1.29</td>
<td>0.637**</td>
<td>0.676**</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: own study.

A multiple linear regression was calculated to check the ERP assimilation with effect of absorptive capacity and dominant logic in Table 2,3, and 4. A significant regression among the variables was found (F(2,327) = 178.108, p< .000), with an $R^2$ of .521. ERP is equal to .816 + 524 (AC) + .314(DL) where, ACAP is measured in two subsets PACAP and RACAP, and dominant logic has subsets in four dimensions. Furthermore, it shows that absorptive capacity and dominant logic has positive impact on ERP assimilation. And shows that if information resources are located properly with better leadership in decision making it will have a positive impact on the ERP of the firm.
Table 2. Model Summary of ACAP, DL and EPR assimilation

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.722$^a$</td>
<td>0.521</td>
<td>0.518</td>
<td>0.90203</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ACAP, DL2
Source: own study.

Table 3. ANOVA$^a$ Regression analysis between ACAP, DL and EPR assimilation

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>289.839</td>
<td>2</td>
<td>144.919</td>
<td>178.108</td>
<td>0.000$^b$</td>
</tr>
<tr>
<td>Residual</td>
<td>266.067</td>
<td>327</td>
<td>0.814</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>555.906</td>
<td>329</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ERP; b. Predictors: (Constant), ACAP, DL2
Source: own study.

Table 4. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized B</th>
<th>Coefficients Std. Error</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.816</td>
<td>0.231</td>
<td>–</td>
<td>3.535</td>
<td>0.000</td>
</tr>
<tr>
<td>DL2</td>
<td>0.314</td>
<td>0.052</td>
<td>0.278</td>
<td>6.019</td>
<td>0.000</td>
</tr>
<tr>
<td>PACv2</td>
<td>0.524</td>
<td>0.046</td>
<td>0.529</td>
<td>11.462</td>
<td>0.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ERP
Source: own study.

The implication of this study are for firms where there is a lack of information disseminated in order to make the processes more efficient. This study implies its significance on the private firms. From above discussion it is clear that information is very important for any firm to compete in the market place. We treat wide boundary span and a critical link between environment and organizational structure. That firms face multiple environments and thus have turbulent time in coping with the challenges on a daily basis. Managers need to learn from their past experience and gain from the new knowledge available in the environment to make critical decisions and resource allocation which will ultimately improve the ERP assimilation of the organization.

5. DISCUSSION

The survey was conducted in Chinese private firms to study their ability of absorption of knowledge and to study the dynamic capabilities of top management. The purpose of this study was to explore the dynamic capabilities of top management in context of Chinese market, their ability to explore the working environment for opportunity and threats. From their past experiences and knowledge to generate new knowledge in order to stand in market, that effects ERP in a positive way. Our work suggests absorptive capacity consists of different processes by which a firm can get knowledge from environment, such as creating alliance, personal relations and experiences. These processes make the absorptive capacity very effective that
can help ERP to perform in a better way. On the other hand, dominant logic shows the dynamic capabilities of top management. The two subsets of absorptive capacity show the dynamic capabilities of absorptive capacity which effect the ERP from different aspects in this study. From acquisition of knowledge to routine that knowledge in ERP assimilation potential and realize absorptive capacity the dynamic capabilities of absorptive capacity play significant role at different stages of ERP. Dynamic capabilities are not tautological, vague, and endlessly recursive as some have suggested (e.g. Priem & Butler, 2001; Williamson, 1999). But they consist of the processes which are key elements of the firm, management of resources, and in critical situations make such kind of decisions which help the firm to turn over the problems to their benefit.

This research provides some contribution to management research and practice. 1) The Absorptive capacity effects ERP assimilation; 2) Dominant logic and its effects on ERP assimilation 3) absorptive capacity, dominant logic and their inter relationship 4) Knowledge of conditions under which top management use their capabilities and knowledge to improve ERP. For management researchers, we provide insights into appropriate use of absorptive capacity. Our study provides a guideline for managers how they can use their capabilities and absorb knowledge from in and around the environment. Which later on they can use in ERP assimilation. These contributions are discussed in detail below:

First, this study provides a critical empirical evidence of the impact of absorptive capacity on ERP assimilation. In this view of ERP system, acquiring knowledge regarding ERP systems and ERP consulting firms a user’s absorptive capacity for understanding knowledge play an important role. Second a user’s ability to understand the knowledge and internalize the knowledge into his or her work environment. Once members of the organization understand the knowledge, they need to assimilate it. Moreover, individual’s required knowledge to understand in new context and synthesize it into their task environment in order to effectively transfer knowledge (Park et al., 2007). Our results show the influence of absorptive capacity over ERP assimilation, as the results $\beta = 0.676$ which is positively related to ERP assimilation, whereas $p<0.01$. According to this result absorptive capacity has a positive effect on ERP assimilation. Second, our study suggests that dominant logic has a positive relation with ERP assimilation. The dynamic capabilities of top management have a major effect on ERP. Private firms depend on the dynamic capabilities of top management, in terms of resource allocation, key processes of an organization, and decision-making etc. We suspected that dominant logic plays an important role in any firms’ success and has a great impact over ERP assimilation, for that we provided empirical and theoretical support in this study. DL makes the environment exogenous and alter it significantly in mature markets and extend outlines, and tendency; different effective types of DL should alter towards further composite programs and structured design of organization which allows better projections, control, and efficient exploitation of expanded resource base (Wiltbank, Dew, Read, & Sarasvathy, 2006). According to our results $r = 0.628$, Which shows that dominant logic (DL) has...
a positive effect over ERP assimilation where \( p < 0.01 \). This result shows that dominant logic and dynamic capabilities of top management are one of the key elements for the better at any stage and on any level of ERP. Top management and their way of thinking about any opportunity and threat effects the firm in a positive way and vice versa. Third, our study provides an empirical evidence for the impact of absorptive capacity on dominant logic. From managerial cognition, managers are assumed as “information workers” (Lundberg, 1985). Managers consume their time acquiring, assimilating, and disseminating knowledge about issue, opportunities, and problems. Managers see their ways through which flow of information can make the decisions and solving problems easy (Walsh, 1995). As our results \( r = 0.676 \) where \( p < 0.01 \) according to this result absorptive capacity has a positive influence on ERP assimilation. For firms and top management knowledge plays a key role to overcome their failures. From our results it is proved that for a better firm performance top management must be full of knowledge. Not only for firm’s performance but also scanning the environment for opportunity and threats, knowledge boosts the abilities to be more innovative and which also impacts ERP assimilation. From past experiences and updated knowledge that helps the managers to make good decisions in critical situations, and resource allocation in limited resources. Our results suggest that absorptive and dominant logic have significant influence on ERP.

An organization deals with languages, beliefs, and practices that consist of organizational code (Whyte 1957; Van Maanen, 1973). At the same time, organizational code is varying to individual beliefs. This kind of mutual learning has benefits for both individuals and for an organization. Knowledge stores in the organization’s norms, rules, routine and forms over time as knowledge is gathered, and learning progresses (March, 1991).

For top management, this paper provides insight regarding knowledge absorption and use of the individual dynamic capabilities to improve the ERP assimilation. This study provides insights about manager’s views towards opportunities, threats, and quick responsiveness towards decision-making. As the folk wisdom all the issues should be viewed as opportunities. Managers should be sure about the presence of opportunities within challenges and threats. But in order to convince the team positively we must always highlight the opportunities (Jackson & Dutton, 1988).

6. CONCLUSIONS

Like all studies in empirical research domain, our study also has some limitations. One key limitation that needs to be mentioned is the sample size and second is that the study focused on one specific city.

To study the ERP assimilation of the firm there are still many complications and many more constructs that involve and test the impact of ERP assimilation. In order to get a better understanding of the firm’s specific nature in ERP assimilation we must consider larger datasets and more diverse set of firms to enrich the understanding. This study focused on the firms located in Hefei city located in Anhui province, China. For
future study more firms could be examined from different regions so that better understanding about ERP assimilation can be provided and regional variations also assessed.

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**Competing interests**

As declared the authors do not have any competing interests.