Journal of Business Research xxx (xxxx) xxx–xxx

Contents lists available at ScienceDirect

Journal of Business Research

journal homepage: www.elsevier.com/locate/jbusres

Integration of knowledge and enhancing competitiveness: A case of acquisition of Zain by Bharti Airtel

Sanjay Dhir[a,*], Viput Ongsakul[b], Zafar U. Ahmed[c], Rishabh Rajan[d]

[a] Department of Management Studies, Indian Institute of Technology (IIT) Delhi, Hauz Khas, New Delhi 110016, India
[b] NIDA Business School, National Institute of Development Administration, Bangkok, Thailand
[c] Professor of Marketing, Department of Marketing, School of Business, American University of Ras Al Khaimah, Ras Al Khaimah, United Arab Emirates
[d] Department of Management Studies, Indian Institute of Technology Delhi, New Delhi, India

ARTICLE INFO

Keywords:
Acquisitions
Knowledge
Technology
Performance
Case study

ABSTRACT

Merger and acquisition is a popular governance structure that strategically combines the resources of one firm with those of another. This paper examines the diverse factors influencing the acquisition process and the associated benefits of good governance. The study evaluates the post-acquisition performance from the perspective of Zain's acquisition by Bharti Airtel in South Africa. The acquisition operation is described in terms of how the acquiring firm exploits their capabilities to enhance the overall performance in an emerging market. Efforts have also been made to consult the literature in order to identify the key factors affecting post-acquisition performance. This study is useful for providing academic researchers, managers, and practitioners with a body of knowledge in the telecom field and in the planning of cross-border acquisition operations. The strategic acquisition strengths and opportunities in the field of mobile network development and in the telecom industry, in general, are also covered. Based on the case study of Zain's acquisition, a research model for assessing post-acquisition performance was developed. We highlight four dynamic aspects that enhance a firm's post-acquisition performance: organizational learning, knowledge integration, technological capability, and technology relatedness.

1. Introduction

The role of acquisitions in a company's growth strategy is one of the main themes of the literature in academics and business practices. Mergers and acquisitions are strategic arrangements of two firms which can facilitate entry into a new market in order to gain competitiveness and also to enhance a firm's performance. An acquisition is essentially a business takeover of one firm by another (Ferreira, Santos, de Almeida, & Reis, 2014), ostensibly for improving the efficiency and capabilities of the acquiring firm (Park & Ghauri, 2011). The acquiring firm acts as the controlling body wielding significant power in both antagonistic and friendly situations (Schraeder & Self, 2003). Furthermore, the holding firm uses its knowledge and experience, technological resources and exploitive synergies (Gold, Malhotra, & Segars, 2001; Miller, Fern, & Cardinal, 2007) to maximize performance as a part of changing the business environment (Pablo & Javidan, 2009). Effective acquisitions are primarily known for their achievements in economic improvement, gaining market access (Inkpen, 2000; Meyer & Tran, 2006) and internationalization of the business. A well-researched acquisition offers instant access to the external assets of a firm (Al-Laham, Schweizer, & Amburgey, 2010; Dhir & Mital, 2012) and many improvements in productivity and management. It is usual for several organizations to be engaged in an acquisition in order to achieve the competitiveness and development embodied in the likes of Google, Facebook, and Cisco (Laamanen & Keil, 2008). In the global economy, acquisitions have become the most eminent strategies of the business structure for improving market share, increasing competitiveness and bolstering a firm's performance (Pablo & Javidan, 2009). Also, the technological capabilities and specific knowledge have great significance in a firm's performance in the context of acquisitions. In 2000, the worldwide acquisition activity was estimated at $3.5 trillion. By 2007, overall acquisition activities had expanded to $4.5 trillion (Reus & Lamont, 2009) as the strategic practice enabled progressive companies to grow and access additional resources, eradicate inefficiencies, produce tax advantages and increase market share (Chakrabarti, Gupta-Mukherjee, & Jayaraman, 2009). In a wise acquisition, the partner firms gained important core capabilities and integration of their knowledge bases (Moschieri & Campa, 2014).

* Corresponding author.
E-mail address: sanjaydhir@dms.iitd.ac.in (S. Dhir).

https://doi.org/10.1016/j.jbusres.2019.02.056
Received 31 August 2018; Received in revised form 21 February 2019; Accepted 25 February 2019
0148-2963/

Please cite this article as: Sanjay Dhir, et al., Journal of Business Research, https://doi.org/10.1016/j.jbusres.2019.02.056

There has been scarce research in the area of acquisitions for competitive advantage and with regard to optimizing post-acquisition performance (Goerzen, 2007). Numerous scholars have concentrated on the acquisition strategy and process, but few have attempted to define the factors influencing excellence in post-acquisition performance (Peng & Fang, 2010). This paper tries to answer some specific questions like: What are the specific situations affected by the choice of acquisition, and what strategies are implemented by the acquiring firm to take over another firm and how does this influence overall performance? This study emphasizes the intention of acquisition as a strategy for enhancing firm performance and competitive advantage. Also, this study sought to elucidate the role of identified constructs in overall firm performance and in attaining greater market share. Published reports have demonstrated the importance of a constructive relationship between post-acquisition performance and acquisition practice (Barkema, Bell, & Pennings, 1996), and here we propose that post-acquisition performance has a direct relationship with (1) organizational learning, (2) knowledge integration, (3) technological capability, and (4) technology relatedness. The researchers examined numerous factors affecting post-acquisition performance (Chakrabarti et al., 2009), especially with regard to several acquisition cases that failed to achieve their organizational performance goals. The current study proposes a number of hypotheses derived from the existing literature on post-acquisition performance. The hypotheses consider the connection between post-acquisition performance and distinguishing factors like technological capability, organizational learning, technological relatedness, and knowledge integration.

In the succeeding sections of the paper, we review the relevant literature, advance several hypotheses, present the Zain acquisition case, and provide an in-depth discussion of its implications and limitations, together with suggestions for future research.

2. Theoretical background

2.1. Post-acquisition performance

Previous work demonstrated that well-planned acquisition activity had constructive outcomes on the acquiring firm's performance and competitiveness (Asimakopoulos & Athanasoglou, 2013; Tse & Soufani, 2001). Scholars have also discussed acquisitions in which the acquiring firms have substantially enhanced their post-acquisition performance (Palich, Cardinal, & Miller, 2000). The acquisition process involves the skill, resources, top manager experience and marketability of the acquired firm for successful post-acquisition performance (Hayward, 2002) in terms of increased financial and market growth, profitability, extended consumer base, technological capabilities and competitive advantage (Lane & Lubatkin, 1998; Mao, Liu, Zhang, & Deng, 2016). The literature on organizational learning also suggested that the knowledge and expertise acquired through this means can be effectively leveraged by the acquiring firm to succeed in a new area of business or market. Under these conditions, the pre-existing resources of the acquiring firm are more likely to be valued and to improve post-acquisition organizational performance (Dhir & Mital, 2013a, 2013b; Popli, Akbar, Kumar, & Gaur, 2016). Acquisitions can be considered as significant business strategies wherein new access channels are established and resources are redeployed to gain entry into new markets and obtain financial synergies (Capron, Dussauge, & Mitchell, 1998). For example, prior acquisition experience helps firms achieve better organizational performance during the post-acquisition integration period (Hoang & Rothaermel, 2005; Kale, Dyer, & Singh, 2002), as experience in specific business practices enhance capability (Argote & Miron-Spektor, 2011). The assimilation of new resources and technologies allows the acquiring firm to perform better than its competitors (Wiklund & Shepherd, 2003; Wu, Yeniyurt, Kim, & Cavusgil, 2006).

Only a few researchers have examined the post-acquisition performance of companies on the basis of technological relatedness and knowledge integration (Si & Bruton, 2005). The technology and resource relatedness between the acquiring firm and the acquired firm has a significant impact on a firm's post-acquisition performance; moreover, it can diminish the financial and operational risks associated with the acquisition (Hora & Klassen, 2013; Khanra & Dhir, 2017). The technological capability of the acquiring firm can increase the knowledge and technical inputs obtained from the acquired firm and consequently, the merger should stimulate innovation and development and increase productivity (Kogut & Zander, 1992; Taylor & Greve, 2006).

In this era of globalization and transnational corporations, it is virtually necessary for a firm to undertake acquisitions to ensure that their market competitiveness is sustained. In general, weak under-performing firms are targeted for acquisitions (Erel, Liao, & Weisbach, 2012) by successful acquiring firms that have learned how to take advantage of new markets and have embraced the latest technology for staying competitive. Some researchers have suggested that non-technical acquisitions do not have much effect on innovation and performance (Ahuja & Katila, 2001) whereas technical acquisitions enhance the innovativeness and performance of the acquiring firm (Makri, Hitt, & Lane, 2010). Well-timed acquisitions usually have a positive impact on the performance of a firm by enhancing capabilities for utilizing more advanced technology for innovation (Zhang, Vonderembse, & Lim, 2002). Increased competition is the major challenge in today's dynamic market environment and the most important goal of any firm is to enhance performance for achieving competitive advantage by successfully implementing strategies like acquisitions (Porter & Kramer, 2002). Fig. 1 illustrates the theoretical model of our study. Acquisitions are the fuel that powers the increase in resources that energizes a firm's overall performance in a global, dynamic market environment (Mills & Smith, 2011). The basic reason behind an acquisition is to maximize the acquiring firm's growth and to build more value than competitors (King, Dalton, Daily, & Covin, 2004).

In the subsequent review of performance literature, we assumed that with additional practice in global acquisition, expanded technological capabilities, and technology relatedness, the acquiring firm can deal more efficiently with organizational disputes in a competitive market. Post-acquisition firm performance can be improved by resource sharing and learning from a technically related target firm.

2.2. Organizational learning

The main principle of business management is organizational learning. Numerous scholars have stressed the importance of organizational learning and its advantageous effects on a firm's structure and performance (Dhir, Mital, & Chaurasia, 2014; Jiménez-Jiménez & Sanz-Valle, 2011), and defined its role in developing the organizational capabilities of a firm (Teece, Pisano, & Shuen, 1997). The growth curve

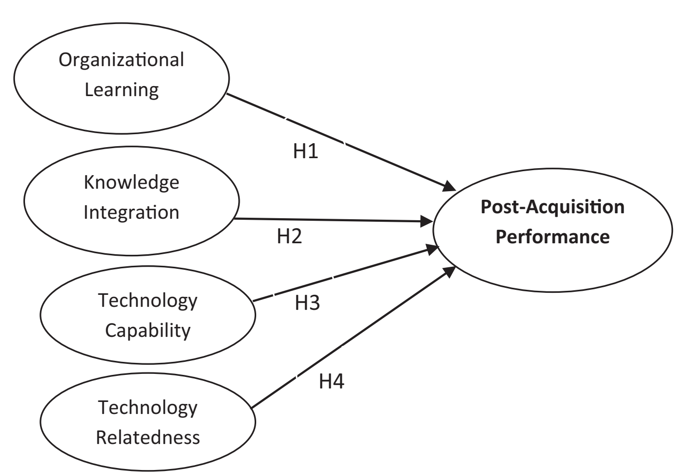

Fig. 1. Theoretical model.

of organizational learning improves based on the experience and education of the company's workers and the knowledge acquired by management. All companies develop business strategies to enhance and maximize their organizational performance (Zheng, Yang, & McLean, 2010) and also adopt innovative technologies to retain a market advantage in a volatile environment (Park, Chen, & Gallagher, 2002). The research and development program of a firm can serve as a major source of learning if it is properly structured (Mowery, 1983). The organizational learning process succeeds when the top level managers of the organization understand and aggressively pursue knowledge as a business strategy goal (Cepeda & Vera, 2007). Therefore, the strength of business management is the source of learning and its capability. Some scholars have suggested that the acquisition of organizational knowledge is not a straightforward affair and the acquisition situation renders it more complicated to imitate and transfer (Grant, 1996). Organizational learning constitutes a source of competitive advantage and higher performance, but also enables a business to acquire the necessary strategic skills in pre-acquisition experience for post-acquisition success (Chao, 2018). Organizational learning involves the transfer of knowledge and assimilation of one firm's experience to integrate it into a different business (Barkema & Schijven, 2008). The absorptive capability (Xie, Zou, & Qi, 2018), knowledge and skill transfer, and the subsequent organizational learning are all significant factors in post-acquisition performance and improved competitiveness (Cooke, Wu, Zhou, Zhong, & Wang, 2018). Organizational learning not only influences a company's position towards international acquisition but also helps to identify ideal acquisition targets and prioritize business activities to reach the goal (He & Zhang, 2018). Organizational learning develops the competence of a firm for utilizing inferences from earlier experience to become more competitive and enhance post-acquisition performance (Barkema & Schijven, 2008; Ibeh & Makhmadshoev, 2018). Learning opportunities must be consistently exploited for the formation and utilization of innovative knowledge and skills to broaden the strategic market base and create confidence for tackling risk (Inkpen, 1998). Companies have three different levels of learning, individual, group and organizational (Cangelosi & Dill, 1965) that are interconnected with each other; and knowledge flow within the organization will be severely limited without their coordination (Bontis, Crossan, & Hulland, 2002). Multilevel learning participation will develop knowledge effectively within the firm and improve the performance of the firm globally (DeCarolis & Deeds, 1999; Minbaeva, Pedersen, Björkman, Fey, & Park, 2003). Furthermore, the rapid sharing of knowledge within an organization has a positive impact on its performance, enhances the firm's intellectual capital (Boud, Cohen, & Sampson, 1999), and reduces the knowledge gap (Reber, 1989). Past literature claimed that proper organizational learning (Jiménez-Jiménez & Sanz-Valle, 2011) improved a firm's knowledge base and its ability to adapt to change as well as to develop competitiveness (Goh, 2002). A resource-based view of an organization allows researchers to explore the relationships between performance and knowledge acquisition (Prahalad & Hamel, 1990). The organizational learning process allows businesses to attain stronger positions in the global market and promotes skills in detecting and correcting business strategy errors (Shipton, Fay, West, Patterson, & Birdi, 2005). Numerous publications have confirmed the value of organizational learning in the highest performance of transnational firms across the global market (McGill, Slocum, & Lei, 1992), the enhancement of competitive advantage and more targeted use of new technology (Pucik, 1988). Thus, organizational learning has to be viewed as the key component for successful competition in an international market (Tippins & Sohi, 2003). Based on the previous discussion, it is hypothesized that:

H1. Organizational learning has a positive impact on the post-acquisition performance of the firm.

2.3. Knowledge integration

The most important resource of any firm is knowledge (Zou & Ghauri, 2008) that enhances overall performance in constantly changing market environments. One way to increase a company's knowledge base is by innovative strategy in the form of acquisition of another firm's experience and skills (Bresman, Birkinshaw, & Nobel, 2010). Thus, the acquiring firm can expand its base of knowledge by offering economies of scale and research scope (Ahuja & Katila, 2001). Knowledge creation depends upon the wise use of existing data through active debate and discussion among employees and management within an organization (Pérez-Luño, Saparito, & Gopalakrishnan, 2016). Knowledge identification is associated with a firm's purposes and vision (Khalid & Bhatti, 2015), but is also influenced by the contribution and experience of individual employees (Argote & Miron-Spektor, 2011; Dhir & Shukla, 2018; Gold et al., 2001). A diversity of technical, cultural and managerial skills especially influences the international growth of a firm (Eriksson, Johanson, Majkgård, & Sharma, 2015), and the experience gained through prudent application of knowledge stimulates the creativity needed to stay on top of changing markets (Dhir & Dhir, 2018; Johanson & Vahlne, 1977). Consequently, the capability to identify the knowledge is generally beneficial for the firm to gain competitive advantage and performance in changing business environments (Kogut & Zander, 1992; Reed, Storrud-Barnes, & Jessup, 2012). Knowledge plays a crucial role in the formulation of international strategy and enhances the overall performance of any firm. The knowledge can be sourced from individuals or be a collective acquisition of the group (Tsoukas & Vladimirou, 2001). Individuals possess a direct and practical knowledge acquired by years of training and experience, while collective knowledge is developed by a group of individuals working together within the firm (Grant, 1996; Sosa, 2011). Collective knowledge is the result of knowledge integration and it permits a firm to deal efficiently with the unstable market environment (Delios & Beamish, 1999), and knowledge integration gained by acquisitions can assist a firm to deal more effectively with culturally and socially diverse working environments (Akhtar & Sushil, 2018; Delios & Beamish, 2001; Dhir, 2016). With greater experience, firms can determine the best sources of knowledge and how best to obtain it (O'dell & Grayson, 1998) by applying innovative strategy like mergers and acquisitions or joint ventures (Dhir & Sushil, 2017). The firm's learning outcomes include the assimilation of the acquired firm's knowledge (Fu, Sun, & Ghauri, 2018) base. The growth of the acquiring firm is influenced by its access to the financial resources of the acquired company as well as the technology (Alvarez & Barney, 2001). The goal of the acquisition is to gain information and broaden knowledge (Madhok, 1997), and the knowledge transfer has a significant role in adding value to the firm (Tamer Cavusgil, Calantone, & Zhao, 2003; Tsai, 2001). The acquisition managers must also recognize the firm's limits and cultural dissimilarity in order to profit most from the acquisition of useful experience and knowledge. By leveraging its pre-acquisition knowledge, the acquiring firm can resolve organizational issues and improve the post-acquisition performance (Morosini, Shane, & Singh, 1998). The firm's ability to produce and transfer knowledge can provide a competitive advantage internationally (Andersson, Forsgren, & Holm, 2001) because the knowledge transfer allows it to operate more efficiently (Kotabe, Jiang, & Murray, 2011), expand globally and flourish in new international markets (Eriksson et al., 2015). The chances of survival in a global market are directly linked to the value of knowledge transferred. Hence, the information database and knowledge of an organization have a substantial effect on the organizational performance (Birasnav, 2014; Palanisamy & Sushil, 2003; Tseng, 2010). Prior literature suggests that a firm's knowledge base helps to enhance its absorptive capacity and capability to use the information to solve problems (Cohen & Levinthal, 1989; Zahra & George, 2002). The acquirer's knowledge base enhances the innovativeness of the firm resulting in increased output and improved overall performance (Cohen &

Levinthal, 1989; Makri et al., 2010). Based on the previous discussion, it is therefore hypothesized that:

H2. Knowledge integration has a positive impact on the post-acquisition performance of the firm.

2.4. Technical capability

Technological capability is a key resource of any firm to allow it to compete globally and continue developing. Adoption of novel technologies allows business managers to manipulate the competition for market leadership and competitive advantage in the global market (Hu, 2012). Both large and small firms can enhance their technological capability through acquisitions and mergers that substantially raise their performance (Yunis, Tarhini, & Kassar, 2018). Acquisitions have the capacity to advance the technological capabilities of the firm and elevate overall performance. The firms that have fewer expenses in research and development are more likely to be an acquirer firm whereas the firms having extensive R&D are likely to be acquired in the acquisitions operation. The combination of knowledge exploitation and technological innovation capabilities are the major drivers of acquisitions (Yam, Lo, Tang, & Lau, 2011). The knowledge is incorporated by the acquiring firm and thereby enhances its performance; as a result, acquisitions represent a popular strategy for businesses to enhance their technological capabilities (Jo, Park, & Kang, 2016). Generally speaking, there is a technological overlap among acquired and acquiring firm; and this overlap of technology affects the organization's capability and performance (Sears & Hoetker, 2014). After the acquisition process, the firms exchange information and identify opportunities for transforming internal knowledge resources acquired from business ties in order to gain competitiveness (Alvarez & Barney, 2001). Considering the strong motivation for acquisitions in a developed market, a successful firm must utilize all its strategic resources including innovation (Burrus, Edward Graham, & Jones, 2018; Dhir, Aniruddha, & Mital, 2014) and advanced technological capabilities to succeed. The strategic resources include processes, knowledge, advanced technology and experience. Advanced technological assets make the firm more competent to undertake and adopt innovation to gain market share (Bharadwaj, 2000). Technological assets and capabilities are considered the key intermediaries between the acquisition of the firm and post-acquisition performance in an emerging market. Technological capability includes applying appropriate methods in a timely fashion and the ability to develop new products to satisfy the future needs of customers. The acquired firm needs greater technological capability in order to counter unforeseen technological advances and opportunities created by competitors in the industry (Puranam, Singh, & Chaudhuri, 2009). Firms with advanced technological assets play a vigorous role in managing information and knowledge and have an upbeat effect on post-acquisition performance. Capability includes the ability to create new products and processes to operate effectively in a competitive market (Teece et al., 1997). The proper application of technological capability must also rely on the deployment of available resources to improve performance and productivity (Makadok, 2001). The technical skills of any firm can be an immediate source of competitive advantage and overall performance. The innovation process is also a result of the technological capability of a firm by which the organization can generate and develop novel ideas. Ideas are transformed into new products and services during the innovation process which improves the organizational performance and business structure (Damanpour & Aravind, 2011). All firms should adopt an innovative business model, organizational forms and processes to stay up with the market and improve quality and productivity (Teece, 2010). Past literature shows that technological capability is associated positively with organizational performance (Damanpour, Walker, & Avellaneda, 2009). Hence, the wise application of technology can eliminate the performance gap within an organization caused by changes in the external business environment. The increased technological skill of a firm speeds up its information sharing capability, innovativeness, and communication that can result in the introduction of value-added products and services that enhance organizational performance (Damanpour & Aravind, 2011). High-performing firms have stronger technology and capability compared to low-performing firms. Consequently, improving technological capabilities can lead to enhanced competitiveness (Yam, Guan, Pun, & Tang, 2004). This discussion leads to the following hypothesis:

H3. The acquirer's technology capability will enhance the post-acquisition performance of the firm.

2.5. Technology relatedness

The point at which two organizations are active in the specialized technical area and the way they share knowledge after the merger is considered as “technological similarity” or “technology relatedness” (Ahuja & Katila, 2001). Technology relatedness can be termed as the complementarity between the acquiring and acquired firm's technical perspectives (Cassiman, Colombo, Garrone, & Veugelers, 2005). Technological relatedness and understanding enhance the learning output of the firms, and the similarity can be used to assimilate and apply the knowledge more rapidly to promote collaboration within the two joined firms (Ahuja & Katila, 2001). Technological relatedness enhances the existing knowledge base, and also positively influences the efficiency of the target and acquirer firm as well (Phene, Tallman, & Almeida, 2012). Technology relatedness allows acquisition teams to expand upon the available information and enhances innovation through the integration of two similar knowledge bases (Zahra & George, 2002); it assists mutual understanding between the acquirer and acquired firm and encourages the sharing and use of available information (Cassiman et al., 2005; Lane & Lubatkin, 1998). The literature suggests that technology relatedness influences post-acquisition performance and the expansion of research and development operations of a firm (Colombo & Rabbiosi, 2014). How to define and measure technological relatedness is a major issue in management research, but there is a growing body of evidence on the advantages of technological similarity for enhancing organizational performance (Hill & Hoskisson, 1987). Organizations adopt and apply new technology to strengthen their competencies but not usually within a specific time frame. The technical similarity between the acquiring and acquired firms usually results in an expansion of the R & D operations, and therefore, contributes to gains in economy of scale (Cassiman et al., 2005). Thus, mergers and acquisitions have become an important strategy for businesses to fill the gaps in their technological platform with the resources and capabilities of the acquired firm (Colombo, Piva, & Rossi-Lamastra, 2014). Where there is a similarity in technology, the top managers of the acquirer and the acquired firm have related functions and skills which can further their common understanding and reduce the asymmetry of knowledge. Hence, both firms will have a better grasp of operations and available expertise, which can positively affect their productivity. The technological similarity is useful for both immediate advantages and in the long run for expanding into new markets, reaching new clients and retaining customer loyalty (Hagedoorn & Duysters, 2002). Technology relatedness will help acquirer firm to capture access to sources of innovation (Graebner, 2004), extend their resources (Dhir & Dhir, 2017; Uhlenbruck, Hitt, & Semadeni, 2006) and enhance capabilities for fulfilling increased demand for improved products and services (Makri et al., 2010). Also, employees experienced in working in the related technologies will have greater opportunity to utilize their technical skills to foster the growth of the merged firms and enhance customer satisfaction (Klepper & Thompson, 2010). Both acquirer and acquired firms must recognize the significance of each other's technical capabilities and resources, communicate their information effectively and control their technical bases in concert (Makri et al., 2010).

Based on the previous discussion, it is therefore hypothesized that:

H4. Similarities in the acquiring and acquired firm's technology are positively related to the post-acquisition performance of the firm.

3. Research methodology

3.1. Research design

The research design of the current study is based on the sort of research questions that have been asked in the literature. The constructs used here were identified and possible relationships were established with the overall performance. The goal was to investigate the acquisition of Zain Telecom by Bharti Airtel in South Africa using the current exploratory case study approach. The researchers in this case study planned to deal with the "why" and "how" through specifically designed survey questions (Ibeh & Makhmadshoev, 2018), and to discover the potential advantages of the identified constructs in the post-acquisition performance of this telecom firm. The current study combines data from websites, journals, and articles and relies on secondary data as the main source of data including non-participant observations, research papers, reports, financial statements, and company websites. The data are qualitative (words) as well as quantitative (numbers). The identified constructs in this case study research will help to build the theory (Eisenhardt, 1989).

A thorough literature review was used to develop the conceptual framework illustrated in Fig. 1. We selected the acquisition of Zain Telecom in South Africa by Bharti Airtel as representative of business mergers in the telecom field. Then we incorporated different constructs like knowledge integration, technological capabilities, organizational learning, and technological relatedness according to the literature to check the performance after the acquisition. The study explores the connections between the identified constructs and the post-acquisition performance of Bharti Airtel. The research is exploratory in nature. Data on the Zain acquisition were collected from the literature and websites and subjected to in-depth analysis. The case study provides a full contextual analysis of the interrelations of the identified constructs in the context of Zain's acquisition by Bharti Airtel. The study also investigated the relationship between the acquisition strategies employed by Bharti Airtel in South Africa and its post-acquisition performance.

The investigation deals with the confirmation of organizational theory in the context of post-acquisition performance. Multiple secondary data sources were commonly used in the study to trace and contextualize all the phenomena, structures, and relationships in the context of the Zain acquisition.

3.2. The Zain acquisition case

3.2.1. The telecommunication sector in South Africa

In the past few years, the international telecom market has drastically changed with a shift in traditional voice services to mobile data networks and from wired systems to mobile networks. This change has been observed in the South African market where the requirement for high speed and inexpensive mobile data is expanding rapidly, mainly in 4G services which are expected to grow in the next several years. The telecom sector in South Africa has been considerably expanded over the past decades and Africa presents a great opportunity for communications companies ("The Future of Telecoms in Africa", 2014). The active competition and extension of communication services by multinational companies have added to the telecom revolution in South Africa. The infrastructure and services have already been improved in Tanzania, Uganda, South Africa, and Kenya due to privatization and liberalization. Also, the governments of African countries have increased spending on communications infrastructure by privatizing state-owned enterprises and providing monetary support for the development of internet connectivity through the National Broadband Plan. Liberalization of regulations and advancement in technology has played a great role in transforming the telecom industry. Distinct markets have emerged with huge capital investments resulting in new challenges and opportunities.

Some of the best telecom service providers like Bharti Airtel, Vodafone, France Telecom, and Airtel International have ensured the success of partial privatization through their massive investment in Telkom Kenya Ltd., Safaricom Ltd., and Econet Ltd. respectively in the South African market. South African telecom operators have mainly focused on network expansion and infrastructural development to enhance nationwide coverage ("The Future of Telecoms in Africa", 2014).

3.2.2. Zain telecom

In 1983, Zain telecom was established in Kuwait as Mobile Telecommunications Company (MTC) and afterwards rebranded as Zain in 2007, the first mobile operator in a regional circle. The company offered mobile data services, operations, installation and maintenance of mobile telephones in 21 other companies in North Africa and the Middle East with a workforce of over 13,000 and 72.5 million active customers (Mobile Telecommunications Company, n.d.). Africa has shown one of the most rapid growths in the mobile phone industry of 38%. Zain was a pioneer in the mobile telecom sector in the Middle East. It was the first company to use Global Systems for Mobile Communications (GSM) in the African circle and the third largest telecom company in terms of geographic coverage. In 2007, it launched "Accelerate Growth in Africa (ACE)" to combine the resources and to spread out into adjacent telecom markets (Dar es Salaam, 2007). Zain telecom has realized the highest profit of any company in Kuwait's private telecom sector.

Zain Africa had mobile services operating in 15 countries including Chad, Burkina Fasoc, Congo Brazzaville, Gabon, Ghana, Kenya, Democratic Republic of Congo basin, Madagascar, Niger, Malawi, Nigeria, Tanzania, Sierra Leone, Uganda, and Zamibia. The total population of these fifteen countries was nearly 450 million with telecom access of roughly 32% which was exceptionally high in the continent. Zain's business strategy was to become the leading player in the mobile service market ("MTC concludes the acquisition", 2007). As of 2018, Zain had a corporate presence in eight countries across the Middle East with 46.9 million active individual and business customers.

3.2.3. Bharti Airtel

Bharti Airtel is a leading telecom services provider in twenty countries across Africa and Asia. The company has undertaken an end-to-end mobile network transformation program across its mobile operations in sixteen African countries and an expansion of the network for all of Airtel's African operations like data, charging, radio, network management, and consumer-services platforms. Bharti Airtel provides mobile wireless services including GSM-based technology within telecom operation circles, along with telephone and broadband in 94 cities, all offered under the Airtel brand. The company offers its customers a set of telecom solutions in addition to providing extended global connectivity. As India's biggest mobile telecom service operator, Bharti Airtel acquired the South African Zain telecom business for $10.7 billion in 2010 (Jain, Dasgupta, & Arora, 2010), a milestone for the international telecom industry. This business acquisition was a leading step towards South-South cooperation and strengthened the relationship between Africa and India. At the conclusion of this acquisition deal, Bharti Airtel has been transformed into an international telecom with industry operations across 18 countries.

The Zain acquisition was the second largest cross-border deal by an Indian entity. Before the Zain deal, Airtel had outsourced its customer service operations and networks. In 2012, after the acquisition, Bharti Airtel launched an integrated brand with services in South Africa and updated the name to Airtel Africa. After the deal, the company adopted the third generation of mobile communication (3G) in 13 out of the 22 telecom circles and also offered high-speed internet, mobile TV, and video streaming. Airtel Africa sold over 3500 towers in six countries

Table 1
Bharti Airtel coverage post-acquisition.

	2010	2015
Country	15	17
Sites	10,000	18,800
Customers	35 mm	76 mm

(Source: Bharti Airtel Ltd. Capital Market Publishers India Pvt. Ltd., 2017)

across Africa including operational markets in Ghana, Uganda, Kenya, Niger, Malawi, Eaton, and Burkina Faso to become an independent telecom tower company in Africa (Banik & Nag, 2016).

3.2.4. Airtel's Zain acquisition in South Africa

Bharti Airtel acquired Zain's African business for about $10.7 billion to become the fifth largest telecom in the international market. Airtel now manages Zain's mobile services and operations in 15 countries with a customer base of over 42 million (Banik & Nag, 2016). Zain was the market leader in ten of these countries and held second place in four. After the acquisition, Bharti Airtel became the fifth largest network company with mobile operations in 17 countries (Table 1) (Bharti Airtel Ltd. Capital Market Publishers India Pvt. Ltd., 2017) and 18,800 service sites in 2015. Its customer base has swelled from 35 million to 76 million, and the Airtel network has now reached over 1.8 billion customers and has the second largest customer coverage among the global telecom companies.

The acquisition of Zain by Bharti Airtel is the second largest by an Indian business unit after Tata's Corus deal ("Zain Deal Takes India's Outbound", 2010).

The African market was the next target of telecom growth and it made good business sense for Airtel to invest in this emerging market. Mobile base user operations were particularly low in Africa. At the time of Zain's acquisition, it was experiencing substantial financial losses, which is one reason that Airtel was successful in acquiring the company. In 2009, the Zain telecom shareholders in Kuwait were looking for a buyer because they had a reported loss of $112 million in seven of the fifteen countries (Riyadh, 2009). Zain's group business was $2 billion in debt when the acquisition took place in 2010 and there were legal disagreements near Zain's Nigerian unit. Airtel captured the African operations after the acquisition because nine out of fifteen of Zain's African markets had more than 33% subscribers and mobile network access exceeded 45% in five African markets including Ghana and Nigeria. Zain telecom had also suffered losses in Uganda, a circle with 35% access and had MTN as a bigger competitor in the telecom industry. The Zain acquisition expanded Airtel's business across the African market and reduced the business shocks with a stronger presence on the continent. Bharti Airtel initiated the acquisition to grow and enhance its operating performance in the emerging markets of South Africa and to gain market share in the country. As a result of the acquisition, Airtel Africa improved their performance and competitiveness, gained knowledge and international experience as well as access to Zain's resources and technology, and helped to create brand value across the world. Airtel Africa launched the 3G spectrum in 13 out of 22 telecommunication circles, offering live video streaming and high-speed internet data communication ("India's Leading Provider of Prepaid", n.d.). In consequence of the Zain acquisition, Bharti Airtel controlled the entire African market and acquired a stronger presence as a global telecom industry player with Zain setting up its base in the world market.

We have developed the expected relationship paths for the post-acquisition performance with contextual constructs including the technological capability of the firm, the presence of organizational learning, technological relatedness and knowledge integration (Fig. 2).

4. Results

The main achievement of this study is the identification of the factors and constructs affecting post-acquisition operations and performance that can lead to subsequent improvement in customer base, satisfaction, and market share. The integration of knowledge, technological capabilities, and technological relatedness are very important variables, playing a crucial role in making the acquisition process successful. In the particular case of Bharti Airtel's acquisition of Zain, the technology and industry were similar to each other and the acquiring firm was more easily able to interface with the acquired firm. With the support of this observation, the case study results suggest that there exists a strong relationship between technology relatedness and the M&A process that allows the acquiring company to gain a competitive advantage.

In the post-acquisition process of Bharti Airtel, we looked at the strategic management through which the acquiring company gained market share and customers as well as the opportunity to become the market leader. There is a major role of knowledge transfer and creativity involved in the outstanding performance of any firm. A fruitful acquisition will enhance the technological as well as managerial capabilities of the acquiring firm. As a result of the merger, Bharti Airtel integrated Zain's resources and capabilities to build up customer trust and enhance brand image, which can be termed as non-technological capabilities. On the other hand, the deployment of 3G networks, the implementation of good quality video streaming, and the presence of new shared towers are all examples of enhanced technological capabilities, showing the advantage of industry relatedness on post-acquisition performance. The integration of additional technological and non-technological capabilities as a result of the post-acquisition management strategy increased Bharti Airtel's market share in South Africa, enhanced its brand image across the world and also facilitated knowledge transfer and the creation of intellectual capital within the firm.

Table 2 shows the growth-ratio analysis of the financial performance of Bharti Airtel, pre- and post-acquisition (Smart Network. Smarter Experiences-Airtel, 2017).

EPS (earnings per share) is the part of a firm's profit allocated to shareholders. In terms of EPS, the pre-acquisition performance of Bharti Airtel was INR 120.08 billion and the post-acquisition performance was INR 179.68 billion (Table 2). Researchers (Ali, Divya, & Saradhi, 2017) have concluded that the post-acquisition performance of Bharti Airtel was high. The maximum pre-acquisition performance of Bharti Airtel in terms of return on equity was INR 4.96 billion in 2009–2010 (Table 3).

The lowest pre-acquisition return on equity was INR 3.29 billion in 2007–2008. The maximum return on equity performance after the acquisition was INR 16.86 billion in the year 2014–2015. The lowest return on equity in pre-acquisition was INR 8.93 billion in 2015–16. Therefore, the post-acquisition performance of Bharti Airtel was increased compared to pre-acquisition.

4.1. Organizational learning and post-acquisition performance of Bharti Airtel

Airtel Africa utilized its earlier knowledge base, especially its rural marketing experiences, in order to expand its African market. Prior to the acquisition, Airtel Uganda had 25% of the market share and this increased to 38% in 2013 ("Airtel Africa makes its fifth market consolidation", 2018). In 2016, Airtel Africa announced that there would be further asset consolidation in low-performance markets to increase profitability and market share. Bharti Airtel has had a great experience with 2G, 3G, and 4G services in all 22 circles, which makes it unique when compared to other network and service providers around the world. The increased intellectual capability also comes from the firm's experience. Airtel Africa continued to invest in networks and data capabilities by increasing 3G and 4G coverage to capture the African market and improve customer experience. As of March 31, 2017, the

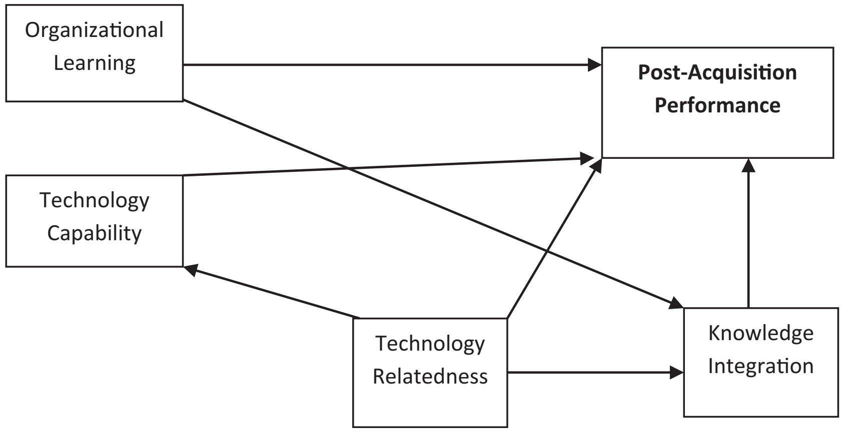

Fig. 2. Research model.

Table 2
Pre and post-acquisition performance of Airtel through growth ratios.

Growth ratio	Earnings per share (in billions)
Pre-acquisition	
2007–2008	34.23
2008–2009	41.40
2009–2010	24.13
2010–2011	20.32
Total (T1)	120.08
Average	30.02
Post-acquisition	
2011–2012	21.59
2012–2013	29.41
2013–2014	45.89
2014–2015	43.86
2015–2016	38.93
Total (T2)	179.68
Average	35.93

(Source: Smart Network. Smarter Experiences-Airtel, 2017).

Table 3
Pre and post-acquisition performance of Bharti Airtel through profitability ratios.

Profitability ratio	Return on equity (in billions)
Pre-acquisition	
2007–2008	3.29
2008–2009	4.07
2009–2010	4.96
2010–2011	4.06
Total (T1)	16.38
Average	4.09
Post-acquisition	
2011–2012	11.59
2012–2013	9.41
2013–2014	9.89
2014–2015	16.86
2015–2016	8.93
Total (T2)	56.68
Average	11.33
Grand Total (T1 + T2)	73.06

(Source: Smart Network. Smarter Experiences-Airtel, 2017).

company had 80.1 million customers in Africa across fifteen countries, compared to 74.7 million customers in 2016 which shows the enhanced performance of the company. Airtel has been rated among the top 10 most admired brands in Africa in 2016–17 by Brand Africa (Management Discussion and Analysis, 2017).

4.2. Knowledge integration and post-acquisition performance of Bharti Airtel

Bharti Airtel Africa adopted the Zain acquisition strategy to enhance its performance and to gain market share across Africa. The merging of the two companies has improved Airtel Africa's performance by enhancing international experience and exposure. The knowledge and experience of Bharti Airtel led to economies of scale, elimination of competition and increased profitability. The company effectively transformed its enterprise knowledge and experience into wealth-creating ideas, products, and solutions. Because of its international market experience, Bharti Airtel entered the African market in 2010 by acquiring the telecom business of Zain in 17 countries for $10.7 billion. After the deal, Airtel Africa launched a high-quality voice service for its customers and became the third operator to launch mobile HD voice service in the African market. This voice service has enriched the user experience for Airtel subscribers and led to its outstanding growth in the highly competitive environment (Ghosh, 2012).

4.3. Technology capabilities and post-acquisition performance of Bharti Airtel

Bharti Airtel acquired South Africa-based Zain telecom and it is now known as Airtel Africa Telecommunication Company. Airtel Africa quickly adopted 3G technology in order to achieve a global competitive advantage in the telecom market. 3G technology ensured high network speed and low investment requirements. Airtel Africa's technology capability has improved the organization's performance and increased profits through data revenue, SMS revenue, and an enhanced consumer base. The technology was quickly taken up by the consumers of South Africa who recognized its value, and it has also captured the new smartphone-enabled customer segment, leading to a clear competitive advantage and enhanced performance (Management Discussion and Analysis, 2017).

4.4. Technology relatedness and post-acquisition performance of Bharti Airtel

Zain and Bharti Airtel both have technology relatedness in the field of telecom services and operations. After the Zain acquisition, Airtel Africa benefited from the deal by way of diversification of revenue streams and new growth opportunities in the African market. Airtel Africa also adopted an outsourcing strategy to maximize revenue and productivity by contracting for IT services and call-centers allowing it to focus more energy on the organization's core business. The technology similarity with Zain, clearly netted Airtel Africa a competitive advantage, as the company enhanced performance through improved network relationships. The innovative strategy of sale and leaseback of networks and towers also increased company profits by reducing site-operation costs, providing faster access, redeploying manpower to the tower companies and strengthening network efficiency, while elevating overall performance of Airtel Africa (Management Discussion and Analysis, 2017). The similarity in networks and services of the firms allowed seamless integration of the multiple operations across various countries and also created valuable synergies (Dhir & Mital, 2013a, 2013b; Lee, Lee, & Garrett, 2017). Through a combination of astute business strategies in technology plus the overall quality of the acquired company, the infrastructure and consumer base of Airtel Africa has been extended in all services across the African market, resulting in vastly improved market penetration. The leaseback and sale of towers, as well as network sharing, have become prime business strategies for enhancing financial performance, raising productivity and facilitating the use of technology and capabilities.

Based on the literature review and case study analysis, a relationship path is proposed between the identified factors and the competitiveness and performance.

5. Discussion and implications

5.1. Theoretical implications

The study examined the effects of the identified constructs on Airtel Africa's post-acquisition performance, allowing for the extension of current research empirically. The selection of constructs is crucial for long-term performance and strategic renewal. Our results suggest that knowledge integration, organizational learning, technological capabilities, and technical similarity facilitate a firm's performance after an acquisition deal in the context of the telecom industry. There is a lack of research on the relationship between knowledge integration, capability, and organizational learning and the post-acquisition performance of a telecom company, and this study contributes to organizational learning theory by examining the post-acquisition performance of the Bharti Airtel Company. Another major contribution of this study involves the identified relationships between knowledge, organizational learning, and technology and organizational performance through acquisitions. The results add to the literature on organizational learning by showing that the technological capability of an acquiring firm plays a critical role in affecting post-acquisition performance. Knowledge integration, learning, and experience all were seen to influence post-acquisition performance in the telecom sector. The study also identified technological capability, technology relatedness, knowledge integration and learning as imperative factors in a firm's positive development after concluding an acquisition deal. The major constructs that provide the framework for assessing a company's post-acquisition business performance were highlighted. We have tested these identified constructs according to reports in the literature and found them to have a direct relationship with high performance. This case study evaluated the impact of knowledge, skills, capabilities, and technology on the performance of the acquiring firm in terms of profitability, customer base, and market growth. Also, we investigated the experience and knowledge of managers and employees and their impact on a firm's organization and performance in the context of acquisitions. By separating organizational learning into different components, this study gives new insights into the relationships between different dimensions of organizational learning like knowledge integration, information sharing and knowledge transfer relative to post-acquisition performance. We also investigated the link between technology relatedness and knowledge flow in the context of acquisition operations. Some scholars have considered the acquisition process as a business strategy for the redeployment of resources that is related to market failure (Capron et al., 1998).

Our study focused on the effectiveness of such redeployment in the context of a telecom acquisition and demonstrated that it effectively enhanced the performance of the firm after its acquisition of Zain through enhanced productivity, targeting of customer services and market growth of the acquiring firm. Thus, this case study research further develops the theories of organizational learning that are based on an appraisal of cross-border acquisition operations. We verified that organizational learning and knowledge integration are significant factors in the operation of an international business (Petersen, Pedersen, & Lyles, 2008). In summary, this case study research contributes to the theory of acquisition and organizational learning in rising markets by identifying the constructs of post-acquisition performance.

5.2. Managerial implications

The study suggests that a firm's managers can better evaluate its preparedness for a potential acquisition process and improve the likelihood of successful performance afterwards by assessing its capacity for knowledge assimilation and integration, technology capabilities, and similarities between them and the company being acquired. Careful analysis of organizational performance is essential for predicting the outcome of a business acquisition, and this study is very useful in that regard, as it highlights how a firm can build up a competitive advantage and capabilities through cross-border acquisitions. A firm can gain additional capabilities, technological as well as non-technological, through implementing innovative strategies like collaborations, mergers, and acquisitions. A strategic acquisition of a similarly structured company is often the best way for a firm to branch out and adapt to changing global market forces. Our research shows that the acquisition process can provide substantial benefits for an organization to adapt to market demands and maintain a competitive edge. Good managers do not simply rely on prior experience to engineer an acquisition but also take into account some important factors such as technology matches, knowledge bases and learning environments to expedite the merger process and enhance post-acquisition performance. As our work shows, the successful implementation of an acquisition process relies on the relationship between the constructs and overall performance; and managers should be aware of the dynamic issues and factors affecting the post-acquisition performance. For every cross-border acquisition, enhancing the performance should be a strategic objective number one. Our study will help managers plan a workable post-acquisition operation through a deeper understanding of the challenges and factors affecting it. To overcome these challenges, the managers can employ strategies including experiential learning, capability enhancement and knowledge transfer from similar markets.

5.3. Study limitations and directions for future research

The current findings were derived from firm acquisitions, and in this study, empirical data and analysis of such data were limiting. Future research should investigate the wider aspects of a firm's performance in addition to the competitive advantages gained as a result of an acquisition. Also, future research could be conducted in the context of pre-acquisition, especially for telecom services. The major limitation of the current study is the use of single-case research, which was motivated by the lack of previous research in post-acquisition performance. Multiple cases are desirable for an in-depth investigation of the current context. Also, more cases and acquisition events are required to uncover additional constructs influencing a company's performance and competitiveness. Additionally, a future study could examine the interrelationships between organizational learning, knowledge learning, technological capability, and technology relatedness and their effects on performance. We encourage researchers to adopt a multilevel approach to conduct case study research in order to validate their findings. Furthermore, acquisition issues can also be addressed by examining the cross-border mergers process separately. To expand this research, some other factors like a geographical barrier (Ragozzino, 2009), cultural differences and target firm position can be included. The future research can examine the interrelationship between the identified constructs based on organizational performance after the acquisitions.

References

Ahuja, G., & Katila, R. (2001). Technological acquisitions and the innovation performance of acquiring firms: A longitudinal study. *Strategic Management Journal, 22*(3), 197–220.

Akhtar, M., & Sushil (2018). Strategic performance management system in uncertain business environment: An empirical study of the Indian oil industry. *Business Process Management Journal, 24*(4), 923–942.

Ali, S. S., Divya, K. H., & Saradhi, J. P. (2017). Financial performance analysis of Bharti Airtel in the context of pre and post acquisition of Zain Group (A Kuwait basis telecommunication company). *International Journal of Engineering Technology Science and Research, 4*(8), 126–141.

Al-Laham, A., Schweizer, L., & Amburgey, T. L. (2010). Dating before marriage? Analyzing the influence of pre-acquisition experience and target familiarity on acquisition success in the "M&A as R&D" type of acquisition. *Scandinavian Journal of Management, 26*(1), 25–37.

Alvarez, S., & Barney, J. (2001). How entrepreneurial firms can benefit from alliances with large partners. *Academy of Management Executive, 15*(1), 139–148.

Andersson, U., Forsgren, M., & Holm, U. (2001). Subsidiary embeddedness and competence development in MNCs: A multi-level analysis. *Organization Studies, 26*(6), 1013–1034.

Argote, L., & Miron-Spektor, E. (2011). Organizational learning: From experience to knowledge. *Organization Science, 22*(5), 1123–1137.

Asimakopoulos, I., & Athanasoglou, P. P. (2013). Revisiting the merger and acquisition performance of European banks. *International Review of Financial Analysis*, 237-249.

Banik, A., & Nag, T. (2016). Bharti Airtel and Zain: A journey into new territories. *Global Business Review, 17*(6), 1510–1515.

Barkema, H. G., Bell, J. H., & Pennings, J. M. (1996). Foreign entry, cultural barriers, and learning. *Strategic Management Journal, 17*(2), 151–166.

Barkema, H. G., & Schijven, M. (2008). How do firms learn to make acquisitions? A review of past research and an agenda for the future. *Journal of Management, 34*(3), 594–634.

Bharadwaj, A. S. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS quarterly*, 169-196.

Bharti Airtel Ltd. Capital Market Publishers India Pvt. Ltd (2017). Retrieved from *http://www.capitalmarket.com/Company-Information/Information/About-Company/Bharti-Airtel-Ltd/15542/*Accessed 12 August 2018.

Birasnav, M. (2014). Knowledge management and organizational performance in the service industry: The role of transformational leadership beyond the effects of transactional leadership. *Journal of Business Research, 67*(8), 1622–1629.

Bontis, N., Crossan, M. M., & Hulland, J. (2002). Managing an organizational learning system by aligning stocks and flows. *Journal of Management Studies, 39*(4), 437–469.

Boud, D., Cohen, R., & Sampson, J. (1999). Peer learning and assessment. *Assessment & Evaluation in Higher Education, 24*(4), 413–426.

Bresman, H., Birkinshaw, J., & Nobel, R. (2010). Knowledge transfer in international acquisitions. *Journal of International Business Studies, 41*(1), 5–20.

Burrus, R. T., Edward Graham, J., & Jones, A. T. (2018). Regional innovation and firm performance. *Journal of Business Research, 88*, 357–362.

Cangelosi, V. E., & Dill, W. R. (1965). Organizational learning: Observations toward a theory. *Administrative Science Quarterly,* 175–203.

Capron, L., Dussauge, P., & Mitchell, W. (1998). Resource redeployment following horizontal acquisitions in Europe and North America, 1988–1992. *Strategic Management Journal, 19*(7), 631–661.

Cassiman, B., Colombo, M. G., Garrone, P., & Veugelers, R. (2005). The impact of M&A on the R&D process: An empirical analysis of the role of technological-and market-relatedness. *Research Policy, 34*(2), 195–220.

Cepeda, G., & Vera, D. (2007). Dynamic capabilities and operational capabilities: A knowledge management perspective. *Journal of Business Research, 60*(5), 426–437.

Chakrabarti, R., Gupta-Mukherjee, S., & Jayaraman, N. (2009). Mars-Venus marriages: Culture and cross-border M&A. *Journal of International Business Studies, 40*(2), 216–236.

Chao, Y. C. (2018). Organizational learning and acquirer performance: How do serial acquirers learn from acquisition experience? *Asia Pacific Management Review, 23*(3), 161–168.

Cohen, W. M., & Levinthal, D. A. (1989). Innovation and learning: The two faces of R & D. *The Economic Journal, 99*(397), 569–596.

Colombo, M. G., & Rabbiosi, L. (2014). Technological similarity, post-acquisition R&D reorganization, and innovation performance in horizontal acquisitions. *Research Policy, 43*(6), 1039–1054.

Colombo, M. G., Piva, E., & Rossi-Lamastra, C. (2014). Open innovation and within-industry diversification in small and medium enterprises: The case of open source software firms. *Research Policy, 43*(5), 891–902.

Cooke, F. L., Wu, G., Zhou, J., Zhong, C., & Wang, J. (2018). Acquiring global footprints: Internationalization strategy of Chinese multinational enterprises and human resource implications. *Journal of Business Research, 93*, 184–201.

Damanpour, F., & Aravind, D. (2011). Managerial innovation: Conceptions, processes, and antecedents. *Management and Organization Review, 8*(2), 423–454.

Damanpour, F., Walker, R. M., & Avellaneda, C. N. (2009). Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations. *Journal of Management Studies, 46*(4), 650–675.

Dar es Salaam. 2007, January 21. MTC Celtel Group launches new growth strategy - ACE. Retrieved from *https://www.zain.com/en/press/mtc-celtel-group-launches-new-growth-strategy-ace/*Accessed 12 August 2018.

DeCarolis, D. M., & Deeds, D. L. (1999). The impact of stocks and flows of organizational knowledge on firm performance: An empirical investigation of the biotechnology industry. *Strategic Management Journal, 20*(10), 953–968.

Delios, A., & Beamish, P. W. (1999). Geographic scope, product diversification, and the corporate performance of Japanese firms. *Strategic Management Journal, 20*(8), 711–727.

Delios, A., & Beamish, P. W. (2001). Survival and profitability: The roles of experience and intangible assets in foreign subsidiary performance. *Academy of Management Journal, 44*(5), 1028–1038.

Dhir, S. (2016). Practice-oriented insights on creative problem solving. *Journal of Management and Public Policy, 7*(2), 5–7.

Dhir, S., Aniruddha, & Mital, A. (2014). Alliance network heterogeneity, absorptive capacity and innovation performance: A framework for mediation and moderation effects. *International Journal of Strategic Business Alliances, 3*(2–3), 168–178.

Dhir, S., & Dhir, S. (2017). Adoption of open-source software versus proprietary software: An exploratory study. *Strategic Change, 26*(4), 363–371.

Dhir, S., & Dhir, S. (2018). Role of ambidexterity and learning capability in firm performance: A study of E-commerce industry in India. *VINE Journal of Information and Knowledge Management Systems, 48*(4), 517–536.

Dhir, S., & Mital, A. (2012). Decision-making for mergers and acquisitions: The role of agency issues and behavioral biases. *Strategic Change, 21*(1–2), 59–69.

Dhir, S., & Mital, A. (2013a). Asymmetric motives in Indian bilateral cross-border joint ventures with G7 nations: Impact of relative partner characteristics and initial conditions. *International Journal of Strategic Business Alliances, 3*(1), 69–92.

Dhir, S., & Mital, A. (2013b). Value creation on bilateral cross-border joint ventures: Evidence from India. *Strategic Change, 22*(5–6), 307–326.

Dhir, S., Mital, A., & Chaurasia, S. (2014). Balanced scorecard on top performing Indian firms. *International Journal of Indian Culture and Business Management, 9*(1), 89–100.

Dhir, S., & Shukla, A. (2018). The influence of personal and organisational characteristics on employee engagement and performance. *International Journal of Management Concepts and Philosophy, 11*(2), 117–131.

Dhir, S., & Sushil (2017). Flexibility in modification and termination of cross-border joint ventures. *Global Journal of Flexible Systems Management, 18*(2), 139–151.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review, 14*(4), 532–550.

Erel, I., Liao, R. C., & Weisbach, M. S. (2012). Determinants of cross-border mergers and acquisitions. *The Journal of Finance, 67*(3), 1045–1082.

Eriksson, K., Johanson, J., Majkgård, A., & Sharma, D. D. (2015). *Experiential knowledge and cost in the internationalization process.* Networks and Power: Knowledge41–63.

Ferreira, M. P., Santos, J. C., de Almeida, M. I. R., & Reis, N. R. (2014). Mergers & acquisitions research: A bibliometric study of top strategy and international business journals, 1980–2010. *Journal of Business Research, 67*(12), 2550–2558.

Fu, X., Sun, Z., & Ghauri, P. N. (2018). Reverse knowledge acquisition in emerging market MNEs: The experiences of Huawei and ZTE. *Journal of Business Research, 93*, 202–215.

Ghosh, S. 2012, May 03. For Airtel, Africa operations are in stark contrast to home market. Retrieved from *https://www.livemint.com/Companies/HK80ffTfxi0cPnONNUy0bI/For-Airtel-Africa-operations-are-in-stark-contrast-to-home.html/*Accessed 12 August 2018.

Goerzen, A. (2007). Alliance networks and firm performance: The impact of repeated partnerships. *Strategic Management Journal, 28*(5), 487–509.

Goh, S. C. (2002). Managing effective knowledge transfer: An integrative framework and some practice implications. *Journal of Knowledge Management, 6*(1), 23–30.

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems, 18*(1), 185–214.

Graebner, M. E. (2004). Momentum and serendipity: How acquired leaders create value in the integration of technology firms. *Strategic Management Journal, 25*(8–9), 751–777.

Grant, R. M. (1996). Prospering in dynamically-competitive environments: Organizational capability as knowledge integration. *Organization Science, 7*(4), 375–387.

Hagedoorn, J., & Duysters, G. (2002). External sources of innovative capabilities: The preferences for strategic alliances or mergers and acquisitions. *Journal of Management Studies, 39*(2), 167–188.

Hayward, M. L. (2002). When do firms learn from their acquisition experience? Evidence from 1990 to 1995. *Strategic Management Journal, 23*(1), 21–39.

He, X., & Zhang, J. (2018). Emerging market MNCs' cross-border acquisition completion: Institutional image and strategies. *Journal of Business Research, 93*, 139–150.

Hill, C. W., & Hoskisson, R. E. (1987). Strategy and structure in the multiproduct firm. *Academy of Management Review, 12*(2), 331–342.

Hoang, H., & Rothaermel, F. T. (2005). The effect of general and partner-specific alliance experience on joint R&D project performance. *Academy of Management Journal, 48*(2), 332–345.

Hora, M., & Klassen, R. D. (2013). Learning from others' misfortune: Factors influencing knowledge acquisition to reduce operational risk. *Journal of Operations Management, 31*(1–2), 52–61.

Zain deal takes India's outbound M&A tally to $15 Bn in 2010. Retrieved from *https://economictimes.indiatimes.com/industry/telecom/zain-deal-takes-indias-outbound-ma-tally-to-15-bn-in-2010/articleshow/5744239.cms/*Accessed, Accessed date: 17 August 2018.

India's leading provider of prepaid & postpaid mobile services in India (n.d.). Retrieved from *https://www.airtel.in/press-release/04-2017/airtel-builds-a-future-ready-network-doubles-mobile-sites-in-just-two-years/*Accessed 10 August 2018.

MTC concludes the acquisition of 100% of Celtel. Retrieved from *https://www.zain.com/*

en/press/mtc-concludes-the-acquisition-of-100-of-celtel/Accessed, Accessed date: 3 August 2018.
The future of telecoms in Africa The "blueprint for the brave". Deloitte. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/fpc/Documents/secteurs/technologies-medias-et-telecommunications/deloitte_the-future-of-telecoms-in-africa_2014.pdf/Accessed, Accessed date: 16 August 2018.
Hu, M. C. (2012). Technological innovation capabilities in the thin film transistor-liquid crystal display industries of Japan, Korea, and Taiwan. *Research Policy, 41*(3), 541–555.
Ibeh, K., & Makhmadshoev, D. (2018). Post-acquisition integration behavior of nascent African multinational enterprises. *Journal of Business Research, 93*, 255–267.
Inkpen, A. C. (1998). Learning and knowledge acquisition through international strategic alliances. *The Academy of Management Executive, 12*(4), 69–80.
Inkpen, A. C. (2000). Learning through joint ventures: A framework of knowledge acquisition. *Journal of Management Studies, 37*(7), 1019–1044.
Jain, A., Dasgupta, C., & Arora, S., (2010). India dials Africa–Bharti Airtel acquires Zain's African assets. Johnson-Cornell. Retrieved from https://www.johnson.cornell.edu/Emerging-Markets-Institute/Research/Case-Studies/India-dials-Africa-Bharti-Airtel-acquires-Zains-African-Assets/Accessed 05 august 2018.
Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research, 64*(4), 408–417.
Jo, G. S., Park, G., & Kang, J. (2016). Unravelling the link between technological M&A and innovation performance using the concept of relative absorptive capacity. *Asian Journal of Technology Innovation, 24*(1), 55–76.
Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm—A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies, 8*(1), 23–32.
Kale, P., Dyer, J. H., & Singh, H. (2002). Alliance capability, stock market response, and long-term alliance success: The role of the alliance function. *Strategic Management Journal, 23*(8), 747–767.
Khalid, S., & Bhatti, K. (2015). Entrepreneurial competence in managing partnerships and partnership knowledge exchange: Impact on performance differences in export expansion stages. *Journal of World Business, 50*(3), 598–608.
Khanra, S., & Dhir, S. (2017). Creating value in small-cap firms by mitigating risks of market volatility. *Vision, 21*(4), 350–355.
King, D. R., Dalton, D. R., Daily, C. M., & Covin, J. G. (2004). Meta-analyses of post-acquisition performance: Indications of unidentified moderators. *Strategic Management Journal, 25*(2), 187–200.
Klepper, S., & Thompson, P. (2010). Disagreements and intra-industry spinoffs. *International Journal of Industrial Organization, 28*(5), 526–538.
Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organizational Science, 3*(3), 383–397.
Kotabe, M., Jiang, C. X., & Murray, J. Y. (2011). Managerial ties, knowledge acquisition, realized absorptive capacity and new product market performance of emerging multinational companies: A case of China. *Journal of World Business, 46*(2), 166–176.
Laamanen, T., & Keil, T. (2008). Performance of serial acquirers: Toward an acquisition program perspective. *Strategic Management Journal, 29*(6), 663–672.
Lane, P. J., & Lubatkin, M. (1998). Relative absorptive capacity and inter organizational learning. *Strategic Management Journal, 19*(5), 461–477.
Lee, R., Lee, J. H., & Garrett, T. C. (2017). Synergy effects of innovation on firm performance. *Journal of Business Research,* 1–9.
Madhok, A. (1997). Cost, value and foreign market entry mode: The transaction and the firm. *Strategic Management Journal, 18*(1), 39–61.
Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal, 23*(5), 387–401.
Makri, M., Hitt, M. A., & Lane, P. J. (2010). Complementary technologies, knowledge relatedness, and invention outcomes in high technology mergers and acquisitions. *Strategic Management Journal, 31*(6), 602–628.
Management Discussion and Analysis (2017). Bharti Airtel Limited Annual Report 2016–17. Retrieved from https://www.airtel.in/airtel-annual-report-2016-17/pdf/statutory-reports/management-discussion-and-analysis.pdf/Accessed 06 August 2018.
Mao, H., Liu, S., Zhang, J., & Deng, Z. (2016). Information technology resource, knowledge management capability, and competitive advantage: The moderating role of resource commitment. *International Journal of Information Management, 36*(6), 1062–1074.
McGill, M. E., Slocum, J. W., & Lei, D. (1992). Management practices in learning organizations. *Organizational Dynamics, 21*(1), 5–18.
Meyer, K. E., & Tran, Y. T. T. (2006). Market penetration and acquisition strategies for emerging economies. *Long Range Planning, 39*(2), 177–197.
Miller, D. J., Fern, M. J., & Cardinal, L. B. (2007). The use of knowledge for technological diversification within diversified firms. *Academy of Management Journal, 50*(2), 308–326.
Mills, A. M., & Smith, T. A. (2011). Knowledge management and organizational performance: A decomposed view. *Journal of Knowledge Management, 15*(1), 156–171.
Minbaeva, D., Pedersen, T., Björkman, I., Fey, C. F., & Park, H. J. (2003). MNC knowledge transfer, subsidiary absorptive capacity, and HRM. *Journal of International Business Studies, 34*(6), 586–599.
Mobile Telecommunications Company KSCP stock quote, Mobile Telecommunications Company KSCP company overview|Reuters India. (n.d.). Retrieved from https://in.reuters.com/finance/stocks/overview/ZAIN.KW/Accessed 12 August 2018.
Morosini, P., Shane, S., & Singh, H. (1998). National cultural distance and cross-border acquisition performance. *Journal of International Business Studies, 29*(1), 137–158.
Moschieri, C., & Campa, J. M. (2014). New trends in mergers and acquisitions: Idiosyncrasies of the European market. *Journal of Business Research, 67*(7), 1478–1485.
Mowery, D. C. (1983). The relationship between intrafirm and contractual forms of industrial research in American manufacturing, 1900–1940. *Explorations in Economic History, 20*(4), 351–374.
O'dell, C., & Grayson, C. J. (1998). If only we knew what we know: Identification and transfer of internal best practices. *California Management Review, 40*(3), 154–174.
Pablo, A. L., & Javidan, M. (2009). Mergers and acquisitions: Creating integrative knowledge. *John Wiley & Sons,* 60–75.
Palanisamy, R., & Sushil (2003). Achieving organizational flexibility and competitive advantage through information systems flexibility: A path analytic study. *Journal of Information & Knowledge Management, 2*(03), 261–277.
Palich, L. E., Cardinal, L. B., & Miller, C. C. (2000). Curvilinearity in the diversification–performance linkage: An examination of over three decades of research. *Strategic Management Journal, 21*(2), 155–174.
Park, B. I., & Ghauri, P. N. (2011). Key factors affecting acquisition of technological capabilities from foreign acquiring firms by small and medium sized local firms. *Journal of World Business, 46*(1), 116–125.
Park, S. H., Chen, R., & Gallagher, S. (2002). Firm resources as moderators of the relationship between market growth and strategic alliances in semiconductor start-ups. *Academy of Management Journal, 45*(3), 527–545.
Peng, Y. S., & Fang, C. P. (2010). Acquisition experience, board characteristics, and acquisition behavior. *Journal of Business Research, 63*(5), 502–509.
Pérez-Luño, A., Saparito, P., & Gopalakrishnan, S. (2016). Small and medium-sized Enterprise's entrepreneurial versus market orientation and the creation of tacit knowledge. *Journal of Small Business Management, 54*(1), 262–278.
Petersen, B., Pedersen, T., & Lyles, M. A. (2008). Closing knowledge gaps in foreign markets. *Journal of International Business Studies, 39*(7), 1097–1113.
Phene, A., Tallman, S., & Almeida, P. (2012). When do acquisitions facilitate technological exploration and exploitation? *Journal of Management, 38*(3), 753–783.
Popli, M., Akbar, M., Kumar, V., & Gaur, A. (2016). Reconceptualizing cultural distance: The role of cultural experience reserve in cross-border acquisitions. *Journal of World Business, 51*(3), 404–412.
Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review, 80*(12), 56–68.
Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review, 90*(3), 79–91.
Pucik, V. (1988). Strategic alliances, organizational learning, and competitive advantage: The HRM agenda. *Human Resource Management, 27*(1), 77–93.
Puranam, P., Singh, H., & Chaudhuri, S. (2009). Integrating acquired capabilities: When structural integration is (un) necessary. *Organization Science, 20*(2), 313–328.
Ragozzino, A. (2009). The effects of geographic distance on the foreign acquisition activity of US firms. *Management International Review, 49*(4), 509–535.
Reber, A. S. (1989). Implicit learning and tacit knowledge. *Journal of Experimental Psychology: General, 118*(3), 219.
Reed, R., Storrud-Barnes, S., & Jessup, L. (2012). How open innovation affects the drivers of competitive advantage: Trading the benefits of IP creation and ownership for free invention. *Management Decision, 50*(1), 58–73.
Reus, T. H., & Lamont, B. T. (2009). The double-edged sword of cultural distance in international acquisitions. *Journal of International Business Studies, 40*(8), 1298–1316.
Riyadh 2009, February 23. Zain's Saudi Arabia 2008 results exceed revenue targets by 27%, customers exceed 2 million. Retrieved from https://economictimes.indiatimes.com/industry/telecom/zain-deal-takes-indias-outbound-ma-tally-to-15-bn-in-2010/articleshow/5744239.cms/Accessed 01 August 2018.
Schraeder, M., & Self, D. R. (2003). Enhancing the success of mergers and acquisitions: An organizational culture perspective. *Management Decision, 41*(5), 511–522.
Sears, J., & Hoetker, G. (2014). Technological overlap, technological capabilities, and resource recombination in technological acquisitions. *Strategic Management Journal, 35*(1), 48–67.
Shipton, H., Fay, D., West, M., Patterson, M., & Birdi, K. (2005). Managing people to promote innovation. *Creativity and Innovation Management, 14*(2), 118–128.
Si, S. X., & Bruton, G. D. (2005). Knowledge acquisition, cost savings, and strategic positioning: Effects on Sino-American IJV performance. *Journal of Business Research, 58*(11), 1465–1473.
Smart Network. Smarter Experiences-Airtel (2017). Bharti Airtel Limited Annual Report 2016–17. Retrieved from https://www.airtel.in/airtel-annual-report-2016-17/pdf/Annual-report-2016-17.pdf/Accessed 02 August 2018.
Sosa, M. E. (2011). Where do creative interactions come from? The role of tie content and social networks. *Organization Science, 22*(1), 1–21.
Tamer Cavusgil, S., Calantone, R. J., & Zhao, Y. (2003). Tacit knowledge transfer and firm innovation capability. *Journal of Business & Industrial Marketing, 18*(1), 6–21.
Taylor, A., & Greve, H. R. (2006). Superman or the fantastic four? Knowledge combination and experience in innovative teams. *Academy of Management Journal, 49*(4), 723–740.
Teece, D. J. (2010). Business models: Business strategy and innovation. *Long Range Planning, 43*(2–3), 172–194.
Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533.
Tippins, M. J., & Sohi, R. S. (2003). It competency and firm performance: Is organizational learning a missing link. *Strategic Management Journal, 24*(8), 745–761.
Tsai, W. (2001). Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal, 44*(5), 996–1004.
Tse, T., & Soufani, K. (2001). Wealth effect of takeovers in merger activity eras: Empirical evidence from the UK. *International Journal of Economics of Business, 8*(3), 365–377.
Tseng, S. M. (2010). The correlation between organizational culture and knowledge conversion on corporate performance. *Journal of Knowledge Management, 14*(2), 269–284.
Tsoukas, H., & Vladimirou, E. (2001). What is organizational knowledge? *Journal of*

Management Studies, 38(7), 973–993.
Uhlenbruck, K., Hitt, M. A., & Semadeni, M. (2006). Market value effects of acquisitions involving internet firms: A resource-based analysis. *Strategic Management Journal, 27*(10), 899–913.
Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic Management Journal, 24*(13), 1307–1314.
Wu, F., Yeniyurt, S., Kim, D., & Cavusgil, S. T. (2006). The impact of information technology on supply chain capabilities and firm performance: A resource-based view. *Industrial Marketing Management, 35*(4), 493–504.
Xie, X., Zou, H., & Qi, G. (2018). Knowledge absorptive capacity and innovation performance in high-tech companies: A multi-mediating analysis. *Journal of Business Research, 88*, 289–297.
Yam, C. M., Guan, J. C., Pun, K. F., & Tang, P. Y. (2004). An audit of technological innovation capabilities in Chinese firms: Some empirical findings in Beijing, China. *Research Policy, 33*(8), 1123–1250.
Yam, R. C., Lo, W., Tang, E. P., & Lau, A. K. (2011). Analysis of sources of innovation, technological innovation capabilities, and performance: An empirical study of Hong Kong manufacturing industries. *Research Policy, 40*(3), 391–402.
Yunis, M., Tarhini, A., & Kassar, A. (2018). The role of ICT and innovation in enhancing organizational performance: The catalysing effect of corporate entrepreneurship. *Journal of Business Research, 88*, 344–356.
Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review, 27*(2), 185–203.
Zhang, Q., Vonderembse, M. A., & Lim, J. S. (2002). Value chain flexibility: A dichotomy of competence and capability. *International Journal of Production Research, 40*(3), 561–583.
Zheng, W., Yang, B., & McLean, G. N. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *Journal of Business Research, 63*(7), 763–771.
Zou, H., & Ghauri, P. N. (2008). Learning through international acquisitions: The process of knowledge acquisition in China. *Management International Review, 48*(2), 207.