The current issue and full text archive of this journal is available on Emerald Insight at:
www.emeraldinsight.com/2040-8269.htm

Alliance portfolios and firms' business strategy: a content analysis approach

Pedro Mota Veiga
University of Beira Interior, Covilhã, Portugal, and
Mário Franco
CEFAGE-UBI Research Center,
Management and Economics Department, University of Beira Interior,
Covilhã, Portugal

Received 28 April 2014
Revised 13 September 2014
14 November 2014
Accepted 14 November 2014

Abstract

Purpose – The purpose of this study is to understand in what way the business strategy of a firm operating on a global scale is linked to its alliance portfolio, from the product-market matrix of Ansoff (1957) and the resources-partners matrix of Yasuda and Iijima (2005).

Design/methodology/approach – To meet this objective, the case study method was adopted, with data being obtained from interviews and documentary analysis of the selected firm/case: Borgstena Textile (BT).

Findings – Based on a content analysis approach, it was possible to observe an alliance portfolio with advantages for BT and include those partnerships in the four quadrants referring to the nature of resources and partners defined by Yasuda and Iijima. In terms of growth strategy, BT simultaneously defined the typology of product-market strategies proposed by Ansoff, i.e. BT tries to use strategic alliances to execute specific business strategies.

Practical implications – This research seeks to make a practical contribution, identifying the main association between the alliance portfolio and several specific firm strategies. This may allow better understanding of the composition of the alliance portfolio and, in this way, improve strategic management. This means that alliances should be managed as a whole and not in a dyadic way.

Originality/value – This study is innovative because it seeks to make a contribution to the literature, from a theoretical perspective, by developing two matrixes by Ansoff (1957) and Yasuda and Iijima (2005). These frameworks allow us to analyze the relationship between alliance portfolio and business strategy.

Keywords Business strategy, Alliances, Business networks, Alliance portfolio

Paper type Case study

1. Introduction

Globalization poses new management challenges. This has resulted in the rise of new organizational structures (Barkema *et al.*, 2002), ranging from focused multinational firms to the formation of multiple-partner alliances or constellations competing against each other for the attraction of new members and for the penetration of their products or

This study was supported by Fundação para a Ciência e a Tecnologia and FEDER/COMPETE (grant UID/ECO/04007/2013). The authors thank the anonymous reviewers for their very helpful comments, which contributed to developing this paper.

Management Research Review
Vol. 38 No. 11, 2015
pp. 1149-1171
© Emerald Group Publishing Limited
2040-8269
DOI 10.1108/MRR-04-2014-0093

www.m

services in customer markets (Lazzarini, 2007). Leading firms increasingly use alliances in globalized markets to increase their competitive advantage (Dunning, 2004; Harbinson and Pekar, 1997; Hoffmann, 2007), cooperating with different types of players such as customers, suppliers, competitors and complementors (Brandenburger and Nalebuff, 1996). As such, the number of firms involved in cooperative alliances and networks has grown (Vapola *et al.*, 2010).

In the past two decades, alliances have become a central part of the majority of firms' competitive and growth strategies (Barringer and Harrison, 2000; Parmigiani and Rivera-Santos, 2011; Kale and Singh, 2009; Yasuda and Iijima, 2005). Alliances help firms to strengthen their competitive position, increase market power and move faster in new markets and technologies (García-Canal *et al.*, 2002; Hagedoorn, 1993; Kogut, 1993), gain access to resources and capacities (Rothaermel and Boeker, 2008), acquire new competences (Hagedoorn, 1993; Hennart, 1988) and increase efficiency (Ahuja, 2000a). As a result, today many firms are incorporated in networks of organizational relationships with customers, suppliers, competitors and complementary firms (Gomes-Casseres, 1996; Hoffmann, 2007) and orientation of its evolution raise important strategic issues for the firms involved (Hoffmann, 2007). Strategic alliances are understood here as all types of cooperative inter-organizational relationships that create and/or protect competitive advantage (Doz and Hamel, 1998; Hagedoorn and Osborn, 1997).

The formation of strategic alliances has become an indispensable means for firms to implement their business strategy and develop their potential for future growth (Yasuda and Iijima, 2005; Carpenter *et al.*, 2012; Schilke and Goerzen, 2010). The increasing importance of strategic alliances in the global business environment leads to the question of how firms' choice of strategy is associated with their alliance portfolio (Vapola *et al.*, 2010; de Leeuw *et al.*, 2014). In this study, an alliance portfolio is the set of all alliances that the focal firm has with its external partners (Hoffmann, 2007).

Numerous studies explore the impact of strategic alliances on a firm's performance (Gulati, 1998; Harrigan, 1988; Khanna *et al.*, 1998; Ohmae, 1989; Franco, 2011; de Leeuw *et al.*, 2014). However, the focus of prior research in this area has been primarily limited to activity-based motivations, and there has been little research addressing the relationship between a firm's internal strategic orientation and its management of a large number of external relationships (Vapola *et al.*, 2010), i.e. its alliance portfolio.

Some studies have started to investigate the impact of the alliance portfolio on all kinds of performance (Jiang *et al.*, 2010; Lahiri and Narayanan, 2013; Oerlemans *et al.*, 2013; Yamakawa *et al.*, 2011; de Leeuw *et al.*, 2014) but there has been limited attention to the antecedents of the alliance portfolio. Of course the strategy of firms plays an important role in the formation of alliances and thus in the alliance portfolio (Yasuda and Iijima, 2005; Carpenter *et al.*, 2012; Schilke and Goerzen, 2010). Therefore, to capture the strategy with regard to the alliance portfolio, two models were used related to strategy for business growth (Ansoff, 1957) and to business strategy of firms undertaking strategic alliances (Yasuda and Iijima, 2005).

Furthermore, research has centered mainly on the analysis of individual alliances (Ahuja, 2000b; Chung *et al.*, 2000; Gulati, 1995a). However, attention has recently shifted to study of the alliance portfolio generated by the individual firm (Heimeriks *et al.*, 2007; Sarkar *et al.*, 2009). So it is extremely relevant to analyze the link between firms' alliance portfolio and their business strategy, and how those strategies are portrayed in the

المنارة للاستشارات
www.m

activities of an alliance process. Indeed, for successful implementation of business strategies, in most cases firms cannot form alliances of a single profile, but rather a wide-ranging alliance portfolio that gives access to necessary external resources (Gomes-Casseres, 1996). Consequently, Hoffmann (2007) argues that alliance portfolio management has become an important strategic issue.

While there is a wealth of literature both within the international strategy (Birkinshaw *et al.*, 2006; Doz *et al.*, 2001; Kogut and Zander, 1993; Stopford and Wells, 1972) and the strategic alliance (Contractor and Lorange, 2002; Eisenhardt and Schoonhoven, 1996; Gomes-Casseres, 1996) research streams, less research explicitly examines the link between business strategy and alliance portfolio.

Against this background, the research question of this study is:

RQ1. What is the relationship between a firm's business strategy and its alliance portfolio?

Given this question, the main objective of this research is to understand how the business strategy of a firm operating on a global scale – Borgstena Textile (BT) – is linked to its alliance portfolio. More precisely, a contribution of this paper is to propose a new theoretical approach linking a firm's strategy and its alliance portfolio. So, our study is important because it shows an innovative framework which lets us find a link to growth strategy based on the market-product matrix of Ansoff (1957) and the resources-partners matrix of Yasuda and Iijima (2005). These two perspectives are seen as a useful theoretical framework to address the research question outlined above.

The remainder of the paper is organized as follows: Section 2 presents a review of the literature on alliance portfolios and business strategy. Section 3 describes the methodology used in the study. Section 4 presents the results of the case study. Discussion of the results, conclusions and implications are presented in Section 5, and finally, Section 6 points out the limitations of the study and suggests future lines of research.

2. Theoretical framework

2.1 Strategic alliances and portfolios

Strategic alliances correspond to intentional relationships between two or more independent firms, which involve the exchange, share or co-development of resources or capacities to reach mutually relevant benefits that cannot be achieved easily by firms individually (Di Guardo and Harrigan, 2012; Gulati and Sytch, 2008; Gulati, 1995b; Kale and Singh, 2009), and may include, among other forms: joint ventures, R&D production agreements, licensing, sales and distribution agreements and technology exchanges.

The growth of strategic alliances has been attributed to firms' strategies aiming to determine solutions to respond to the various environmental changes, including increased technological innovation, the globalization of markets and the importance of customer relationships. Therefore, strategic alliances are a popular topic in the strategic management literature (Anh *et al.*, 2006; Dong and Glaister, 2006; Garcia-Canal and Sanchez-Lorda, 2007; Hagedoorn, 1993; Harrigan, 1988; Hennart, 1988; Nakamura, 2005; Nielsen, 2007; Parkhe, 1993; Franco and Haase, 2013).

The formation of strategic alliances has become an indispensable measure for firms to implement their business strategy, and consequently many firms today are inserted in a dense network of inter-organizational cooperation relationships (Gomes-Casseres,

www.m

1996; Hoffmann, 2005). As a result of this movement, one of the latest tendencies in the literature on alliances focuses on alliance portfolios, often defined as sets of alliances (Oerlemans *et al.*, 2013), which potentially contribute to firms' performance, providing access to new resources and markets, creating scale economies, reducing costs, sharing risks and improving flexibility (Lavie, 2009).

Strategically, alliances may serve to reinforce deficiencies in the firm's internal configuration (Prahalad and Doz, 1987) or exploit strengths. Thus, the business strategy may be important in explaining the formation and development of a particular firm's strategic alliance portfolio.

It becomes clear, therefore, that corporate strategy is an important factor in determining how an organization defines its alliances. When an organization defines and implements various alliances that can help it to carry out its organizational strategy, it is necessary to manage the alliances as a portfolio (Parise and Casher, 2003).

In recent years, not only the number of firms forming alliances has increased, but also the prevalence of alliance portfolios has grown over time, the characteristics of that portfolio being fundamental for firms' performance (Lavie, 2009; Vapola *et al.*, 2010; de Leeuw *et al.*, 2014). The majority of investigations conceive an alliance portfolio as the sum total of a focal actor's strategic alliances (Hoffmann, 2007; Wassmer, 2010).

The different partners in alliance portfolios (de Leeuw *et al.*, 2014) possess different types of knowledge. Universities and research laboratories give access to fundamental knowledge and the possibility of carrying out high-quality research (Lansing, 2013; Laursen and Salter, 2006; von Raesfeld *et al.*, 2012). Suppliers possess knowledge related to production processes and entry characteristics which can lead to process innovation, cost reduction or product innovation (Sobrero and Roberts, 2002), while customers can be sources of ideas for new products (Hernández-Espallardo *et al.*, 2011). Collaboration with competitors gives access to specific knowledge of the sector and the possibility of sharing engineering capacities and marketing knowledge, which helps the commercialization of innovations (Gnyawali and Park, 2011; Tödtling *et al.*, 2009). So the diversity of alliances has the potential to bring firms advantages by giving them access to various resources of knowledge and capacities with a view to company growth and improved financial and innovative performance (Duysters *et al.*, 2012, de Leeuw *et al.*, 2014).

Various theories have been used in studying strategic alliances. Recently, research has emphasized alliance network structure, and the configuration of assets and capacities across these networks, as key constructs underlying alliance portfolio management (Dhanaraj and Parkhe, 2006; Goerzen, 2005; Gomes-Casseres, 1996; Hoffmann, 2007; Lavie and Rosenkopf, 2006; Rowley *et al.*, 2000). The link between alliance network structure and the characteristics of different individual relationships within the networks has received significant attention (Rowley *et al.*, 2000). Thus, the network theory (Granovetter, 1973) provides sophisticated models which can address firms' structural and relational embeddedness, using network density, centrality, strength and redundancy of ties and various other measures to analyze the alliance network. On the other hand, according to social network theory (Wasserman and Faust, 1994; Gulati, 1998; Das and Teng, 2000), an alliance portfolio may be understood in terms of a firm's egocentric network of alliances (Baum *et al.*, 2010).

Resource-based theory (Pfeffer and Salancik, 1978; Wernerfelt, 1984) also provides useful information on the best strategy to exploit firms' resources and capacities in relation to external opportunities (Barney, 1991). In general terms, a resource is

المنارة للاستشارات

www.m

something a firm possesses, which can include physical and financial assets as well as collaborator and organizational skills, whereas a capacity is something a firm is able to achieve using its resources and routines, and resource-based theory emphasizes the role of both in forming the basis of competitive advantage (Hart and Dowell, 2011; Meiseberg and Ehrmann, 2013), just as obtaining additional resources through alliances helps firms to compete effectively (Eisenhardt and Schoonhoven, 1996).

Because resource-based theory posits that a firm would select the strategy that best exploits its resources and capabilities relative to external opportunities (Grant, 1991), it is the most suitable means for considering alliance activities in terms of linkage with business strategy. According to Das and Teng (2000), the vision based on resources suggests the reason for forming alliances is the potential to create value from grouped resources, and for Yasuda and Iijima (2005), it is an appropriate approach for considering the articulation between alliance activities and business strategy.

In viewing strategic alliances as an "exchange of resources" between partners, it would be useful to study the nature of the exchange by referring to social exchange theory. This was developed by Blau (1968) to explain social relations and forecast the outcome of their interactions with others. Indeed, social exchange theory, corresponding to an exchange of resources between partners, is also useful in approaching strategic alliances to study the nature of that exchange (Yasuda and Iijima, 2005). According to social exchange theory, trust is fundamental in alliances, and can be developed or extended between partners as a result of continuous interaction and communication, shared values and an equitable relationship. Any alteration to organizational trust between partners is liable to influence the results of communication, the specificity of assets, dependence, learning and alliance performance (Murray and Kotabe, 2005). Firms involved in collaborative relationships based on trust clearly reduce the search for new partners and easily decide to ally to firms in which they already trust (Franco, 2011; Gulati, 1995b; Madhok, 1995).

2.2 Strategy and resources – partners in alliances: research propositions

The essential concepts and vision of strategic planning and corporate strategy are the work of Ansoff (1957), who concluded that certain strategies are necessary to achieve long-term performance and goals. Ansoff presented a product-market strategy, the matrix of product-market expansion (Figure 1), in which a firm can grow through four types of strategies characterized by the combination of new or existing products and new or existing markets:

(1) product development, achieving growth through introducing new products in the firm's current markets;

(2) diversification, in which growth is achieved by the firm introducing new products in new markets;

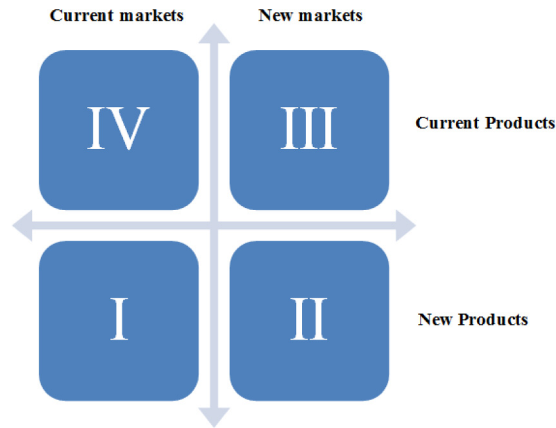
(3) market development, where growth is achieved by entering new markets with existing products; and

(4) market penetration, with growth being achieved by remaining in current markets with current products.

Each of the above strategies describes a distinct path which a business can take toward future growth.

المنارة للاستشارات

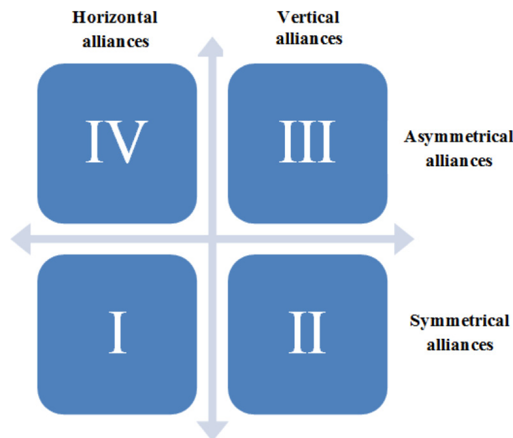
www.m



Source: Ansoff (1957)

Figure 1.
Product-market strategies for business growth alternatives

In social exchange theory, exchanges can be classified in multiple dimensions (Cook and Rice, 2006). One dimension concerns the nature of the resources to be exchanged and another focuses on the partners who make that exchange of resources (Das and Teng, 2002). According to Yasuda and Iijima (2005), in an analogy to the categorization of social exchange theory, strategic alliances can be divided in two dimensions. In one dimension, the emphasis is placed on the nature of resources, where the shared resources are of the same type, symmetric alliances, or of different types, asymmetric alliances. The other dimension focuses on the relationship between partners, with strategic alliances being classed as horizontal, if partners belong to the same industry, or vertical, if organizations belong to different industries. Figure 2 presents those two dimensions in two axes, forming four areas of strategic alliance positioning and providing a useful tool



Source: Yasuda and Iijima (2005)

Figure 2.
Alliance matrix according to resources and partners

المنارة للاستشارات
www.m

for analyzing the alliance portfolio. Each specific firm and strategic alliance is positioned in one of the four zones of the alliance matrix defined by Yasuda and Iijima (2005).

When the focus is on product development, the strategy is to reach the current market with new products (Ansoff, 1957). In this strategy, the reasons for forming alliances are the lack of capacity in a single firm to have all the resources necessary to develop the new product (Yasuda and Iijima, 2005). A single firm cannot afford to provide all the resources (for example, engineering talent, intellectual property and capital) required for the development of a range of new products. Especially in situations where the development costs and technical uncertainties are high, firms need to reduce costs and risks through sharing resources, which enables them to meet development requirements (Yoshida, 2002). Das and Teng (2000) developed a resource-based theory of alliances, suggesting that access to complementary and additional resources is the main reason for entering into strategic alliances. As mentioned, according to this theory (Pfeffer and Salancik, 1978; Wernerfelt, 1984), alliances are a mechanism to manage scarcity of resources. Thus, frequently cited motives for alliances formation include the sharing of resources (Das and Teng, 2000) and the exchange of complementary skills and talents which cover different aspects of the know-how needed (Contractor and Lorange, 1988; Rothaermel and Deeds, 2006).

To implement the product development strategy, it could be necessary to turn to symmetrical alliances, in which partners share similar resources (Varadarajan and Cunningham, 1995; Yasuda and Iijima, 2005). On the other hand, a firm might enter an alliance to try to develop new products through collaboration with customers in the same industry (horizontal). Therefore, we form the following proposition:

P1. A firm with a product development strategy (introducing new products in current markets) chooses horizontal and symmetrical alliances.

Diversification strategy concerns the sale of new products in new markets (Ansoff, 1957). This strategy carries more risk, since it places the firm in a very uncertain position due to a lack of knowledge about the product and market. The motives for alliance formation are speeding up market entry and product development, reducing technological and market uncertainties, and internalizing the partner's skills. When a firm is unfamiliar with a new product or a new market, it faces the challenge of deciding which products to develop and the methods to market them. Because customers know their market well, a firm can access market information and learn how to enter new markets through alliances (Miotti and Sachwald, 2003). Customers may play the role of competence source for a firm in this situation (Thomke and von Hippel, 2002).

To implement this strategy, it may also be necessary to resort to symmetrical alliances (Varadarajan and Cunningham, 1995; Yasuda and Iijima, 2005) through partners contributing with complementary resources but in different industries, namely vertical alliances. For this purpose, we formulate this proposition:

P2. A firm with a diversification strategy (introducing new products in new markets) chooses vertical and symmetrical alliances.

When the aim is to enter a new market with current products, we have the market development strategy (Ansoff, 1957). This strategy is used, for example, to access

المنارة للاستشارات

www.m

international markets and is appropriate to alliance formation with a view to avoiding entry barriers to new markets, speeding up the pace of market entry and acquiring knowledge of the unknown market (Miotti and Sachwald, 2003; Thomke and von Hippel, 2002). In today's business environment, globalization offers firms great opportunities and international expansion provides new markets and access to additional resources. However, the process of internationalization is a difficult undertaking for firms that lack intangibles or have limited resources (Zacharakis, 1997). Alliances allow partners to join their activities, share resources, acquire knowledge, access resources and explore new fields of business (Hakansson and Snehota, 1995; Walter *et al.*, 2001), as well as letting them seek resources and opportunities in international markets (Westhead *et al.*, 2001; Zahra and George, 2002). Access to new markets for carrying out firms' sales objectives (Ellis, 2000; Harris and Wheeler, 2005) are considered the main drivers for alliances.

A firm may also consign product sales to partners who have strong sales channels in a specific market, thereby enhancing the sales position of the products. In these alliances, where partners aim for inter-dependence in innovative processes, they will contribute complementary but different resources, creating asymmetrical alliances (Varadarajan and Cunningham, 1995; Yasuda and Iijima, 2005). The situation is characterized by alliances with partners in a different industry, exchanging different resources. Yasuda and Iijima (2005) argue that this type of alliance would be effective for creating new markets, but would be an inefficient measure for developing products because of the difficulty in matching product-related resources between such partners. Thus, we suggest the following relationship:

P3. A firm with a market development strategy (entering new markets with current products) chooses vertical and asymmetrical alliances.

When current markets are targeted with current products, market penetration (Ansoff, 1957) is the main focus, implying that current customers are encouraged to buy more of the same product or the market's potential customers begin to use the products. In this case, Harrigan (1985) refers to consolidation of market position and creation of competitive strength/advantages. Since a firm can use its present market and knowledge of the product to carry out its strategy, this is less risky. So, the reasons for forming alliances are to reduce production and marketing costs. Transaction Cost Theory (Coase, 1937; Williamson, 1975, 1985) emphasizes the use of strategic alliances as a means to reduce risks and costs.

A firm looking to enhance competitiveness in a familiar market might well find it more effective to form alliances with partners in the same industry, i.e. horizontal alliances (Perry *et al.*, 2004; Varadarajan and Cunningham, 1995). For example, manufacturing alliances to reduce costs or sales alliances to expand channels are best done with partners in the same industry. Especially in high-technology industries with turbulent competition and sweeping regulatory changes, firms want to develop horizontal alliances for offensive and defensive reasons in existing markets (Perry *et al.*, 2004, Yasuda and Iijima, 2005). Thus, we propose the following:

P4. A firm with a market penetration strategy (staying in current markets with current products) chooses horizontal and asymmetrical alliances.

المنارة للاستشارات
www.m

3. Methodology

3.1 Type of study

This study intends to understand the connection between business strategy and the alliance portfolio. To answer the study's central question, a qualitative approach was chosen, specifically an exploratory case study, analyzing the firm's strategy and the partnerships/alliances formed. A case study approach was suitable, due to its tradition of providing rich contextual data (Levy and Powell, 2003) and enabling in-depth examination of the subject material (Owens and Robertson, 2000). The case study method enabled "how" and "why" questions to be asked to understand the nature and complexity of the processes taking place (Benbasat *et al.*, 1987).

Case studies are in-depth surveys that represent and clarify distinctive qualities, approach various phenomena simultaneously and the borders between the phenomenon and the context are not completely clear (Marconi and Lakatos, 2011; Yin, 2009). The case study is one of the research methods used to gain knowledge of organizational phenomena, as it lets researchers keep the holistic and significant characteristics of organizations and management processes (Yin, 2009). What makes these studies valid is the rigor of the links established between theoretical bases and empirical investigation (Laperrière, cited in Martins, 2004).

Case studies have been criticized as giving rise to anecdotalism (Smith, 1991) and not maintaining researcher objectivity (Salkind and Rainwater, 2003). These issues were overcome by constructing a systematic case study protocol. The following protocols were employed in the case study design: case selection, design of research tools and data collection method, field procedures and data analysis (Yin, 2009). The case study focuses on an industrial textile firm supplying the car industry, BT.

3.2 Selection and characterization of the case

The choice of BT for the study was due to various criteria: particularly, it is an exporting firm (all production is exported), and simultaneously belongs to a traditional sector (textile industry), and one which is extremely competitive and innovative worldwide (car industry), where production is carried out in large quantities following a just-in-time approach and having a wide range of partners in Europe, Asia and South America. This firm was also chosen due to the openness to carrying out the study demonstrated by those in charge.

BT is a firm owned mainly by the Swedish group of Borgstena Gruppen, founded in 1925, and having a presence in Portugal since 1998, with 270 employees at the unit in Nelas. This unit includes the department of product development, although a small part of product design is carried out in Sweden. BT's clients are the car manufacturers of Volvo, Ford, Kia-Hyundai, Volkswagen Group (VW, Seat and Skoda), Renault-Nissan, Honda, Scania, MAN, DAF and Renault Trucks, and it is the world leader in the market niche of textile production for curtains for heavy goods lorries. In 2012, BT had a turnover greater than €43M.

3.3 Data collection and analysis

In qualitative research, various techniques can be used for data collection (Marconi and Lakatos, 2011). According to Yin (2009), the quality of a case study is increased if several techniques are used to reveal evidence. In this study, three techniques were used in data collection: interviews; documentary analysis; and analysis of electronic records.

المنارة للاستشارات

www.m

The interviews were held at three different times with the Chief Executive Officer (CEO) and twice with the Director of Research and Development and Innovation (DRDI) (see Table I). The first contact had the purpose of informing the CEO and DRDI of the interest, usefulness and objective of the study with a non-directed interview held with both at this time. The second interview with the CEO was semi-structured and aimed to find out about BT's internal and external organization and the business strategies underlying the firm's current situation. The third and fourth interviews were held with the CEO and DRDI, respectively, and followed a structured typology. The third interview with the CEO aimed at identifying strategy of business expansion/growth in BT relative to market penetration strategy, product development strategy and market development strategy, and alliances established to achieve these strategic objectives and which way is done the selection of partners. The fourth interview with the DRDI aimed at identifying strategy of BT relative to diversification strategies and R&D strategies, and alliances established and which way is done the selection of partners.

Regarding documentary analysis and electronic records, we analyzed the firm's business plan for the period 2005-2013, the strategic management process, the manual of the management system and the system for managing Research & Development and Innovation (RDI), as well as other administrative and marketing documents and the firm's Web site (www.borgstena.com). In treatment of the interviews and documentary analysis, the content analysis approach was used.

4. Results and discussion of the case study

This section presents the results in three parts. A description of BT's strategic management process is followed by presentation of BT's principal historical events up to the beginning of this millennium. A third section analyses the partnerships/alliances formed as a function of growth strategies. Finally, we present the validation of our research propositions.

4.1 BT's strategic management process

BT has implemented a strategic management process with the objective of "creating guidelines aiming to generate business opportunities, achieve client satisfaction and create value for stakeholders" (Figure 3). The inputs of that process are the shareholders'

Table I. Interviews and key informants

Interviewee	Date	Duration
CEO and DRDI	06-05-2013	30 minutes
CEO	17-05-2013	1 hour 15 minutes
CEO	07-06-2013	1 hour
DRDI	11-06-2013	45 minutes

Source: Borgstena management process strategy

Figure 3. Strategic management process

المنارة للاستشارات

www.m

objectives and the history of BT, information about the market, particularly the competition and the environment, and input from clients. Considering these inputs, a strategy is defined having as outputs the business plan, client satisfaction, results and action plans, together with plans for RDI.

In terms of documentation, the business strategy includes the Mission, Vision, Firm Values, short- and long-term Objectives, Marketing and Sales Plan, RDI Plan and Operational Division Plans. In terms of processes, the strategy includes the sub-processes of Marketing and Sales and RDI.

BT's strategy to establish business growth focuses on:

> […] creating a global platform to deal with our clients anywhere in the world; valuable solutions combined with quality service; competitive advantage in the market, based on the culture of relationships with existing clients; and a detailed wide-ranging strategy of sales, treating each client personally and separately (CEO).

4.2 History and development of BT

Table II presents the principal events in the history of BT up to the beginning of the 21st century, to give a better contextualization of its current business strategies.

According to the CEO:

> […] the globalization process did not have the expected results and in 2005 the BT shareholders defined a new business strategy focused on Europe, beginning by defining that the group's CEO should not be Swedish.

with the current Portuguese CEO being chosen. At the time, it was necessary to have a "survival strategy, since the units in Sweden and the USA were showing great losses, a strategy aiming to increase technology, productivity, quality and cost reduction".

The first strategic decision taken by that new administration was to:

> […] close down the unit in the USA, begun in 2005, and in 2006, production in Sweden[1] began to be wound down with the consequent transfer of production to Borgstena Textile Portugal to increase productivity (CEO).

Date	Events
1925	Foundation as a firm producing textiles and clothing
1970s	Expansion of business to the car sector Pioneering introduction in Europe of production of circular fabrics for Volvo
1980s	Production centered solely on the car industry
Beginning of the 1990s	Introduction of web fabrics in its product portfolio
End of the 1990s	Initiation of the internationalization process with acquisition of a German firm to introduce and acquire knowledge of textile technology (*Gosttschalk*). Acquisition of *Borgstena Textile Portugal* which later came to produce with textile technology, since the *Gosttschalk* firm closed down. It became one of the few textile-producing firms in Europe manufacturing circular fabrics, web fabrics and with textile technology, as well as finishing and rolling
Beginning of the 2000s	Start of the globalization process with participation in *ARA Borgstena* in Malaysia strengthened by the acquisition of *Borgstena Textile North America* in the United States of America

Table II. History and development of BT

المنارة للاستشارات

www.m

However, this last closure had to be postponed due to the "tragic fire" which completely destroyed Borgstena Textile Portugal in June 2006, and was only "implemented when Borgstena Textile Portugal started up again in September 2007" (CEO). Unfortunately, in September 2008 the scenario was repeated and Borgstena Textile Portugal "was on fire once again" (Diário de Notícias online, June 7, 2008) and only the offices of the industrial plant escaped the violence of that second outbreak. This double rising from the ashes "was an extreme test of the trust and dedication of collaborators and customers", states the CEO.

Despite these incidents and the global crisis of 2008, Borgstena Textile Portugal was not affected, since the "survival strategy had anticipated that crisis and was decisive in making the firm viable", the CEO also states.

4.3 Strategy of business expansion/growth in BT

In 2009, BT began a new cycle with a new expansion strategy, as it was "dependent on an area of business and some clients. Three factors were taken into account for that expansion; Geography; Clients; and Risk and partnerships formed". (CEO)

4.3.1 Alliances and market penetration strategy. At the beginning of this millennium, a new player emerged in the car industry, Hyundai-Kia, which in 2005 in Europe produced 50,000 vehicles in Turkey, forecasting production in 2014 of 850,000 vehicles in the different plants in Europe (Romania, Czech Republic and Turkey). In cultural terms:

> Korean firms prefer to work with other Korean firms, decisions about suppliers are often political decisions and despite having a purchasing department for Europe in Germany, decision-making centres are in South Korea.

Aiming to supply this manufacturer, the CEO underlines that "in 2005 the first contacts were made with Korean firms to form partnerships".

In 2009, BT formed an alliance with Korean Group Dual, a firm supplying various components to the car industry, among them textiles and textile products, and which also needed a partner in Europe to supply Hyundai-Kia in this continent. In that context, a licensing form of partnership was established whereby BT produces textiles in Portugal for Hyundai-Kia in Europe, paying Korean Group Dual royalties. However, that first partnership became an "important strategic alliance in other business", according to the CEO.

4.3.2 Alliances and product development strategy. Another of BT's strategic decisions was:

> […] vertical diversification of products, i.e. besides producing textiles, it was deemed necessary to create a new division of activities, the textile products division, also originating the creation of synergies (CEO).

To diminish the risks associated with that new business unit, it was decided to create a joint venture with Korean Group Dual, named Trimsol (50 per cent each partner), and for geographical reasons, implementation of the first industrial production unit was in Romania, close to the Hyundai-Kia plants, this being inaugurated in 2010. In 2012 that unit was expanded and in the same year Trimsol Czech Republic was created, recently beginning operations and "those units supply the seat covers for all Hyundai-Kia cars produced in Europe, whether or not the textiles are produced by BT". According to the interviewee, this strategic alliance was revealed to be "particularly relevant for the

المنارة للاستشارات
www.m

growth of BT in recent years" and there is currently a situation of "trust, dialogue, friendship, relationship and affinity between the parties and the numbers only come after that".

4.3.3 Alliances and market development strategy. As for the strategy to enter new markets with current products in partnerships, it was possible to observe two current situations and one at an implementation stage. In 2011, Trimsol Brazil was created, with that unit beginning production in 2012.

In another sphere, "the Volkswagen group insists its suppliers have the capacity to produce on a global scale" (CEO) and therefore, BT needed to "find a partner in India to manufacture some of its products with a view to supplying Volkswagen locally". So a licensing agreement was defined in 2011 with the BMD Group, whereby the latter makes BT products for Volkswagen India, paying royalties for that production. According to the CEO, "this group currently has 80 per cent of the Indian market of textiles for the car industry".

In terms of market development "in the short term, Trimsol Mexico will be created to supply the market in North and Central America", the CEO also points out.

4.3.4 Alliances and diversification strategies. Certification through the norm of NP 4,457:2007 (Management of Research, Development and Innovation (RDI) was one of the requirements of the RDI management system, and that "was decided in 2010 as being a strategic move, aiming to use it as a tool to formalize a systematic process of innovation management" (CEO), built on a "pro-active rather than reactive innovation policy" (DRDI).

The purpose of this strategy is to "obtain competitive advantages through a constant supply of innovative products to current markets and new markets" (DRDI) and as a "door-opener" (CEO). In this context, BT has various partners from the national and international scientific and technological system to acquire their knowledge (Table III). Nationally, of particular prominence are the Technological Centre for the Textile and Clothing Industries in Portugal (CITEVE) in Vila Nova de Famalicão and the University of Minho (UM) in Braga. Concerning international R&D institutions, the Swedish technological centre of SWEREA IVF and the German Hohenstein Institute stand out. In

Technology and R&D Centre	Activities
Technological Centre for the Textile and Clothing Industries in Portugal (Vila Nova de Famalicão)	Laboratory and consultancy services in analysis and interpretation of results, with joint projects of co-promotion innovation
University of Minho (Braga)	Joint applications to innovation projects, BT professionals attend courses, seminars and workshops organized by that university and BT is part of the UM's knowledge database
SWEREA IVF (Sweden)	Provision of laboratory and consultancy services with some current joint innovation projects where Borgstena Textile Portugal itself provides consultancy services
Hohenstein Institute (Germany)	Studies and trials in the area of comfort and consultancy

Table III. Partners of the national and international scientific and technological system

المنارة للاستشارات

www.m

the opposite direction, BT transfers knowledge to R&D units, on matters related to processes, the market and clients.

One of the RDI projects currently being developed by BT, and where it is a leader, is the HARKEN project. This corresponds to a project financed by the 7th Programme Framework of the European Commission, with a view to creating, developing and producing "non-intrusive sensors incorporated in the driver's seat and seatbelt, to measure heartbeat and breathing frequency" (DRDI). Regarding the network associated with this Project, BT has alliances/partnerships with the Bio-mechanic Institute of Valencia (Spain), the University of Manchester (United Kingdom), connected to smart materials, and the Osauhing Eesti Innovatsioni Instituut (Estonia), knowledge in the area of signal processing and with the firms of Sensing Tex (Spain), Plux – Wireless Biosignals (Portugal) and Alatex – Narrow Webbings (Germany).

4.3.5 Other alliances and strategies. BT also has other partnerships, namely one in the Northern Region of Portugal in the textile industry, which functions through sub-contracting of a small proportion of the textiles it produces. According to the CEO, that partnership is maintained:

> […] on one hand as a contingency plan for when a machine breaks down or something unforeseen crops up, but above all because it was a firm that helped BT in the tragic years of 2006 and 2008 and for ethical reasons, that partnership is maintained.

There is also the "existence of partnerships with suppliers, holding frequent open day meetings with them to deal with subjects such as quality, innovation, new products and technologies" (DRDI).

4.4 Strategy and alliance portfolio

Figure 4 presents the framework of alliances/partnerships formed by BT in Ansoff's product-market matrix. Concerning growth strategy through product development, the alliance with Korean Group Dual to set up Trimsol (sharing similar resources) and the partnerships connected to innovation (sharing different resources) are found to agree with the work by Varadarajan and Cunningham (1995) and Yasuda and Iijima (2005). As for market penetration strategy, BT manufacturing products under license from Korean Group Dual corresponds to a horizontal alliance (Perry *et al.*, 2004; Varadarajan and Cunningham, 1995; Yasuda and Iijima, 2005). Innovation strategy (diversification) with the different partners is also included in this strategy.

As for the strategy of entry to new markets with current products in partnerships, it was possible to observe two current situations; the creation of Trimsol Brazil and the

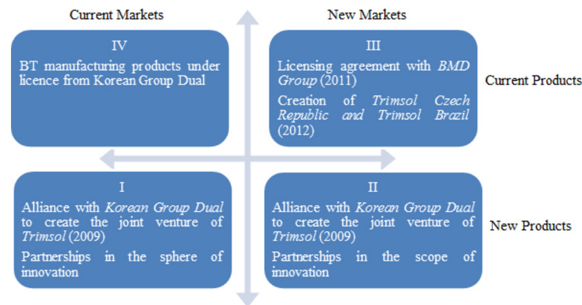


Figure 4. Alliances in the product-market growth strategy matrix

www.m

licensing agreement with the BMD Group for the Indian market, aiming to avoid entry barriers in the case of India and speed up entry to the Brazilian market (Miotti and Sachwald, 2003; Thomke and von Hippel, 2002). Innovation strategy is also in line with the strategy of growing diversification. In this case, the reasons for forming alliances are product development, with fewer technological and market uncertainties, and absorbing partners' skills, resorting above all to asymmetrical alliances (Varadarajan and Cunningham, 1995; Yasuda and Iijima, 2005). Our results also indicate that BT is trying to use strategic alliances to execute these specific business strategies.

BT is also involved in various alliances/partnerships which can be positioned in the four quadrants of the matrix defined by Yasuda and Iijima (2005) (Figure 5).

In the case of the alliances with Korean Group Dual, these are inserted in the second and fourth quadrants, associated with creation of the Trimsol joint venture and with the licensing of products for Europe and also inserted in the fourth quadrant is the licensing agreement with the BMD Group of BT products for India. This analysis is due to the fact that on creation of that joint venture, BT did not have any business unit for textile products, unlike Korean Group Dual, inferring a vertical alliance with equality of resources, since the capital is shared fairly between the two organizations.

As for licensing, we have horizontal alliances, as this is within the same market, textile production, but with asymmetrical resources since one organization develops the product while the other manufactures it.

The creation of Trimsol Czech Republic and Trimsol Brazil is inserted in the first quadrant since at those moments BT already had a textile product business unit, i.e. it was already inside that industry just as its partner was and the resources are also symmetrical as those joint ventures are held by BT and by Korean Group Dual, with 50 per cent participation by each organization.

Partnerships with R&D and technology entities and with firms included in the Harken Project are included in the third quadrant, since they are bodies with know-how in different areas and the resources shared are also different among the partners.

From the empirical evidence obtained in relation to alliances, BT is found to effectively acquire knowledge and carry out research with universities and research laboratories (Lansing, 2013; Laursen and Salter, 2006; von Raesfeld *et al.*, 2012), and the frequent meetings with suppliers provide knowledge related to production processes and entry characteristics that can lead to process innovation, cost reduction or product innovation, as stated by Sobrero and Roberts (2002). Collaboration with the competitors BMD Group and Korean Group Dual gave access to specific knowledge of the sector and

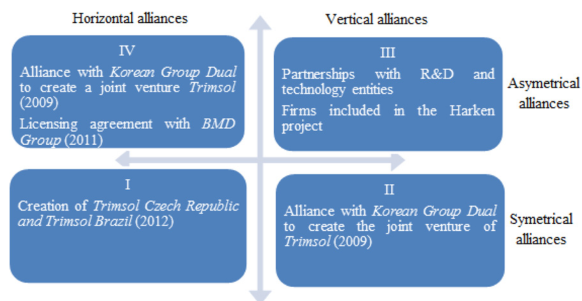


Figure 5.
Alliances in the alliance matrix according to resources and partners

www.m

the possibility of sharing engineering capacity and marketing knowledge (Gnyawali and Park, 2011; Tödtling *et al.*, 2009).

In sum, the following table summarizes the total/partial confirmation of the propositions formulated about the interaction between the business strategy and the resources-partners alliances formed by the case here studied (Table IV).

P1 (a firm with a product development strategy chooses horizontal and symmetrical alliances) is confirmed, since in its product development strategy, BT has a symmetrical (shared resources are of the same type) and horizontal (firms from the same sector) alliance with Korean Group Dual, the joint venture of Trimsol having been created, in particular, Trimsol Czech Republic for the European market. BT also has asymmetrical and vertical alliances with R&D institutions to implement the product development strategy.

Regarding P2 (a firm with a diversification strategy chooses vertical and symmetrical alliances), this is also confirmed, since in its diversification strategy, BT has an asymmetrical (shared resources are of different types) and vertical (since it produces other components for the car industry, besides textiles) alliance with Korean Group Dual, the joint venture of Trimsol having been created, in particular Trimsol Brazil for the South American market. BT also has asymmetrical and vertical alliances with R&D institutions to implement its diversification strategy.

P3 (a firm with a market development strategy chooses vertical and asymmetrical alliances) was partially confirmed, since to implement its market development strategy, BT formed a partnership with Korean Group Dual which is simultaneously horizontal/vertical and symmetrical/asymmetrical.

Finally, P4 (a firm with a market penetration strategy chooses horizontal and asymmetrical alliances) was completely confirmed with the partnerships established with the competitors of BMD Group and Korean Group Dual, but with asymmetrical associations.

5. Conclusions and implications

The objective of this study was to provide an in-depth analysis of the interface between the business strategy and portfolio of alliances. For this purpose, we developed some research propositions derived from insights gained in the linkage between the product-market matrix of Ansoff (1957) and the resources-partners matrix of Yasuda and Iijima (2005) and applied it on a firm/case operating on a global scale in Portugal.

From the empirical evidence obtained in the case studied here, it was possible to understand and confirm the connection between the characteristics of the business strategy and the portfolio of alliances formed. From the content analysis it was also possible to observe the existence of an alliance portfolio with advantages for BT, by providing that firm with access to various resources, such as knowledge and capacities

Table IV. Research propositions about the interaction between the business strategy and the resources-partners in alliances

	Resources-partners in alliances			
Business strategy	Horizontal	Vertical	Asymmetrical	Symmetrical
Product development	P_1✓			P_1✓
Diversification		P_2✓		P_2✓
Market development		P_3	P_3	
Market penetration	P_4✓		P_4✓	

المنارة للاستشارات
www.m

to aid its growth and improve both financial and innovative performance. It therefore becomes evident that corporative strategy is an important factor in determining how an organization defines its alliances. When a firm defines and implements various alliances that can help it to fulfill its organizational strategy, it is necessary to manage alliances as a portfolio. Our study shows also that the strategy of firms plays an important role in the formation of alliances and thus it is seen as an antecedent in the alliance portfolio.

This study seeks to make a contribution to the literature, from a theoretical perspective, by developing two matrixes by Ansoff (1957) and Yasuda and Iijima (2005). These frameworks allow us to analyze the relationship between alliance portfolio and business strategy. This may help us to understand better how strategic alliances are generated and how the architecture or structure of the alliance portfolio develops in firms. In addition, referring to two economic theories, resource-based theory and social exchange theory, we propose an analytical framework of alliance activities drawing attention to two factors: "resources to be exchanged" and "partners to exchange such resources". A firm's business strategy was categorized according to its growth strategy, as shown in Ansoff's product-market expansion model. This is an essentially exploratory and descriptive case, as it aims to raise hypotheses/propositions for future studies.

Our findings on the link between a firm's business strategy and its selection of alliance activities provide a new aspect of analysis for strategic alliances, and are also useful for a firm planning an alliance portfolio as a measure towards achieving business objectives. Moreover, this research seeks to make an empirical or practical contribution, identifying the main association between the alliance portfolio and several specific firm strategies. This may allow better understanding of the composition of the alliance portfolio and, in this way, improve strategic management. This means that alliances should be managed as a whole and not in a dyadic way.

Our study is not free from limitations, which in many cases suggests future lines of research. In the first place, the analysis was of a single supplier of components for the car industry, with very particular cultural characteristics, and in a single sector, which could make extrapolation of the results to other sectors difficult. It would therefore be important to study alliances from the various partners' perspectives, and in what way the alliances formed with the firm are linked to its business strategy. Although the historical contextualization of this study was essentially transversal, in the future more research should be done adopting a longitudinal approach.

The second is the fact of the study being centered on just one company, not obtaining a sufficient quantity of data to allow generalization within the industry. This limitation is a consequence of the method adopted (case study) which, despite being the most appropriate way to respond to the objectives set for the research, in fact presents the disadvantage of not considering generalization. This suggests the need to carry out a quantitative study to allow generalizations to be made on this subject, and also the need to define the methodology to be used for effective implementation. Therefore, this type of research approach constitutes a future line of investigation to develop a more complete model of the relationship between alliance portfolio and business strategy.

Note

1. Some services connected to product design and the commercial side remained in Sweden, and this is still the case, serving as the "front line" for the main client, Volvo.

المنارة للاستشارات

www.m

References

Ahuja, G. (2000a), "Collaboration networks, structural holes, and innovation: a longitudinal study", *Administrative Science Quarterly*, Vol. 45 No. 3, pp. 425-455.

Ahuja, G. (2000b), "The duality of collaboration: inducements and opportunities in the formation of interfirm linkages", *Strategic Management Journal*, Vol. 21 No. 3, pp. 317-343.

Anh, P.T., Baughn, C., Hang, N.T. and Neupert, K.E. (2006), "Knowledge acquisition from foreign parents in international joint ventures: an empirical study in Vietnam", *International Business Review*, Vol. 15 No. 5, pp. 463-487.

Ansoff, H.I. (1957), "Strategies for diversification", *Harvard Business Review*, Vol. 35 No. 5, pp. 113-124.

Barkema, H.G., Baum, J.A. and Mannix, E.A. (2002), "Management challenges in a new time", *Academy of Management Journal*, Vol. 45 No. 5, pp. 916-930.

Barney, J.B. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.

Barringer, B.R. and Harrison, J.S. (2000), "Walking a tightrope: creating value through interorganizational relationships", *Journal of Management*, Vol. 26 No. 3, pp. 367-403.

Baum, J.A.C., Cowan, R. and Jonard, N. (2010), "Network-independent partner selection and the evolution of innovation networks", *Management Science*, Vol. 56 No. 11, pp. 2094-2110.

Benbasat, I., Goldstein, D. and Mead, M. (1987), "The case research strategy in studies of information systems", *MIS Quarterly*, Vol. 11 No. 3, pp. 369-386.

Birkinshaw, J., Braunderhjelm, P., Holm, U. and Terjesen, S. (2006), "Why do some multinational corporations relocate their headquarters overseas?", *Journal of International Business Studies*, Vol. 37 No. 4, pp. 681-700.

Blau, P. (1968), "The hierarchy of authority in organizations", *American Journal of Sociology*, Vol. 73 No. 4, pp. 453-467.

Brandenburger, A.M. and Nalebuff, B.J. (1996), *Co-Opetition*, Currency Doubleday, New York, NY.

Carpenter, M.A., Li, M. and Jiang, H. (2012), "Social network research in organizational contexts: a systematic review of methodological issues and choices", *Journal of Management*, Vol. 38 No. 4, pp. 1328-1336.

Chung, S., Singh, H. and Lee, K. (2000), "Complementarity, status similarity and social capital as drivers of alliance formation", *Strategic Management Journal*, Vol. 21 No. 1, pp. 1-22.

Coase, R.H. (1937), "The nature of the firm", *Economica*, Vol. 4 No. 16, pp. 386-405.

Contractor, F. and Lorange, P. (1988), "Why should firms co-operate?", in Contractor, F. and Lorange, P. (Ed.), *Cooperative Strategies in International Business*, Lexington Books, Lexington, MA, pp. 3-18.

Contractor, F.J. and Lorange, P. (2002), "The growth of alliances in the knowledge-based economy", *International Business Review*, Vol. 11, pp. 485-502.

Cook, K.S. and Rice, E. (2006), "Social exchange theory", in Delamater, J. (Ed.), *Handbook of Social Psychology*, Springer, New York, NY, pp. 53-76.

Das, T.K. and Teng, B.-S. (2000), "A resource-based theory of strategic alliances", *Journal of Management*, Vol. 26 No. 1, pp. 31-61.

Das, T.K. and Teng, B.-S. (2002), "Alliance constellations: a social exchange perspetive", *Academy of Management Review*, Vol. 27 No. 3, pp. 445-456.

المنارة للاستشارات
www.m

de Leeuw, T., Lokshin, B. and Duysters, G. (2014), "Returns to alliance portfolio diversity: the relative effects of partner diversity on firm's innovative performance and productivity", *Journal of Business Research*, Vol. 67 No. 9, pp. 1839-1849.

Dhanaraj, C. and Parkhe, A. (2006), "Orchestrating innovation networks", *Academy of Management Review*, Vol. 31 No. 3, pp. 659-669.

Di Guardo, M.C. and Harrigan, K.R. (2012), "Mapping research on strategic alliances and innovation: a co-citation analysis", *The Journal of Technology Transfer*, Vol. 37 No. 6, pp. 789-811.

Dong, L. and Glaister, K.W. (2006), "Motives and partner selection in international strategic alliances: perspectives of Chinese firms", *International Business Review*, Vol. 15 No. 6, pp. 577-600.

Doz, Y.L. and Hamel, G. (1998), *Alliance Advantage: The Art of Creating Value Through Partnering*, Harward Business School Press, Boston, MA.

Doz, Y.L., Santos, J. and Williamson, P. (2001), *From Global to Metanational*, Harvard Business School Press, Boston, MA.

Dunning, J.H. (2004), "An evolving paradigm of the economic determinants of international business activity", in Cheng, J. and Hitt, M. (Eds), *Advances in International Management, Vol. 15: Managing Multinationals in a Knowledge Economy: Economics, Culture, and Human Resources*, Elsevier, Oxford, pp. 3-27.

Duysters, G., Heimeriks, K.H., Lokshin, B., Meijer, E. and Sabidussi, A. (2012), "Do firms learn to manage alliance portfolio diversity? The diversity-performance relationship and the moderating effects of experience and capability", *European Management Review*, Vol. 9 No. 3, pp. 139-152.

Eisenhardt, K.M. and Schoonhoven, C.B. (1996), "Resource-based view of strategic alliance formation: strategic and social effects in entrepreneurial firms", *Organization Science*, Vol. 7 No. 2, pp. 136-151.

Ellis, P. (2000), "Social ties and foreign market entry", *Journal of International Business Studies*, Vol. 31 No. 3, pp. 443-469.

Franco, M. (2011), "Determining factors in the success of strategic alliances: an empirical study performed in Portuguese firms", *European Journal International Management*, Vol. 5 No. 6, pp. 608-632.

Franco, M. and Haase, H. (2013), "Interfirm alliances: a taxonomy for SMEs", *Long Range Planning*, Vol. 48 No. 3, pp. 168-181.

García-Canal, E., Duarte, C.L., Criado, J.R. and Llaneza, A.V. (2002), "Accelerating international expansion through global alliances: a typology of cooperative strategies", *Journal of World Business*, Vol. 37 No. 2, pp. 91-107.

Garcia-Canal, E. and Sanchez-Lorda, P. (2007), "One more only if it is one of us. The number of partners and the stock market reaction to domestic and international alliance formation in EU telecoms firms", *International Business Review*, Vol. 16 No. 1, pp. 83-108.

Gnyawali, D.R. and Park, B.-J. (Robert). (2011), "Co-opetition between giants: collaboration with competitors for technological innovation", *Research Policy*, Vol. 40 No. 5, pp. 650-663.

Goerzen, A. (2005), "Managing alliance networks: emerging practices of multinational corporations", *Academy of Management Executive*, Vol. 19 No. 2, pp. 94-107.

Gomes-Casseres, B. (1996), *The Alliance Revolution: Summary of Chapters Table of Contents*, Harvard University Press, Cambridge.

Granovetter, M. (1973), "The strength of weak ties", *American Journal of Sociology*, Vol. 78 No. 6.

المنارة للاستشارات

www.m

Grant, R.M. (1991), "Resource based theory of competitive advantage: implications for strategy formulation", *California Management Review*, Vol. 33 No. 3, pp. 114-135.

Gulati, R. (1995a), "Social structure and alliance formation patterns: a longitudinal analysis", *Administrative Science Quarterly*, Vol. 40 No. 4, pp. 619-652.

Gulati, R. (1995b), "Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances", *Academy of Management Journal*, Vol. 38 No. 1, pp. 85-112.

Gulati, R. (1998), "Alliances and networks", *Strategic Management Journal*, Vol. 19 No. 4, pp. 293-317.

Gulati, R. and Sytch, M. (2008), "Does familiarity breed trust? Revisiting the antecedents of trust", *Managerial and Decision Economics*, Vol. 190 Nos 2/3, pp. 165-190.

Hagedoorn, J. (1993), "Understanding the rationale of strategic technology partnering: interorganizational modes of cooperation and sectoral differences", *Strategic Management Journal*, Vol. 14 No. 5, pp. 371-385.

Hagedoorn, J. and Osborn, R.N. (1997), "The institutionalization and evolutionary dynamics of interorganizational alliances and networks", *Academy of Management Journal*, Vol. 40 No. 2, pp. 261-278.

Hakansson, H. and Snehota, I. (1995), *Business Networks*, Routledge, London.

Harbinson, J. and Pekar, P. (1997), *Smart Alliances*, Booz, Allen and Hamilton, New York, NY.

Harrigan, K.R. (1985), *Strategies for Joint Ventures*, Lexington Books, Lexington, MA.

Harrigan, K.R. (1988), "Joint ventures and competitive strategy", *Strategic Management Journal*, Vol. 9 No. 2, pp. 141-158.

Harris, S. and Wheeler, C. (2005), "Entrepreneurs' relationships for internationalization: functions, origins and strategies", *International Business Review*, Vol. 14 No. 2, pp. 187-207.

Hart, S.L. and Dowell, G. (2011), "Invited editorial: a naturalresource-based view of the firm: fifteen years after", *Journal of Management*, Vol. 37 No. 5, pp. 1464-1479.

Heimeriks, K.H., Duysters, G. and Vanhaverbeke, W. (2007), "Learning mechanisms and differential performance in alliance portfolios", *Strategic Organization*, Vol. 5 No. 4, pp. 373-408.

Hennart, J.-F. (1988), "A transaction costs theory of equity joint ventures", *Strategic Management Journal*, Vol. 9 No. 4, pp. 361-374.

Hernández-Espallardo, M., Sánchez-Pérez, M. and Segovia-López, C. (2011), "Exploitation- and exploration-based innovations: the role of knowledge in inter-firm relationships with distributors", *Technovation*, Vol. 31 Nos 5/6, pp. 203-215.

Hoffmann, W.H. (2005), "How to manage a portfolio of alliances", *Long Range Planning*, Vol. 38 No. 2, pp. 121-143.

Hoffmann, W.H. (2007), "Strategies for management a portfolio of alliances", *Strategic Management Journal*, Vol. 28 No. 8, pp. 827-856.

Jiang, R.J., Tao, Q.T. and Santoro, M.D. (2010), "Alliance portfolio diversity and firm performance", *Strategic Management Journal*, Vol. 31 No. 10, pp. 1136-1144.

Kale, P. and Singh, H. (2009), "Managing strategic alliances: what do we know now, and where do we go from here?", *Academy of Management Perspectives*, Vol. 23 No. 3, pp. 45-63.

Khanna, T., Gulati, R. and Nohria, S.N. (1998), "The dynamics of learning alliances: competition, cooperation and relative scope", *Strategic Management Journal*, Vol. 19 No. 3, pp. 193-210.

Kogut, B. (1993), "Joint ventures and the option to expand and acquire", *Management Science*, Vol. 37 No. 1, pp. 19-34.

المنارة للاستشارات

www.m

Kogut, B. and Zander, U. (1993), "Knowledge of the firm and the evolutionary theory of the multinational enterprise", *Journal of International Business Studies*, Vol. 24, pp. 625-645.

Lahiri, N. and Narayanan, S. (2013), "Vertical integration, innovation, and alliance portfolio size: implications for firm performance", *Strategic Management Journal*, Vol. 34 No. 9, pp. 1042-1064.

Lansing, E. (2013), "Vertical integration, innovation, and alliance portfolio size: implications for firm performance", *Strategic Management Journal*, Vol. 34 No. 9, pp. 1042-1064.

Laursen, K. and Salter, A. (2006), "Open for innovation: the role of openness in explaining innovation performance among U.K. manufacturing firms", *Strategic Management Journal*, Vol. 27 No. 2, pp. 131-150.

Lavie, D. (2009), "Capturing value from alliance portfolios", *Organizational Dynamics*, Vol. 38 No. 1, pp. 26-36.

Lavie, D. and Rosenkopf, L. (2006), "Balancing exploration and exploitation in alliance formation", *Academy of Management Journal*, Vol. 49 No. 4, pp. 797-818.

Lazzarini, S.G. (2007), "The impact of membership in competing alliance constellations: evidence on the operational performance of global airlines evidence in the global airline", *Strategic Management Journal*, Vol. 28 No. 4, pp. 345-367.

Levy, M. and Powell, P. (2003), "Exploring SME internet adoption: towards a contingent model", *Electronic Markets*, Vol. 13 No. 2, pp. 173-181.

Madhok, A. (1995), "'Revisiting multinational firms' tolerance for joint ventures: a trust-based approach", *Journal of International Business Studies*, Vol. 26 No. 1, pp. 117-138.

Marconi, M.D.E.A. and Lakatos, E.M. (2011), *Metodologia Científica*, 5th ed., Atlas, São Paulo.

Martins, H.H. (2004), "Metodologia qualitativa de pesquisa", *Educação e Pesquisa*, Vol. 30 No. 2, pp. 289-300.

Meiseberg, B. and Ehrmann, T. (2013), "Tendency to network of small and medium-sized enterprises: combining organizational economics and resource-based perspectives", *Managerial and Decision Economics*, Vol. 34 Nos 3/5, pp. 283-300.

Miotti, L. and Sachwald, F. (2003), "Co-operative R&D: why and with whom?", *Research Policy*, Vol. 32 No. 8, pp. 1481-1499.

Murray, J.Y. and Kotabe, M. (2005), "Performance implications of strategic fit between alliance attributes and alliance forms", *Journal of Business Research*, Vol. 58 No. 11, pp. 1525-1533.

Nakamura, M. (2005), "Joint venture instability, learning and the relative bargaining power of the parent firms", *International Business Review*, Vol. 14 No. 4, pp. 465-494.

Nielsen, B.B. (2007), "Determining international strategic alliance performance: a multidimensional approach", *International Business Review*, Vol. 16 No. 3, pp. 337-361.

Oerlemans, L., Knoben, J. and Pretorius, M. (2013), "Alliance portfolio diversity, radical and incremental innovation: the moderating role of technology management", *Technovation*, Vol. 33 No. 6, pp. 234-246.

Ohmae, K. (1989), "The global logic of strategic alliances", *Harvard Business Review*, Vol. 67 No. 2, pp. 143-154.

Owens, I. and Robertson, D. (2000), "Aligning e-commerce with business strategy: the case of the Bank of Scotland", *Proceedings of the 5th UKAIS Conference, Cardiff*, 26-28 April, pp. 26-28.

Parise, S. and Casher, A. (2003), "Alliance portfolios: designing and managing your network of business-partner relationships", *Academy of Management Executive*, Vol. 17 No. 4, pp. 25-39.

المنارة للاستشارات

www.m

Parkhe, A. (1993), "Strategic alliance structuring: a game theoretic and transaction cost examination of interfirm cooperation", *Academy of Management Journal*, Vol. 36 No. 4, pp. 794-829.

Parmigiani, A. and Rivera-Santos, M. (2011), "Clearing a path through the forest: a meta-review of interorganizational relationships", *Journal of Management*, Vol. 37 No. 4, pp. 1108-1136.

Perry, M.L., Sengupta, S. and Krapfel, R. (2004), "Effectiveness of horizontal strategic alliances in technologically uncertain environments: are trust and commitment enough?", *Journal of Business Research*, Vol. 57 No. 9, pp. 951-956.

Pfeffer, C. and Salancik, G. (1978), *The External Control of Organization: A Resource Dependence Perspective*, Harper and Row Publishers, New York, NY.

Prahalad, C.K. and Doz, Y.L. (1987), *The Multinational Mission: Balancing Local Demands and Global Vision*, The Free Press, New York, NY.

Rothaermel, F.T. and Boeker, W. (2008), "Old technology meets new technology: complementarities, similarities, and alliance formation", *Strategic Management Journal*, Vol. 29, pp. 47-77.

Rothaermel, F.T. and Deeds, D.L. (2006), "Alliance type, alliance experience and alliance management capability in high-technology ventures", *Journal of Business Venturing*, Vol. 21 No. 4, pp. 429-460.

Rowley, T., Behrens, D. and Krackhardt, D. (2000), "Redundant governance structures: an analysis of structural and relational embeddedness in the steel and semiconductor industries", *Strategic Management Journal*, Vol. 21 No. 3, pp. 369-386.

Salkind, N.J. and Rainwater, T. (2003), *Exploring Research*, 5th ed., Prentice-Hall, Upper Saddle River, NJ.

Sarkar, M.B., Aulakh, P.S. and Madhok, A. (2009), "Process capabilities and value generation in alliance Portfolios", *Organization Science*, Vol. 20 No. 3, pp. 583-600.

Schilke, O. and Goerzen, A. (2010), "Alliance management capability: an investigation of the construct and its measurement", *Journal of Management*, Vol. 36 No. 5, pp. 1192-1219.

Smith, N. (1991), "The case-study: a vital yet misunderstood research method", in Smith, N. and Stake, R. (Eds), *The Art of Case Study Research*, Sage, London, pp. 145-158.

Sobrero, M. and Roberts, E.B. (2002), "Strategic management of supplier – manufacturer relations in new product development", *Research Policy*, Vol. 31 No. 1, pp. 159-182.

Stopford, J.M. and Wells, L.T. (1972), *Managing the Multinational Enterprise*, Basic Books, New York, NY.

Thomke, S. and von Hippel, E. (2002), "Customers as innovators: a new way to create value", *Harvard Business Review*, Vol. 80 No. 4, pp. 74-81.

Tödtling, F., Lehner, P. and Kaufmann, A. (2009), "Do different types of innovation rely on specific kinds of knowledge interactions?", *Technovation*, Vol. 29 No. 1, pp. 59-71.

Vapola, Tl., Paukku, M. and Gabrielsson, M. (2010), "Portfolio management of strategic alliances: an international business perspective", *International Business Review*, Vol. 19, pp. 247-260.

Varadarajan, P.R. and Cunningham, M.H. (1995), "Strategic alliances: a synthesis of conceptual foundations", *Journal of the Academy of Marketing Science*, Vol. 23 No. 4, pp. 282-296.

Von Raesfeld, A., Geurts, P., Jansen, M., Boshuizen, J. and Luttge, R. (2012), "Influence of partner diversity on collaborative public R&D project outcomes: a study of application and commercialization of nanotechnologies in the Netherlands", *Technovation*, Vol. 32 Nos 3/4, pp. 227-233.

المنارة للاستشارات

www.m

Walter, A., Ritter, T. and Gemunden, H. (2001), "Value creation in buyer-seller relationships: theoretical considerations and empirical results from a supplier's perspective", *Industrial Marketing Management*, Vol. 30 No. 4, pp. 365-377.

Wasserman, S. and Faust, K. (1994), *Social Network Analysis: Methods and Applications*, Cambridge University Press, Cambridge.

Wassmer, U. (2010), "Alliance portfolios: a review and research agenda", *Journal of Management*, Vol. 36 No. 1, pp. 141-171.

Wernerfelt, B. (1984), "A resource-based view of the firm", *Strategic Management Journal*, Vol. 5 No. 2, pp. 171-180.

Westhead, P., Wright, M. and Ucbasaran, D. (2001), "The internationalization of new and small firms: a resource-based view", *Journal of Business Venturing*, Vol. 16 No. 4, pp. 333-358.

Williamson, O.E. (1975), *Markets and Hierarchies Analysis and Antitrust Implication*, Free Press, New York, NY.

Williamson, O.E. (1985), *The Economic Institutions of Capitalism*, Free Press, New York, NY.

Yamakawa, Y., Yang, H. and Lin, Z. (John). (2011), "Exploration versus exploitation in alliance portfolio: performance implications of organizational, strategic, and environmental fit", *Research Policy*, Vol. 40 No. 2, pp. 287-296.

Yasuda, H. and Iijima, J. (2005), "Linkage between strategic alliances and firm's business strategy: the case of semiconductor industry", *Technovation*, Vol. 25 No. 5, pp. 513-521.

Yin, R.K. (2009), *Case Study Research: Design and Methods*, 4th ed., Sage Publications, Beverly Hills, CA.

Yoshida, J. (2002), "Three forge R&D team in France", *Electronics Engineering Times*, Vol. 4 No. 15, p. 8.

Zacharakis, A.L. (1997), "Entrepreneurial entry into foreign markets: a transaction cost perspective", *Entrepreneurship Theory & Practice*, Vol. 21 No. 3, pp. 23-39.

Zahra, S.A. and George, G. (2002), "International entrepreneurship: the current status of the field and future research agenda", in Hitt, M., Ireland, R., Camp, M. and Sexton, D. (Eds), *Strategic Leadership: Creating a New Mindset*, Blackwell, London, pp. 255-288.

About the authors

Pedro Mota Veiga is a PhD student in Management from Beira Interior University, Portugal, and Director of Statistics and Research of Curva de Gauss Consulting. His research focuses on strategic management and competitiveness, innovation, entrepreneurship and statistical methods in Management. He is currently involved in projects on competitiveness and entrepreneurship.

Mário Franco is an Assistant Professor of Entrepreneurship and SME Administration at the Department of Management and Economics, Beira Interior University, Portugal. He received his PhD in Management from Beira Interior University in 2002. In 1997, he was a doctoral candidate and participated in the European Doctoral Programme in Entrepreneurship and Small Business Management in Spain and Sweden. His research focuses on strategic alliances, business networks, innovation and business creation. He is also a member of a Research Center (CEFAGE-UBI) and currently involved in several research projects on SMEs. Mário Franco is the corresponding author and can be contacted at: mfranco@ubi.pt

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: **permissions@emeraldinsight.com**

المنارة للاستشارات

www.m

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

المنارة للاستشارات

www.manaraa.com