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Strategic Networks - Building Competitive Advantage through Effective Partnerships

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Strategic Networks - Building Competitive Advantage through Effective Partnerships

Strategické aliance – získání konkurenční výhody pomocí efektivních partnerství

Author: Peter Kysela

Summary:

The subject of this diploma thesis is strategic alliances and gaining competitive advantage through formation of effective partnerships. The subject is analyzed from both theoretical and practical point of view.

The structure of the diploma thesis is divided into two part. The theoretical part deals with academic overview of strategic alliances, especially about their formation, synergic effects, dynamics in time, metrics used to measure alliance performance, and about their advantages, as well as disadvantages, and failures. The practical part analyses whether theoretical perspectives of alliances are recognized in a technology-based firm, what alliance metrics are used to measure alliance success, and it analyzes through examination of selected case studies whether competitive advantage was achieved by forming strategic alliance. It also includes suggestions for potential improvements which could strengthen competitive advantage of the firm.

Souhrn:

Předmětem této diplomové práce jsou strategické aliance a získání konkurenčních výhod pomocí úspěšných partnerství. Předmět práce je analyzován jak z teoretického, tak i praktického hlediska.

Struktura diplomové práce je rozdělena do dvou částí. Teoretická část se zabývá akademickým přehledem strategických aliancí, zejména jejich vznikem, synergickými efekty a dynamikou v čase. Zároveň jsou popsány metriky používané k měření jejich výkonu, klady a zápory i případná selhání.

Praktická část analyzuje, do jaké míry jsou teoretické poznatky strategických aliancí aplikovatelné v technologické firmě a jaké metriky jsou používány k měření jejich úspěchu. Dále bylo prostřednictvím rozboru vybraných případových studií zjišťováno, zda a jakých konkurenčních výhod bylo dosaženo vytvořením strategických aliancí. Praktická část také obsahuje návrhy pro potenciální zlepšení, která by mohla posílit konkurenční výhody firmy.

Keywords:

Strategic alliances, competitive advantage, alliance failure, alliance metrics, synergic effects.

Klíčová slova:

Strategické aliance, konkurenční výhoda, selhání aliancí, alianční metriky, synergické efekty.

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	STEINHILBER, Steve a Michael ROBINSON. <i>Strategic Alliances: Three Ways to Make Them Work (Memo to the Ceo)</i> . 1. vyd. Boston: Harvard Business School Press, 2008, 112 s. ISBN 978-1422125885.		
	LEWIS, D. Jordan. <i>Trusted Partners: How Companies Build Mutual Trust and Win Together</i> . 1. vyd. New York: Free Press, 2007, 336 s. ISBN 978-1416576655.		
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List of abbreviations

AVG	AVG technologies
CRM	Customer Relationship Management
GSA	Global Strategy Alliances
ISP	Internet Service Provider
OEM	Original Equipment Manufacturers
P2P	Peer to Peer
R&D	Research and Development
ROI	Return on Investment
SDK	Software Development Kit
SPP	Service Provider Partnerships

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1 Introduction

The subject of this diploma thesis is strategic alliances and gaining competitive advantage through formation of effective partnerships. The main reason for choosing this topic is because strategic alliances nowadays form a critical element in the day-today practice of many firms and are formed in virtually every business sector and virtually every activity. They are often the key drivers of firm's competitive advantage and therefore this paper focuses on their role in the inter-firm networks.

Alliances between companies are not a new phenomenon, however. Strategic cooperations among firms have been established for several decades and have caused an increasing scientific interest from economics, psychology, and organization theory point of view. Firms decide to form alliances in activities within their core competences which are increasingly seen as the basis of a firm's long term competitive advantage.

The structure of the diploma thesis is divided into theoretical and practical part. The theoretical part deals with academic overview of strategic alliances, especially about their formation, synergic effects, dynamics in time, metrics used to measure alliance performance, and about their advantages, as well as disadvantages, and failures. The practical part analyses whether theoretical perspectives of alliances are recognized in a technology-based firm, what alliance metrics are used to measure alliance success, and it analyses through examination of selected case studies whether competitive advantage was achieved by forming strategic alliance.

1.1 Main objective of the thesis

The main objective of the theoretical part is to analyze strategic alliances and their underlying factors (why they are formed, how they should be implemented and operated, how can competitive advantage be achieved and measured, etc.) from secondary sources. The main objective of the practical part is to analyze selected strategic alliances in a technology-based firm and to test through examination of these alliances, whether:

- the assumptions underlying the theoretical part of the paper were recognized and comprehensive enough for the need of technology-based firm;

- what alliance metrics were implemented to measure effectiveness of strategic alliances, and whether they were effective enough for determining the success or failure of alliances;
- any synergic effects were achieved by forming strategic alliances, and;
- to propose solutions for potential improvements which could strengthen competitive advantage of the firm.

1.2 Methodology

1.2.1 Theoretical part

The methodology of the theoretical part is aimed to achieve goals set for the theoretical part of paper and is based on secondary data collection of existing literature on the topic, mainly obtained from academic books, publications, reviews from the analysts, and the internet.

1.2.2 Practical part

The methodology of the practical part of paper is aimed to achieve goals set for the practical part of paper. The main method used for achieving first two goals of the practical part is the use of expert interviews. It uses the qualitative technique of semi-structured and closed in-depth interviews, based on questions identified in Annex 1, so the interviewees are free to narrate what they view is important to them. The main focus of the interviews is on the aspects of decision-making, as well as on the process aspects.

Another method used for achieving first two goals of the practical part is the method of observation. It is realized by observing of what employees responsible for strategic alliances do, and by collecting information about their working processes, documentation, and corporate materials.

2 Theoretical part

2.1 Business of partnering – strategic alliances

Because strategic alliances determine the scope of this paper, it is of importance to have a clear definition of the term "strategic alliances". The term "strategic alliance" or simply "alliance" is the most common international terminology used for this type of partnerships and therefore it will be used throughout this paper. Other terms include cooperative ventures, coalitions, corporate alliances, business alliances and others. For a complete list of these terms see Vodáček and Vodáčková (2002).

Despite the growing numbers and increasing significance of strategic alliances, there are many different academic perceptions and definitions. According to Wheelen and Hunger (2012) a strategic alliance is "an agreement between firms to do business together in ways that go beyond normal company to company dealings, but fall short of a merger or a full partnership" while Ireland et al. (2002) describes strategic alliances as "cooperative arrangements between two or more firms to improve their competitive position and performance by sharing resources".

Dussauge and Garrette (1999) define an alliance as "a cooperative agreement or association between two or more independent enterprises, which will manage one specific project, with a determined duration, for which they will be together in order to improve their competences. It is constituted to allow its partners to pool resources and coordinate efforts in order to achieve results that neither could obtain by acting alone. The key parameters surrounding alliances are opportunism, necessity and speed". Harbison and Pekar (1998) view alliance as "cooperation between two or more companies, from different countries, that unite to pursue a set of agreed goals through continuously sharing their respective complementary assets and core competences, whereby each of them retains their independence and identity, to gain mutual benefit and to strengthen their competitive advantage" and Steinhilber (2008) views alliances as a "relationship between one or more organizations that – through the combination of resources – can create significant and sustainable value for everyone involved".

Despite these (and other numerous) academic definitions, for the purpose of this paper we conclude that strategic alliances are partnerships between at least two partner firms that:

- remain legally independent after the alliance is formed;
- share benefits and managerial control over the performance of assigned tasks;
- make continuing contributions in one or more strategic areas, such as technology or products by combining their resources and skills.

As can be seen on Picture 1, what makes alliances "strategic" in compare to other similar forms of alliances (for example transactional alliances) is the fact that partners share a common strategy, their relationship increases both firms' market value, they are willing to share and leverage core capabilities, and they learn from each other during the process (Harbison and Pekar, 1998).

Picture 1 Strategic alliance values



Source: Own modification

2.1.1 Classification of alliances

The term strategic alliance is broad and therefore academic literature suggests to divide it into separate groups based on different aspects. Each author (Das and Teng, 2002; Bucklin and Sengupta, 1993; Doz and Hamel, 1998; Vodáček and Vodáčková, 2002) classifies strategic alliances differently, but the most common types of classification include:

- alliances based on number of participants (Das and Teng, 2002) these types of alliances can be divided into two generic forms bilateral (dyadic) alliances, and network (multi-partner) alliances. The difference between bilateral and network alliances is in the number of partners consisting the alliance where bilateral alliances consist of two partners only (based on pair-wise agreements or equity stakes), and network alliance consists of at least two partners, usually a group of separate firms linked through collaborative agreements where not all the firms are linked directly to the others (Bamford et al., 2003). Das and Teng (2002) characterize network alliances as a "collection of alliances";
- alliances based on the organizational integrity (Bucklin and Sengupta, 1993)
 they can be either horizontal, or vertical. While vertical alliances consist of buyer supplier alliances, horizontal alliances are partnerships among firms in the same industry. Horizontal alliances are often concluded between two competitors or complementers.

In addition to the above, Vodáček and Vodáčková (2002) mention five more types of alliances based on:

- function examples of functional alliances are marketing, technological, business, financial, and consulting alliances;
- territory domestic alliances, or international alliances;
- ownership private alliances, public alliances, mixed alliances;
- profitability profitable alliances, non-profitable alliances, mixed alliances;
- duration short-term alliances, long-term alliances, occasional alliances.

2.1.2 Most common motives for forming alliances

In past, the most common motive for forming alliances was gaining access to foreign markets or benefiting from economies of scale, and alliances were rarely used for innovative purposes (de Man et. al., 2001).

Nowadays, the motives for firms to engage in alliance formation vary according to firmspecific characteristics (internal factors) and the external factors, but in majority of cases, firms form alliances to create additional value and are connected to corporate strategy (de Man et. al., 2001). Both internal and external motives are often complementary, in the meaning that an external factor which urges firms to engage in alliance strategies is mirrored by an internal factor that reinforces the motivation.

In Freidheim's (1998) view, modern strategic alliances can be divided into four eras based on the motives of formation:

- product performance (1970s) the main goal was to gain access to the latest technology and international markets;
- position-focused (1980s) firms formed alliances to build industry structure, with a focus on product development;
- capabilities-focused (1990s) alliances were formed to gain advantage in response to rapidly changing market conditions and new opportunities;
- network-focused (2000s) focus has been on creating long-term network relationships to achieve competitive advantages and synergic effects.

It is obvious from the above that alliances used to be cost-driven to achieve economies of scale but nowadays, firms form strategic alliances for many other reasons: enhancing their productive capacities, reducing uncertainties in their internal structures and external environments, achieving competitive advantages that enables them to increase profits, or to gain future business opportunities that will allow them to command higher market values for their outputs (Das and Teng, 2002). Another important shift is in the perception of alliances from cost-saving partnerships to knowledge-intensive partnerships by acquiring new skills and knowledge from the partner (Bilderbeek, 2000).

As can be seen on Graph 1, business conducted through alliances has grown since 1990 by more than 35% (Andersen Consulting, 2010), so it is important to know the main reasons of forming strategic alliances.



Graph 1 Total business conducted through alliances

Source: Andersen Consulting, 2010

Academic literature suggests many different approaches for forming alliances. For the purpose of this paper, below are the most common motives for forming alliances (Dyer et al., 2001; Sundaram and Inkpen, 2004; Segil, 2003; Lavie and Rosenkopf, 2006; Bamford et al., 2003):

- gaining access to new or converging technologies for many small companies the only way to stay competitive, or even survive in today's technologically advanced business world, is to form partnerships with other companies. Not all companies can develop technologies on their own that would allow them to effectively compete on the market. By forming partnerships with other companies who do have the necessary resources, knowhow, and means, small businesses can accomplish bigger projects in a shorter period of time, more profitably and effectively, than if they tried to do it on their own;
- gaining access to key complementary assets one way to achieve sustainable advantage is by combining the innovation strategy of a firm with a competitive asset that complements the innovation. This can provide a good protection against potential competitors. The use of complementary assets advantages becomes even more important as the technology itself matures;
- growth strategies due to lack of internal resources, many firms struggle when trying to gain access to new markets, to diversify their production to form new businesses, or to achieve vertical integration. In such case, forming an alliance with an existing company already in that marketplace can be the best alternative. Partnering with such companies can make the expansion into unfamiliar territory a lot easier and more effective for a company;
- risk diversification for some companies, it can be risky to be involved in development of a new product, service or in any kind of investment. In such cases, the best solution is to spread the risk among other companies who are willing to participate in the development process (cost sharing, pooling of resources, risk reduction and risk diversification etc.). Other companies, especially small non-profit organizations are limited in resources and skills, so one of the options is to create partnerships with other companies who can

provide the necessary resources and skills, or with companies who also need help and provide what is needed for all. Examples of risk diversification can be horizontal alliances (partnerships among firms in the same industry), or vertical alliances (buyer–supplier alliances).

According to Zuzák (2011), another example of risk diversification is the socalled synergic effect. Synergic effects are achieved when a sum of combined elements is greater than the sum of its parts – the scope becomes less, yet the firm achieves more. Firm can achieve them by expanding its activities and the outcome of such synergies is lowering cost of production, and at the same time, increasing turnarounds. Synergic effects are usually achieved in the area of sales, human resources, and inputs;

- knowledge acquisition/learning in many firms according to Dyer et al. (2001), Sundaram and Inkpen (2004) and Segil (2003), the necessary knowledge and know-how is not processed for quick adaptation to organizational and external market changes. One of the most effective ways suggested by the authors is to partner with a firm that does possess these means and can provide what is needed in a short period of time. By doing so, the firms can benefit from these partnerships and acquiring new skills, gain market knowledge and experience;
- politics/collective lobbying according to Sundaram and Inkpen (2004) the idea of collective lobbying is standing strong together. For example firms can decide to form an alliance to set technical standards for new a technology. With these standards, the technology will become more valuable, and more expensive;
- revenue growth/stock market gains according to Dyer et al. (2001), one of firm's main objective is to maximize revenue, and one of the options for managers is to form alliances to boost revenue returns. As shown on Graph 2, another important reason (only for firms listed on the stock exchange) is that following announcements of forming strategic alliance, average stock market price increases;
- fear as part of transaction cost theory, the fear motive can also be a strong motive to form alliance. Whenever two firms transact on a long-term basis, problems can arise from the difficulty of setting future prices, delivery and

guaranteeing quality, or technological and strategic decisions. A supplier that initially sets a low price, may claim unexpected, or hidden costs. Joint venture can be the best alternative by providing incentives for both parties to perform accoording to their contractual obligations (Bamford et al., 2003).





Source: Dyer et al., 2001

All of the above motives can be grouped into four different categories based on the area of interest: organizational, financial, strategic and political (Todeva and Knoke, 2005). Below Table 1 summarizes all four motives.

Table 1 Firm's motives for alliances

Motives for alliances	Examples		
	knowledge transfer/acquistion, collective and embedded skills, restructuring,		
	improving business performance, acquiring means of distribution, extending supply		
Operational	links, complementarity of goods and services to markets		
	cost sharing, pooling of resources, risk reduction and risk diversification, obtaining		
Financial	economies of scales, co-specialisation, revenue growth, stock market gain		
	achieving vertical integration, achieving competitive advantage, diversifying into		
	new business, gaining access to new technology, new product development,		
Strategic	cooperation with potential rivals, pre-pmetying competitors		
Political	market developments, overcoming, legal/regulatory barriers		

Source: Todeva and Knoke, 2005

2.1.3 Theoretical motives for forming alliances

Besides the motives mentioned in section 2.1.2, there are also theoretical approaches to the motives for forming alliances, especially economic theories (including transaction cost economics theory, and resource-based theories), strategic behavior theory (game theory), and relational theories. Economic theories are usually applied in the development phase, while the strategic and relational theories in the operational phase of the alliance life cycle.

There are five main perspectives in economic theory on cooperative strategies:

- according to the market power theory the main motive why firms enter into alliances is securing a stronger position on the markets (Krugman and Helpman 1993);
- according to **transaction cost economics**, strategic alliances are formed to have the most efficient transactions and decisions of firms are explained through reasons of efficiency (Williamson, 2011). Firm's main business motive for acquiring assets is to minimize costs (transactional, costs required for exchange, etc.). The theory assumes that alliances between firms are formed mainly to lower the cost of participating in a market (transaction costs) when internal production costs are high, markets are inefficient, and acquisitions are costly;
- **increasing returns theory** holds that companies can develop strategic technological networks to become major players on the market and that way to overcome potential competition;
- resource based theories explain the behavior of a firm through its resources (Barney and Clark, 2007; Kogut, 1988; Gulati, 2007). According to these theories, alliances are formed to optimize the competitiveness of their resources. The formation of alliances is a means for stabilizing the flow of resources of a firm and for reducing the uncertainty confronted by the firm. They state that there is a relation between the resources (assets, capabilities, processes, knowhow) of a firm and its performance and therefore each firm should enhance their core competencies in order to develop sustainable competitive advantage. The degree of competitive advantage is dependent on how valuable and scarce these resources are. According to this theory, alliances are formed to achieve, or to maintain their competitive resources by having access to partner's resource base and that way the value of their resources is maximized by combining their resources they increase. Resource based theories are in opposite to the external oriented theories based on firm's position in the industry and the structure of industries (Porter, 1998).

Another theory is the strategic behavior theory. The theory focuses on the competitive positioning of the firm. The behavior of the firm is directed towards influencing the balance of forces in the industry and improving its own competitive position (Porter, 1998). The most influential strategic behavior theory is considered the Game theory. It is not the intent of this paper to summarize theoretical aspects of Game theory, but rather to explain its implications for forming alliances. This perspective has not received much attention in the research literature so far, and it is problematic to find appropriate literature on this topic.

The underlining principle of the Game theory is maximization of utility through mutual interdependence and its original philosophy is based on defeating the opponent. In order to maximize firm's utility, it must taken into consideration the decisions of other firms in the market (competition). It also studies how alliances are formed and how partners interact within an alliance. One outcome of the theory is the prediction under which constellations there is a certain solution (Arnold, 2011), and the second outcome is the decision of the firm whether to gain competitive advantage over the opponent, or to achieve mutual competitive advantage for both sides by synergies (win-win strategy) (Zuzák, 2011). There are several models based on the game theory. Park and Ungson (2001) in their studies came to conclusion that the decisions of firms to join alliances are based on the competitive pressure of the market. Under this pressure, weak firms are more likely (or are forced) to participate in the alliance. If firms in the industry form alliances, they create competitive pressure for other firms in the industry and therefore can cause them potential losses for not participating in the alliance.

The Game theory also explains behavior of partners during the alliance (Stackelberg, 2008). Once the alliance has been established, each firm wants to achieve the potential of the alliance, however, each firm will have a strong incentive to grab a large portion of benefits from this alliance (opportunism) and will sooner, or later face the dilemma between commitment to the alliance and opportunism.

In the relational theories, the main focus is on how best to organize the alliances. According to these theories a relationship among partners grows, develops, deteriorates, and eventually terminates through repeated relational interactions. Alliance members are focused on relational elements such as commitment to the alliance and trust between partners, rather than focusing on financial aspects and resources (Muthusamy and White, 2005). Relational approach to alliances does not focus on rationale behind alliances, but rather on factors contributing to the performance of the alliance.

According to Porter (1998), the competitive strategies approach is the best-known market theory and the formation of strategic alliances depends on the five forces: the threat of new entrants, the bargaining power of suppliers, and the buyers, the threat of substitute products, and rivalry among firms. These forces are used in conjunction with the three generic strategies: product differentiation, cost leadership, and focus in order to outperform the competition. Kogut (1988) on the other hand states that the competitive strategies approaches believe that alliances are formed as a defensive mechanism in order to protect themselves against strategic uncertainty. Picture 2 summarizes all of the above findings about theoretical motives for forming alliances.

Picture 2 – Theoretical motives for forming alliances



Source: Own modification

2.1.4 Basic forms of strategic alliances

Most of the academic researchers suggest that alliances can take different forms from simple arm's length contracts to complicated mergers and acquisitions or equity joint ventures (Harbison and Pekar, 1998; Contractor and Lorange, 2002). Cauley de la Sierra (1995) also suggests extending the list by cartels and franchising.

Picture 3 shows the basic forms of alliance relations as suggested by various authors (Vodáček and Vodáčková, 2002; Segil, 2002; Harbison and Pekar, 1998; Contractor and Lorange, 2002). At the top right corner are hierarchical relations in which one firm takes

full control, absorbing another's assets and personnel into a one entity. At the bottom left are market transactions requiring no obligation for recurrent cooperation among the parties. In between these extremes of market and hierarchy are general strategic alliance forms including R&D, and technology transfer combining various characteristics of market interaction and bureaucratic integration.







Source: Own modification

2.1.4.1 Alliances between competitors

Besides the basic forms of alliances mentioned in Picture 3, there also exist alliances between competitors. One of the intrinsic features of such relationship is the ambiguity which combines rivalry on one side, and co-operation on the other. The best known theoretical model between competitors is the co-opetition model which occurs between two or more competing firms, interacting with partial congruence of interests (cooperative competition). The goal of such cooperation is achieving higher value added (or competitive advantage) in compare to the value created without their interaction. Co-opetition usually occurs among competing firms from the same market working together in order to share knowledge and research of new products, lowering operation costs, and at the same time competing for bigger market share (Brandenburger and Nalebuff, 1996).

The model as shown on Picture 4 is based on five players – customers, partners, distributors, competition, and firm who interact with each other to achieve common goals.



Picture 4 Interaction flow of main players in co-opetition

Source: Zuzák, 2011

There are two opposing views on the co-opetition model. The first group believes that co-opetition is an effective tool for creating new opportunities leading to achieving higher values, and practicing ethical manners in the business relationship between players. The second group led by the ideas of the Nash equilibrium theory believes that the cooperation between competitors does not necessary lead to positive and ethical outputs. Each player knows the equilibrium strategies of the other players, and no player has any incentive to gain by changing only his own strategy (Zuzák, 2011).

Academic literature views alliance between competitors in three different ways. The first group believes that alliance between competitors eliminates competition between them and strengthen both partners' position in relation to the external environment (collective competition). This group views competition between firms as a constellation of competitive units with a group-based advantage (Gomes-Casseres, 2006). The second group believes that alliance between competitors does not eliminate the inter-partner rivalry, only modifies it, and the outcome of this relationship is unbalanced as one partner is bound to lose what the other gains (Doz and Hamel, 1998). The third group argues that alliances between competitors exacerbate rivalry between partners (Park and Ungson, 2001). Table 2 summarizes all findings about perception of competition.

For the purpose of this paper, we assume that alliances between competing firms eliminate competition between them and open new opportunities for both sides.

	Traditional competition	Collective competition
Competitive units	Firms	Constellations
Industry structure	Oligopoly of firms	Oligopoly of constellations
Source of competitive		
differentiation	Firm-based advantage	Group-based advantage
Valuable resources	Controlled by firms	Assembled by constellation
Gevernance of resources	Corporate structure	Constellation structure
Source of profit	Rent in the value chain	Rent in the constellation

Table 2 Traditional versus collective competition

Source: Gomes-Casseres, 2006

According to Dussauge and Garrete (1999), there are three types of alliances between competitors:

- **complementary alliances** this type of partnership (usually bilateral) is based on partners' contributions to the alliance which are set up to take advantage of the complementariness of the partners. Complementary alliances do not bring direct competition between the partners and are generally limited to marketing and sales, and sometimes manufacturing. Besides that, complementary alliances often produce uneven benefits for the partners. While one partner benefits from acquiring new skills and knowledge (and often manages to develop similar product on its own), other partner's position is often unchanged. These alliances have impact on market by bringing new firms into the market, increasing the intensity of competition, and products made available for customers;
- shared-supply alliances this type of short term partnership involves firms that choose to ally in order to achieve economies of scale on a particular stage of the production process (R&D partnerships). The collaboration is aimed on improving efficiency in production and cutting development costs. Sharedsupply alliances are usually formed between directly competing firms, so at the final stage of product development process, firms compete with separate offerings. Shared-supply alliances are less important ventures with a limited scope and impact and do not affect long-term strategies of the firms. They have almost no impact on the intensity of competition in the market, do not increase or decrease number of firms in the market, and have no impact on the diversity of products. These types of partnerships are common in the automobile industry, electronics, and software industry;

- quasi-concentration alliances – alliances are comprised of partners contributing similar assets and capabilities to develop common products. The main goal of these partnerships is (as it was in case of share-supply alliances) to achieve economies of scale and to produce a single product common to all partners (unlike share-supply alliances). Quasi-concentration alliances are mainly formed in the aerospace and defense sectors, as well as in technology sectors and tend to induce the formation of oligopolies.

Picture 5 summarizes all the above described types alliances between competitors.



Picture 5 Alliances between competitors

Source: Dussauge and Garrete, 1999

2.1.5 Dynamics of alliances – the alliance life cycle

Most of the alliance literature is based on a static perspective not taking into consideration the dynamics of alliances. The concept of dynamics refers to the changes that take place within a system (Ireland et. al., 2012). There are generally two types of dynamics in alliances, the dynamics of an alliance with a life cycle approach, and the dynamics within an alliance with partner dynamics (Singh, 2009).

As it is not the intend of this paper to analyze behavioral theories, they are excluded from the paper. For further information on partner dynamics, see Interpartner harmony in strategic alliances: managing commitment and forbearance by Das and Kumar (2009).

Kale and Singh (2009) suggest (as also seen on Picture 6) that the strategic alliance process life cycle can be divided into three phases: formation phase, design (implementation) phase, and post-formation phase. Each of these phases has further critical factors that should be considered.

Picture 6 Typical phases of alliance life cycle



Source: Kale and Singh, 2009

2.1.5.1 Formation phase

According to Kale and Singh (2009), the first step in creating a successful alliance is **developing an alliance strategy**. This involves setting alliance mission and vision, studying the alliance's feasibility including market analysis, existing technical solutions, localization of the project, human resources assessment, risk analyses, financials, legal and competitive assessment, and also resource strategies for production, technology, and people. The most important thing is to align the alliance strategy with the firm's business strategy.

Once the alliance strategy has been set, potential partners need to be selected. This involves **partner assessment**. Partner assessment involves analyzing a potential partner's strengths and weaknesses, preparing appropriate partner selection criteria, understanding and addressing resource capability gaps that may exist for a partner. Shah and Swaminathan (2008) suggest that potential partner should have the following traits: partner complementarity, partner commitment, and partner compatibility or fit. Resource-based theories suggest that the greater the complementarity between partners

them greater the likelihood of alliance success (Barney and Arikan, 2001). Partner should also be compatible with the leading firm and committed to the relationship (Beamish, 1987). No positive results on due diligence will overcome the lack of strategic alignment between firm and potential partner. Without these assurances, the alliance is deemed to fail.

2.1.5.2 Implementation phase

The second phase in the alliance life cycle is the implementation phase which includes contract negotiation and technical implementation.

Contract negotiations between partners can begin according to Bamford et. al. (2003) only after both sides have understood the strategy and objectives of the alliance. A negotiating strategy is crucial, and developing one must begin during the development phase. Well planned contract negotiations ensure and create realistic objectives and outcomes, defining each partner's contributions and rewards as well as protect any proprietary information, addressing exit strategies, and penalties for underperformance, handling late payments, and highlighting the degree to which arbitration procedures are clearly stated and understood. **Technical implementation** can according to Bamford et. al. (2003) happen when all contract terms have been defined and agreed by both parties, the next step is the technical implementation of the deal. It can take various forms from implementing an existing technical solution which will enable partners to submit reports and analyses, or to create a new technical solution based on the agreed goals of the partnership.

2.1.5.3 Post-formation phase

The last phase of the alliance life cycle involves alliance operation and alliance termination. **Alliance operation** according to Bamford et. al. (2003) includes ensuring resources devoted to the alliance, linking of budgets and other resources with firm's strategic priorities, measuring the alliance performance, and assessing the performance and results of the alliance. The main task in this phase is to manage the alliance, and keep the alliance investments up to the expectations and monitor the alliance carefully.

Alliance termination according to Peng and Shenkar (2002) involves winding down the alliance, for instance when its objectives have been met or cannot be met, or when a partner adjusts priorities or re-allocates resources elsewhere. If an alliance was taskoriented and all these tasks fulfilled, termination might be a logical and a nonproblematic phase of the alliance, but in most cases the termination of the alliance is problematic.

2.2 Achieving competitive advantage – the main goal of alliances

The term competitive advantage is very broad and academic literature defines it in many different ways. According to Porter (1985) competitive advantage means achieving low costs, differentiation advantage, in combination with a successful focus strategy, as shown on Picture 7.







Another definition suggested by Zuzák (2011) that competitive advantage is a long term ability to create higher values for the customers, or values that exceed customers' expectations. This higher value is than reflected in higher prices of the goods or services and customers are willing to pay the extra price in compare to other similar products or services. Competitive advantage is sustainable until it gives customers value added and until the competition is not able to imitate it. For the purpose of this paper, competitive advantage is viewed as a long term ability of alliance partners to create greater synergic values in compare to the separate values created without such cooperation.

2.2.1 Quantitative and qualitative evaluation of synergic values

One way how to measure synergic values is by quantifying synergy. According to Douma (1997), quantifying synergy is one of the most objective ways of determining the value of competitive advantage and the transaction costs theory could be a good starting point for the quantifying of synergy. A disadvantage of this theory is its difficult translation into practice mainly because of its theoretical framework. The theory assumes that firms may evaluate the optimal degree of integration on the cost evaluation basis.

In case savings on transaction costs have been achieved over the costs of hierarchy, alliance has achieved synergic values greater in compare to the separate values created without this alliance (Williamson, 2011; Douma, 1997). Quantifying synergy can be viewed as one of the possible ways of measuring synergic effects, but not the only one.

Another method of evaluating synergic effects of competitive advantage is through qualitative evaluation. According to Douma (1997) it evaluates effectiveness based on the degree of goal realization and can be done by asking the alliance managers whether the strategic objectives of the alliance have already been accomplished, and if both partners have recouped their investment in the alliance.

Another way of qualitative evaluation of synergic values is the degree of success based on the operational status, the alliance lifetime, and the degree of alliance success estimated by the responsible alliance managers (Douma, 1997). This allows measuring alliances in cases when there are no measurable financial results in place, or in case financial results do not yield necessary results.

The qualitative approaches of measuring synergic values will be used later in the paper to determine whether alliances have achieved competitive advantage.

2.3 Alliance metrics

As companies engage in greater numbers of strategically and financially important alliances, it is important for each stakeholder to pay attention to alliance performance metrics. Most companies possess the financial, technological, and managerial expertise to define meaningful alliance metrics because in most cases they have to track the performance of their own. However, alliances pose some unique challenges when it comes to performance measurement, and these have a great deal to do with the process by which metrics developed, and by which they are implemented (Hughes, 2002).

One of the key features in alliance success is the presence of constant evaluation metrics and monitoring of the alliance (Segil, 2004). Each well designed alliance should not lack some sort of metrics which are used for tracking performance and other business areas of the partnerships. Some academic authors (Bamford, 2003) suggest using predesigned balanced scorecard (based on balanced scorecard of Kaplan and Norton) for the development of alliance metrics which includes financial values, non-financial values, operational effectiveness, and maintaining a good relationship between the partners, and others suggest using an ad hoc, alliance by alliance basis metrics mutually designed by the partners which would enable each partner to track what is important for them.

In either case, these metrics must be linked with the alliance vision and strategy and implemented in the early phases of the process to ensure that both parties understand what is expected from the outcomes of their partnership.

2.3.1 Types of alliance metrics

Cravens and Piercy (2000) mention five dominant partner resource areas which should be taken into consideration when creating metrics for alliances: financial, strategic, operational, relationship, and technology. Table 3 lists all of these evaluation implications, risks associated with them, and control mechanisms that can be implemented in order to minimize the risks.

Table 3 Alliance metrics

Resource contribution	Type of risk	Evaluation implications	Control system components
		Lack of trust by investing partner creates	
		preference for control over decision-making	
	Relational	which often manifests in equity ownership	Hierarchical approval structure
		Profitability concerns create a desire for explicit	Short-term evaluation metrics, financially
Financial	Performance	exit provisions in contract	oriented metrics
		Lack of trust between partners; tighter control	The dominant partner seeks to place its
	Relational	mechanisms; hierarchical structure of authority	managers in key positions of authority
			Co-ordination among partners is critical; Top
			managers selected by all partners for extended
		Higher level of trust between partners; focus on	periods to encourage co-ordination and
Strategic	Performance	improving mangerial efficiency	interaction
		Stability is the key goal; incentive to link	
		partners to the alliance in a long-term manner;	
	Relational	shared equity ownership	Tight controls to limit opportunistic behaviour
		Much lower incidence of this type of risk; overall	
		goal is resource flexibility and recurrent	
Operational	Performance	contracts	Short-term evaluation metrics
			Periodic management meetings, forums for
Relationship	Relational	Open communication is the main goal	reviewing alliance performance
			Lack of free flow communication and
		Preference for controls over information from	informaction, formal communication
	Relational	proprietary processes	mechanisms
		Preference for licensing technology to multiple	Short-term evaluation metrics, financially
Technology	Performance	partners	oriented metrics

Source: Cravens and Piercy, 2000

As per Steinhilber (2008), there are five areas of interest (thought a little different from Cravens and Piercy) where metrics can be applied. **Financial performance** area, where metrics can be quantified based on the incremental revenue impact, savings, ROI over years based on incremental cash flow after investment. **Time to market**, which can be measured based on incremental market share over years (customer acquisition). **Market access** is metric measuring reducing entry costs, access to key accounts, incremental revenue, and long-term sustainable market share. **Competitive market position** is metric that is measuring improvement of the market share, profitability, and ability to address market opportunities.

In compare to the former type of alliance metrics suggested by Cravens and Piercy (2000), Steinhilber's approach is more suited for executives who are mostly interested in the strategic and financial outcomes of partnerships, not taking into consideration operational, relational and other areas.

When it comes to implementing alliance metrics, the biggest challenge of alliance performance measurement is usually the process by which these metrics are developed, and implemented.
Hughes (2002) suggests using six principles for implementing alliance metrics:

- ensuring comparability of metrics across alliances where each firm in the strategic alliance business should have a set of pre-designed metrics for different types of alliances which are linked to the business strategy of the firm. This approach lowers the odds that the alliance management will not find the time to define metrics. Only few alliance managers have the expertise to define a balanced set of metrics that would cover all strategic areas of the relationship. Another reason for having pre-designed metrics is connected to time. Alliance management can spend a long time with internal stakeholders trying to define and negotiate targets and measurements of success for each alliance separately. Moreover, there is one more aspect that should not be forgotten. Knowledge about useful and well designed metrics supports learning across alliances. It enables less experienced partners to learn how metrics should be implemented;
- defining and discussing metrics with alliance partner it is critical to engage partners in discussions about how both sides will measure alliance performance already in the formation phase of the alliance. It is important to acknowledge their different view on metrics and to adjust metrics on time to avoid possible future discrepancies. Alliances in which partners do not discuss their own metrics of success put themselves and the whole alliance at risk. In the absence of such discussions, the pursuit of goals by one partner of which another partner is unaware can lead to unnecessary conflict;
- ensuring clarity around implications of alliance performance even after defining effective alliance metrics with the partner, it is often the case that there is no common understanding of the implications of missing goals. Therefore it is important to discuss the consequences of under-performance while setting alliance metrics. Well designed alliance metrics should be able to answer the following concerns:
 - what will happen if the alliance underperforms based on some metrics but over-performs on others,
 - minimum level of performance set for each metric,
 - under what circumstances should the alliance be terminated,
 - level of performance which leads to expand the scope of the alliance.

- implementing a process for auditing alliance performance in most cases, data needed for financial, operational, and strategic metrics can be extracted from existing CRM applications. At this phase it is important to know how often will the data be collected, and by whom. Once collected, who will be these reports delivered to, and who will interpret them. If these question cannot be answered, metrics are unlikely be utilized;
- linking alliance performance with individual performance evaluation only few alliances are staffed by individuals whose personal scorecards in any way reflect the role they play in the alliance. Failure to align individual performance evaluation with alliance goals is one reason performance failure;
- creating a forum for reviewing and acting on alliance performance data there must be some basic infrastructure to support the review of metrics and problem solving and planning based on what those metrics reveal and making alliance teams jointly responsible for a single report to their respective management teams helps to ensure that alliance performance tracking is actually done, reinforces a sense of common purpose among those who manage the alliance interface, and minimizes the chance that different, incomplete, or potentially biased reports of performance will be provided to senior management at each partner.

Segil (2004) went even further in defining alliance metrics. According to her, alliance metrics can be divided into development and implementation metrics based on the alliance life cycle stage. While development metrics are used before launching partnerships, implementation metrics are used from the start up phase to the declining phase of the alliance. The problem with alliance metrics is that each stakeholder is interested in measuring different business areas. Some are interested in sales growth, cost savings, some are in market share, and others are interested in change in competitive advantage et. Picture 8 shows variety of metrics which can be used within the alliance framework.

Picture 8 Alliance metrics according to Segil



Source: Segil, 2004

Learning
Knowledge transfer
Time-to-market change

2.3.2 Balanced scorecard approach to alliance metrics

Another way to formalize the implementation process of alliance metrics is to employ the balanced scorecard framework developed by Kaplan and Norton (2010). The balanced scorecard system explains how the strategy of a firm can be translated into performance measures based upon four fixed perspectives: customers, financials, internal business processes, and learning. These four perspectives provide the balance necessary for a firm to focus in order to achieve its competitive advantage. The key driver of balanced scorecard development is the alliance strategy. It forces managers to consider other measures of performance than only financial.

The variable in the balanced scorecard approach to alliance metrics is the management control system which varies from firm to firm. Each alliance should have a unique set of controls connected to the firm's strategy. As per Kaplan and Norton (2010), the management control system can be viewed as the process by which managers influence other members of the organization to implement the organization's strategies. These controls allow the alliance partner to understand what metrics are necessary relative to the strategy of the partnership.

As seen in Table 4, Kaplan and Norton (2010) suggest using six management control activities – planning, coordinating, communicating, evaluating, deciding, and implementing. Structuring the evaluation criteria based on the management control

activities helps provide a focus on the different activities necessary to accomplish strategic objectives of the alliance.

Management control activity	Balanced scorecard dimensions				
	Financial	Customer focus	Internal business process	Learning and growth	
		Targeting of key customer		New ideas generated for	
	Assesment of partner assests	groups - identification of	Process definition and	extensions of the	
Planning	and utilization	segments	measurable outputs	collaborative relationship	
		Integration of efforts			
	Contribution from co-	regarding alliance image in	Contribution to co-	Team-based measures of	
	ordination of joint R&D or	terms of product of service	ordination objectives	success focusing in	
Co-ordinating	implementation efforts	attributes	detailed by participants	collaborative efforts	
				Measures of employee	
		Contacts with partners to	Number of contacts with	satisfaction with	
	Regular issuance of financial	gain information about	partners to discuss process	relationship communication	
Communicating	reports	customer needs	improvements	functions	
<u> </u>		Comparisons of success		Employee productivity in	
	Revenue, or growth by	relative to customer		terms of revenue and output;	
	segment or cost reduction by	profitability and aprtner	Process cost and quality	number of suggestions for	
Evaluating	segment	contact	measurements	alliance improvements	
	Estimated potential revenues	Market share assessment by			
	versus or cost of	customer groups and partner	Process time expactations	Availability of strategic	
Deciding	continuance in total	contribution	versus results	alliance information	
				6	
	Measures of utilization of	Measures of customer	Measures of improvement of	Measure of staff turnover	
	alliance value compared to	satisfaction relative to	process since inception and	and value added per	
Implementing	targets	alliance co-ordination	quality yield measurements	employee	

Table 4 Balanced scorecard dimensions

Source: Kaplan and Norton, 2010

The nature of the activities may vary during the alliance life cycle, as well the measurements used to assess the effectiveness of the relationship. At different alliances phases, measures are more appropriate to the specific dimensions. For example, growth and customer dimension will be more appropriate in the post-formation phase of the alliance.

2.4 Advantages and disadvantages of forming strategic alliances

Strategic alliances are generally known for bringing positive outcomes for both sides, and are sometimes even called "win-win alliances". This section examines what are the benefits of forming alliances as well as disadvantages, or failure.

2.4.1 Benefits of strategic alliances

Majority of academic literature mentions positive outcomes from forming strategic alliances. Soares (2007) mentions four potential benefits of forming alliances: ease of market entry, shared risks, shared knowledge and expertise, synergy and competitive advantage. The benefit ease of market entry refers to the cost of entering new markets which can be costly for a single firm with no experience, so forming a strategic alliance with a firm already in the market brings benefits of rapid entry while keeping the cost down (economies of scale), overcoming obstacles such as entrenched competition and hostile government regulations. The shared risks benefit comes to emphasis when viewing the competitive (and sometimes hostile) nature of business that makes it difficult for firms entering new market or launching new products. In such cases, forming an alliance can be an effective way to share knowledge and expertise which allows firms to focus on what they do best and leave other firms to do the rest. The shared knowledge and expertise benefit develops due to the fact that most firms focus on a couple of areas (competences) and lack expertise in other areas. The knowledge and expertise that a firm gains through strategic alliances stays with a firm and can be used for future project. Achieving synergy and a competitive advantage according to Soares happens when partnering firms leverage off each other's strengths and reach synergy in processes that allow them easier to get into new markets and industries than by doing it alone.

Soares (2007) also mentions other benefits of forming alliances:

- speed and cost by which firm can achieve its goals much faster, and for much less resources in compare to acquisition or greenfield;
- access to key complementary assets firm can gain access to complementary assets.

Bamford (2003) groups all benefits of strategic alliances into one value creation, which is expressed as a percentage growth of the company's stock value as an effect of alliance formation. According to him, computer alliances increase value by forming licensing alliances by 8-9%, and by forming marketing and R&D joint ventures by 7-8%.

2.4.2 Failures of strategic alliances

Besides all the benefits of forming strategic alliances mentioned in this paper, there are also potential problems that should be taken into consideration. Academic literature has not spent much attention on the underlying causes of alliance failures but some authors (Dacin at. al., 1997; Bamford et al., 2003) mention failures in their works. Dacin proposes a failure rate of approximately 60%, while others (Park and Russo, 1996) suggest even higher rates.

Segil (2003) also mentions alliance failures in her studies and based on her research,¹ the most common reason for alliance failure (64%) is "poor or damaged relationship". According to her, this number is even higher for firms involved in more than 20 alliances. Below Graph 3 shows the most common causes of alliance failure:

Graph 3 Most common causes of alliance failure



Source: Segil, 2003

Causes of alliance failures can be grouped into two categories based on the nature of failure: external related, and internal related. Some academic authors (Park and Ungson, 2001; Segil, 2003) suggest using static models of alliance failure, but this paper focuses on dynamic models which take alliance life cycle (time) into consideration, while the former model does not.

Authors Sheng-yue and Xu (2006) mentions dynamic model that analyses the causes of alliance failures at different stages of the alliance life cycle. At the **formation stage**, competitiveness between partners, unanimity of strategic objectives and existence of inverse choice have great influence on the future development of alliances. All these factors are called "ex ante" factors. In **implementation stage**, the most problems occur during the contract negotiation process when both partners try to achieve the best

¹ Research is based on a three-year study of 130 companies including more than 150 alliance managers.

possible outcomes. This stage is one of the most critical ones in the alliance life-cycle as many alliances cannot reach a common agreement and therefore. The **operational stage** faces potential issues such as moral hazard of partners, agency problems, and communication problems. They are called "in situ" factors. The most common issues according to authors Sheng-yue and Xu (2006) include:

- alliance strategy in case partners cannot reach an agreement about alliance strategy adjustments, the alliance is most likely not going to work since the beginning. According to the authors, 50% of the alliance's dissolution could be attributed to the strategic disagreement;
- agency problems a typical agency problem occurs when the alliance partner is interested in improving its own competitiveness while the alliance managers of the other firm are more concerned about their personal interests (income, bonuses) due to the fact that their positions will not suffer in case the alliance terminates or underperforms;
- **alliance culture** alliances among firms with different corporate cultures may be accompanied by serious conflicts and frictions. Especially in multinational alliances (global strategic alliances), cultural conflicts are commonplace. They are one of the major factors contributing to the failure of alliances.

3 Practical part – Analyses of selected case studies of AVG Technologies

Practical part of the paper analysis strategic alliances in AVG Technologies (AVG) and is aimed to find answer on whether the assumptions underlying the theoretical part of the paper were recognized and comprehensive enough for the need of AVG. It also analyses alliance metrics that were implemented to measure effectiveness of alliances, whether they were effective enough for determining the success or failure of alliances and whether any synergic effects were achieved by forming these alliances. Practical part is divided into two parts – first part analyses strategic alliances in AVG from strategic and operational point of view, and the second part analyses three business cases in chronological order formed between period 2007-2011.

3.1 Introduction of the company

Headquartered in the Netherlands, AVG was founded in 1991 by Jan Gritzbach and Tomas Hoferin in the Czech Republic with the express purpose of protecting people around the world using the latest in cutting edge security technologies. AVG quickly gained international success and is now recognized as one of the main players in the security software market. AVG currently holds its corporate offices in Europe in Czech Republic, The Netherlands, Cyprus, Germany, UK, France; in the US in Florida, Atlanta, San Francisco, and Boston, in the Middle East in Israel; in Asia in Beijing and Hong Kong (AVG Technologies, 2012).

AVG's mission is to "simplify, optimize and secure the Internet experience, providing peace of mind to a connected world" (AVG Technologies, 2012). Users who choose AVG's software and services, become part of a global community which benefits from positive network effects. As of January 2013, AVG's user base was approximately 146 million active users (AVG Technologies, 2012).

AVG's innovation in the industry is accomplished by employing some of the world's leading experts in threat detection, software development, and risk analysis.

Moreover, AVG continues to invest in research and development, teaming with leading technical universities to maintain its technological advantage.

AVG has achieved significant growth in the last few years and continues to expand to address the needs of the global market through improved technology and broader language and platform support (AVG Technologies, 2012; Nasdaq, 2012).

3.2 Overview of the current internet security markets

The markets for the internet security solutions are highly competitive with the expose of rapid technological changes. Competition in the internet security market is expected to increase in the future and some companies may not be able to successfully compete against their current or potential competitors without considering potential alliances. Some companies already make acquisitions, enter into strategic relationships to offer more comprehensive products and services, and new competitors enter the market through these acquisitions, and strategic relationships (Nasdaq, 2012).

Internet security vendors compete between each other mainly on functionality of products and price, and some vendors even offer free products in order to gain bigger market share/users.

Vendors in the Internet security market fall into the following categories (Nasdaq, 2012):

- vendors with so called "freemium" pricing such as AVG Technologies, Avast!, and PC Tools, and Microsoft;
- traditional vendors such as AVG Technologies, Symantec, McAfee, Eset, Trend Micro, Kaspersky Labs, Panda Software, and F-Secure;
- vendors offering tune-up products, such as UniBlue, and AVG Technologies, and;
- large corporations offering a wide range of products, such as Microsoft, Google, Tencent, Apple, and Qihoo.

3.2.1 AVG in the Internet Security Market

As can be seend in Picture 9, as of December 2012, AVG's market share was 8,8% in compare to the market leader AVAST, who took 17,5% of the market. Majority of AVG's competitors have greater financial resources devoted to corporate development and brand name recognition. For example, Microsoft entered the internet security market with their endpoint product Microsoft Security Essentials, a free product that has gained a significant market share of the freemium security market a took significant market share from AVG. Similarly, Google in 2012 entered the security market by adding a malware alarm to its search engine results. Because of AVG's limited financial resources and capabilities, one of the quickest and least expensive ways to expand, or to retain its market share is through formation of strategic alliances with other companies in/outside the market (Nasdaq, 2012).



Picture 9 Internet security market share - December 2012 vs December 2011

Source: Opswat, 2012

3.3 AVG product portfolio

AVG launched its very first product in 1992 named as Anti-Virus Guard. It was the first free anti-virus product of its kind on the market which helped AVG to quickly gain international recognition and many users. In late 1990s, AVG decided to extend their product portfolio by adding additional product lines, including AVG Anti-Virus (paid version). As of 2012, AVG product portfolio has been divided into three segments – home security, business security, and mobile security (AVG, 2012).

The home security segment includes the following products:

- AVG AntiVirus
- AVG AntiVirus Free Edition
- AVG Internet Security
- AVG Secure Search
- AVG LinkScanner
- AVG Family Safety
- AVG PC Tuneup
- AVG Premium Security
- AVG LiveKive (US only)
- AVG Unlimited Tech Support

The business security segment includes:

- AVG AntiVirus Business Edition
- AVG Internet Security Business Edition
- AVG File Server Edition
- AVG Email Server Edition
- AVG Linux Server Edition
- AVG Rescue CD
- AVG Remote Administration
- AVG CloudCare (US only)
- Education Security (US only)
- Government Security (US only)

The mobile security segment includes:

- AVG AntiVirus Free for Android
- AVG AntiVirus Pro for Android
- AVG AntiVirus Pro for Android Tablets
- AVG Family Safety for iPhone and iPad
- AVG Family Safety for Windows Phone
- AVG Safe Browser for iPhone and iPad

3.4 Overview of AVG Global Strategic alliances

Based on the interviews with AVG senior management team, AVG Global Strategic Alliances (GSA) group was formed in 2010 with the main focus on corporate development and licensing initiatives, as well as strategic partnerships. In 2010, the main objective of the GSA group was to increase corporate value and revenue by developing and growing AVG's strategic partner channel and inbound licensing, as well as assisting with merger and acquisition objectives.

The main focus of the GSA group was to build strategic relationships with technology, social media, e-commerce, and online gaming companies, as well as internet service providers (ISPs) and original equipment manufacturers (OEMs) and by forming successful strategic relationships to enhance competitive advantage of the company.

Since 2010, AVG has formed more than 30 strategic alliances ranging from arm's length contracts to acquisitions including alliances with: Yahoo! Inc., Cisco, Virgin Digital Help, WatchGuard, and others. A list of selected AVG strategic alliances can be found in appendix 2 (AVG, 2012).

3.4.1 GSA strategy

Based on the interview with AVG's executive team, strategy of the GSA group was not clear at the time of formation, and therefore AVG entered into some risky ventures which were terminated soon after they were formed as a result of poor performance.

In 2010, GSA group has formed its strategy which reflected the needs of the market and internal stakeholders. The main GSA strategic goals now include:

- increasing monetization by leveraging existing user base;
- growing and retaining user base;
- expanding capabilities for mobile markets;
- finding ways to monetize free users;
- enhancing AVG competitive advantage on current markets by adding additional layers of protection to the existing products.

3.4.2 Classification of AVG alliances

Based on the interviews with AVG senior management team, strategic alliances in AVG can be classified by number of participants, organizational integrity, and product integration.

Based on the **number of participants**, alliances in AVG are strictly bilateral (dyadic) which means they are formed between two partners only. Interviewees explained that the reasons for having only bilateral alliances and not network alliances are that they are much easier to manage, implement, the outcomes are more predictable, and the overall relationship is more flexible in case some changes need to be implemented.

Based on the **organizational integrity**, AVG alliances are both vertical and horizontal. An example of a vertical alliance is the alliance with Virgin Digital Help providing technical expertise, tools and support for home PCs and AVG providing an Anti-virus tool which is integrated into the free Digital Helper application. One example of a horizontal alliance is the alliance with GFI Software, a provider of internet security solutions. By integrating AVG anti-virus engine into their existing security product, GFI significantly enhanced the security layers of the products.

Based on the **product integration**, AVG alliances can be either inbound or outbound. Inbound alliances integrate new technological features into an existing AVG product, and outbound alliances integrate new technological features into partner's product portfolio. An example of outbound alliance is the alliance with LimeWire, who integrated AVG anti-virus engine into their P2P networking applications, and an example of inbound alliance is the alliance with Yahoo! who incorporated Yahoo! search engine into the AVG Toolbar solution.

3.4.3 Motives for forming strategic alliances

Motives for forming strategic alliances are based on the interviews with AVG senior management team derived from the GSA strategy which means that they are either financial or strategic, but in reality, they are often combined. **Financial motives** are used mostly to fulfill short term goals, and strategic motives to fulfill long term goals. There are two financial motives for forming alliances. First one is revenue growth, both subscription and platform-derived, and the other one is stock market gain. As one of the members of AVG senior management team said: "it is not hard to measure revenue growth initiated by the alliance as it is supported by internal ERP system, but to measure stock market gain due to alliance activity is extremely hard and sometimes impossible".

The main strategic motives for forming alliances include:

- finding ways to increase user base in each region where AVG operates (North America, Europe, Asia and Pacific);
- enhancing AVG competitive advantage in regions;
- bringing significant new features to existing products;
- expanding market by bringing new IT solution providers into the security services market.

3.4.4 Forms of strategic alliances

In line with the GSA strategic goals, and based on the AVG corporate materials, there are six basic forms of strategic alliances:

- technology partnerships alliances based on extending partners value proposition by bringing significant new features to the existing product portfolio. These types of partnerships are either inbound (bringing new technological features to an existing AVG product), or outbound (bringing new technological features to partner's product portfolio). Technology partnerships are connected to all three alliance strategic goals;
- service provider partnerships (SPP) alliance based on delivering added value to end-customers through a strong security offering. These types of partnerships are only outbound (bringing new service solutions to an existing product). AVG has developed Software Development Kit (SDK) which embodies AVG's anti-virus engine. Recently, AVG has widened its product portfolio by AVG CloudCare, which is also offered in SDK. It can be integrated

into partner's product to enhance product's security. SPPs are connected to the first alliance strategy – increasing revenue;

- original equipment manufacturer (OEM) partnerships alliances based on creating single branded total solution that integrates AVG technologies "behind the scenes". These partnerships are similar to the service provider partnerships, with only difference being in the type of offering OEM products are offered as tangible products, while services are intangible. OEM partnerships are also connected to the first alliance strategy increasing revenue;
- joint marketing these types of alliances are based on mutual benefits for both sides and are formed to achieve both short-term and long term strategic goals, such as increasing users base in selected segments;
- licensing these types of alliances are very simple in nature one of the partners licenses their know-how to the other partner, and the later pays royalty/licensing fees based on a number of sold products to end-users. These partnerships are connected to increasing revenue and users base strategic goals;
- upsell/distribution these partnerships are based on the upsell technique distributing free version of AVG applications on devices with the possibility of upsells to paid versions. Upsell partnerships are connected to all three alliance strategic goals.

Graph 4 below explicitly shows how big share each of strategic alliances represents in AVG:



Graph 4 Forms of strategic alliances in AVG

Source: AVG Technologies, 2012

There are also other types of alliances AVG is involved in – mergers and acquisitions, but according to AVG senior management team, they are not recognized as strategic alliances in AVG. They are used to fill in core competencies gaps which cannot be realized due to lack of internal resources and time.

3.4.5 The life cycle of strategic alliances in AVG

Based on the interviews with AVG senior management team and AVG corporate materials, each strategic alliance in AVG has four maturity stages: conception stage, collaboration (drafting) stage, execution stage, administration stage, and closeout stage as shown on Picture 10:

Picture 10 AVG Strategic alliances lifecycle



Source: Own modification

The **conception** stage is divided into two steps – the first step in the conception stage is identifying potential opportunities that would fit into the alliance strategy of the region (Americas, Europe, Asia). Each new potential partnership must meet at least one of the four GSA strategic motives, either by bringing additional revenue, users, finding ways to monetize free user base, or enhancing AVG competitive advantage. Only when this objective has been met, and business case approved by all stakeholders, it can progress to the second step. The second step in the conception stage is to find potential partners (if not found already) who would fulfill (meet) AVG's requirements.

The **collaboration** stage (also called drafting phase) in AVG includes contract drafting and negotiating contract terms. Based on the interviews, the collaboration phase is the longest and the hardest of all. It can take several months to achieve common view on the alliance with the partner and in about 40% of cases, this cannot be achieved due to several reasons including different corporate strategies, cultures and expectations. Another common reason based on the interviews is the so called "cannibalization" when firm (or some individuals) fights against certain alliance and does not allow to form them.

The **execution** stage of the alliance is usually the shortest one - it defines the effective start of the signatures of authorized personnel from all parties. This is the time, when the alliance is "born".

The **administration** – after the alliance has been established, the administration part takes place. It includes: tracking and auditing contract terms, and making sure that the alliance runs smoothly. As one of the member of AVG senior management team said: "The main goal of this phase is to ensure procedural, regulatory and other compliance and to ensure that all alliance objectives are met as expected and agreed upon. In case all the procedures and alliance objectives were thoroughly discussed in the previous stages, the alliance will work effectively".

The **closeout** – if a decision is made for any reason to terminate an alliance, AVG has all procedures and supporting documentation ready to adequately verify that all administrative matters, resolutions of all open items have been settled.

3.4.6 Enhancing AVG competitive advantage

Based on the interviews with AVG senior management team, there are several areas in which strategic alliances help enhancing AVG competitive advantage. Among the most significant ones are:

 technological leadership – technology partnerships with industry leaders enable AVG products to outperform most of the competition in terms of quality, virus detection, and speed by combining AVG anti-virus engine with other cutting edge technologies;

- innovation leadership successful alliances have enabled AVG to become innovative leaders by exploiting new market opportunities, and access new technologies to deliver new and improved products each year;
- market innovation/expansion strategic alliances create new non-traditional forms of business partnering which yield higher and quicker returns on investment in compare to the traditional forms (distribution, etc.). AVG alliances expand existing markets and create new possibilities of market penetration by bringing new players into the security services market. This allows AVG to quickly expand to markets where it might not have been possible otherwise;
- enhancing freeware business model strategic alliances help AVG to enhance their freeware business model by finding ways to monetize free users.

3.5 AVG alliance metrics

As described in the AVG corporate materials, alliance metrics "are designed to track the performance of the GSA strategic goals and are the key indicators of the alliance health and performance". They are based on the Balanced scorecard approach and are different for each alliance life cycle. The main metrics include financial metrics, partnership metrics; users metrics, technology metrics, business process metrics and are standardized for all alliances. All of the mentioned metrics are grouped in electronic management control system called "Dashboard" which enables management to check alliance performance, to see areas where alliance lacks behind the expectations, as well as the areas where the alliance outperforms.

Financial metrics are, based on the interviews, the most important alliance metrics in almost all maturity stages because each stakeholder is interested mainly in financial benefits of the partnership. These metrics are connected to the first alliance motive – to increase revenue. Below is a summary of main financial metrics in different maturity stages:

 conception stage – the main financial metrics in the conception stage are projected costs and benefits of the potential alliance. On the benefits side, it analyses incremental revenue and cost savings, and on costs side incremental commissions, cost of operations, external/internal project expenses. The potential alliance is approved from finance point if cumulative gross benefits outweigh cumulative costs;

- administration stage the main financial metrics in the administration stage are forecasted revenues and costs in compare to actuals. These metrics show how alliance is performing in compare to the pre-set revenue targets;
- closeout financial metrics in the final stage of the alliance lifecycle include financial "wrap up" metrics which show whether the alliance met all financial goals.

Partnership metrics are, based on the interviews, also imperative to estimate the clarity of partner's motives to form alliance with AVG. In the past, AVG joined some alliances with partners who did not communicate their intensions and therefore the outcomes and expectations were not unambiguous and all of these alliances had to be prematurely terminated due to underperformance, bad relations, and misunderstandings. AVG partnership metrics have been implemented mostly because of the above described experience. The main partnership metrics based on the AVG corporate materials in conception stage include clarity of partner motives, partner commitment, partner capabilities, partner resources and partner processes.

Based on the AVG corporate materials, the clarity of partner motives deals with the following concerns:

- what are our partner's motives to form alliance with AVG? Are they congruent with AVG motives?
- are there any conflicts between partner's and AVG motives?
- does our partner understand AVG motives to form alliance?

The partner commitment concerns:

- is the partner committed to the alliance?
- is the partner critical for the alliance, why?

The partner capabilities concerns:

- does the partner posses all the skills to be delivered?
- do the partner's skills compliment our skills?
- can the partner easily access all necessary skills?

The partner resources concerns:

- does the partner have necessary managerial resources?
- what is the total cash flow of the partner?
- what are the partner's cash reserves per month?

The partner processes concerns:

- are the partner's processes appropriate?
- are AVG processes compatible with those of the partner?

Users metrics are connected to the second strategic alliance motive – increasing users base. Below is a summary of main user metrics used in different alliance stages:

- conception stage the basic user metrics include: expected active user gains which shows how many new users are expected to be acquired by forming alliance, expected user conversion rate which show many users are expected to be converted from other vendors, and subscription user gains which show many new paid users are expected to be acquired by forming alliance;
- administration stage cumulative active user gains, user conversion, subscription user gains, revenue per gained active user are compared on a monthly basis to forecasted values to determine whether the alliance is fulfilling its targets;
- closeout stage in the final stage of the alliance, total active user gains, user conversion, subscription user gains, revenue per gained active user are compared to alliance targets.

Technology metrics are used to ensure technological compatibility with alliance partners in the conception stage, and during administration stage, they are used to track whether systems are working properly. These metrics are different for each alliance.

Business process metrics are, based on the interviews, the most complex and hardest to implement. They are implemented in the administration stage when the alliance is already running. There are two main categories of internal business process metrics:

- quantity metrics – these metrics are used for tracking average time spent on various tasks, volumes, productivity, capacity, resources, etc. Results are than

compared to the pre-set values to determine whether some tasks/processes are lagging behind, or are over performing. These metrics are considered lagging;

 quality metrics – the main purpose of quality metrics is to ensure that all business processes are running as expected. They include procedures, work instructions, detailed process flows, cross training skill matrix, etc. These metrics are considered leading.

The below Table 5 summarizes all alliance metrics used for tracking alliance performance in different alliance stages.

Type of	Alliance stage	Alliance metrics				
metrics		Financial	Partnership	Technology	Users	Business process
Strategic	Conception	projected C&B, expected revenue, expected cost of revenue, expected cost savings	partner motives, partner capabilities, partner commitment, partner resources, partner processes	technology requirements inbound, outbound	expected active user gains, user conversion, subscription user gains, revenue per gained active user	
Operational	Administration	forecasted revenue vs actual revenue, forecasted costs vs actual costs		system stability	cumulative active user gains, user conversion, subscription user gains, revenue per gained active user	quantity metrics, quality metrics, leading/lagging metrics, capacity utilization, control charts
Operational and strategic	Closeout	financial outcomes of the alliance - total revenue vs forecasted revenue, total costs vs forecasted costs, total savings	evaluation of the partnership		total active user gains, user conversion, subscription user gains, revenue per gained active user	

Table 5 Overview of AVG Alliance Metrics

Source: AVG, 2012

3.6 Case study 1 – Strategic alliance between AVG and Yahoo!

In 2007, one of the AVG's strategic goals was to release each year a new product which would bring additional security features to the customers, and at the same time would bring additional revenue. AVG decided to release security toolbar which would add safety ratings to users' browser by integrating its AVG LinkScanner technology. Because AVG did not have its own search engine, it needed to team up with one of the Internet search engine providers who would integrate their technology into the AVG toolbar solution. AVG chose Yahoo! mainly because of the compatibility of corporate strategies. It was AVG's first strategic alliance (AVG, 2012).

3.6.1 Motives for forming strategic alliance

AVG's motives for forming alliance with Yahoo! were both financial and strategic. Financial motives included increasing platform-derived revenue, and strategic motives included:

- bringing significant new features to AVG products which enhance security layers of AVG products;
- finding ways to monetize users.

Yahoo! motives for forming alliance included expanding the search engine market share by adding approximately 100 million AVG users to their customer database.

3.6.2 Overview of the solution

The Yahoo! solution for AVG toolbar included integrating Yahoo! Search engine into the AVG toolbar's search field. As can be seen on Picture 11, it redirected all search results to Yahoo! web page where user could view all search results which were checked by AVG LinkScanner technology for additional security by placing safety ratings next to the search results. The solution provided additional layers of security to users and made sure their identity, computer, and personal information were protected. At the same time, when AVG user used AVG LinkScanner functionality and clicked on a Yahoo ad or sponsored link, the user generated money for Yahoo, which was shared with AVG, as shown on Picture 11:

Picture 11 AVG Security Toolbar integrating Yahoo! Search



Source: AVG, 2012

3.6.3 Classification and form of strategic alliance

Based on number of participants, the alliance is classified as dyadic, based on organizational integrity, it is classified as horizontal, and based on product integration, the alliance is classified as inbound. The form of the strategic alliance between AVG and Yahoo! falls into the category of inbound technology partnerships, because the alliance brings new technology features to existing AVG products.

3.6.4 Metrics implemented for measuring alliance success

Metrics implemented by AVG to measure alliance success included only financial metrics which measured revenue gains by using AVG Security Toolbar. Table 6 summarizes all financial metrics used for this alliance.

Table 6 Alliance metrics for Yahoo! alliance

	Alliance metrics			
Alliance stage	Financial			
	revenue gains, forecasted revenue versus actual revenue (in %),			
Administration	operational costs, revenue gains/operational costs (in %)			
Closeout	cumulative gross benefits/losses			

Source: AVG, 2012

3.6.5 Synergic effects of the alliance

This alliance was supposed to create synergic effects by bringing additional platformderived revenue and new technology features to AVG, and at the same time search engine market share growth to Yahoo! by redirecting potential 100 million users to Yahoo! Search site.

As can be seen on Graph 5, Yahoo!'s search engine market share declined by 3% during the period 2008 – 2012 which means that the main Yahoo!'s strategic motive for forming alliance with AVG failed.



Graph 5 Search engine market share in 2008 versus 2012

Source: Netmarketshare, 2013

On the other hand, AVG's strategic motive of increasing platform – derived revenue was achieved. As can be seen on Graph 6, subscription revenue in 2008 accounted for 92% of sales, and AVG revenue from platform business including AVG Toolbar only for 8% of sales. In 2012, revenue from platform business grew to 45% of sales, reducing subscription revenue to only 55% of sales² (Nasdaq, 2013). In 2012 AVG toolbar has been the most successful product to monetize AVG user base and has been AVG's primary growth engine.

It is obvious from the above, that the pre-set synergic effects of the alliance were not achieved.





² This also includes revenue generated by another strategic alliances with Google.

3.7 Case study 2 – Strategic alliance between AVG and Virgin Digital Help

3.7.1 Business case background

In 2010, AVG formed strategic alliance with Virgin Digital Help, a consumer support service operated by Virgin Group which provides technical expertise, and support for home PCs. In order to offer competitive service product, Virgin Digital Help needed an internet security provider who would deliver good protection which does not frustrate the end-user and offers a basic service free of charge. Because Virgin Digital Help could not provide such services and protection, it teamed up with AVG who included its anti-virus tool and other security solutions within the free Digital Helper application (AVG, 2012).

3.7.2 Overview of the solution

The AVG solution for Virgin Digital Help included recommendations to secure PCs using the latest AVG Free anti-virus solution in case no security was in place. Along with these recommendations, it also added additional layers of security against web threats using AVG's LinkScanner and Identity Protection solutions by integrating AVG Internet security solution into Virgin Digital Help support subscriptions. It also included recommendations to upgrade from AVG Free anti-virus to premium AVG Internet security solution. Subscription fees paid by the user were equally shared between both sides (AVG, 2012). Picture 12 shows AVG solution for Virgin digital Help.

Picture 12 AVG solution for Virgin Digital Help

PC Best Mate

Upgrade to PC Best Mate and enjoy total peace of mind with complete computer protection



Source: PC best mate, 2012

3.7.3 Classification and form of strategic alliance

Based on number of participants, the alliance is dyadic, based on organizational integrity it is vertical, and based on product integration it is outbound. Alliance is in the category of upsell partnerships as the solution offers free version of AVG applications with the possibility of upsells AVG premium paid products.

3.7.4 Motives for forming strategic alliance

Based on the interviews with AVG senior management team, AVG motives for forming alliance with Virgin Digital Help were both financial and strategic. While financial motives included increasing subscription revenue, strategic motives included:

- finding ways to monetize free users;
- increasing active user base in UK region;
- bringing new IT solution providers into the security services market.

Virgin Digital Help's motives were almost identical to the AVG's motives. They included:

- increasing revenue;
- increasing user base.

3.7.5 Metrics implemented for measuring alliance success

Based on interviews with AVG senior management team all alliance metrics were implemented after mutual agreement with Virgin Digital Help to ensure consistency among them. All alliance metrics have been reviewed on a monthly meeting with Virgin Digital Help to determine whether alliance is fulfilling all expectations.

Alliance measures included financial metrics, user metrics, and business process metrics. Table 7 summarizes all AVG metrics implement for the alliance.

Table 7	' Alliance	metrics :	for `	Virgin	Digital	Help	alliance
				. 0	0		

	Alliance metrics				
Alliance stage	Financial	Partnership	Technology	Users	Business process
	expected revenue,	partner motives,	technology	expected free user	
	expected revenue	capabilities	requirements,	gains, expected	
	costs		compatibility of	subscription user	
			systems	gains	
Conception					
	forecasted revenue	partnership	system stability	cumulative free	number of licenses
	versus actual	expectations versus	metrics - web,	user gains,	sold, user
	revenue	real outcomes,	eshop, suppor	cumulative	satisfaction metrics
		partnership		subscription user	
		satisfaction metrics		gains	
Administration				8	

Source: AVG, 2012

3.7.6 Synergic effects of the alliance

It can be deducted from section 3.7.4 that both sides had identical motives for forming alliance which is one of the most important points in order to achieve synergic effects. Based on the AVG corporate materials and AVG income statements, subscription revenue generated by this alliance increased total subscription revenue by 0,6% in 2010, 1,7% in 2011, and in 2012 by 3,7% which means, that first AVG motive to find ways to monetize free users has been achieved. Graph 7 summarizes these findings.



Graph 7 Revenue generated by Virgin Digital Help

Another AVG motive to increase user base in UK region has, according to AVG corporate materials, also been achieved by increasing active user base in UK by 11%. It was achieved by incorporating AVG Free anti-virus solution into Virgin Digital Help support subscriptions. It also increased user base of AVG Internet Security solution in case customers decided to upgrade their AVG Free anti-virus solution to AVG Internet Security solution.

Because Virging Digital Help's motives were identical to AVG's, one can conclude that they also were achieved as the alliance increased Virgin Digital Help's revenue by offering AVG Internet Security solution to its customers for additional fee and increased their user base which is seen as one of their long-term competitive advantages.

3.8 Case study 3 – Strategic alliance between AVG and Zbang

In 2011 AVG formed strategic alliance with Israeli startup Zbang It LTD, a technology company that provides social inbox product for managing quantity of content that people share on a daily basis. Product enables users to aggregate their email inboxes and social network accounts into a single, interface and is capable of sharing a variety of files through a cloud sharing services, and lets users to communicate and collaborate with other people provided they connect to applications like Facebook, Flickr, Twitter, and LinkedIn (AVG, 2012).

Zbang developed its social inbox product in 2010, but as a standalone, it did not get much attention. In order to go viral, Zbang needed to gain user trust in terms of privacy and security, so one of the options was to set up a strategic partnership with an internet security provider. With 110 million users worldwide in 2011, and with a wide range of freeware security products, AVG was an obvious choice (AVG, 2012).

3.8.1 Overview of the solution

In collaboration with AVG, Zbang launched free Windows desktop application MultiMi which organizes multiple inboxes, calendars, social networks, media albums and shares their content securely with one another by automatically scanning all messages through

AVG LinkScanner, which checks all links in real time. AVG solution also includes protection against malware, identity theft, phishing, and other added functionality from technologies developed by AVG, so in addition to users desktop antivirus software, MultiMi adds additional layers of protection by reputation-based web link security (AVG, 2012). Picture 13 shows the final MultiMi desktop application offered to users.

MultiMi"		Kept safe with 📑 AVG 🛛 🗕 🗆 🗙
OEM	▲ ► 🔂 Home	🔍 🤄 Search 🛛 🖌
Convertises Conve	MESSAGES Connect your messages accounts Connect Connect Connect	& SOCIAL Connect your social accounts
	Connect your ca	ilendar accounts
Connect to a chat service		Status Connected

Picture 13 MultiMi application interface

Source: AVG, 2012

3.8.2 Classification and form of strategic alliance

Based on number of participants, the alliance is dyadic, based on organizational integrity it is vertical, and based on product integration it is outbound. Alliance is in the category of outbound technology partnerships, because the alliance integrates AVG technology into existing Zbang product, and also in the category of upsell partnerships as the solution offers basic protection with the possibility of upsells to AVG premium paid products.

3.8.3 Motives for forming strategic alliance

Based on the interviews with AVG senior management team, AVG motives for forming alliance with Zbang were both financial and strategic.

Financial motives included increasing revenue, and strategic motives included:

- finding ways to monetize free users, increasing active user base, bringing new IT solution providers into the security services market, and expanding to social media markets.

Zbang's motive for forming alliance with AVG was increasing its user base.

3.8.4 Metrics implemented for measuring alliance success

Based on the AVG corporate materials, all alliance metrics implemented for measuring alliance success were standardized. Table 8 summarizes all metrics.

	Alliance metrics				
Alliance stage	Financial	Partnership	Technology	Users	Business process
	expected revenue,	partner motives,	technology	expected free user	
	expected revenue	capabilities	requirements,	gains, expected	
	costs		compatibility of	subscription user	
Conception			systems	gains	
	forecasted revenue	partnership	system stability	cumulative user	number of licenses
	versus actual	satisfaction metrics	metrics	gains, cumulative	sold, user
	revenue, forecasted			subscription user	satisfaction metrics
	costs versus actual			gains	
Administration	costs				

Table 8 Alliance	e metrics for	Zbang	alliance
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Source: AVG, 2012

3.8.5 Synergic effects of the alliance

Synergic effects of the alliance were achieved in increasing user base of both AVG and Zbang. Based on the AVG corporate materials, due to the alliance, AVG user base has grown by 2,6% as of December 2012. AVG platform-derived revenue grew in 2012 by 6,1% in compare to 2011 (Nasdaq, 2012) and based on the AVG corporate materials, MultiMi accounts for 1,2% of this growth.

4 Conclusion

The main goal of the theoretical part of diploma thesis was to understand the reasons firms enter alliances and other underlying factors including how alliances can achieve competitive advantage, what metrics are used to measure alliance success, and the advantages as well as disadvantages of forming them. Historically, strategic alliances used to be formed to achieve economies of scale and were focused mainly on product performance, which those days was seen as firms' competitive advantage. Nowadays, firms form strategic alliances for the same reason to achieve competitive advantage with the difference, that the perception of competitive advantage has changed and is seen in long-term network relationships, rather than in firms' products. It means that competitive advantage is not formed by the product itself, but rather it is a result of successful network relationships. These network relationships, among others, enable firms to acquire new skills, knowledge, experience, and the needed results in short time.

As firms engage in greater numbers of strategically and financially important alliances, it is important for each stakeholder to pay attention to alliance performance metrics. The alliance metrics are viewed as "sensors" of the alliance for their ability to track alliance performance and other business areas of the partnerships. The most common metrics include financial, strategic, operational, relationship, and if applicable, technology metrics. If implemented correctly, these metrics cover all strategic areas of the alliance and give to alliance managers early signals about the alliance performance.

Most of the academic literature suggests positive outcomes of strategic alliances, and they are even generally known as "win-win alliances" for their abilities to share risks, knowledge, expertise, decrease operational costs, and to speed up market access, but there has not been paid much attention on disadvantages and failures of alliances. Among the few possible failures mentioned in the academic literature are poor alliance strategy planning, and bad or damaged relationships. Author believes that knowing the possible causes of alliance failures is as important as knowing all the advantages of the alliances as it helps to understand what firms should be aware of when entering into alliance. The first objective of the practical part was to describe how strategic alliances are implemented and operated in a technology-based firm based on the theoretical findings. Strategic alliances in AVG are implemented and operated almost identically to the theoretical findings. Author found the scope of the theoretical part comprehensive enough for the need of technology-based firm as it covered all areas of strategic alliances in AVG including setting alliance strategy, reasons for entering alliance, the use of alliance metrics, and their connection to the competitive advantages of AVG.

Another objective of practical part was to describe what alliance metrics were implemented to measure effectiveness of strategic alliances, and whether they were effective enough for determining the success or failure of alliances. Alliance metrics in AVG are mainly designed to track performance of the GSA strategic goals and are standardized for all alliances (since 2011). There are different metrics used for each alliance life cycle, but the biggest attention is paid on metrics during the administration stage when alliance is already running. The main metrics used across all alliance stages include financial metrics, and users metrics. Metrics implemented for smaller alliances, such as the one with Virgin Digital Help and Zbang, turned out to be effective for determining alliance success as they were focused on all alliance strategic motives. Based on the above, synergic effects of the alliance were achieved which is one of the main reasons why the alliances have been successfully running to date and have yielded positive results for both sides. In case of more complicated alliances, like the one with Yahoo!, not all strategic motives were measured by metrics which resulted in miscommunication and was one of the main reasons why the alliance as-a-whole underperformed, even though AVG's strategic motives were satisfied. Author believes that it is a result of not having common strategic goals for the alliance which results in no synergic effects.

Author's conclusion on AVG's alliance metrics is that the metrics used for measuring alliance success should be more dynamic in a meaning, that they should also include metrics benefiting both sides, not only AVG. Measuring revenue gains, and user gains is often in the interest of AVG only. The other party also has its own strategic motives, and if this is not taken into consideration, synergic effects of the alliance may never be achieved. Author would suggest to keep current metrics used for measuring alliance

success as they are linked to the AVG alliance strategy, but would also suggest adding "variable" metrics, which would be implemented to measure common goals of the alliance, and would be different for each alliance. Another dimension which is not covered by alliance metrics is user's value. There are no metrics which would analyze user's experience with the outcome of the alliance. This is mainly due to the fact, that this dimension is not covered in the GSA strategy. All of the above described would help both parties to focus on the alliance as a whole, instead of focusing on their own strategies and could result in more revenue gains, or user gains for AVG.

The last goal of the practical part of the thesis was to find answer on whether competitive advantage was enhanced by forming strategic alliances. Achieving competitive advantage is one of the AVG's strategic motives for forming alliances, which means that not all alliances must enhance AVG's competitive advantage. AVG sees its competitive advantage in its technological leadership, innovation leadership, speed to market abilities and in market innovation/expansion. There are alliances which were formed to achieve one of them, including alliance with Zbang which helped AVG to enhance its market innovation/expansion advantage by expanding to social network markets. Another example of a successful alliance which helped enhancing AVG's competitive advantage was the alliance with Auslogics, a developer of tune-up software which enhanced AVG's competitive advantage by integrating tune-up feature to the existing AVG products. This alliance enhanced AVG's technological leadership, because AVG was the first security vendor with this feature on the market. Author believes that AVG should re-think its view on competitive advantage because it is seen mostly from a product point-of-view. With a user base of more than 146 million, author sees this as another strong competitive advantage which should not be viewed as an end result of strategic alliances, but rather as a strong competitive advantage which could help forming prosperous, and long-term strategic networks. In this case, the question would not be whether strategic alliances enhance competitive advantage, but whether competitive advantage helps forming successful alliances and long-term networks.

Literature

Primary sources

AVG corporate materials, interviews

Monographs (books and journals)

ARNOLD, Roger A and Delwyn N CLARK. *Economics: techniques for analyzing industries and competitors : with a new introduction*. 10e [ed.]. Mason, OH: South-Western, Cengage Learning, c2011, xxxii, 856 p. ISBN 05-384-5285-4.

BAMFORD, James, Benjamin GOMES-CASSERES and Michael ROBINSON. *Mastering Alliance Strategy: A Comprehensive Guide to Design, Management, and Organization.* 1. vyd. San Francisco: Jossey-Bass, 2003, 432 p. ISBN 978-0787964627.

BARNEY, Jay B and Delwyn N CLARK. *Resource-based theory: creating and sustaining competitive advantage*. 4th ed. New York: Oxford University Press, 2007, vii, 316 p. ISBN 978-019-9277-698.

BRANDENBURGER, Adam. *Co - opetition*. New York: Currency Doubleday, 1996, xiv, 288 p. ISBN 03-854-7950-6.

CAULEY DE LA SIERRA, M. *Managing global alliances: key steps for successful collaboration*. Reading, Masp.: Addison-Wesley Pub. Co., c1995, xi, 220 p. ISBN 02-014-2771-0.

CONTRACTOR, Farok J and Peter LORANGE. *Cooperative strategies and alliances*. 1st ed. Boston, Masp.: Elsevier Science, 2002, xxxvii, 925 p. ISBN 00-804-4021-5.

DOUMA, Marc Ulco. *Strategic alliances fit or failure*. Enschede: University of Twente [Host], 1997. ISBN 90-365-0962-9

DOZ, Yves L and Gary HAMEL. *Alliance advantage: the art of creating value through partnering*. [Nachdr.]. Boston: Harvard Business School Press, c1998, xviii, 316 p. ISBN 08-758-4616-5.

DUSSAUGE, Pierre and Bernard GARRETTE. *Cooperative strategy: competing successfully through strategic alliancep.* 1. vyd. New York: John Wiley, 1999, xviii, 236 p. ISBN 04-719-7492-7.

DYER, Jeffrey, Prashant KALE and Harbir SINGH. How to Make Strategic Alliances Work: Developing a dedicated alliance function is key to building the expertise needed for competitive advantage. 2001, no. 4243, p. 43.

FREIDHEIM, Cyrup. The trillion-dollar enterprise: how the alliance revolution will transform global businesp. Reading, Masp.: Perseus Books, c1998, xiii, 253 p. ISBN 07-382-0004-2.

GULATI, Ranjay. *Managing network resources: alliances, affiliations and other relational assetp.* New York: Oxford University Press, 2007, xi, 325 p. ISBN 01-992-9935-8.

HARBISON, John R and Peter P PEKAR. *Smart alliances: a practical guide to repeatable succesp.* 1st ed. San Francisco: Jossey-Bass, c1998, xxvi, 169 p. ISBN 07-879-4326-6.

Ireland, R. D., Hitt, M. A., Vaidyanath, D. (2002). Alliance Management as a source of Competitive Advantage. Journal of Management 28 (3), 413-446.

KRUGMAN, Elhanan Helpman; Paul R. *Market structure and foreign trade: increasing returns, imperfect competition and the international economy.* 5th print. Cambridge, Masp. [u.a.]: MIT Press, 1993. ISBN 02-625-8087-X.

MAN, Adrianus Pieter de, Geert DUYSTERS and Ash VASUDEVAN. *The allianced enterprise: global strategies for corporate collaboration*. [Nachdr.]. River Edge, N.J.: distributed by World Scientific Pub. Co., c2001, x, 131 p. ISBN 18-609-4290-3.

PORTER, Michael E and Delwyn N CLARK. *Competitive strategy: techniques for analyzing industries and competitors : with a new introduction*. 1st Free Press ed. New York: Free Press, 1998, xxviii, 396 p. ISBN 978-0-684-84148-9.

SEGIL, Larraine. *Measuring the value of partnering: how to use metrics to plan, develop, and implement successful alliances.* New York: AMACOM, c2004, xvii, 279 p. ISBN 08-144-0778-1.

STACKELBERG, Heinrich von, Damien WONG and Lynn URCH. Global strategic management: techniques for analyzing industries and competitors : with a new introduction. 10e [ed.]. Armonk, N.Y.: M.E. Sharpe, c2008, xvi, 579 p. ISBN 3642125859.

STEINHILBER, Steve and Michael ROBINSON. *Strategic Alliances: Three Ways to Make Them Work (Memo to the Ceo)*. 1. vyd. Boston: Harvard Business School Press, 2008, 112 p. ISBN 978-1422125885.

VODÁČEK, Leo and Oľga VODÁČKOVÁ. *Strategické aliance se zahraničními partnery*. 1. vyd. Praha : Management Press, 2002. ISBN 80-7261-058-9.

WHEELEN, Thomas L and J HUNGER. *Concepts in strategic management and business policy: toward global sustainability*. 13th ed. Upper Saddle, N.J.: Pearson Prentice Hall, c2012, xxiv, 391 p. ISBN 01-321-5335-1.

WHEELEN, Thomas L and J HUNGER. *Strategic management and business policy: concepts and casep.* 10th ed. Upper Saddle River, NJ: Pearson Prentice Hall, c2006, 1 v. (various pagings). ISBN 01-314-9459-7.

WILLIAMSON, Stephen D. *Macroeconomics*. 4th ed. Boston: Addison-Wesley, c2011, xviii, 702 p. ISBN 01-313-6873-7.

ZUZÁK, Roman. *Strategické řízení podniku*. 1. edition. Praha: Grada, 2011, 172 p. Expert (Grada). ISBN 978-80-247-4008-9.
Internet sources

ANDERSEN CONSULTING, Warren Comp. EIU Global Executive Survey. *Total Business Conducted by Alliances*. 2011, no. 1.

AVG TECHNOLOGIES. *AVG* [online]. 2012 [cit. 2012-07-12]. Available at: http://www.avg.com/eu-en/homepage

BARNEY, Jay B. and Asli M. ARIKAN. The Resource-based View: Origins and Implications. *The Blackwell Handbook of Strategic Management* [online]. 2001, volume. 1 [cit. 2012-09-14]. Available at: http://www.blackwellreference.com/public/tocnode?id=g9780631218616_chunk_g9780 6312186169

BUCKLIN, Louis P. and Sanjit SENGUPTA. Journal of Marketing. *Organizing Successful Co-Marketing Alliancep*. 1993, no. 57. Available at: http://groupp.haap.berkeley.edu/marketing/PAPERS/PBUCKLIN/organ.txt

CRAVENS, Karen, Nigel PIERCY and David CRAVENS. Assessing the performance of strategic alliances. *European Management Journal* [online]. 2000, volume. 18, n. 5, p. 529-541 [cit. 2013-03-20]. ISSN 02632373. DOI: 10.1016/S0263-2373(00)00042-6. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0263237300000426

DACIN, M.Tina, Michael A. HITT and Edward LEVITAS. Selecting partners for successful international alliances: Examination of U.S. and Korean firms. *Journal of World Business* [online]. 1997, volume. 32, n. 1, p. 3-16 [cit. 2012-09-11]. ISSN 10909516. DOI: 10.1016/S1090-9516(97)90022-5. Available at: http://linkinghub.elsevier.com/retrieve/pii/S1090951697900225

DAS, T.K. and Rajesh KUMAR. Interpartner harmony in strategic alliances: managing commitment and forbearance. *International Journal of Strategic Business Alliances* [online]. 2009, volume. 1, n. 1, p. 24- [cit. 2013-03-20]. ISSN 1756-6444. DOI: 10.1504/IJSBA.2009.023650. Available at: http://www.inderscience.com/link.php?id=23650

59

GOMES-CASSERES, Benjamin. Competing in Alliance Constellations: A Primer for Managerp. *Alliance Strategy* [online]. 2004 [cit. 2012-07-12]. Available at: http://alliancestrategy.biz/PDFs/BGC%20ConstellationPrimer%20Carnegie04.pdf

HUGHES. Implementing Alliance Metrics: Six Basic Principles. *Vantage Partners* [online]. 2002, volume 1 [cit. 2012-07-18]. Available at: http://www.duysters.com/Downloads%20managerial/implementingalliancemetrics.pdf

KALE, Prashant and Harbir SINGH. Managing Strategic Alliances: What Do We Know Now, and Where Do We Go From Here?. *Academy of Management Perspectives* [online]. 2009-8-1, volume 23, no. 3, p. 45-62 [cit. 2012-08-09]. ISSN 1558-9080. DOI: 10.5465/AMP.2009.43479263. Available at: http://amp.aom.org/cgi/doi/10.5465/AMP.2009.43479263

KAPLAN, Robert S., David P. NORTON and RUGELSJOEN. Managing Alliances with the Balanced Scorecard. *Harvard business review* [online]. 2010, volume 1 [cit. 2012-10-20]. ISSN 0017-8012. Available at: http://aspheramedia.com/v2/wp-content/uploads/2011/02/managing-alliances-balanced-scorecard.pdf

KOGUT, Bruce. Joint ventures: Theoretical and empirical perspectivep. *Strategic Management Journal* [online]. 1988, volume 9, no. 4, p. 319-332 [cit. 2012-11-19]. ISSN 01432095. DOI: 10.1002/smj.4250090403. Available at: http://doi.wiley.com/10.1002/smj.4250090403

LAVIE, D. and L. ROSENKOPF. BALANCING EXPLORATION AND EXPLOITATION IN ALLIANCE FORMATION. *Academy of Management Journal* [online]. 2006-08-01, volume 49, no. 4, p. 797-818 [cit. 2012-11-19]. ISSN 0001-4273. DOI: 10.5465/AMJ.2006.22083085. Available at: http://amj.aom.org/cgi/doi/10.5465/AMJ.2006.22083085

MUTHUSAMY, P. K. Learning and Knowledge Transfer in Strategic Alliances: A Social Exchange View. *Organization Studies* [online]. 2005-03-01, volume 26, no. 3, p. 415-441 [cit. 2012-11-21]. ISSN 0170-8406. DOI: 10.1177/0170840605050874. Available at: http://osp.sagepub.com/cgi/doi/10.1177/0170840605050874

NASDAQ. *Form F1* [online]. 2012 [cit. 2012-07-04]. Available at: http://www.nasdaq.com/markets/ipos/filing.ashx?filingid=7965942

OPSWAT Market Share Reports. *OPSWAT* [online]. 2012 [cit. 2012-12-30]. Available at: http://www.opswat.com/about/media/reports

PARK, Seung Ho and Gerardo R. UNGSON. Interfirm Rivalry and Managerial Complexity: A Conceptual Framework of Alliance Failure. *Organization Science* [online]. 2001, volume 12, no. 1, p. 37-53 [cit. 2012-06-10]. ISSN 1047-7039. DOI: 10.1287/orsc.12.1.37.10118. Available at: http://orgsci.journal.informp.org/cgi/doi/10.1287/orsc.12.1.37.10118

PARK, S. H. and M. V. RUSSO. When Competition Eclipses Cooperation: An Event History Analysis of Joint Venture Failure. *Management Science* [online]. 1996-06-01, volume. 42, n. 6, p. 875-890 [cit. 2012-09-11]. ISSN 0025-1909. DOI: 10.1287/mnsc.42.6.875. Available at: http://mansci.journal.informs.org/cgi/doi/10.1287/mnsc.42.6.875

PC Best Mate. *Virgin Digital Help* [online]. 2012 [cit. 2012-10-20]. Available at: http://www.virgindigitalhelp.co.uk/pc-mate/best-with-avg

PENG, Mike W. and Oded SHENKAR. Joint venture dissolution as corporate divorce. *Academy of Management Executive* [online]. 2002-5-1, volume. 16, no. 2, p. 92-105 [cit. 2013-03-19]. ISSN 1079-5545. DOI: 10.5465/AME.2002.7173550. Available at: http://amp.aom.org/cgi/doi/10.5465/AME.2002.7173550

SHAH, Reshma H. and Vanitha SWAMINATHAN. Factors influencing partner selection in strategic alliances: the moderating role of alliance context. *Strategic Management Journal* [online]. 2008, volume 29, no. 5, p. 471-494 [cit. 2012-07-12].
ISSN 01432095. DOI: 10.1002/smj.656. Available at: http://doi.wiley.com/10.1002/smj.656

SHENG, YUE and Ren XU. *Analyses of Strategic Alliance Failure : A Dynamic Model* [online]. Beijing, P.R.China, 2006 [cit. 2012-09-19]. Available at: http://www.google.cz/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDcQFjAA&url =http%3A%2F%2Fwww.seiofbluemountain.com%2Fsearch%2Fdetail.php%3Fid%3D315&ei= WE9KUZCLFobRsgbZ0oDoDg&usg=AFQjCNEfCcwIkZXDui1eiHroKbVXrmvcmQ&sig2=0 OPP_sYJV2hvD26axZj4aA&bvm=bv.44158598,d.Yms&cad=rja. Dissertation. School of Economics and Management.

SOARES, Bernadette. *The use of strategic alliances as an instrument for rapid growth, by New Zealand based questor companies*. New Zealand, 2007. Dissertation. Unitec New Zealand.

SUNDARAM, Anant K. and Andrew C. INKPEN. The Corporate Objective Revisited. *Organization Science* [online]. 2004, volume 15, no. 3, p. 350-363 [cit. 2013-03-19]. ISSN 1047-7039. DOI: 10.1287/orsc.1040.0068. Available at: http://orgsci.journal.informp.org/cgi/doi/10.1287/orsc.1040.0068

TODEVA, Emanuela and David KNOKE. MANAGEMENT DECISION. Strategic alliances and models of collaboration. *Management Decision*. 2005, volume 43, no. 1, p. 123-148. ISSN 0025-1747. DOI: 10.1108/00251740510572533, 0025-1747. Available at: http://www.emeraldinsight.com/10.1108/00251740510572533

Annexes

Annex 1 Questions raised in the electronic/face-to-face interviews

AVG Global strategic alliances

- 1. What are the main motives for forming alliances?
- 2. What are the strategic goals for GSA and how are they connected to the corporate strategy?
- 3. What forms of alliances does AVG have?
- 4. What is the typical alliance life cycle?
- 5. What alliance metrics does AVG use?
- 6. What do alliance metrics measure, and how they measure success?
- 7. Why were alliance metrics implemented?
- 8. How would you describe competitive advantage of GSA?
- 9. How is competitive advantage measured?
- 10. Has competitive advantage of AVG enhanced by forming alliances?
- 11. Have you experienced any problems with alliances?

Selected Case studies

- 12. What was the main motives for forming alliance?
- 13. What is the form of alliance?
- 14. What is the value added of this alliance from corporate point of view?
- 15. What alliance metrics were used to measure alliance success?
- 16. Were synergic effects of the alliance achieved?

Type of alliance	Alliance partner	Partnership overview
Acquisitions	Ewido Networks	In 2006, AVG acquired Ewido which provided AVG with cloud-based software
		installation platform and integrated its anti-spyware product into AVG's portfolio.
	Exploit Prevention Labs	In 2007, AVG acquired Exploit Prevention Labs, a provider of technology which AVG
		used in their AVG LinkScanner product.
	Sana Security	In 2009, AVG acquired Sana Security, a developer of behavioral technology security
		software to block attackers from accessing sensitive information. Their technology
		has been integrated into AVG's product portfolio.
	Visionize	in 2011, AVG acquired Visionize, provider of toolbars for web prowsers and
	DroidSecurity	In 2011 AVG acquired DroidSecurity, a developer of cloud-based mobile security
		solutions, which enabled AVG to enter the mobile security market.
	TuneUp	In 2011, AVG acquired TuneUp to incorporate their PC optimization software into
		AVG's product portfolio.
	Bsecure	In 2011, AVG acquired Bsecure, a provider of cloud-based management of
		information technology to incorporate their product into AVG's product portfolio.
	Ookla	In 2011, AVG acquired a non-controlling minority stake in Ookla, a provider of
		network performance solutionp.
	OpenInstall	In 2012, AVG acquired OpenInstall, a provider of cloud-based software installation
		platform. Their technology has been used in AVG portfolio since 2012.
Licensing	Auslogics	In 2010, AVG entered into a strategic allliance with Auslogics, a developer of
		computer maintenance and optimization software. This partnership allowed AVG to
		release a new product - AVG PC TuneUp.
Technology partnerships	Yahool	In 2007, AVG formed strategic alliance with Yaho!, who provided AVG with their
		search engine which was integrated into the AVG toolbar solution.
	MokaFive	In 2010, AVG entered into strategic alliance with MokaFive, a virtual desktop
		management company. AVG Anti-Virus has been integrated into the MokaFive
		virtual desktop management suite to provide the industry's first complete solution
		for a secure virtual desktop that can be deployed directly on the end user's personal
	Opera Software	Indulinep.
		web browser Opera. The protection was added to the existing Fraud Protection
		technology.
	Zbang	In 2011, AVG formed strategic alliance with Zbang to launch Multimi, a free
		Windows and iPad app that integrates e-mail, social media and multimedia in one
		interface.
	WatchGuard	In 2011, AVG formed strategic alliance with WatchGuard, a provider of mission-
		critical protection firewallp. By integrating AVG anti-virus engine into their
		existing firewall solutions, WatchGuard provided additional layer of protection for
		end-userp.
	Limewire	IN 2010, AVG formed strategic allance with Limewire leading freeware provider of P2P networking applications. By integrating AVG anti-virus engine
		Limewire has greatly reduced users' exposure to malicious content.
	GFI Software	In 2007, AVG formed strategic alliance with GELSoftware, a provider of internet
		security solutions with AVG anti-virus solutions. GFI integrating AVG anti-virus
		engine into their solutions to enhance security layerp.
	Virgin Digital Help	In 2010, AVG and Virgin Digital Help formed an alliance to include an Antivirus tool
		within the free Digital Helper application to help users ensure that they have
		adequate layers of protection in place. It included recommendations to secure the
		customer's PCs using the AVG Free antivirus solution.
	Google	In 2011, AVG formed strategic alliance with Google (replacing Yahoo!), who
		provided AVG with their search engine which was integrated into the AVG
Joint marketing	Netlog	In 2011, AVG entered into strategic alliance with Netlog, one of the fastest-growing
		and most popular social networking sites amongst European youth between the
		ages of to and 23. This participantly anowed AVG to faultuin a co-brailded Security Center which informs and educates users about Internet security.
		center which mornis and cuddates users about internet security.

Source: AVG, 2012