Strategic Alliances in Greek Mobile Telephony

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ABSTRACT

The mobile telephony market is a very competitive market. Mobile telephony companies try to expand by forming strategic alliances with companies from various industries. The objective of this paper is to analyze the motives, the actions and the results of the collaborations and alliances of two Greek mobile telephony companies (Cosmote and Vodafone Hellas). In addition, this paper illustrates examples of how the technology change and the technological convergence (Internet, computers, and mobile telephony) affected and activated the proliferation of these alliances. The entry of I-mode and Vodafone Live! in the Greek market caused an increase in the number of alliances especially with content aggregators and media companies.

INTRODUCTION

During the last decade, strategic alliances have experienced a tremendous growth. Specifically, telecommunications companies have exploited strategic alliances to achieve competitive advantage and handle the organizational and technological complexities of the global market.

In Greece, the mobile telecommunication sector is a quite competitive market. Cosmote and Vodafone Hellas are the mobile operators with the largest Greek market share. During the last years, each company has formed a significant number of alliances. This paper investigates the reasons for this alliance's booming. It shows that the technology evolution (from 2G to 2.5G or to 3G), the convergence of mobile telephony with Internet and computers, together with the globalization drove Vodafone Hellas and Cosmote to large numbers of alliances with content aggregators, media companies, equipment manufacturers, Internet service providers, computer and software companies.

Both companies formed their alliances in order to support their innovative products "i-mode" and "Vodafone Live!". After a major alliance with the Japanese NTTDoCoMo, Cosmote concentrated its efforts in enriching i-mode's content. Similarly, Vodafone Hellas' intention was the successful deployment of Vodafone Live! into the Greek market.

In this paper we present Cosmote's and Vodafone's alliance partners and we examine the motives for each alliance and the resources contributed by each alliance partner. Finally, we show the necessity and emergency of proper alliance formations for a mobile company, in order to survive and to further grow in the continuously changeable mobile telecommunications sector.

STRATEGIC ALLIANCES

Strategic alliances are formed when two or more companies agree to collaborate with each other on some domain, from the common manufacturing to the risky Research and Development domain. By linking the specific assets and facets of two or more businesses, a strategic alliance is able to provide a "trading partnership that enhances the effectiveness of the competitive strategies of the participating firms by providing mutually beneficial trade in technology, skills and/or products" (Yoshino & Rangan, 1995). Companies establish alliances in order to achieve their goals based on cooperation with appropriate partners. Furthermore, companies ally in order to stretch their boundaries, gain access to critical resources, restructure their capabilities and accumulate resources, experience and knowledge (Kogut, 1988). In a broad interpretation, strategic alliances are agreements between companies that

remain independent while often they are in competition. Yoshino and Rangan (1995) have referred three common characteristics of alliances:

- The partnering companies continue to remain independent even after the formation of the alliance.
- The partners allocate responsibility for the conduct and performance of specific sets of tasks and are then able to jointly share the benefits.
- The partners contribute on an ongoing basis, using their own resources and capabilities for the development of one or more areas of the alliance (important for them). This could be technology, marketing, production, R&D or other areas.

A crucial point of the strategic alliances is their ability to temper the vagaries of the competitive market for collective gain; they form a type of "organized competition". Despite the fact that acquisitions and mergers are still some popular strategic movements of achieving competitive advantage, more and more companies choose to make strategic alliances which will allow them to handle the emerging organizational and technological changes in the global market. Companies usually prefer to form strategic alliances under the following conditions (Pellicelli, 2003):

- When each partner recognizes the need to have access to capabilities and competencies it cannot develop internally.
- When a gradual approach is preferable in accessing resources, capabilities and competencies. Uncertainties about the future evolution of demand and technology often advise flexibility. The alliance can provide this.
- When the acquisition of another company is not a possibility in achieving particular development goals.

So, alliances will help them to get access to the complementary resources of their partners and will further enhance their competitive position into the market. The potential of a proper alliances' strategy is enormous. If it is implemented correctly it can dramatically improve the company's operations and competitiveness (Brucellaria, 1997). Each company builds its strategic alliances considering its present and future needs, its position into the market, its technological capabilities and also taking into account the size and the capabilities of the partner company. According to Hill and Jones (1999), the right partner in an alliance must have three principal features.

- The partner must have the resources and capabilities to help the company achieve its strategic goals. It must bring to the alliance what the company is missing (access to a market or technology or share of the risk).
- The partner must share its long-term goals for the alliance. Failure is inevitable if the goals are divergent.
- The partner must not use the alliance to appropriate know-how, relationships with clients or suppliers or technology without making contributions of equal strategic weight.

Forming strategic alliances can be an effective way to diffuse new technologies rapidly, to enter a new market, to bypass governmental restrictions expeditiously, and to learn quickly from the leading firms in a given field (Elmuti & Kathawala, 2001). Chief executive officers are increasingly turning to alliances as a way to grow their business and maximize shareholder value. However, researches found that more than half of all alliances fall well short of expectations (Park & Ungson, 2001; Zinedlin & Dodourova, 2005). This happens because alliances are different from other structural transactions, such as mergers or acquisitions, and they need to be managed differently. Alliances are an ongoing activity, messier to manage and somewhat open-ended in terms of their duration and focus. Often, strategic and managerial motivations are more important than financial and technological motivations (Zinedlin & Dodourova, 2005). In order to form successful alliances, companies should consider the following (Anslinger & Jenk, 2004):

- Develop clear, common objectives and definition of success.
- Ensure proper alliance form.
- Determine appropriate governance model with clear decision-making.
- Anticipate the most likely conflicts.
- Plan for evolution.
- Establish clear metrics to track and measure success.

Pekar (1996) and Hagedoorn (1990) pointed out the more common kinds of alliances:

- Collaborative advertising.
- R&D partnerships.
- University-based cooperative research.
- Lease service agreements.
- Shared-distribution.
- Technology transfer.
- Co-operative budging.
- Cross-manufacturing.
- Resource venturing.
- Government and industry partnering.
- Internal spin-offs.
- Cross-licensing.
- Customer-supplier agreements.

There are many classifications of the alliances according to the motives, the resources, the structure or the direction. Here, we refer the most common ones (Yasuda, 2003), depending on the nature of the exchanged resources. Two dimensions are considered:

1) Vertical – Horizontal alliances, and
2) Symmetrical – Asymmetrical alliances.

In the vertical alliances, companies from different industrial sectors contribute in the development of a product or service. For example, a mobile company collaborates with a manufacturer to develop special mobile phones. Vertical alliances will probably dominate in markets where competition demands for cost leadership and product innovation. In the horizontal alliances, companies form alliances with partners in the same industry. For example, two mobile companies ally in order to expand their wireless networks. This kind of alliance appears mostly in mature industries where due to the market globalization there is an increasing competition.

In the symmetrical alliances, the same type of management resources is exchanged. One of their major purposes would be to supplement the companies' resources which are not sufficient to meet the required market size, by utilizing the same resources available from their partners. The alliance partners share the resources in order to achieve the common goal. In the asymmetrical alliances, different types of management resources are exchanged. These alliances aim to complement the firms' resources with different resources available by their partners. An example of this is when a company contributes its management resources in Capital and Production while the other company contributes its available ones in Technology and Human Resources.

THE TELECOMMUNICATION SECTOR

During the last two decades, the telecommunications sector has been one of the most dynamically growing sectors. The industry has progressively opened up to competition in all parts of the world, as new technologies such as Internet, electronic services, handheld devices and cellular networks finally converge and create a new reality where new opportunities for profit are emerged. Important characteristics of this industry include high costs, rapid technological advances, high obsolescence, and intense competition in most segments. The liberalization of telecommunications caused reduction of the conventional voice service fees for consumers. This resulted to a gradual decrease in the average revenue per user of contracted accounts and the shrinkage of the operators' profits (Kuo & Yu, 2006). Open standards are encouraging innovation and lower prices, while deregulation has opened the entry of telecommunications companies into all segments of the market (Grover & Saeed, 2003; Rice & Galvin, 2006). For example, the Open Mobile Alliance (OMA) is a leading industry forum for generating market-driven specifications for interoperable mobile service enablers (e.g. mobile Web services, push-to-talk over cellular, presence) (Brenner, et al., 2005). This will facilitate global user adoption of advanced mobile multimedia services.

Globalization affects the nature of competition as well. Barriers to international commerce are falling. Although each country might only support one or two domestic telecommunications giants, a world market enables each giant to participate in a huge market. Marketing alliances between national telecommunications companies and international mergers and investments are evidence that a world telecommunications market is emerging (Strouse,

1999). For example, Ericsson and Nokia formed a dynamic alliance whose rationales changes over the industry life cycle of the product (Rice & Galvin, 2006). In addition, changing demographics are affecting telecommunications markets in many ways. Family and business structures continue to evolve, and technology enables further changes in the way people live and work. Telecommuting, wireless technologies, and paging technologies free customers to live and work in ways that were impossible without these conveniences. Perceived usefulness, ease of use, social influences, wireless trust environment, and facilitating conditions are also affecting the acceptance of wireless Internet via mobiles (Lu, et al., 2005). Ultra-wideband (UWB) services are emerging (Templeton & Schmidt, 2005). These changes will alter the nature of telecommunications competition.

Technology convergence has driven the business lines of telecommunications companies to become blurred and now each company tries to figure out its new role in the telecommunications arena. Three basic truths govern the decisions that companies are making today to define themselves within the new business models (Shepard, 2002). The first of these is that access and transport are commodity products that can be bought from a variety of providers at ever-lower rates. Second, if access and transport companies want to continue to maintain an edge in their marketplace, they must change the services chain and become more than what they currently are. They must become full-service telecommunications providers because more and more often customers are looking for all services from a single provider. Customers want services, content, Internet, access, and more, all delivered properly and billed under a single invoice. There is a demand for mobile services not only from individuals but also from enterprises (Jain, 2005). Third, wireless access is creeping in, and the percentage of fixed wireless local loops is climbing steadily. The growth of mobile telephony has been phenomenal, so that mobile subscription will soon surpass that of fixed telephone lines. Mobile service providers can increase their revenues by increasing the number of their customers or/and the usage that existing customers make of their mobile devices (Peppard & Rylander, 2006). However, everyone in a developed country is a customer of a mobile operator. So, the way to go is to offer many mobile applications to the customers in order to increase their usage. These mobile applications would be developed by third-party companies. The mobile service providers may form alliances with such companies. They may even offer discounts to their customers when they buy products or services from their partnering companies (Son et al., 2006). However, consumers' willingness to pay for online services is likely to be influenced by their perceived value of convenience these services provide, and by the extent to which they utilize these services (Ye, et al., 2004).

According to a research conducted by Andersen Consulting (1999) three business strategies have emerged in the telecommunications arena:

- dominate on one piece of the business: become a key player in one business sector, like Vodafone in the mobile sector,
- cover all bases: compete in as many business sectors is possible and if there is somewhere lack of resources then form an alliance or outsource it,
- become a "solution provider": create a "bundle" of the best services and integrate the system without having physical infrastructure or assets and just switch business partners to suit the vagaries of the market place.

No single company in the telecommunications industry today is capable of accomplishing this service reorientation on its own. Telecommunication companies need to participate in at least one alliance (Brenner, et al., 2005). They try to achieve economies of scale, to share infrastructure, resources, 'know how' and experiences, to increase their resources without investing, to harmonize their technology and pricing models (Sismanidis & Economides, 2007). During the last years, various mobile operators have cooperated to form mobile alliances:

- **Asia Mobility Initiative (AMI)**: Celcom (Malaysia), CSL (Hong Kong), CTM (Macau), DTAC (Thailand), Maxis (Malaysia), MobileOne (Singapore), Smart (Philippines), Telstra (Australia), TM Int. (Malaysia),
- **Asia-Pacific Mobile Alliance**: Far East Tone Telecommunications Co (Taiwan), Hutchison Essar (India), Hutchison Telecommunications Hong Kong (Hong Kong and Macau), KT Freetel (Korea), NTT DoCoMo (Japan), PT Indosat (Indonesia) and StarHub (Singapore),
- **Bridge Mobile Alliance**: Airtel (India), CSL (Hong Kong), CTM (Macau), Globe Telecom (Philippines), Maxis (Malaysia), SingTel Mobile (Singapore), SingTel Optus (Australia), SK Telecom (Korea), Taiwan Mobile (Taiwan), Telkomsel (Indonesia),

- **Fixed-Mobile Convergence Alliance (FMCA)**: AT&T, Azimuth, Belgacom, Airtel, Brasil Telecom, Broadcom, BT, China Telecom, T-Com, eircom, Huawer, innove, Korea Telecom, Marvell, Maxis, NTT Communications, OPTUS, PCCW, Quiconnect, Rodgers Wireless, KPN, Swisscom, TDC Mobil, Telecom Italia, Telecom, Telia Sonera, True,
- **FreeMove:** Orange (France, Netherlands, Spain, U.K.), TeliaSonera (Nordic and Baltics), TIM-Telecom Italia Mobile (Italy), T-Mobile (International),
- **I-mode**: Base (Belgium), Bouygues Telecom (France), Cellcom (Israel), COSMOTE Mobile Telecommunication (Greece), E-Plus Mobilfunk (Germany), Far East Tone Telecommunications (Taiwan), KPN Mobile (Netherlands), mmO2 (Germany, Ireland, U.K.), MTS (Russia), NTT DoCoMo (Japan), Telefonica Moviles Espana (Spain), Telstra (Australia), Wind Telecomunicazioni (Italy),
- **Open Mobile Alliance (OMA)**:
- **Open Mobile Terminal Platform (OMTP)**: Cingular Wireless, Hutchison 3G, Orange (France, Netherlands, Spain, U.K.), SK Telecom, Telefonica Moviles Espana (Spain), TIM-Telecom Italia Mobile (Italy), Telenor (Norway and International), T-Mobile (Germany and International), Vodafone,
- **Starmap Mobile Alliance**: Amena (Spain), Eurotel (Czech Republic), mmO2 (Germany, Ireland, U.K.), One (Austria), Pannon GSM (Hungary), SONOFON (Denmark), Sunrise (Switzerland), Telenor Mobile (Norway), Wind (Italy),
- **Vodafone Group Plc and Partner Network**: in 33 countries,
- **Wireless Broadband Alliance (WBA)**: BT (U.K.), CNC (China), CSL (Hong Kong, DT, du (UAE), IM2 (Indonesia), Korea Telecom, Maxis (Malaysia), NTTCom (Japan), Orange (France), PTWiFi (Portugal), SMART (Philippines), StarHub (Singapure), Swisscom Mobile, TAT-VSNL (India), Telecom Italia, Telefonica (Spain), Telmex (Mexico), True (Thailand), T-Mobile (International).

Such alliances are motivated by the desire to achieve economies of scale without investing, to overcome technical problems such as interoperability, roaming (Curwen & Whalley, 2005) and to provide their multinational enterprise customers with global services. There is even cooperation between alliances (FreeMove and Bridge Mobile Alliance, 27-3-2007). However, mobile operators form alliances with companies from other industries too. The convergence effect is forcing telecommunications, media, ISP's (Internet Service Providers), content aggregators and computer industry firms to form cross-industry strategic alliances at such a frenetic pace that major new alliances are announced weekly. Some alliances fail due mostly to the mismatch of partner's strategy (Duysters & Heimeriks, 2002), while others grow quickly, but all are aimed at building profitable parts of the new infrastructure. Furthermore, the rationale for alliance formation changes over time (Rice & Galvin, 2006) in response to changing legislation, competition, market, technology etc. Companies need to adapt their resources to these changing conditions. Their strategy is based on their resources. However, if they decide to change their strategy's objectives they should also acquire the appropriate resources. It is important to investigate how companies adjust their resources over time in response to environment's changes. A fast way to accumulate resources is by forming alliances. For example, Vodafone Group Plc formed alliances aiming at continuously introducing new products and services that drive the full capacity usage of its voice and data infrastructure (Dodourova, 2003). Its inter-industry alliances aimed at securing resources to provide customers with a wide range of services. Its intra-industry alliances mainly aimed at geographical scope expansion. Also, 3Com Corporation entered into many domestic partnerships with large firms and many of these partnerships were repeated (Vivio, 2004). The majority of its alliances were in four categories: technology exchange, cooperative R&D, unidirectional licensing/marketing agreements, and customer-supplier relationships.

This paper analyzes the alliances' of two Greek mobile telephony companies. Since no single company has all the required resources to effectively compete in the changing environment, they should continuously form alliances to acquire the needed complementary resources.

STRATEGIC ALLIANCES IN MOBILE TELEPHONY IN GREECE

In Greece, mobile telephony is considered to be a mature market with a variety of value added services and quite a strong competition. According to the Greek Foundation for Economic and Industrial Research (2004), mobile telephony penetration rate is rather impressive; it reached 95% in the first semester of 2003 from 20% in 1998. Despite this, Greek users underutilize their handsets in comparison to the European average. This fact promises further profit growth in the future. Mobile companies believe that the 3G will receive high acceptance in the future.

Thus, technology evolution and new value added services will also create new sources of profit. Furthermore, the expected replacement of the wired telephony with the mobile telephony and the new innovative services (video, voice and photography) will shape a new market.

Due to the convergence of mobile telephony with Internet, the domain of mobile telephony is considered to be a particular competitive part of the market. During the last years, a growing number of alliances have been recorded. The companies that operate in the Greek mobile telephony sector are Cosmote, Vodafone Hellas, TIM and Q-Telecom, with a total number of about 10 million subscribers.
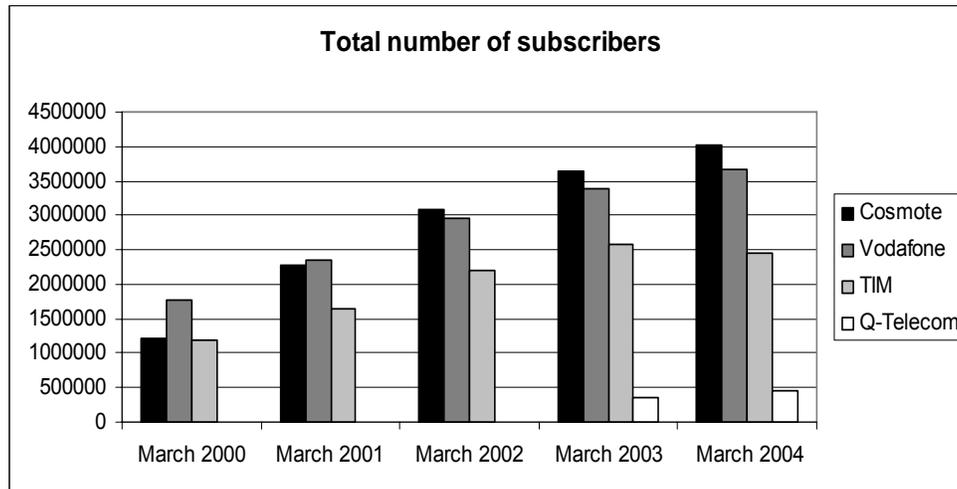

Chart 1: Total number of Greek mobile telephony subscribers.

On March 2004, Cosmote held 37.95%, Vodafone Hellas 34.7%, TIM 23.06% and Q-Telecom held 4.28% of the total mobile telephony subscribers. During the first quarter of 2006, the subscriber marker share has been: Cosmote (37.4%), Vodafone Hellas (35.6%), TIM (19.5%) and Q-Telecom (7.5%). On June and October 2005, TIM and Q-Telecom have been acquired by Apax Partners and Texas Pacific Group (TGP), companies which are not specialized in mobile telephony. In mobile telephony with a contract, Cosmote is the leader with 1,600,135 subscribers (44.34% share of mobile telephony with contract market). In mobile telephony with prepaid time calling cards, Vodafone is the leader with 2,512,041 subscribers (35.93% share of prepaid mobile telephony market). We should also notice here the strong and accelerating subscribers' preference in using prepaid calling cards (66% of total subscribers), especially for young people, who need to control their budget.

As there is a strong competition in the mobile telephony market and especially between Cosmote and Vodafone Hellas, it is rather interesting to see how Cosmote and Vodafone Hellas develop their alliance strategies, with which companies and what they have gained from these. We collected data about Cosmote (www.cosmote.gr) and Vodafone Hellas (www.vodafone.gr) from the companies' websites, talks with the companies' staff, media announcements about their co-operation and research papers. The search covered a five-year period (2000- 2004). We created a database to register the alliances' characteristics (e.g. date, partners, partner's industrial scope, partner's nationality, alliance's motives, partner's resources). Then, we analyzed the data and created useful tables detailing the identified partnerships by: participating firms, purpose and motivation, resources contributed by the partners, general description of each participating company and date of the partnership. During our analysis, we found out that a critical point for both companies was the deployment of i-mode (June 2004) and Vodafone Live! (January, 2003) services. So, we distinguished the before and after periods. Regarding Cosmote, we have the "before i-mode" period (January 2000-May 2004) and the "after i-mode" period (June 2004-December 2004). Regarding Vodafone Hellas, we have the "before Vodafone Live!" period (January 2000-December 2002) and the "after Vodafone Live!" period (January 2003-December 2004).

We classified the Vodafone's and Cosmote's motives for forming alliances based on the work by Harrigan (1988), Glaister and Buckler (1996), Lorange and Roos (1997), Doz and Hamel (1998), and Spekman, Isabella and MacAvoy (1999). We distinguished the following motives:

- Market-related motives. Gain access to new market segments, or to new geographical areas that are protected by national tariff and other barriers. Avoid controls on importation, and overcome barriers to commercial penetration. Experiment with new markets and defend/enhance market position in present markets.
- Product-related motives. Create and experimenting with new products, add value to existing ones, differentiate/enter new product domains.
- Technology-related motives. Fill critical technology gaps, set new global standards, experiment and gain access to technology.
- Risk reduction-related motives. Share risk in case of large R&D costs, reduce technological/market uncertainty.
- Competencies and skills-related motives. Access skills or capabilities faster and at a lower cost than internal development permits, learn new skills or enhance present skills.
- Cost-related motives. Share R&D, manufacturing, marketing and organizational costs, achieve economies of scale.
- Industry and market structure modification-related motives. Raise entry barriers, and change the technological base of competition.
- Timing-related motives. Exploit new product or market or new technology faster from competitors.

Cosmote

Cosmote is a mobile company subsidiary of OTE. It started its commercial operation in 1998, five years later than its competitors using GSM1800 technology in contrast to GSM900 of the other operators. It has experienced an impressive subscriber base growth, gaining one in every two new subscribers in the Greek market and securing the lowest churn rate. Currently, it has a market share of about 37.5% and is considered to be the most successful third entrant in the European Market. According to its financial results reported at the end of the 3rd quarter of 2004, revenues for the 9th month period reached 1,116.1 million euro, contract customers were 1,610,032, while prepaid customers reached 2,481,141, giving a total number of 4,091,173 customers. Also, Cosmote successfully deployed a high-quality cellular network GSM 1800 during the Athens 2004 Olympic Games (Sergiadis, 2005).

Cosmote's financial achievements, reliable telecommunications network with over 2600 stations, new technologies successful implementation and management drove it into the first position of the Greek mobile telephony companies. For this reason, "The Banker" (the magazine of Financial Times) honored Cosmote the title of the "Company of the year 2003" in Greece. As Cosmote continues its successful route, it moves towards impressive deals with foreign leaders (NTTDoCoMo) aiming to further development and more revenues. Additionally, its strategic presence in other Balkan countries through its subsidiary AMC in Albany, Globul in Bulgaria and COSMOFON in Fyrom shows Cosmote's strong will for geographic expansion. Cosmote also cooperated with global leader COMMERCE ONE for the formation of cosmoONE, an e-commerce, business to business, company.

Cosmote introduced i-mode service into the Greek market on June 7th, 2004, after an exclusive strategic partnership agreement with Japan's leading mobile communications provider, NTTDoCoMo. This was the eighth alliance of NTTDoCoMo i-mode. I-mode's success factors include the low fees for data and content, the provision of content from many companies (other than the mobile operator), the provision of entertainment services, and the high revenues shares for content providers (Weber and Winger, 2006). Although NTTDoCoMo believed that mobile banking will be a killer application, it encouraged content providers to offer their content and applications via i-mode (Haas, 2007). The higher demand by users for a given content or application positioned it higher on the menu of i–mode. So, the customers decided upon the fate of a content provider. Future 3G services would include news, entertainment, and traveling services (e.g. checking schedules, traffic reports, reservations, ticketing) (Karjaluoto, 2006).

For the needs of this study, we created extensive Charts for the "before i-mode" and "after i-mode" periods. These Charts present Cosmote partners, the partners' specialization, the alliances' motives, the alliances' purposes, and

finally the contributed resources. The partners were further identified and the alliances were classified as either intra-industry (telecommunications companies) or inter-industry (equipment manufacturers, content aggregators, computers and software, media, ISP's etc.) alliances. The next Chart 2 shows the classification of Cosmote's alliance partners in the two periods according to the partners' industrial sectors.
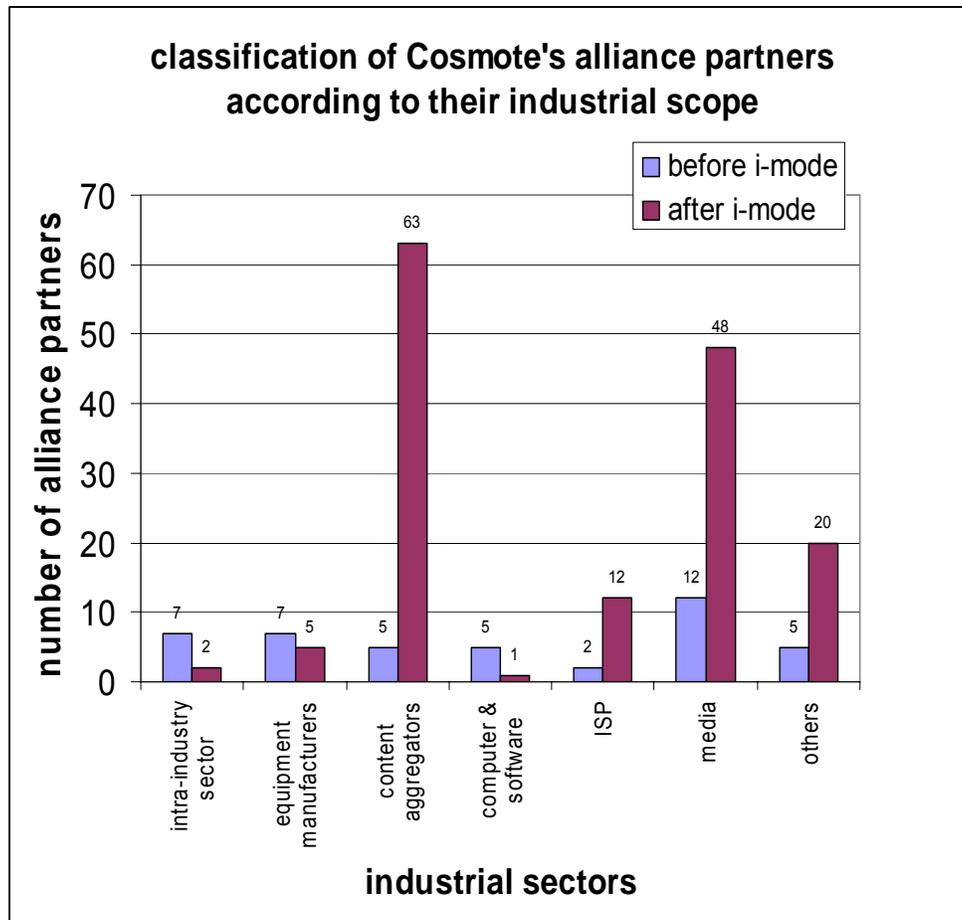

Chart 2: Classification of Cosmote's alliance partners according to their industrial scope.

Chart 2 shows that Cosmote formed 36 alliances with 43 companies in the "before i-mode" period, and 149 alliances with 151 companies in the "after i-mode" period. Most of its partners are from other complementary industrial sectors. Thus, Cosmote is trying to enhance its presence in other technological domains and markets and get competitive advantage.

Since spring 2004, Cosmote's alliances are concentrated on the successful deployment of i-mode, and in the enrichment of the provided content. In the "after i-mode" period, the striking majority of its alliances are formed with content aggregators and media companies which provide rich content. So, Cosmote wanted to offer plenty of content and applications via i-mode in order its customers increase the usage of its network and its services. So, its customers would pay larger usage bills and spend extra money on the offered services. Thus, Cosmote would increase its revenues due to higher bills, advertisements on i-mode, and revenue shares from its partner companies.
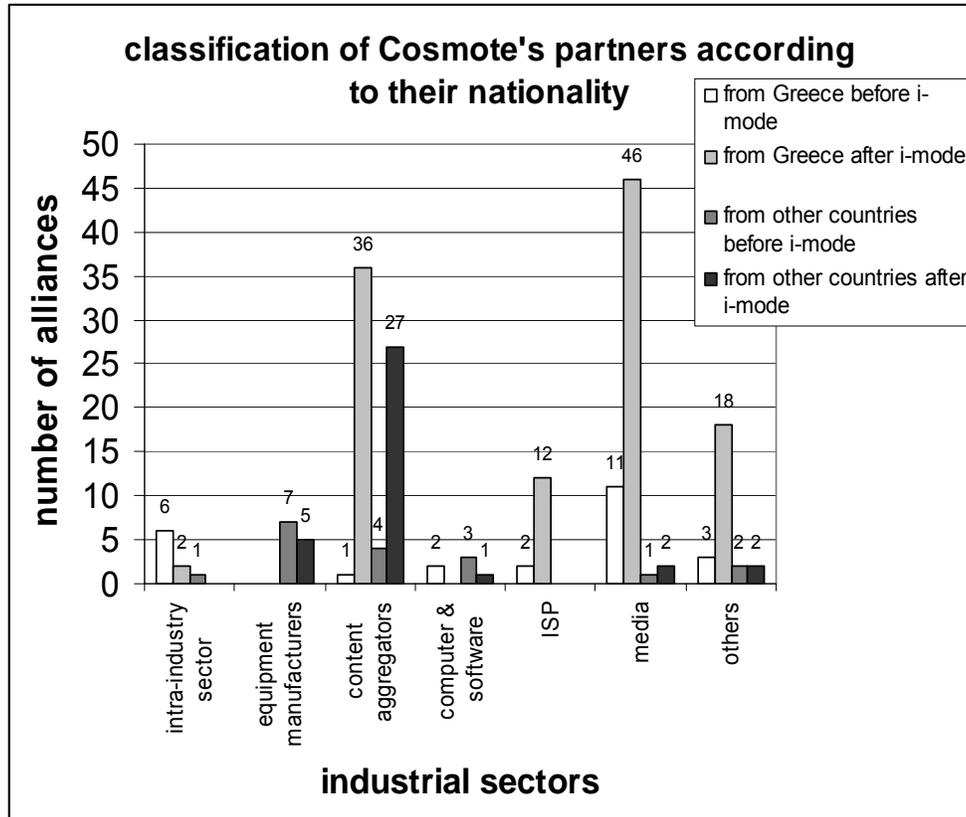
    Chart 3 shows the nationality of Cosmote's partners.

Chart 3: Classification of Cosmote's alliance partners according to their nationality.

 During the "before i-mode" period, 25 out of 43 Cosmote's partners have been Greek companies. During the "after i-mode" period, 114 out of 151 Cosmote's partners have been Greek companies. Thus, there is a significant shift towards Greek companies.

In both periods, the ISPs (Internet Service Providers) are Greek companies. On the contrary, the equipment manufacturers (Nokia, Ericcson etc.) who provide Cosmote the customized handsets and equipment are always from other countries since there are not Greek companies with appropriate know-how and technology. Finally, due to the Internet penetration in the last years, more and more content aggregators and media companies were formed and they provided to Cosmote rich content. During the "after i-mode" period, there has been an explosion of alliances with Greek content aggregators and media companies in order to provide to Cosmote's customers with a variety of Greek content and applications. Almost all of Cosmote's customers speak the Greek language and have the Greek culture. So, the majority of the content and applications that is offered via i-mode should be in the Greek language and tailored to the Greek culture. So, Greek content aggregators and media companies are the most appropriate to provide such content and applications.

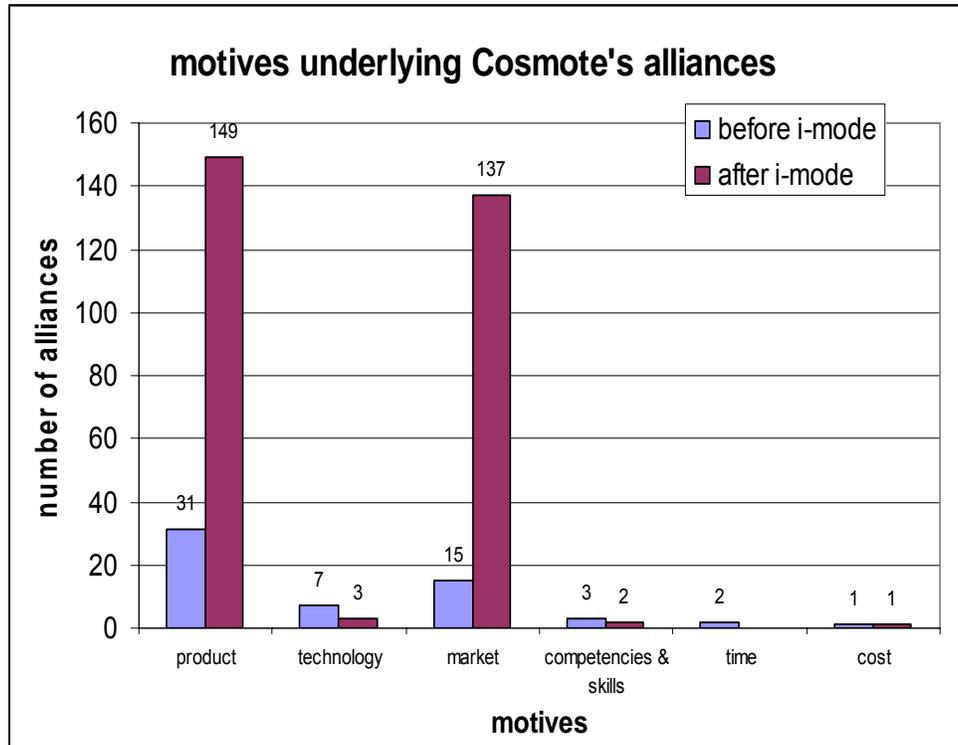Chart 4 shows the collaborative motives that shaped Cosmote's strategic profile.

motives underlying Cosmote's alliances

Chart 4: Cosmote's alliance formation motives.

The results are cumulative since in most alliances the motives for alliance formation were more than one. In both periods, product related motives seem to surpass the others. Cosmote is much interested in innovating, introducing new products (MyCosmos, i-mode), and adding continuously value to them. The market related motives follow, which shows that Cosmote is active in gaining access to new markets and also enhancing its market position. Cosmote's alliances with content aggregators and media companies are mainly based on product and market related motives, while its relationships with computer and software companies and equipment manufacturers are product and technology motivated. Finally, its relationships with intra-industry companies have to do with enhancing skills and competencies and with motives related with market enhancement. During the "after i-mode" period, Cosmote's main motives have concerned product and market. So, Cosmote wanted to experiment with new products, add value to existing ones, gain access to new markets segments and enhance its market position in present markets.

Chart 5 shows that the highest priority Cosmote's alliances for resources are for content and market share.
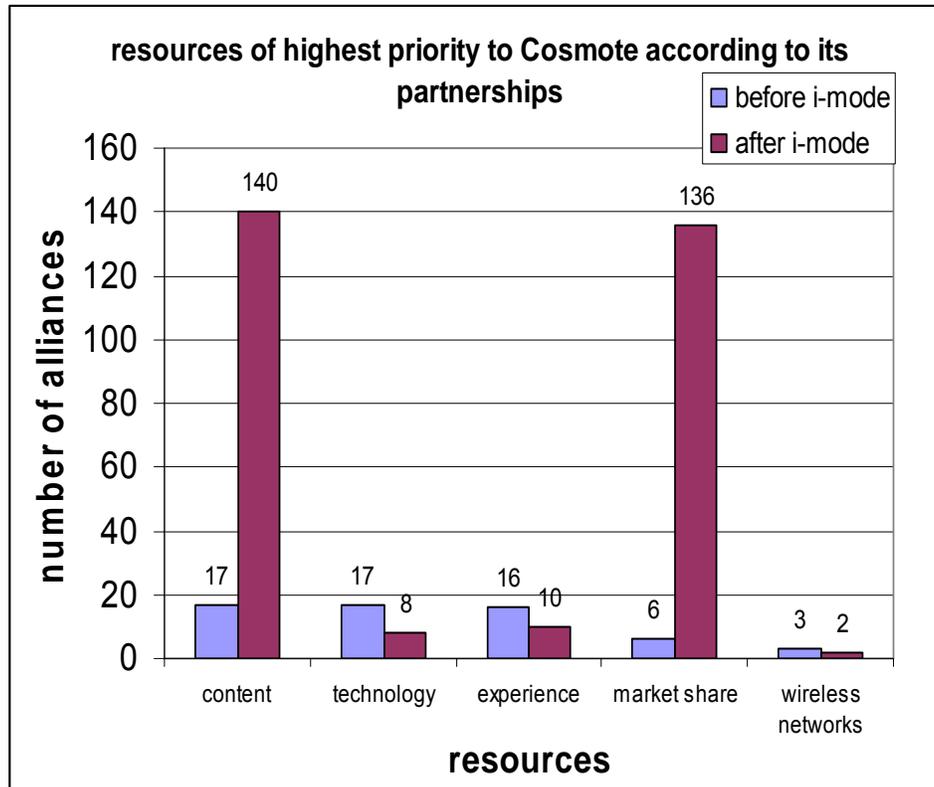
resources of highest priority to Cosmote according to its partnerships

Chart 5: Highest priority resources of Cosmote according to its partnerships.

Cosmote seeks intra-industry alliances that provide complementary networks in order to offer better services and expertise in wireless internet. Also, Cosmote collaborates with content aggregators and media companies in order to obtain rich content and market share. Equipment manufactures and computer and software companies contribute with their technology and experience, while ISPs provide their valuable internet-related experience and technology. Finally, Cosmote seeks content and experience from the rest alliances. During the "after i-mode" period, Cosmote clearly has been looking for partners with rich content and market share. So, Cosmote wanted to form alliances in order to increase its market share and its content on i-mode. Increasing its market share would give it competitive advantage. Increasing the content on i-mode would cause increased communications usage and purchases via i-mode by its customers resulting to increased revenues for Cosmote.

Concluding Cosmote's alliances are both strategic and cost economizing. They are strategic because it enters into the new market of mobile Internet. They are cost economizing because it enters the international alliance of i-mode acquiring technology at reduced cost.

Vodafone Hellas

On July 1993, a consortium constituted by Vodafone Group Plc, France Telecom, Intracom and Data Bank started the commercial operation of Panafon. On January 2002, it changed its brand name to Vodafone Hellas. Today its main shareholder is Vodafone Group Plc with 99.381%, the world leader of mobile telephony with presence in 28 countries. Vodafone Hellas might be considered as the biggest private investment in Greece with a total number of 1,67 billion euro of investments since its beginning.

According to its financial results reported for the financial year ending on 31st of March 2004 (1/4/2003-31/3/2004), its revenues reached 1,473.6 million euro, net income rose to 235.4 million, while the total customer base was

3,678,208. Vodafone Hellas was the first Greek company to be awarded the "Achievement in Excellence" from the European Foundation for Quality Management in 2001.

Its high quality network coverage in conjunction with the extended retail chain network of Vodafone Shops has contributed significantly towards Vodafone Hellas success. Its strategic decisions led it also successfully to the Albanian market through its subsidiary Vodafone Albania.

Its strategic goal is the provision of high quality services of mobile communication to the Greek public offering services both for prepay and post pay users. It was the first to launch in the Greek market advanced services, such as Vodafone live! and Vodafone Mobile Connect Card for corporate users.

Launched on January 2003, Vodafone Live! was the first mobile service that integrated handsets, networks, content and services in order to produce an end to end, easy to use customer solution. Since then, all Vodafone's efforts have been concentrated in the enrichment of Vodafone Live!'s content and in providing to its customers plenty of services.

We created various Charts describing the Vodafone Hellas alliances during the "before Vodafone Live!" and "after Vodafone Live!" periods. These Charts present its partners, the partners' specialization, the motives underlying the alliances, the purposes of these alliances and finally the contributed resources. Chart 6 shows the classification of its alliance partners in the two periods according to their industrial sectors.
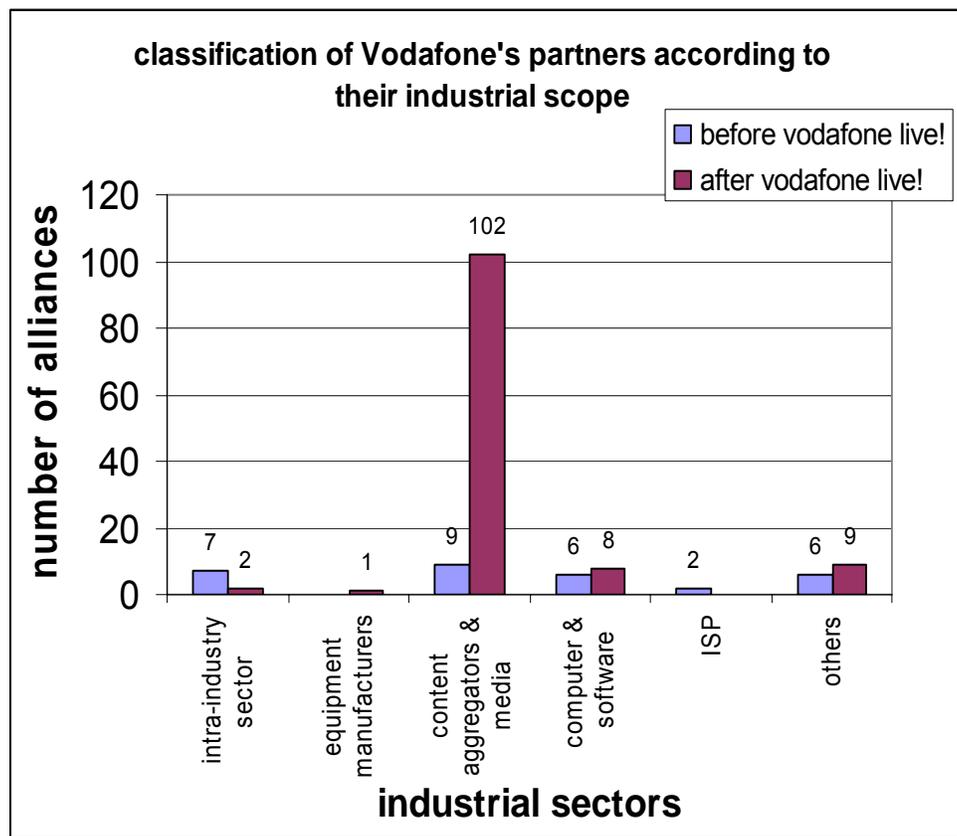
Chart 6: Classification of Vodafone's partners according to their industrial scope.

In the "before Vodafone Live!" period, Vodafone Hellas formed 25 alliances with 30 companies. In the "after Vodafone Live!" period, it formed 118 alliances with 122 companies. So, it over quadruple its alliances after the Vodafone Live! launching.

Since January 2003, most Vodafone Hellas's alliances are content aggregators and media companies. It aims to enrich the content of Vodafone Live! with a variety of areas such as entertainment, ringtones, wallpapers, games etc. So, it formed many alliances with content aggregators and media companies in order to offer to their customers plenty of applications via Vodafone Live!. So, Vodafone Hellas wanted to offer plenty of content and applications via Vodafone Live! in order its customers increase the usage of its network and its services. So, its customers would pay larger usage bills and spend extra money on the offered services. Thus, Vodafone Hellas would increase its revenues due to higher bills, advertisements on i-mode, and revenue shares from its partner companies.

Also, it allied with computer and software companies to support e-commerce and Internet applications. It has formed only one alliance with an equipment manufacturer, Ericsson, in the "after Vodafone Live!" period. However, Vodafone Group Plc (instead of Vodafone Hellas) has formed many such alliances, providing Vodafone Hellas with great economies of scale.

Taking into account the nationality of Vodafone Hellas partners, 19 out of 25 alliances were with Greek companies during the "before Vodafone Live!" period. During the "after Vodafone Live!" period, most of its alliances have been Greek companies belonging to different industrial sectors.

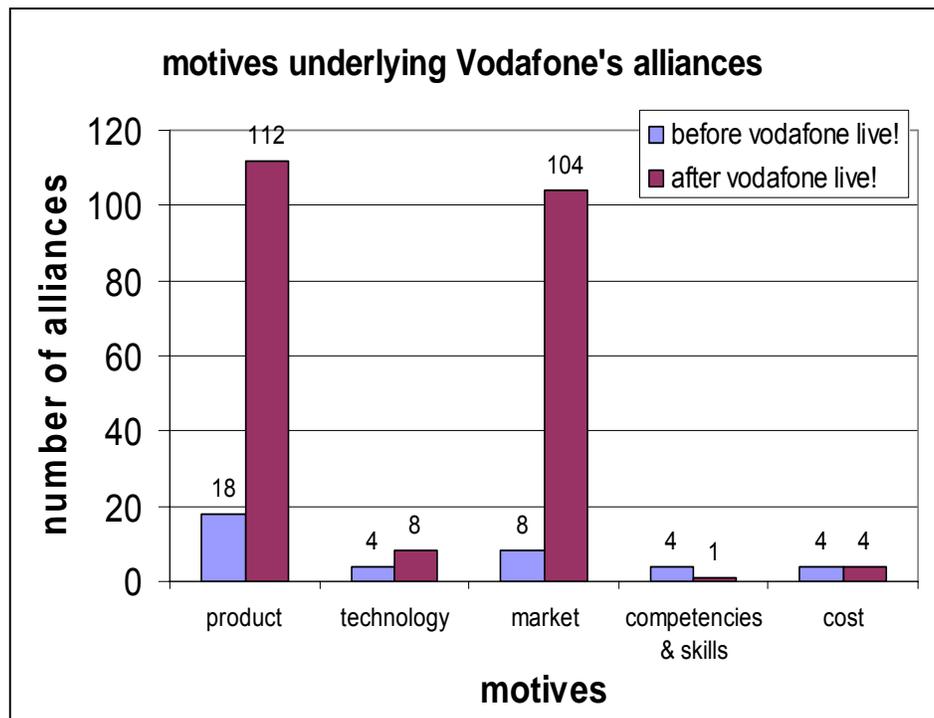The next Chart 7 shows the collaborative motives that had shaped Vodafone's strategic profile in both periods:

Chart 7: Vodafone's alliance formation motives.

Product and market related motives dominate over all other motives. Vodafone Hellas is much interested in creating new products, and making the existing ones better. It is also enhancing its market position and is using interesting and up-to-date content in order to seduce new subscribers. A major advantage is its relationship with its mother company Vodafone Group Plc. Vodafone Hellas is getting access to the most worldwide innovative and sophisticated products, technologies and services and simultaneously is achieving great economies of scale. During the "after Vodafone Live!" period, the main alliances' motives of Vodafone Hellas have concerned product and market. So, Vodafone Hellas wanted to experiment with new products, add value to existing ones, gain access to new markets segments and enhance its market position in present markets.

Chart 8 shows which resources are of highest priority for Vodafone Hellas according to its partnership.
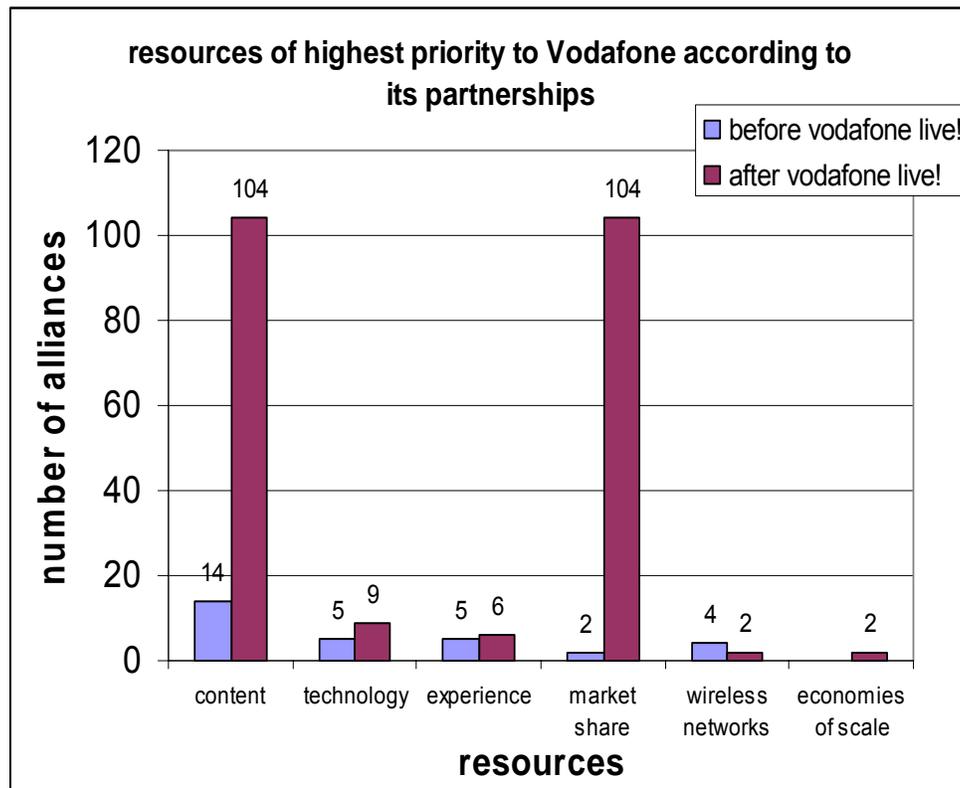
Chart 8: Highest priority resources of Vodafone according to its partnerships.

Content and market enhancement seem to be of the highest priority. Vodafone Hellas also seeks complementary networks for providing better services and market share from its intra-industry alliances. Finally, it seeks mainly rich content and market share from its collaborations with inter-industry companies. During the "after Vodafone Live!" period, Vodafone Hellas clearly has been looking for partners with rich content and market share. So, Vodafone Hells wanted to form alliances in order to increase its market share and its content on i-mode. Increasing its market share would give it competitive advantage. Increasing the content on i-mode would cause increased communications usage and purchases via i-mode by its customers resulting to increased revenues for Vodafone Hellas.

Vodafone Hellas alliances are both strategic and cost economizing. They are strategic because they enable Vodafone to introduce advanced mobile and Internet services. They are cost economizing because of the synergies that it gets from Vodafone Group Plc's alliances (brand name, customized and cheaper handsets and content, advanced technology). Its collaborative relationships show that the company is stretching beyond its core business and is becoming a mobile multimedia company. All Vodafone Hellas steps are well designed and they are part of the Vodafone Group's global strategy.

A COMPARISON BETWEEN COSMOTE AND VODAFONE HELLAS

Both companies over quadrupled their alliances after launching i-mode and Vodafone Live!. Currently, their main alliance strategies motives are product and market related (Chart 9). They try to add value to their innovative products and they enter into new product domains in order to grow their subscriber base. Their major motive for their collaborations seems to be their customers' provision with a wide range of services. This would increase their customers' satisfaction and spending. Customers want a variety of content and applications (Peppard &Rylander, 2006; Haas, 2007). So, if the customers find a lot of content and applications, they will be happy to stay with this mobile operator and spend their money there.
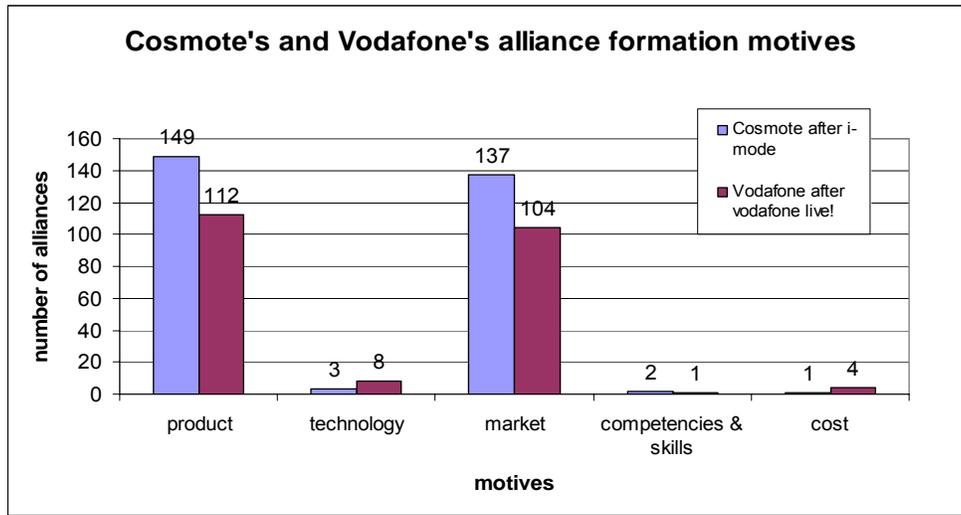
Cosmote's and Vodafone's alliance formation motives

Chart 9: Cosmote's and Vodafone's alliance formation motives.

The resources contributed by their partners are mainly content and market enhancement (Chart 10). These collaborations provide Vodafone and Cosmote with customized wireless content: news, sport, entertainment and other services via multimedia applications for mobile phone users. The provision of such services via mobile phone is a totally new market opportunity which is expected to become highly valued in the next years.
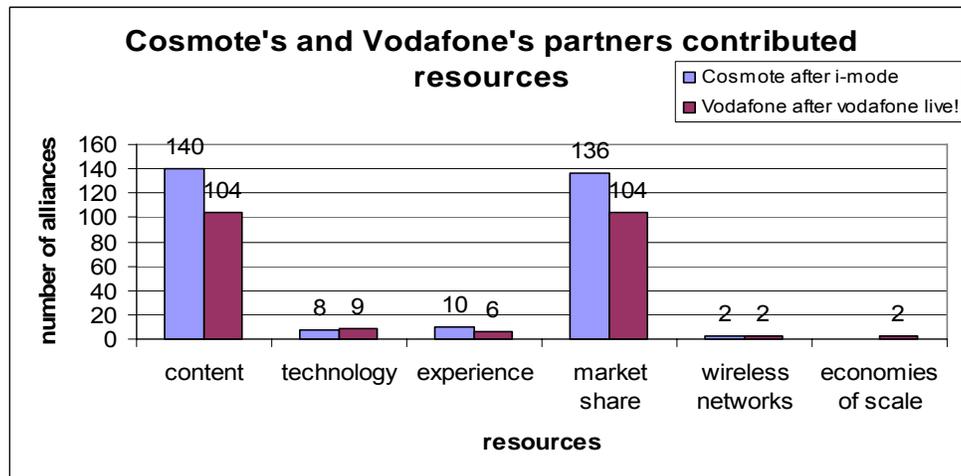
Cosmote's and Vodafone's partners contributed resources

Chart 10: Cosmote's and Vodafone's partners contributed resources.

 The majority of their alliances are customer supplier relationships, which have a lower level of interdependence and are close to the market. The industrial scopes of the majority of their partners do not belong to the telecommunications (Chart 11). Most of the partners are content aggregators and media companies. Both Vodafone Hellas and Cosmote try to enhance their market share and exploit the convergence of Internet, mobile telephony and personal computing. In order to achieve this, they seek to leverage their existing capabilities by collaborating with complementary partners. As long as the profits from transporting voice are falling, both companies try to increase their customer traffic by offering to their subscribers a variety of value added services. They stretch their market boundaries and turn to collaborations with new emergent market segments related to future growth.
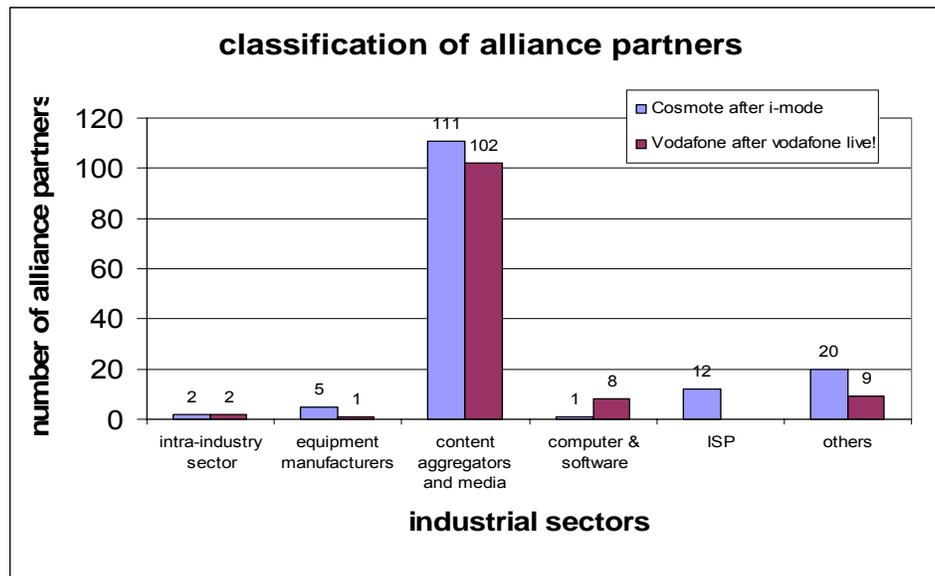
Chart 11: Classification of Vodafone's and Cosmote's alliance partners.

CONCLUSIONS AND FUTURE RESEARCH

Only a few years ago strategic alliances in the telecommunications sector were considered to be an option reserved only for corporate giants. Today, however, for many companies, a go-it-alone strategy no longer seems to be a viable solution. Intensified foreign competition, rapid product obsolescence, globalization, soaring capital investment costs, and the ever-growing demand for new technologies make alliances a really attractive strategy for the future. Companies can select, build, and deploy the critical capabilities that will enable them to gain competitive advantage, enhance customer value, and drive markets (Harbison, 1998). Their goal is to focus on the capabilities that they can use to renew their positions constantly. Furthermore, there is a strong need for each mobile company of joining an international alliance or belonging directly to an international big company in order to gain access to their valuable and constantly renewable resources, achieving simultaneously great economies of scale.

The technology evolution (from 2G to 2.5G or to 3G) as well as the convergence of mobile telephony with computing and Internet drastically increased the number of alliances. Mobile telephony is transformed into a domain of provision of integrated mobile communication services and multimedia applications. No single company in the mobile telecommunications industry is capable of accomplishing the service reorientation on its own. In order to survive, it pools resources with other players and creates the combination of strengths and abilities desired by the customer base. Most alliance partners of a mobile company belong to different and complementary industrial sectors. Content providers, media, software companies, wireless-service providers, and equipment and device manufacturers have to work together with the mobile operators in order to create a seamless and complete wireless data service.

Mobile telephony is changing from an industry that was all about voice to one that is mostly about data. The value of a mobile operator is not just on its network and infrastructure but also on the content and applications that it provides (Peppard & Rylander, 2006). Taking into account the consumers' and enterprises' needs for wireless Internet services and to keep growing, wireless communications companies have to turn to data services, counting on consumers' and enterprises' hunger for wireless Internet services (Lu, et al., 2005; Jain, 2005). As there is a strong belief that in the next years all the growth in telecommunications will come from data traffic, most business to consumer Internet services would finally be sold over mobile phones. Co-promotion alliances with companies in different industries cab benefit all partners (Son, et al., 2006). Customers want a wide variety of content and applications (Peppard & Rylander, 2006; Haas, 2007). Diversity of content and applications, low prices for customers and attractive revenue shares with allies are important issues for successful mobile operators. In fact,

content providers may earn a large share of the charges collected by the mobile operators. For example, DoCoMo kept about 10%, Vodafone Europe kept about 50% of the profits (Weber & Winger, 2006; Peppard & Rylander, 2006; Haas, 2007). So, mobile operators in order to ensure further profiting, they become really active alliance players and form relationships which help them to improve or develop new capabilities, extend their boundaries and ensure control over critical resources. Currently, the mobile operators control the content provisioning market. In the future, it is possible that all players (mobile carriers, device manufacturers, content integrators, content providers and users) will actively participate and exchange roles in negotiating their resources and abilities (Ziv, 2005).

Future research would repeat this study in other countries. Furthermore, a cross-country comparison would identify whether the corresponding mobile operators follow the same strategy in forming alliances. The successes and failures of such alliances would be also investigated. Furthermore, future research would try to answer the following questions: What is the best alliances' structure and control? Is there an optimum number of partners in an alliance? Is there an optimum lifetime of an alliance? What are the success factors for effective alliances? What types of partners are the most attractive? What types of partners are essential for growth? What types of partners are the most promising for profit? What will be the killer applications? For what applications there are not cultural differences?

Future research would investigate the various sub-categories of the content aggregators and media companies in order to discover which specific types of companies are the most appealing candidates to form alliances. For example, it is possible that companies offering location-based, presence-based, entertainment and tourism applications would be attractive candidates. Furthermore, raw data would be collected from consumers about their preferences regarding the applications of i-mode and Vodafone Live!. So, these data would indicate the direction to look for alliances by the mobile operators.

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