



How does coopetition change according to industry evolution? The case of video games consoles sector

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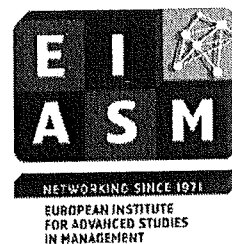
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3rd WORKSHOP
ON
CO-OPETITION STRATEGY:
STRETCHING THE BOUNDARIES OF COOPETITION

Madrid, Spain

February 7-8, 2008

Universidad Carlos III de Madrid – Campus of Getafe

Chairpersons :

Daniela Baglieri, University of Messina - Italy
Giovanni Battista Dagnino, University of Catania - Italy
Marco S. Giarratana, Universidad Carlos III de Madrid - Spain
Isabel Gutiérrez, Universidad Carlos III de Madrid - Spain

Invited Speakers :

Javier Gimeno, INSEAD, France
Micheal A. Hitt, Mays Business School at Texas University, U.S.A.
David Hsu, Wharton School, U.S.A.
Joan Enric Ricart, IESE, Spain

PARALLEL SESSION ONE 7 February Hrs. 11.30-13.00 – Aula 11.0.08 Market Evolution and Coopetition Strategy	PARALLEL SESSION TWO 7 February Hrs. 11.30-13.00 – Aula 11.0.09 Knowledge Management and Coopetition Strategy
<p><i>Chair:</i> Mike Hitt, Texas A&M University</p> <p>Paper 1 Coopetition: a Sustainable or Transitory Strategy? Estelle Pellegrin-Boucher, University of Montpellier I Frédéric Le Roy, University of Montpellier I</p> <p>Paper 2 How Does Coopetition Change According to Industry Evolution? The Case of Video Games Consoles Sector Nabyla Daidj, Institut National des Telecommunications</p> <p>Paper 3 Coopetition as a Market Requirement : When Standardization Is Required in the Electronic Office Documents Format Anne Mione, University of Montpellier I Hervé Chappert, University of Montpellier I</p> <p>Paper 4 The Effects of Strategic Alliances between Key Competitors on Firm Performance Paavo Ritala, Lappeenranta University Jukka Hallikas, Lappeenranta University Heli Sissonen, Lappeenranta University</p> <p><i>Discussant:</i> Paavo Ritala, Lappeenranta University of Technology</p>	<p><i>Chair:</i> Joan Enric Ricart, IESE Business School</p> <p>Paper 1 Coopetition as a Superior Way of Knowledge Integration Montserrat Boronat-Navarro, Jaume I University César Camisón-Zornoza, Jaume I University Ana Villar-López, Jaume I University</p> <p>Paper 2 The Lifecycle of Alliancing Capability in a Cooperative Environment Sören Kupke, University of Potsdam Christoph Lattemann, University of Potsdam</p> <p>Paper 3 Coopetition Capabilities In Action: The Cases of Wintel and Mactel Giovanni Battista Dagnino, University of Catania Marco Galvagno, University of Catania Maria Di Guardo Chiara, University of Cagliari</p> <p>Paper 4 Coopetitive Dynamic Capabilities: The Msi Case in the Mechanical Industry Laurence Lehmann-Ortega, GSCM Montpellier Saïd Yami, University of Montpellier I Gerald Naro, University of Montpellier I</p> <p><i>Discussant:</i> Elena Bonel, University of Trento</p>

Paper Submission

Theme “Market evolution and Coopetition”

“How does coopetition change according to industry evolution? The case of video games consoles sector”

Abstract

To advance research on coopetition strategies, we choose to explore a specific industry, among a wide range of business activities, characterised by the development of cooperative strategies. The objective of this paper is to show how cooperation and competition interact to the evolution of this video games (consoles) growing market. In order to maintain their dominance, on the one hand, Sony and Microsoft struggle to win and on the other hand, have signed different partnerships with the same players. Several examples show the evolution of competition between the two rivals Sony and Microsoft. It is a descriptive and empirical approach as regards the two main firms' roles and objectives.

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Introduction

The video game market has been globalized and has become extremely competitive. Since 1973, the effective date of launch of the first console by Atari (USA), the console market has gone through several phases, alternating between monopoly, duopoly and oligopoly: 1973-1983: monopoly of Atari ; 1983-1986: monopoly of Nintendo ; 1986-1994: duopoly of Sega-Nintendo. From 1995: oligopoly with the arrival of Sony (PlayStation), Nintendo (N64, released 1996) and Sega (Saturn). From 1998, new consoles are released: Sega launches the Dreamcast (1998), Sony the PS2 (2000) and Nintendo the Game Boy Advance (2001).

The video-games industry is currently booming because it has its own cycle, as one generation of hardware succeeds another every few years. The competitors (Microsoft, Sony and to a lesser extent Nintendo), makers of video-games consoles do battles in orderly rounds, one of which occurs every five or six years. The last round started in 2000 when Sony launched Playstation 2 (the PS2 is the most successful among the last generation of games consoles with sales of over 100m units and a market share of around 70%). 2001 is a turning point in the evolution of market structures. On the one hand, Sega retired from the home console market in 2001 (the Dreamcast did not meet the intended success), and on the other hand, Microsoft arrived on the market with the Xbox. In the meantime, Nintendo launched the Gamecube. After a difficult start, Microsoft has now established itself as Sony's main rival. The current generation is represented by three main home consoles: the Xbox 360 (since 2005), the PS3 and the Wii. The Xbox 360 video-games console launch begins a new phase in the battle to remove Sony's Playstation from the leader position. Nintendo is fighting for a third place.

Our contribution consists of an inductive study. The objective of this paper is to show the evolution how cooperation and competition interact to the evolution of this growing market. In order to maintain their dominance, on the one hand, Sony and Microsoft struggle to win and on the other hand, have signed different partnerships with the same players. This exploratory analysis is made of cooperative relationships in the video game industries to develop certain propositions about cooperation. Many authors discuss the importance of cooperation in business by using a specific theoretical frame: it is the case for example of game theory by Nalebuff and Brandenburger¹ (1996). In this paper, we suggest that the cooperation strategy should be subject to understanding of its origins and sustainability thanks to the two fundamental perspectives of strategic management: the internal and the external approaches.

1. The global industrial and technological competitive environment

1.1. Market trend: a growing share of the entertainment industry

1.1.1. Market segmentation

The global market can be divided into several different segments based on the fundamental differentiation between:

- hardware video games use several platforms. Home consoles appeared during the late 1970s in the United States. They are subject to regular technical overhauls at each new cycle and new consoles (which now integrate hard disks, DVD players, high-speed Internet connections etc.) are technologically comparable to personal computers. Handheld consoles, created by Nintendo during the late 1980s, address a rather younger age group. Personal computers are versatile machines which are not just dedicated to gaming. They are nonetheless a serious competitor for consoles on account of their performance and their level of integration in households. Arcade machines, present in video arcades (and in bars) have existed since the 1970s. This list is regularly updated, notably with the appearance of games on mobile platforms (Smartphones/PDAs) since 2003.

- software : Until Sony's PlayStation in 1995, console games were physically different from personal computer games in that they were physically cartridges, whereas PC games came on floppy disks, then on CD-Roms (and later DVDs). Some games are only available on cartridges (Pokemon for GameBoy or for Nintendo 64). Also, one of the characteristics of recent games is that they are more and more often released on several platforms, which greatly increases player interest. Numerous game classifications (game types) exist. The diversity of games available has grown considerably. Games themselves have evolved much, demanding ever more realism, audacity and thus driving changes in platforms.

¹ As a major contribution was made by Brandenburger and Nalebuff (1996) to explain "cooperation", we will focus on it in the literature review (see part 3).

1.1.2. Evolution of the different segments of the videogame industry

The worldwide video game market has witnessed regular growth since the end of the 1990s. The worldwide video game market (all segments together) was worth over 34 billion euros in 2006. After several years of two-digit growth rates, it decreased by 6% to attain 23.9 billion euros in 2004 (end of the cycle). The market again grows in 2005 and 2006 with the arrival of the new consoles (Table 1). Estimations are still very optimistic for 2008 (Table 2).

Table 1- Geographical breakdown of XBox 360, PS3 and Wii consoles worldwide sales*

	America			Europe			Asia		
	Launch Date	2006 sales	Global sales by the end of August 2007**	Launch Date	2006 sales	Global sales by the end of August 2007**	Launch Date	2006 sales	Global sales by the end of August 2007**
Xbox 360 Microsoft	November 2005	3.6 millions	10.13 millions	December 2005	1.7 million	5.03 millions	December 2005	700 000	-
PS3 Sony	November 2006	687 300	3.36 millions	March 2007	-	3.41 millions	November 2006	467 000 (Japan)	1.64 million (Japan)
Wii Nintendo	November 2006	1.2 million	8.18 millions	December 2006	1 million	5.84 millions	December 2006	990 000	4.50 millions

* Figures can vary dramatically from one analyst to another one.

** Source: <http://www.vgchartz.com>

Table 2- Evolution of the video game market 2003 – 2007

Estimations in millions of euros	2003 (e)	2004 (e)	2005 (e)	2006 (e)	2007 (e)	2008 (e)
Home console market (hardware)	7 453,3	5 096,7	2 773,3	8 281,7	12 673,3	13 426,7
Home console market (software)	10 300,0	9 805,0	9 175,0	11 475,0	13 780,0	15 150,0
Handheld console market (HW)	1 521,2	1 596,5	3 803,1	4 674,8	4 795,6	3 939,0
Handheld console market (SW)	2 741,0	3 611,2	5 087,9	5 725,0	5 868,6	5 501,5
PC software market	3 525,0	3 849,0	3 953,0	3 930,5	3 657,0	3 493,5
Total	25 540,5	23 958,4	27 792,3	34 087,0	40 774,5	41 510,7

Source: IDATE, "Video games in the Digital World: Terminals, Markets, Practices",

Market Report IDATE, 2003 ; Idate News n° 311, 11 June 2004 ; afjv.com, October 13, 2006.

The home console market is today a mass market and video games are today considered a pillar of the entertainment industry, along with films and music. Since 2002, states IDATE, the turnover of the video game market has surpassed that of film ticket sales, which confirms its progressive and effective industry into the entertainment market.

Table 3- Geographical distribution of the video game market 2003 - 2006

Est. million euros	2003 (e)	2004 (e)	2005 (e)	2006 (e)
Europe	9 068.4	8 482.0	8 736.2	11 844.5
Japan	4 416.7	4 157.2	4 978.7	7 513.5
United States	12 055.4	11 319.2	11 077.5	14 729.0

Source: IDATE, 2004.

The USA is currently the most important market in value, more so than Europe and Japan. However, table 3 shows that its growth progression by end 2006 will be relatively weaker than that of other regions: around 18.2% behind 23.4% in Europe and 41.2% in Japan.

1.2. Evolution of the production chain and of the value chain

The video game industry is somewhere between the computer (software, components, peripherals...) and the audiovisual (contents, copyright...) sectors. Relations between the different players evolve rapidly, and so does negotiating power. The video game sector is made up of 3 types of players:

- *development studios* create games. They are often small companies which design a game and make a master, which is sold to the publisher. Creating (or developing) games was, until the mid-1990s, mostly the work of teams which were part of publishing companies. Today, development studios are autonomous and other problems – linked to the nature of their subcontracting mission – have appeared.

- *Publishers/producers* handle the financing, manufacturing and marketing of the games. Publishers are often large structures which sometimes have subsidiaries in several countries. Publishers dominate development studios. But publishers do not have access to the multitude of distribution modes that exists in other sectors, which can make them vulnerable. Market evolution, which is based on technical progress, makes publishers fragile because they cannot count on the accumulation of games into a large pool nor on the build-up of a deep catalogue in order to recoup their investment, which is threatened with every new generation of consoles. Since the cost of manufacturing games is ever higher, publishers looking to minimize costs choose to release multiplatform games more and more often, and bet on a limited number of big-budget titles.

- *Console manufacturers* exploit video games by carrying out console manufacturing, marketing and distribution. Three large console makers, Sony (Japan), Nintendo (Japan) and Microsoft (USA), compete in this segment. The number of consoles sold is the essential factor for the long-term dynamic of the video game market (Table 2).

Alongside these « big » players of the video game market, we must also consider: upstream, companies that manufacture electronic components which are needed to build and operate games and consoles and downstream, companies that manufacture various accessories (joysticks, memory cards, cables etc.), retailers (dedicated and large-scale) and specialized media

1.3 A rapidly mutating sector: recent developments

1.3.1 The development of games on mobile platforms

Until recently, the main « mobile platform » was the actual handheld console. The characteristic of this extremely lucrative market is the almost monopolistic position of Nintendo with the GameBoy. This situation stands to evolve in 2005 with the arrival on the market of Sony's PSP (PlayStation portable) and Nintendo's release of the DS (Dual Screen) in February 2005. Although the development of new handheld consoles seems like a natural course, it is the emergence of mobile phones (or sometimes PDAs) integrating small game consoles which is truly new. In this category, two new players have appeared on the market: Nokia on the one hand and Sony Ericsson on the other.

1.3.2 Online games

For many years, online games were restricted to PC gamers who confronted “adversaries” from all over the world through the Internet. Today, the aim is to introduce this functionality on home consoles. These online game services are underdeveloped for the moment but could represent a notable source of complementary revenue for console manufacturers who could charge subscription fees to gamers around the world. All console manufacturers are taking steps toward online gaming, be they market newcomers (Microsoft) or seniors (Nintendo, Sony). The manufacturers’ current offers aim to collect as much information as possible on gamers’ expectations in order to change their consumer habits in the medium term. The challenge lies in progressively attracting the more « solitary » console gamer towards online games. The other target, the online-gaming fanatic *hardcore gamers*, is easier to reach.

2. Sony and Microsoft strategies: the emergence of coopetition?

Sony and Microsoft are currently engaged in the biggest battle, technically as well as financially, the former to preserve its leadership position and the latter to try to dominate the market. The arrival of Microsoft on the market in 2001 did not until 2005 present any real threat to Sony: 2004 was however a turning point for Sony in this branch, which is under growing pressure from Microsoft.

2.1 Sony’s model: the leader in the video game sector since the end of the 1990s

The success of Sony’s entry onto this new market in the mid-1990s, pitting it against Sega and Nintendo, was far from guaranteed. Indeed, Sony at the time had several handicaps (a lack of brand awareness in this market, the inability to capitalise on training and experience, two competitors with a very firm foothold, Sega and Nintendo). Sony’s strategy resulted in Sega’s eviction from the market. It rests on three fundamental principles which also represent the waiver of three barriers to entry:

- *A financial powerhouse* Sony invested a colossal budget to develop consoles, which enabled it to diversify into video games. From the outset, Sony CEO Nobuyuki Idei declared “*The PlayStation has become a major pillar of our economic activity. The whole group is now behind it, ready to mobilize all its resources to ensure its success.*”
- *An obvious technological head start*
- *The establishment of true partnerships with developers.* Sony managed to rally the support (sometimes the favour) of independent publishers by developing true partnerships based on greater freedom granted to publishers. Fewer restrictions, a non-proprietary format, marketing support etc. all serve to further the relationship: instead of being simple subcontracted firms, publishers have become the console manufacturer’s partners, the latter’s role no longer being limited to giving strict orders. This policy promotes the release of numerous and varied games.

2.2 Microsoft: a follower strategy ?

Microsoft, enjoying a virtual monopoly on PC operating systems, decides to enter the video game market in 2001 with the Xbox with the ambition of breaking Japanese firms’ monopoly. With the Xbox, its objective is to create a new entry point in households. Videogames are the sort of product which is based on multiple-purpose hardware and which should grow to its full extent once broadband is widely available. Microsoft becomes a very aggressive challenger and considers the Xbox (and the Xbox 360) as a long-term strategic investment. Microsoft spelled out its ambition right from the start: overtake Sony. Its strategy rested then on several dimensions:

- *An active acquisition and alliance strategy at every stage of the gaming value chain*

The acquisition of developers. As Sony, which had managed to secure the collaboration of several well-known independent publishers in the 90s, Microsoft also launched an active acquisition (and partnership) with publishers, with mixed success. The acquisition of Rareware signals a marked change in Microsoft’s strategy. It has a symbolic significance, as Rareware has long been associated with Nintendo. The signing of an agreement in May 2004 with Electronic Arts, which has worked in exclusive partnership with Sony for many years, is also a sign of Microsoft’s closing of the gap and its will to weaken Sony.

Hardware: highly focused partnerships. The Xbox incorporates the best PC components: Pentium 733 Mhz processor, video-card Nvidia, 64 Mb RAM and sound card (accepting all sound formats). Microsoft has thus developed relations with the leaders in their respective domains: Intel, Nvidia, IBM.

An aggressive marketing and communication policy

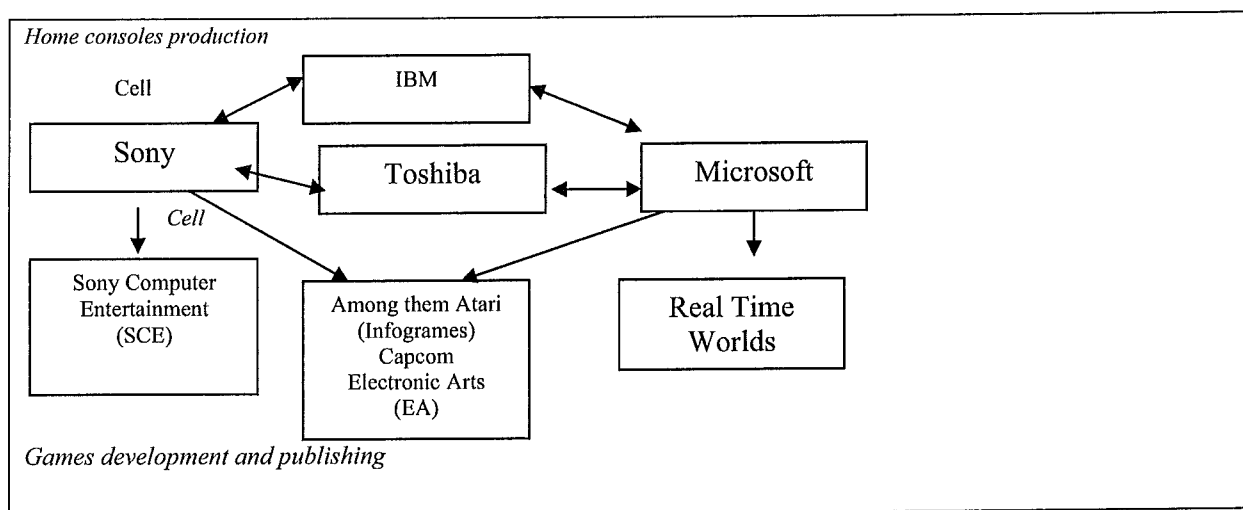
Microsoft had several handicaps upon entering the videogame market, notably a very negative image related to its monopolistic position in operating systems (Windows). In most countries, Microsoft experiences numerous successes thanks notably to an aggressive marketing strategy based on price cuts and multiple promotional packages. The budget devoted to worldwide communication reached the fabulous sum of \$500 million, one third of which on marketing investment in Europe. From its entry on this new market, Microsoft has been trying to broaden the traditionally very young public. However, Microsoft's weakest penetration is in Asia and particularly in Japan, a country where Microsoft runs into all kinds of difficulties.

2.3. The emergence of coopetition?

The video games market is very competitive as mentioned before. But several examples show the evolution of competition between the two rivals Sony and Microsoft who are developed partnerships with the same firm(s):

- it is the case of numerous game developers who work for both of them (Infogrames, EA) ;
- in the third (and current) generation of consoles (2005-2007), only Big Blue (IBM) - with Toshiba - provides new processing chips (Cell chip) for Sony, Microsoft and Nintendo's consoles (Graph 1). Intel, whose processors had powered the Xbox, is no longer in this market ;
- Sony tries also to impose a new technology standard for the next generation of DVDs (included in PS3): the Blue-ray optical drive. Sony is currently locked in a battle with Toshiba, which, despite helping to develop the Cell chip, is pushing an alternative DVD standard.

Graph 1. *Relations between main players*



3. Related Literature

Several authors have explained that the players do not always compete exclusively and may adopt cooperation to create value jointly rather than competing to divide the market. This section reviews briefly the related literature (especially game theory issues). As the notion of competitive strategy requires a knowledge of both the firm's internal strengths and weaknesses and the industry structure, we suggest that the genesis of coopetition is entrenched in a synthesis between them.

3.1. Game theory, value creation and coopetition

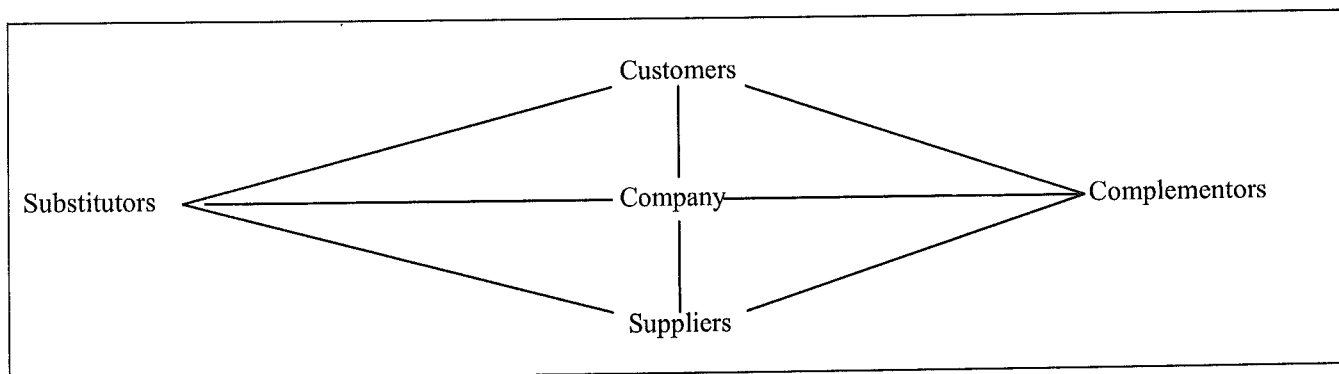
Three main steps characterise strategy research on interdependences across firms:

- this topic has been traditionally based on the competitive vision in the 1980s (Barney 1986; Porter 1980; Vickers, 1995) following the structure-conduct-performance (SCP) paradigm, the Porter model gives a clear understanding of the industry structure in a context where relationships between competitors often are conflicting. In this framework, firms develop competitive advantages that cannot be reached but at the expense of the competitive advantage of the other firms;
- more recently, the fact that firms can establish cooperative relationships (strategic alliances, partnerships, networks) has been widely recognised. This “alternative cooperative paradigm” (Padula, Dagnino, 2007) has led to a very large number of papers from both economics and strategic management fields (based on transaction cost economics, agency theory, resource-based view framework, theories of organizational knowledge and learning, evolutionary economics, game theory). They analyse the motivations of alliances, the different forms and structures of cooperative agreements in the continuum of organizational forms, their evolution in stable and dynamic contexts and the determinants of their success/failure. The advantages pointed out generally in the literature are the following: risks sharing, costs reduction (scale economies), “resource and competencies” complementary (better access to distinctive assets, competencies, new markets and /or geographic areas). Our objective in this paper is not to focus our analysis on these aspects, which are relatively well known and have been extensively considered in academic literature;
- finally, the term of “competition”, defined as “a situation where competitors simultaneously cooperate and compete with each other” (Bengtsson, Kock, 2003), has emerged. The literature on *competition*², which emerged in the 1990s is vast and continues to grow. Several authors have developed new insights into how cooperative and competitive strategies interact to produce results³ (Dowling *et al.* 1996; Gnyawali, Madhavan, 2001; Gulati, 1998, 2000; Hakansson, Ford, 2002; Lado *et al.* 1997). This list of authors is not intended to be comprehensive. Rather than presenting all these studies, we propose to describe briefly the seminal work of Brandenburger and Nalebuff (1995, 1996). They introduce the concept of complementors and propose to add these players in a new model as shown in the following figure. They insist on the necessity to create and to capture value. The value map represents the interdependencies between all the players (Figure 1). The vertical dimension designs the company’s suppliers and customers (two of the five forces identified by Porter) and “along the horizontal dimension are the players with whom the company interacts but does not transact. They are its substitutors and complementors. Substitutors are alternative players from whom customers may purchase products or to whom suppliers may sell their resources (...). Complementors are players from whom customers buy complementary products or to whom suppliers sell complementary resources (...). The Value net describes the various roles of the players. It’s possible for the same player to occupy more than one role simultaneously” (Brandenburger, Nalebuff, 1995, p. 60). Firms may identify those parties that are possible complementors rather than just competitors. In the value net model, firms can be considered, in some situations, as both competitors and cooperative partners, describing a coopetition context.

Figure 1- Who are the players in your Company’s value net?

² According to Walley (2007), the origin of the term “coopetition” is not very clear. Albert (1999) claims the “discovery” of this concept in 1991, but Dowling *et al.* (1996), Bagshaw and Bagshaw (2001), and Dagnino and Padula (2002) argue that Ray Noorda, founder and CEO of the networking software company Novell, used the term for the first time in the 1980s.

³ It is interesting to mention that coopetition has mainly been studied until recently under the form of strategic alliances, cooperation agreements, joint ventures, and contractual agreements.



Source: Brandenburger, Nalebuff, 1995, p. 60.

Borrowings from game theory by management authors are recent (Daidj, Hammoudi, 2007). The primary insight of game theory for business strategies⁴ (and managers) has been summarized by Brandenburger and Nalebuff (1996). In fact, we can consider that co-opetition has its theoretical foundations in game theory. As game theory studies strategic decision-making in situations involving interdependence of players (and outcomes), it can be used to explain cooperative and non cooperative players' behaviours. In game-theoretic models, each firm's action depends on what it believes its rivals will do. Brandenburger and Nalebuff (1996) have adopted a strategy view by using game theoretic modelling (cooperative games) to analyse:

- the value created by vertical chains of suppliers, firms and buyers,
- the added-value of a specific player "defined as the value created by all the players in the vertical chain minus the value created by all the players except the one in question" (Brandenburger, Stuart, 1996, p.6)
- more generally, the creation of asymmetries between the firms. "Along the vertical dimension of the Value Net, there is a mixture of cooperation and competition (...). Along the horizontal dimension, however, managers tend to see only half the picture. Substitutors are seen only as enemies. Complementors, if viewed at all, are seen only as friends. Such a perspective overlooks another symmetry. There can be a cooperative element to interactions with substitutors" (Brandenburger, Nalebuff, 1995, pp. 60-61). Hardware and software companies are classic complementors: faster hardware increases user's willingness to pay for more powerful software. It is the same case with video consoles and games. As already mentioned, consider the case of Sony, which may in some business situations be a competitor to Toshiba (in the sale of electronic products such as DVDs). In other situations, it may be a customer of Toshiba, sourcing key components for a particular product and a partner (cell ships). We can see how Sony and Toshiba benefit from each other.

3.2. Drivers of coopetition: a synthesis of two approaches

To simplify in the field of business strategy, two complementary approaches enable an explanation of a company sustainable competitive advantage, or alternatively its difficulties and its positioning problems in markets characterised generally by a highest degree of competition (known as rivalry) between firms since the 1990s and dynamic and "turbulent" moves⁵: the external perspective and the internal perspective. In this paper, we develop the idea that these two dimensions may explain the emergence and the development of coopetition.

- an initial "external" analysis of the environment calling on the use of various models including that of PESTEL which is a tool for assessing the political, economic, sociocultural, technological, environmental and legal contexts in which a firm operates. In his "5 forces model", Porter focuses on external forces and the changing nature of competition within the industry to which the firm belongs. The framework is based on five forces that determine the

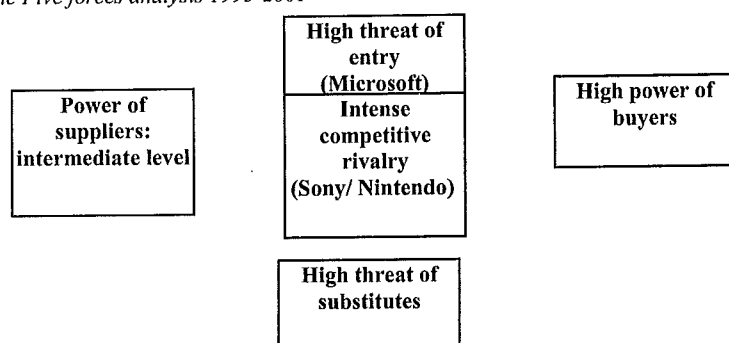
⁴ Game theory is based on several assumptions (a degree of rationality much greater than in other economic models (as mentioned by Saloner, 1991, p. 120), the level and the quality of information sharing (or not) by the players) that raise questions about the usefulness of this tool for managers in real-life situations.

⁵ D'Aveni (1994) has introduced a new concept to characterise the current dynamic market conditions (short product life cycles, new technologies, new entrants, redefinitions of market boundaries) that alter firms strategy and their behaviour in the future: *hypercompetition*.

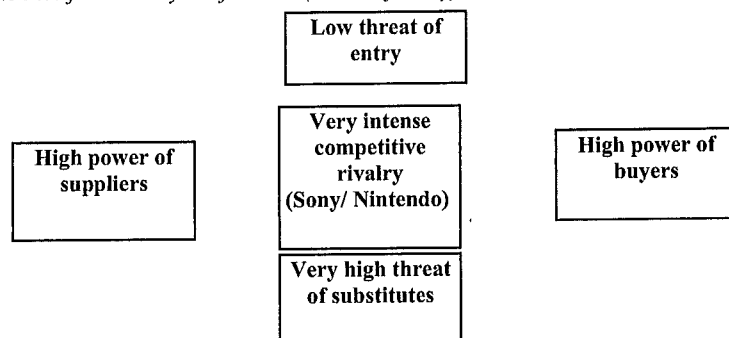
basic structure of an industry (the bargaining power of suppliers, the bargaining power of buyers, the threat of new entrants, threat of possible substitute products, the degree of rivalry among existing competitors). The “horizontal axis” that includes the supplier power and the buyer power (end consumers and channels) represents the industry value chain, another key concept developed by Porter. As he explains, firms can compete in an industry in several ways making a choice among possible “generic” strategies: price wars (low cost advantage) and non-price-based forms of competition (differentiation advantage) depending in particular on the industry structure, the phase of industry life cycle (embryonic, growth, mature and decline), the number of competitors, the disruptive changes created by revolutionary technologies (such as communication and information processing technologies), the level of average industry profitability. This type of analysis evaluates the general attractiveness of an industry from a general perspective and not from that of any particular firm. These “external” models stress the fact that the company must adapt to its environment and find attractive and profitable sectors. In fact, the Porter analysis, that became the dominant strategy approach in the 1980s, belongs to the “positioning school”, identified by Mintzberg and Lampel⁶ (1999) and Mintzberg (1998).

The Five forces is a very useful framework to identify the sources of competition in the video game industry as shown in the two following exhibits. Competition can be driven by opportunities afforded by a changing environment.

The Five forces analysis 1995-2001



The Five forces analysis after 2001 (Microsoft entry)



- a second analysis, based on "resources and competencies" insists conversely on the ability of a company to use and transform its external environment and to change the rules of the game or the game it chooses to play. It has been the case of Sony when it entered the market.

⁶ Mintzberg and Lampel (1998) identify nine *schools of thought* that can be divided into two main types:

- *prescriptive* (in which the challenge for firms is to react or adjust to the external environment): design school, planning school, positioning school ;
- *descriptive* with the following schools: entrepreneurial school, cognitive school, learning school, cultural school, political school, environmental school.

Hamel and Prahalad (1993, 1994) propose the complement Porter's focus on external analysis, identify internal factors affecting the firm's competitiveness with an emphasis on dynamic capabilities and competencies⁷. The most competitive company is the one which possesses the most advantageous resources and the competencies necessary for the implementation and combination of these resources (Barney 1991; Peteraf 1993; Wernelfelt 1984). The resource-based view has become an influential approach for analysing corporate strategy. It is based on the idea that the organisation can be studied as a set of resources, which may differ depending on the company. In this approach, the aim is not to focus on the external environment of the company but instead to thoroughly analyse the company's resources. The resources are of various kinds: physical (machines, manufacturing facilities), human (qualifications, degree of adaptability of employees), and financial (the various sources of liquid assets). They may also be intangible and may be based on goodwill (existence of intangible assets such as a patent, brand or knowhow). Intangible assets are particularly important in that they are hard to access and imitate. They often constitute strategic resources, i.e. unique resources from which the company's competitive advantage stems. The analysis of the strategic capacity of a company depends on three main factors. The concept of resources is thus often associated with the concept of organisational competencies, i.e. the routines, know-how and processes that are specific to the company and to its collective learning process. They must be difficult to imitate in order to create a sustainable advantage. They form part of the "core competencies" (Prahalad and Hamel, 1990). These competencies and distinctive capabilities provide a competitive advantage. The third element is balance between the resources, which involves referring to the concept of Strategic Business Units (SBU) in order to reach the most comprehensive vision of the company's strategy, enabling a definitive judgement to be made about the balance (or imbalance) of the business portfolio.

Sony's strategy resulted in Sega's eviction from the market in the 1990s. This successful Sony strategy has been dependent on the organisation having the internal strategic capability by deploying:

- threshold resources (financial and technological) and competences (communication, marketing and distribution policy, better access to distribution channels)
- unique resources (technological leadership with a new console) and core competences (establishment of partnerships with developers).

This strategy has allowed the company to achieve an international reputation, facilitating alliances with third party publishers and cooperative relationships with other players (such as Toshiba) as Sony does not own specific competences in the field of microprocesseurs.

Conclusion

As complex relationships between firms are an increasingly prevalent and important trend in business practice, many works place an emphasis on *coopetition* and the ability of the organization to compete and to cooperate simultaneously with other firms. In this article, we developed the idea that we have to take into account the multidimensional aspect of competition thanks to the external and internal perspectives. This constitutes a first phase of a larger research project focusing on competition and cooperation between horizontal actors. Although there are several possibilities for further research, we'll focus on the following issue: does coopetition respond more to a short sighted strategy to create value in the short term than to a willingness to seek long-term growth.

⁷ Hamel and Prahalad (1989) deepen this analysis and define the concept of *strategic intent*, in which the organization must develop a long term strategy thanks to its core competencies to achieve a leadership position by defining emerging market opportunities, identifying markets in which its capabilities provide a sustainable competitive advantage or creating entry barriers (linked with a high level of innovation, capital investments, proprietary technologies or a strong brand). In this case, the firm becomes a key player and may alter its competitive environment.

References

- [ALB 99] ALBERT S., "E-commerce Revitalizes 'Co-opetition.'", *Computerworld* 33, 15, p.36, 1999.
- [BAG 01] BAGSHAW M., BAGSHAW C., "Co-opetition Applied to Training—A Case Study", *Industrial and Commercial Training* 33 (5), pp. 175–177, 2001.
- [BAR 86] BARNEY J.B., "Types of Competition and the Theory of Strategy: Toward an Integrative Framework", *Academy of Management Review*, 11 (4), pp. 791–800, 1986.
- [BAR 91] BARNEY J.B., "Firm Resources and Sustained Competitive Advantage," *Journal of Management*, 17, n°1, p.99-120, 1991.
- [BES 05] BESSON M., DAIDJ N., EPINETTE O., « La distribution électronique des jeux vidéo : perspectives pour les services numériques », *Revue française de Marketing*, juillet 2005, n°203, pp. 51-67.
- [BRA 95] BRANDENBURGER A.M., NALEBUFF B.J., The Right Game: Use Game theory to Shape Strategy", *Harvard Business Review*, July-August, pp. 57-71, 1995.
- [BRA 96] BRANDENBURGER A.M., NALEBUFF B.J., *Co-opetition*, Currency/Doubleday, New York, 1996.
- [BRA 97] BRANDENBURGER A.M., NALEBUFF B.J., "Co-opetition: Competitive and Cooperative Business Strategies for the Digital Economy", *Strategy & Leadership*, November-December, vol. 25, Issue 6, 1997.
- [BRA 96] Brandenburger A.M., Stuart H.W., "Value-Based Business Strategy", *Journal of Economics & Management Strategy*, vol. 5, n°1, Spring, pp. 5-24., 1996.
- [DAG 02] Dagnino, G.B., Padula G., "Coopetition Strategy: A New Kind of Inter-firm Dynamics for Value Creation." Paper presented at the Second European Academy of Management Annual Conference, Stockholm, May 9–11 2002.
- [DAG 07] DAGNINO, G.B., PADULA G., Untangling the Rise of Coopetition. The Intrusion of Competition in a Cooperative Game Structure, *Int. Studies of Mgt. & Org.*, vol. 37, no. 2, Summer 2007, pp. 32–52.
- [DAI 05] DAIDJ N., QUELIN B., « Le leadership de Sony dans le secteur des jeux vidéo », Cas pédagogique, n°G1381, Paris, Centrale de Cas et de Médias pédagogiques (CCMP), 2005.
- [DAI 07] DAIDJ N., « L'évolution des chaînes de valeur dans le secteur des jeux vidéo », in VIALLE P., (sous la dir.), *Mutation des STIC. Acteurs, ressources et activités*, Hermes, Paris, chapitre 6, p. 193-221, 2007.
- [DAI 07] DAIDJ N., HAMMOUDI A., *Le management stratégique par la théorie des jeux. Une introduction*, Hermès, Paris, 2007.
- [DAV 94] D'Aveni R.A., *Hypercompetition: Managing the Dynamics of Strategic Manoeuvring*, New York: The Free Press., 1994.
- [DIX 91] DIXIT A., NALEBUFF B., *Thinking Strategically. The Competitive Edge in Business, Politics and Everyday Life*, W.W. Norton, New York, 1991.
- [DOW 96] DOWLING, M.J., ROERING W.D, CARLLIN B.A., WISNIESKI J., "Multifaceted Relationships Under Coopetition—Description and Theory" *Journal of Management Inquiry* 5 (2), pp. 155–167.
- [GRA 04] GRANT R.M., BADEN-FULLER CH., "A Knowledge Accessing Theory of Strategic Alliances", *Journal of Management Studies*, vol. 41, pp. 61-84, 2004.
- [GNY 01] GNYAWALI D.R., MADHAVAN R., "Cooperative Networks and Competitive Dynamics: A Structural Embeddedness Perspective", *Academy of Management Review*, 26 (3), pp. 431–445, 2001.
- [GUL 98] GULATI R., "Alliances and Networks", *Strategic Management Journal*, 19 (4), pp. 293–317, 1998.
- [GUL 00] GULATI R., NOHRIA N., ZAHEER A., "Strategic Networks", *Strategic Management Journal* 21 (3), pp. 203–215, 2000.
- [HAM 89] HAMEL G., PRAHALAD C.K., .Strategic Intent, *Harvard Business Review*, 67, May-June, pp. 63-76, 1989.
- [HAM 93] HAMEL G., PRAHALAD C.K., Strategy as Stretch and Leverage. *Harvard Business Review*, 71, March-April, pp. 75-84, 1993.
- [HAM 94] HAMEL G., PRAHALAD C.K., *Competing for the Future*. Boston, MA: Harvard Business School Press, 1994.
- [HAK 02] HAKANSSON H., FORD D., "How Should Companies Interact in Business Networks?", *Journal of Business Research*, 55 (2), pp. 133–139.
- [IDA 03] Idate, Video Games in the Digital World: Terminals, Markets and Practices, Montpellier, 2003.
- [KAY 05] KAY J., Why Firms Succeed. Choosing Markets and Challenging Competitors to Add Value, Oxford University Press, Oxford, 1995.
- [LAD 97] Lado, A.A., Boyd N, Hanlon S.C., "Competition, Cooperation, and the Search for Economic Rents: A Syncretic Model." *Academy of Management Review*, 22, 1, pp. 110–141, 1997.
- [MIN 98] MINTZBERG G. H., AHLSTRAND B., LAMPEL J., *Strategy Safari: A Guided Tour Through the Wilds of Strategic Management*. New York, NY: The Free Press, 1998.
- [MIN 99] MINTZBERG G. H., LAMPEL J., "Reflecting on the Strategy Process", *Sloan Management Review*, (Spring), pp. 21-30, 1999.
- [PET 93] PETERAF M.A., "The Cornerstones of Competitive Advantage: A Resource- Based View", *Strategic Management Journal*, 14 (3), pp. 179–191, 1993.
- [POR 80] PORTER M.E., *Competitive strategy: Techniques for Analyzing Industries and Competitors*, New York, NY: Free Press., 1980.
- [POR 91] PORTER M.E., How Competitive Forces Shape Strategy. In *Strategy: Seeking and Securing Competitive Advantage*. C.A. Montgomery and M.E. Porter (eds.). Boston, MA: Harvard Business School Press, 1991.
- [POR 96] PORTER M.E., What is Strategy? *Harvard Business Review*, 74, November-December, pp. 61- 78, 1996.

- [SAL 91] SALONER G., "Modeling, Game Theory, and Strategic Management", *Strategic Management Journal*, vol. 12, p. 119-136 (Winter Special Issue).
- [VIC 85] VICKERS J., "Concepts of Competition", *Oxford Economic Papers*, 47 (1), pp. 1-23, 1985.
- [WAL 07] WALLEY K., Coopetition. An Introduction to the Subject and an Agenda for Research, *Int. Studies of Mgt. & Org.*, vol. 37, no. 2, Summer 2007, pp. 11-31, 2007.
- [WER 84] WERNERFELT B., "A Resource-Based View of the Firm", *Strategic Management Journal*, vol. 5, p. 171-80.

Useful Websites

Sony and Microsoft annual reports (www.sony.com et www.microsoft.com)

www.gamesindustry.biz (specialised website)

www.screendigest.com