Final article:

Lindgreen, A., Antioco, M.D.J., and Wetzels, M.G.M. (2004), "Bla-bla-bla: video chat service on the Internet—a market feasibility study", *Qualitative Market Research*, Vol. 7, No. 1, pp. 20-33. (ISSN 1352-2752)

For full article, please contact LindgreenA@cardiff.ac.uk

Adam Lindgreen, PhD[1]

Michael Antioco

Martin Wetzels, PhD

Eindhoven University of Technology

The Netherlands

[1] Address for all correspondence: Dr. Adam Lindgreen, Paviljoen J. 11, Department of Accounting, Finance, and Marketing, Faculty of Technology and Management, Eindhoven University of Technology, Den Dolech 2, P.O. Box 513, 5600 MB Eindhoven, the Netherlands. E-mail: a.lindgreen@tm.tue.nl. Telephone: + 31 – (0) 40 247 3700. Fax: + 31 – (0) 40 246 5949.

Bla-Bla-Bla:

Video Chat Service On the Internet, A Market Feasibility Study

Abstract

The Internet is changing the way that companies carry out their business and, in fact, constitutes an entire new application domain, which makes product innovation possible. Moreover, it is a new medium for reaching consumers, which is a central preoccupation to organisations in the current business market. Our interest lies in video chatting on the Internet. This is a type of service that adds video support to chatting using a web cam and which is gradually attracting more Internet users. The paper consists of a market feasibility study evaluating the potential commercialisation of a software programme that enables the 'cutting away' of the chatters from the original background filmed by the web cam, and later re-integrates them into a new background. The software programme could, therefore, be interesting for advertising companies.

Keywords: Video chat, Internet, Web cam, Market study, Belgium.

Bla-Bla-Bla:

Video Chat Service On The Internet, A Market Feasibility Study

Introduction

The Internet is changing the way that companies carry out their business and, in fact, constitutes an entire new application domain, which makes product innovation possible. Moreover, it is a new medium for reaching consumers, which is a central preoccupation to organisations in today's business market. Two techniques currently allow the diffusion of videos on the Internet. Web casting consists of an audio/video diffusion to a large number of non-specific users at the same time via the Internet [1], while video conference refers to the discussion between users in different locations that are linked together by a telecommunication network using image diffusion. Our interest lies in video chatting on the Internet. This is a type of service that adds video support to chatting using a web cam and which is gradually attracting more Internet users. The paper consists of a market study evaluating the potential commercialisation of a software program that enables the 'cutting away' of the chatters from the original background filmed by the web cam, and later re-integrates them into a new background. The software program could, therefore, be interesting for advertising companies.

The paper is organised in the following manner. The analysis of the web cam market examines the market structure and its evolution, and highlights the opportunities and challenges for a video chat service to be successful. Following that, the video chat market itself is considered. In order to evaluate the pertinence of inserting advertising in the new background – which is of financial importance for a start-up company – an in-depth approach to advertising on the Internet is carried out. After a macro- and micro-segmentation of the potential clients, the different commercialisation modes of the service are considered. Finally, we answer the question of whether or not it is interesting to develop and commercialise the new cutting technique. For clarity, the methodology will be described throughout the paper, following the different stages of the research.

Discussion Of Findings

The Web Cam Market

The approach to the web cam market follows a three-step analysis: an estimate of web cam sales is made followed by a market structure analysis based upon Porter's (1980) five forces analysis, and, lastly, an evaluation of the market evolution is carried out. These findings will enable us to evaluate the potential development of our service, which is dependent on the web cam market. Indeed, the web cams are a key object for the development of video chatting, as it allows for video chatting to take place on the Internet. This justifies our interest in the market structure and the future evolution. In order to evaluate the current market size, as well as past and future sales, three sources are chosen: web cam manufacturers, market studies and public enquiries.

<u>Market Sales</u>

The five largest web cam manufacturers (Logitech, Intel, Ezonics, Creative Labs and Xirlink) were contacted all of whom were chosen on the basis of specialised magazines [2], computer hardware retailers [3] and a market study [4]. Unfortunately, these manufacturers could not assist us with relevant information. Subsequently, three major companies - Emarketer, Médiamétrie and StatsMarket, which cover major issues on e-commerce and online marketing - were contacted, but since they demanded to be paid for participating in an interview we decided to rely on public enquiries carried out by five well-known research groups: the Gartner group [5], Distributique [6], PC Data [7], International Data Company [8] and InfoTrends Research Group [9].

Based on the above-mentioned public enquiries, sales of 500,000 units have been estimated for the time period before 1998, implying a 100 per cent increase between 1997 and 1998, which appears to be a reasonable estimation for an expanding market. Annual sales were estimated at 2.2 million units in 1998, and 8.25 million units have been allocated each year between 2001 and 2004. The figures ranging between 2001 and 2004 are based on the 44 million units estimated for 2004 [10]; sales have been equally spread on these four years as an indicator of future growth.

{Take In Table I About Here}

Market Structure

Porter's (1980) five forces analysis was then carried out in order to assess the web cam market structure, as well as the influence on the future commercialisation of the service. The market structure consists of direct competitors, suppliers, clients, potential entrants and substitutes. Strong competition between manufacturers; many substitutes (e.g., video cameras and digital cameras); low entry barriers due to the fact that the technology is easily mastered; and highly aware clients – especially because of high information accessibility – have been observed. These findings all positively relate to the service offering, as they increase (1) pressure on the web cam manufacturers and (2) the potential market size, as well as facilitate market entry.

Future Evolution Of Market

The major drivers and restricting forces influencing the future market for web cam sales were then identified. Four major restrictors have been identified: the price of web cams, the quality of web cams, the band wave and the price of telecommunication. Although web cam prices have dropped from US$161 to US$96 in November 1999 [11] their current price is still relatively high at around US$80 for a good quality one. In regards to the product quality, IDC's [12] market study identifies it as a major problem although over the past few years improvements have been made (e.g., luminosity sensitivity and image resolution). Band waves are also of relevancy, especially when the user connects to the Internet with a telephone line; a low band wave thus decreases the image quality. However, since a couple of years, cable quality and ADSL have drastically increased the band waves, resulting in a better image quality. Finally, the price of telecommunication is identified as a restrictor since chatters are connected to the Internet for a reasonably long period of time. Prices are decreasing, though, and many Internet access providers are practising a fixed price policy.

Four drivers have been identified: the 'snow ball' effect, the increased interest of Internet users, the building of alliances and the development of new applications. The more web cam possession increases, the more people will desire to own one in order to communicate on the Internet. Moreover, according to an AOL enquiry [13], 67 per cent of the people contacted are planning on practising a video chat activity. The third driver refers to the alliances taking place between web cam and computer manufacturers: for instance, Logitech has signed an agreement with Compaq in the USA [14]. According to the InfoTrends Research Group more than 50 per cent of the computers sold in 2003 onwards will have a web cam; such alliances will inevitably favour market growth. Finally, the development of new applications for web cams will make it more interesting to own one.

In summary, the first part of the market study generates positive findings for the development of our service. Indeed, 11 million web cams have been sold as of today, and the public expects an increase in sales. Moreover, the five forces analysis suggests an increase in quality, and decrease in prices of web cams. These factors positively influence the drivers and current restrictors of the web cam market's evolution.

The Video Chat Market

The video chat market is now analysed in order to better understand the users, adapt the new product, and implement an adequate marketing strategy. According to an eTForecasts study [15] the number of Internet users should rise from 414 million in 2000 to over 1,000 million in 2005. However, not all users will want a video chat service. Two types of profiles have been identified as potential video chatters with video chat satisfying two different needs: the need to communicate with a group of people and the 'fun-need' for chatters who appreciate to use the Internet sharing their hobbies and passion in discussion forums. According to a McKinsey & Co. enquiry [16] these two types of chatters represent, respectively, approximately 23 per cent and four per cent of the Internet surfers. This means that the potential video chatters account for around 100 million in 2000, which may seem large compared with the 11 million web cams sold, but it is an indication of the potential market size.

Again, in order to analyse the video chat market structure, Porter's (1980) five forces seems to be an adequate model. Searching the Internet for the available video chat services has identified the direct competitors. Two main categories have emerged from this search: video chatting via a website and video chatting via a direct connection. Both these categories enable text and audio discussion modes and offer the possibility to view small size videos with variable quality from fluid to slow. The difference between the two modes lies in the fact that, respectively, they enable the creation of one's own discussion forum or enter an existing forum, as well as the discussion between only two persons. To conclude the direct competition analysis, two main aspects should be raised. Firstly, the competition regarding video chatting is rapidly growing and the current commercialisation project should be marketed shortly. Secondly, even if competition is tough, innovation leading to new and better quality products is still possible. Moreover, the presence of a firm commercialising a similar version of our service could facilitate market penetration.

With regard to substitutes, two types of substitutes were identified: those linked to the communication function, and those linked to the 'meeting' function. The first type of substitutes covers the telephone, post, e-mail and traditional chat, but none of these substitutes enable video imaging. The second type of substitute regroups ways of meeting people, for example in meeting clubs. There exists, thus, a certain number of substitute products, but none are superior to others and, basically, aim at different types of potential customers.

Analysing the barriers to entry enables the evaluation of the potential entry of new companies offering the same service. These entry barriers are highly present in the case of video chat services: patents, as well as the importance of technical capacities, the recruiting of computer technicians and the importance of brand image are all impediments to the development of new activities competing with the current service.

The identification of the clients' and suppliers' negotiating power depends highly on the commercialisation mode. These matters will be developed further.

To conclude, the video chat market structure is one that is competitive due to the increased offer and constant improvement of product quality. The entry barriers are quite high, and the strategy implemented to penetrate the market is of great consequence. Finally, one must be aware that video chatting might be a 'fashion phenomenon', which could disappear as quickly as it appeared.

The Advertising Market On The Internet

The current section exposes the advertising market on the Internet with one possibility being to replace the original background with a background integrating adverts. This new type of advertising might be appealing to certain market actors and could be a non-negligible source of revenue. In order to verify so a market study was conducted. However, before doing so, it is needed to identify the actors in the market structure and their role in the elaboration of an advertising campaign; the numbers below refer to Figure 1.

{Take In Figure 1 About Here}

(1) The mandates, an Internet site for example, contact a 'régie' in order to hand them the task of commercialising their advertising space. This means that these régies have a better knowledge of the market and its actors.
(2) The régies then contact the media centres, which play a centralisation role in the market. In the current research, the product to commercialise is the advertising space present in the new video chatting background.
(3) The media centres contact the advertising agencies and present them with the available products.
(4) The agencies advise the announcers on how to master their advertising campaigns. Most of the time (some 80 per cent) steps 5 to 7 will be followed. However, if not, step 8 exposes the alternative step.
(5) The announcers communicate their budget to the agency and also give them a few directives. The agency then proposes the media support and creates the banners and adverts.
(6) The agencies communicate the information regarding the budget and the Websites where the announcer wants to be present to the media centres, leaving them regularly to elaborate the planning aspects, media strategy and tactical announcers' plans.
(7) The media centres contact the régies.
(8) The announcers contact directly the régies, communicating them the budget in order to accomplish the advertising campaign.
(9) The régies insert the adverts to the sites they have an agreement with.

This brief description of the market structure and interaction processes between the actors provides us with key information for the following market study. The methodology has been outlined in Figure 2.

{Take In Figure 2 About Here}

In the first step, the subjacent themes have been identified in order to reply to our interrogation of whether or not it is of interest to include advertising in the new video chat background. These themes refer to the history of advertising on the Internet, the future trends, the international differences, the technical requirements, the financial aspects and the applicability of advertising. Moreover, we asked the interviewees to voice their opinion on our concept.

Previously identified in the advertising market structure, there exist three main categories of actors: the agencies, the media centres and the régies. In Belgium, there are roughly a dozen agencies, nine media centres and 18 régies [17]. In order to have a complete overview of the market, members of all three categories were contacted, selected in an exhaustive list available on websites such as the "Centre d'Information sur les Médias" (CIM) [18] and the "Interactive Advertising Bureau" (IAB) [19]. Three media centres and agencies were randomly picked; however, regarding the régies we were advised by the administrator of a future spin-off of the Telecommunication and Teledetection laboratory of the Catholic University of Louvain to contact RMB and 24/7 and randomly pick two others. All the companies contacted are based in Belgium; however, the majority are present abroad as well, enabling us to discuss the differences between countries.

An interview protocol was then written in order to approach the relevant themes earlier identified. This has been depictured in Figure 3.

{Take In Figure 3 About Here}

Following that, a search on the Internet was conducted for contact information of the different pre-selected actors. Unfortunately, none of the agencies accepted to invite us in for an interview, but two media centres and three régies did. Table I summarises the data collected from these in-depth interviews.

{Take In Table II About Here}

In order to compare the collected data we consulted different studies, the main and most relevant one being the IAB's annual report [20]. In regards with market history, it seems that the second semester results have not affected the advertising revenues and that many announcers have become more dynamic in using the Internet. International differences were found to be important between, on the one hand, Germany and France, which are the most active European countries in advertising on the Internet, and, on the one hand, the United States. In 76.7 per cent of cases, banners are the advertising medium.

In the last step, it was decided that the information gathered from the interviews and previous market study seemed correct, enabling us to consider our findings as representative of reality. It appears that there exists a real interest in the new video chat communication service. In order to identify and better understand the potential clients and/or users the following section consists of a macro- and micro-segmentation of the video chat market. Respectively, they identify the product-market and their different segments (Lambin, 2000).

The Macro-Segmentation Of The Video Chat Market

The aim of macro-segmenting is to define the company's reference markets, narrowly enough in order to implement a strategy, and widely enough as to stimulate, discover and diversify imagination and strategies (Lambin, 2000). In order to do so, we implemented a set of 'who', 'what' and 'how' questions (Abell, 1980). For the ‘who' question we identified Internet surfers, companies and Internet sites. The Internet surfers may want to communicate with friends, meet new people, ‘have fun' or discover new cultures. They may do so using the telephone, post, e-mail, chat and video chat, and with or without the cutting technique. The companies may want to increase brand image and profits. They are capable of doing so by using the same communication medium as the Internet surfers. Finally, the Internet sites may strive for increasing site visits and profits through e-mail, chat and video chat, with or without the cutting technique. According to the interviews conducted with the different actors of the market it was decided to focus on the following groups: the internet surfers who want to communicate and meet new people; the companies that want to improve brand image; and the Internet sites, which long for increased site visits. Naturally, these three actors' intentions are all being fulfilled by using video chat.

The next objective was to analyse the diversity of needs within the product-markets. The Internet surfers have already been discussed in the video chat market analysis. Concerning the Internet sites three different sources of information were exploited: the knowledge gained from the direct competition study of the video chat market, Internet sites frequency visit analyses published by CIM [21] and a study conducted by LemonAd, an advertising monitoring company [22], over a one-week period.

<u>The Micro-Segmentation Of The Video Chat Market</u>

In the current approach, and based on the collected information, the micro-segmentation of the video chat market is based on six relevant factors: the presence of a commercial aim, the core business, the type of advantage looked for by introducing the video chat, the national or international dimension of the Internet site, the size of the client market in terms of revenues and the type of functioning of Internet sites with a video chat core activity. Three micro-segments have been distinguished: video chat sites, portals and editorial sites. Video chat sites such as IsPQ or Cuseeme naturally make video chat their core business. Connection can be made either via an Internet site or through direct connection. As for portals, the aim is to complete their product range in order to increase the number of visitors. They are either national (e.g., Yucom and Ad valvas) or international (e.g., Yahoo, Wanadoo and Tiscali). Editorial sites want to spread the community of visitors and offer them a service around a specific theme. They are either informational (e.g., Le Monde), interest driven (e.g., Walt Disney), professional (e.g., Ibazar) or regrouped in the category 'others' (e.g., Sport4fun).

The video chat market segmentation enabled the identification of a number of client categories. However, it is not possible to satisfy all the clients, especially for a start-up with limited resources. These consequences lead to the questioning of the different options available in regards with the commercialisation mode. Based on market segmentation, Porter's five forces analysis of the video chat market, and ideas collected from in-depth interviews, five commercialisation options were identified (Figure 4).

{Take In Figure 4 About Here}

The first option for the start-up would be to create its own video chat website targeting Internet surfers who video chat, and those who do not as yet. The advantages and drawbacks of this commercialisation technique are presented in Table III. This commercialisation mode seems interesting, but drawbacks are multiple. Even if one can expect advertising revenues, 70 per cent of the total revenue must be generated by the software sales. However, a large majority of the Internet surfers are searching for free downloads. Secondly, if this commercialisation mode is implemented, the distribution would be a key – and especially expensive – factor. Thirdly, and due to tough competition, the software must be differentiated and complete. As a consequence, development costs would increase.

{Take In Table III About Here}

The second commercialisation mode, developing a complete service for other sites, addresses the demand from Internet sites. Table IV presents the advantages and drawbacks of this commercialisation mode. By selling to Internet sites, the start-up can save on maintenance and distribution costs. However, this commercialisation mode would engender extra costs in terms of software adaptation in order to reply to the different Internet sites' requirements. In terms of advertising revenue losses, they could most probably be partly recuperated by alliances or contracts with the clients. Finally, competition not being as though, more time would enable the start-up to develop a more complete version of the software.

{Take In Table IV About Here}

Developing a service with the cutting technique for Internet chatters is the third type of commercialisation that the start-up could consider. In this case, the start-up would have to develop software that masters the cutting technique and the image re-composition. When chatters connect to the Internet site to video chat, they will be able to download the software. The chances of success in this case are low; indeed, even if development costs are low, other cost centres will not be: for example, promotional costs will be significant in order to rapidly reach the Internet users. Moreover, the only substantial revenue would be generated by the software sales, which would most probably be low as an increasing number of Internet users are not ready to pay for downloadable software. Finally, there already exists one company, which commercialises such type of software, which means that competition could thus be quite tough.

The fourth option available to the start-up is the development of the software enabling the cutting technique, but for Internet sites instead of Internet surfers. This commercialisation mode seems interesting; indeed, the investment would be significantly lower than the option requiring the development of the start-up's own Internet site. Moreover, addressing the Internet sites should bring substantially higher revenue than addressing the Internet surfers. The major drawback of this commercialisation option lies in the entry barriers: if this activity is profitable, the only known competitor as of today might, and most probably will, enter the market to compete with the start-up.

The fifth option would be to develop a service for companies with the objective of creating an event on video chat on company demands. Basic software would be developed and would need to be adapted according to companies' demands. Table V regroups the advantages and drawbacks linked to this commercialisation mode. This commercialisation mode probably requires more programming work because each contract is different. Prospecting expenses will also be high, which will significantly raise costs. However, the price charged could be higher, so the market size is an important factor in order to estimate profitability.

{Take In Table V About Here}

At the current stage, it is impossible to settle which of the above options would be the most appropriate; however, the first and third solutions have been rejected because it seems that aiming at Internet surfers would jeopardise the start-up's profitability. In the next paragraphs, our understanding of the start-up's potential is deepened and finalised, evaluating profitability and the required conditions by conducting a market study in the Internet site segment (Figure 5). The sub-jacent questions refer to advertising, commercialisation modes, technical requirements and programme options, exclusivity and financial aspects. The reasons for enquiring lies, respectively, in the fact that advertising can be a selling argument and one wants to assess its impact, the interest we have in companies assessing the proposed commercialisation modes, the fact that clients' expectations influence programming and costs, and the generation of a few financial figures.

{Take In Figure 5 About Here}

In the second step, we followed such a path in order to select the cases. We chose not to sample the Internet surfers and the companies because they were less important financially, and also difficult to study in detail. The companies were not contacted because the segment is too large considering our small possibilities and the needs differ siginificantly from one company to another, which makes our enquiry very complicated.

As for the Internet sites, we decided to contact them because the financial gains are relatively important and the segment size seems reasonable in the sense that it is not too large, which facilitates the enquiry, and not too small, which enables the researchers to have a good-sized sample. In the Internet site segment, three micro-segments were identified: the video chat sites, the editorial sites and the portals. The researchers chose to focus on the portal sites based in Belgium for diverse reasons. These sites are large holders of financial resources; the market size is larger than the one of video chat sites and smaller than the one of editorial sites; all the identified themes can be approached; and their identification and availability are relatively simple. The fact that they are based in Belgium makes it convenient for the interviewing process. The following portals were contacted: Ad valvas, Infonie, Msn, Planet Internet, Skynet, Yucom, Wanadoo, Tiscali Belgium and Free Web. Our objective was to find answers to the interrogation presented in the first phase. Figure 6 illustrates the methodology.

{Take In Figure 6 About Here}

Three portals accepted to meet us, five were interested, but lacked time, and one was not interested in our video chat service. Table VI contains the results gathered from our three interviews with Ad valvas, Tiscali Belgium and Wanadoo Belgium. Firstly, the video chat market seems as though it will indeed continue to develop, as most interviewees seem to believe so. Secondly, the researchers' idea of integrating advertising in the new background has also been taken positively. Based on the gathered data, the researchers believe that the market study has reached its objective in providing a reply to our interrogations.

{Take In Table VI About Here}

Conclusions

In conclusions, we will expose the striking and most relevant findings of this paper. The market studies conducted on the web cam, video chat and advertising market provide us with very encouraging results. The web cam market is growing and competition is becoming tougher, leading to increasing quality and decreasing prices; these conditions can lead us to think that the market will follow a favourable evolution. On the video chat market, where competition is also tough, there is still room for new entrants that need to differentiate themselves. Indeed, the potential video chatters represent approximately 25 per cent of the Internet users - that is a potential market of 100 million people. Our service can provide these potential clients with what they are searching for, that is communication and 'fun' over the Internet. As for the advertising market, advertising expenditures are rising and market actors are constantly searching for new products, better targeted and more interactive.

Encountering the encouraging results from the three market studies, it was decided to further deepen the knowledge and understanding of the eventual possibilities by undertaking a macro and micro-analysis of the market. The micro-analysis enabled the the refinement of the segmentation, therefore, helping the study of various commercialisation options. Two of the options that seemed unprofitable were eliminated and further analyses lead to the consideration of a commercialisation mode that would be adequate to answer the needs of Internet portals. Indeed, the market study carried out on Internet portals highlighted the real interest of the potential clients for the current video chat service. This research enabled the gathering of pertinent information on the potential clients' needs and the amounts of money they are ready to pay for the service. It is now for technicians and professionals to decide whether or not they are ready to create a start-up selling this software or the complete version of a video chat service using the cutting technique enabling the chatter to be integrated to a new background, which will hold advertising agreements with the concerned portals.

Endnotes

[1] Site: http://www.viewontv.com/richmedia.htm.

[2] *Inside Internet*, *SVM*, *Web Magazine* and *Internet & Entreprise*.

[3] IBS, Excel and Microstar

[4] "PC video cameras sales explode in November" (2000), *PC Data*, January; site: http://pcdata.com/.

[5] Site: http://gartner.com/webletter/3comrisi/summer99/article1/article1html.

[6] "Web cams: dans l'œil des constructeurs", *Distributique*, No. 266, p. 40.

[7] "PC video cameras sales explode in November" (2000), *PC Data*, January; site: http://pcdata.com.

[8] "PC cameras popularity shoots to new heights, but work remains to reach its full potential" (2001), *International Data Company*, April; site: http://www.idc.com/Hardware/press/PR/CP/CP112700pr.stm.

[9] "PC video camera market expected to reach 38 million units by 2003" (2001), *InfoTrends Research Group*, March; site: http;//www.infotrends-rgi.com.

[10] "PC cameras popularity shoots to new heights, but work remains to reach its full potential" (2001), *International Data Company*, April; site: http://www.idc.com/Hardware/press/PR/CP/CP112700pr.stm.

[11] "PC video cameras sales explode in November" (2000), *PC Data*, January; site: http://pcdata.com.

[12] "PC cameras popularity shoots to new heights, but work remains to reach its full potential" (2001), *International Data Company*, April; site: http://www.idc.com/Hardware/press/PR/CP/CP112700pr.stm.

[13] Cyberstudy, p. 76; site: http://www.corp.aol.com/press/study/cyberstudy.pdf.

[14] Logitech (2000), January; site: http://www.logitech.com.

[15] Site: htpp://www.etforecasts.com.

[16] McKinsey-DAD (2001), "Comprendre l'e-consommateur belge", 8 February, p. 12.

[17] This information was collected from a product manager online department at RMB Belgium.

[18] Site: http://www.cim.be/base/fr/c/default.html, April 2001.

[19] Site: http://www.iab-belgium.be/noframes/fr_000008.htm, May 2001.

[20] IAB/PricewaterhouseCoopers (2000), *Advertising Revenues Study*.

[21] Site: http://www.cim.be/metriweb/fr/d/dc/default.html.

[22] LemonAd enables to follow the online campaign evolution in most European countries. For the subscribers it is possible to know who announces, on which support, with which frequency, and at what dates. The software tracks, 24/7, 2500 Internet sites in Europe.

References

Abell, D. F. (1999), *Defining the Business: The Starting Point of Strategic Planning*, Prentice-Hall, Englewood Cliff, New Jersey.

Porter, M. (1980), *Competitive Advantage*, The Free Press, New York.

Lambin, J. J. (2000), *Market-driven Management: Strategic and Operational Marketing*, MacMillan, Basingstoke.

Miles, B. and Huberman, A. M. (1994), *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd edition, Sage Publications, Thousand Oaks, California.

Acknowledgements

The authors would like to thank Mr Sébastien Deprez, Mr. David Gelay and Mr. Quentin Noirhomme for their invaluable help in collecting the data and the reviewers of the 2002 e-Business conference held at the Birmingham Business School.

Figure 1. The Advertising Market: Structure And Functioning

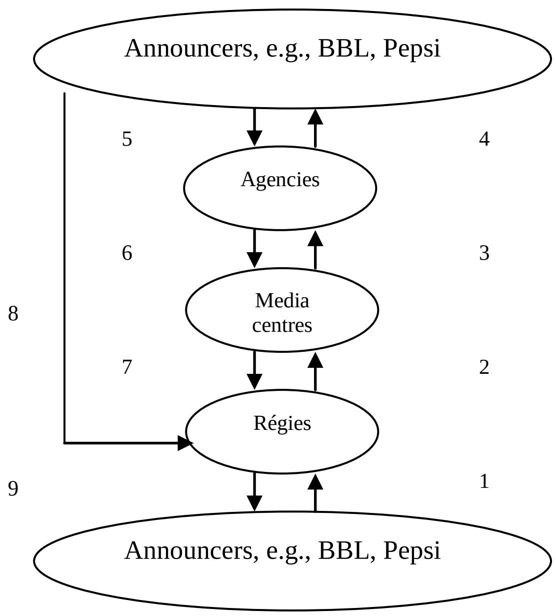

Figure 4. The Five Commercialisation Modes

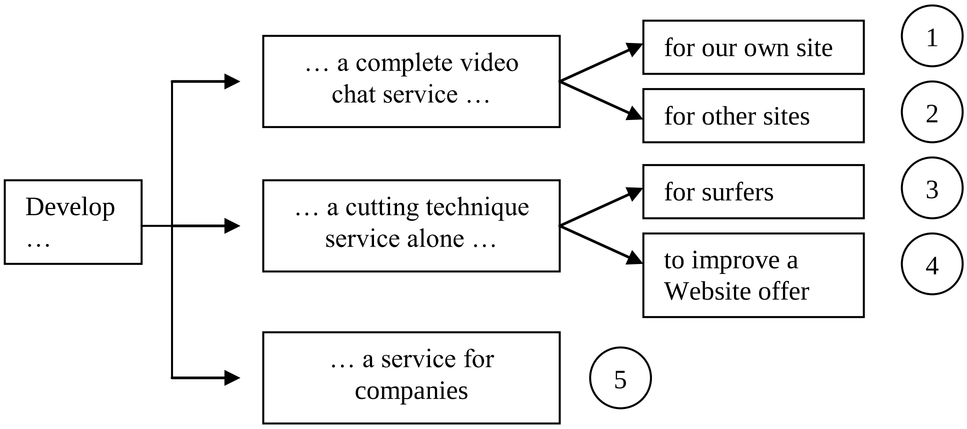

Figure 2. Advertising Market Analysis

Getting started	The general problem has been identified, as well as a certain number of sub-questions. General problem constitutes of evaluating whether or not there is an interest for integrating advertising in the new video chatting background.
Selecting cases	The sample has been built based on market knowledge. For each category of actors, a number of contacts were, either randomly picked or selected upon recommendation.
Crafting instruments and protocols	The choice was made to carry out face-to-face interviews. In order to do so, an interview protocol based on the identified themes of interest was elaborated.
Entering the field	Interviews were carried out without using a dictaphone with five members of different organisations.
Analysing data	The gathered data was analysed according to Miles and Huberman's (1994) four-step method. The analysis was conducted following seven themes. The five interviews were then compared in order to highlight the similarities and differences.
Shaping hypothesis	This step was not relevant to the study. It is more relevant when a detailed theory needs to be inducted.
Enfolding literature	The information gathered were, in this step, compared with relevant publications and previous studies. These studies confirmed the findings.
Reaching closure	It was decided to terminate our study hence the fact that the results appeared to be correct.

Figure 3. The Themes For The Interviews With The Advertising Market Actors

Project and researchers presentation	Have you heard of video chat? What do you believe of the project as a whole?
Market history	How much money has been invested in the past? Is the advertising market on the Internet a growing one? What have been the main advertising products? What mistakes have been made in the past, if any?
Future tendencies and previsions	What are the market expectations? What are the future previsions of growth? What are the new products?
National differences	How does Belgium stand in regards with other European countries? Is the situation in the United States any different?
Applications	How would you advice us to make use of our cutting technology? Are there any other advertising possibilities for our technology?
Technical requirements	Are there any particular technical requirements?
Financial aspects	How much can we expect to earn with this type of product? How, generally, are financial flows generated? Are advertising revenues reliable?

Figure 5. Methodology For The Market Study

Getting started	The general problem is identified as follows: Is there a real interest within the Internet site segment for a video chat service using the cutting technique?
Selecting cases	The sample was based according to the market segmentation presented above. For each category of actors, it was tried to determine whether or not they could help in finding answers to the posed question(s).
Crafting instruments and protocols	Face-to-face interviews were carried out.
Entering the field	Members of three Internet portals were interviewed.
Analysing data	The gathered information was analysed based on within-case and cross-case analysis. The results were then compared with the three interviews.
Shaping hypothesis	This step was not relevant in the current research.
Enfolding literature	Elements from previous steps were compared with the research results.
Reaching closure	The market study was ended because the results appeared satisfying.

Figure 6. The Themes Discussed With The Interviewees Of Portal Sites

Theme	Questions
Project and researchers presentation	Have you heard of video chat? What do you believe of the project in general? Do you think that the cutting technique brings something extra?
Commer-cialisation mode	Which commercialisation mode seems more adapted? Which is the one that interest you the most?
Technical requirements	How do you adapt a software to your information processing system? What are the technical constraints linked to the advertising mode?
Programme options	Would you rather have a complete software in its first version or a software that evolves? Which options are you most interested in? Are there any legal constraints, which hinder the option choices?
Advertising concept	What do you think about this type of advertising? Can you think of any other advertising possibilities using this technology?
Exclusivity agreements	Would you be interested in an exclusivity agreement? Under which conditions?
Financial aspects	How much money can we expect to earn with this type of product? Which are the most frequently used ways to earn money?

Table I. Web Cam Market: Sales And Population, Up To 2004

Year	1998	1999	2000	2001	2002	2003	2004
Annual sales, in millions of units	1	2.2	7.3	8.25	8.25	8.25	8.25
Total population, in millions of units	1.5	3.7	11	19.25	27.5	35.75	44
Total population growth, in per cent		147	197	75	43	30	23

Table II. Results Of The Advertising Market Study

	24/7	RMB	Hi-Media	Carat	Optimedia
Market history	- Large market growth in 2000 - Mini market crisis in the second semester 2000 - Banners add = 90 per cent of the advertising campaigns	- Banner add from 1998 to 2000	- Continuously growing but hard times end of 2000	- Advertising on the Internet increases but is still relatively low compared to other media	- Large market growth in 2000 - Mini market crisis in the second semester 2000
Tendencies and previsions	- New advertising products appearing - Profiling is becoming essential	- Profiling is becoming essential	- Banner add use should decrease from 83 to 50 per cent of advertising market due to new applications.	- The sector should develop but not extensively - Several announcers have doubts on Internet's effectiveness	- Entry of new announcers - Some announcers dare use new products (innovation)
International differences	- USA in advance compared to EU - Belgium is a slow mover	- No information	- USA in advance compared to EU	- In Europe, France and Germany are in advance and more engaged	- United States ahead of EU - Belgium is a slow mover
Technical requirements	- Being able to do profiling	- Need to measure effectiveness	- Insure the non violation of private life	- The application must be perfect in order to be launched	- The application must be perfect in order to be launched
Applications	- No information	- Offering a free service to Internet users	- No information	- Create our own video chat site	- Create our own video chat site
Financial aspects	- Between 0.15 and 0.45 EUR per impression	- Maximum 3.720 EUR - Maximum 20 to 30 per cent of revenue generated by advertising	- No information	- Advertising must be a complementary source of revenue but not the main source	- The large campaigns generate revenues between 495,000 to 990,000 EUR
Our concept	- Interesting because answers a market need	- Interesting but we must be aware of hoping to generate too much revenue from advertising	- Interesting because answers a market need and is an international concept	- Interesting but the market must become more dynamic	- Interesting project but too early to evaluate its viability

Table III. Advantages And Restrictors Of Creating One's Own Web site

Advantages	Restrictors
Possibility to create a better quality video chat by proposing a more complete service with better performance	The software development requires investment in terms of human resources mobilisation (expensive)
The cutting technology would enable the start-up to differentiate itself from existing video chat sites, which do not propose the insertion in a new background	The cutting technique is only a small part of the service; will it be enough to differentiate us from competitors?
Two types of services would be offered: a free software including advertising and a paying one with no advertising	Both options would require two different softwares. However, programming differences would not be to important
Revenue would be generated by the advertising on the free version and the software price on the paying one	A good business plan should count on 30 per cent of revenue maximum generated by advertising. The rest should be generated by the paying version
There will not be physical prospecting (no moving to the clients)	The internet users are very requiring clients; one mistake might lead to serious damage especially due to word of mouth
	In order to attract the announcers, we need to attract a large number of surfers; the software distribution should, therefore, be fast and effective
	Competition is very though in this sector. Many firms are present on the market and it is difficult to penetrate

Table IV. Advantages And Restrictors Of Developing A Complete Service For Other Sites

Advantages	Restrictors
Possibility of creating a video chat service of higher quality; the service would be complete and powerful	The software development requires heavy investments in human resources; different clients might want slightly different versions
The cutting technique enables the start-up to differentiate their product from others	Is the cutting technique sufficient in order to differentiate the service
The start-up could offer different services according to the different client's expectations and their desire to differentiate themselves	In order to limit time and financial costs, the product would need to be standardised to a minimum extend
Revenues would be generated by the software sales and maintenance charges	The start-up could loose all prospects of generating advertising revenues as the clients will probably want to manage the advertising on their Website
The clients would be Internet sites; it would then be business-to-business and profit expectations are higher	In working with companies, expectations are higher and constraints tougher; penetrating the market would not be easy
As presented in the micro-segmentation, the potential number of clients is quite important	Less competition than in the first commercialisation mode because less organisations propose such a service to Internet sites
Less importance in making the general public aware of the new service because the privileged contacts are Internet sites	

Table V. Advantages And Restrictors Of Developing A Service For Other Companies

Advantages	Restrictors
The offered service would be new and companies could benefit from a innovative image	The software development and the needed applications will require investment in time and human resources
The revenues would be generated by the selling of a number of services enabling an event creation	The service quality must be absolutely perfect
The clients are companies; their budgets are large and an increasing part of them are devoted to Internet	The prospecting effort will have to be intense and it is essential to develop an adequate strategy in order to focus on the right customers
Brand image for the grand public is not relevant; the start-up must be known by the companies and the reputation would be built according to service quality	There is a risk that video chatting is a fashion phenomenon; the service length will be determined by the contract length. On the long run, getting new contracts could become more complicated

Table VI. Results Of In-Depth Interviews With Portal Managers

	Ad valvas	Tiscali Belgium	Wanadoo Belgium
Concept	Fun aspect Doubts regarding video chat's development	Interested by video chat Has just integrated a video chat service Open to new proposal if bring extra value	Interested in Video chat Has just integrated a video chat service Like the cutting technique in the current project
Communication mode	Only develop the cutting technique software Do not develop a complete service and it sell it to Internet sites	No particular preferences	No particular preferences Interested by both, the cutting-enabling software and the complete service
Competitive advantage	Core business: Cutting technique software With the complete service, diminishing of the cutting technique	Whatever our choice, we should be able to differentiate The service should also enable Tiscali to differentiate itself	No information
Software options	No Information	Quick messages could be a good idea Be careful in using client profile information	Place lists of all connected surfers but possibility of placing filters Be careful in using client profile information Place an indicator on connection quality Modify character police Be able to create public and private chat rooms.
Exclusivity	No because differentiation based on background	No information	Exclusivity of 6 months to a year in a trial country Then spreading of the system in other countries
Technical requirements	Adaptation often realised internally	Adaptation by the collaboration between the two companies	Adaptation by the collaboration between the two companies
Advertising	How is this technology different from what can be done today?	Interesting but sceptical regarding market reaction	Many possible advertising adaptations Leave space for banner adds
Development	Make it a "fun" service	Interested in everything that could help them differentiate themselves.	Discussion services with stars while seeing film abstracts
Financials	Very difficult to estimate More than EUR 12.000 for each cutting technology software	Very difficult to estimate	Very difficult to estimate For the Belgian market between EUR 250 and EUR 5000 per month for the complete software

Adam Lindgreen

After graduating in Chemistry, Engineering and Physics, Dr. Adam Lindgreen finished an MSc in Food Science at the Technical University of Denmark and an MBA at the University of Leicester (England). He has completed a PhD at Cranfield University (England) – with 18 months as a Visiting Research Fellow at the University of Auckland (New Zealand). Dr. Adam Lindgreen is now with Eindhoven University of Technology (the Netherlands), and he is a Visiting Professor with the Auckland University of Technology (New Zealand) and Groupe HEC in Paris, as well as a Visiting Reader with Harper Adams University College (England). Dr. Adam Lindgreen has published in international marketing journals, and he has received four Best Paper awards at international marketing conferences. He is on the editorial advisory and/or review board of a number of journals.

Michael Antioco

Michael Antioco is now a PhD candidate with Eindhoven University of Technology after having graduated with honours with the Catholic University of Louvain.. As part of his graduation programme, he spent a year at *Sophia University* in Tokyo in Japan studying international business and business administration. As part of his work experiences, he has carried out internships at Bestfoods, Hewlett Packard and IBA (where he also completed his graduation thesis). The topic for his doctoral research is design for service – service for design.

Martin Wetzels

Martin Wetzels (1969) is currently a full professor of marketing with the Faculty of Technology Management, Eindhoven University of Technology (Netherlands). His main research interests are customer satisfaction/dissatisfaction, customer value, services marketing, busines-to-business marketing, (online) marketing research, supply chain management, cross-functional co-operation, e-commerce, new product development, technology infusion in services and relationship marketing. His work has been published in the *International Journal of Research in Marketin*g, *Journal of Economic Psychology*, *Accounting, Organization and Society*, *Journal of Business Research*, *European Journal of Marketing*, *Industrial Marketing Management*, *Journal of Business and Industrial Marketing*, *Journal of Management Studies*, *Journal of Retailing and Consumer Services*, *International Journal of Service Industry Management*, and *Journal of Service Research*. Finally, he has contributed more than thirty papers to conference proceedings.