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The launch of Integrative Fixed Video Phone in Spain

Technology-Market Transfer Plan

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1.Executive Summary

This Technology Market Transfer plan aims to launch the innovative technology of fixed video phones with specific applications in Spain. This technology offers an effective way for operators to gain competitive advantage over their competitors in this competitive industry. This technology has been created by Zonadvanced Company (Appendix 1- Company introduction), an innovative company offering technical communication solution. The technology is sophisticated software to be integrated into fixed phones with camera allowing users see each other without being together and also providing the access to many specific applications. It requires broadband access and a fixed phone with camera at home.

This technology was finally designed for households' use; however, it is operators that extend it. So different kinds of operators represent differently attractive targets for the company. This marketing plan envisions the launch of the technology in the market of Spain. This market has the advantage of high broadband penetration and fixed phone line penetration. Finally, a 31.5% household's retention rate is expected to be achieved in 3 years, representing the profit of 37,202,431 euro.

2.Mission and objectives of Zonadvanced-Technology

Mission: Improve the usage of traditional fixed phone with integrative application and visual function to make people's life more efficient and easy.

Objectives:

1.Introduction of integrative video phone with Zonadvanced-Technology in the market of Spain. Achieving the penetration of fixed video phone with Zonadvanced-Technology in the adoption period of first year with 4.5% in terms of household and 27% penetration in explosion period of next two years.

2.Benefits creation to the company of Zonadvanced and eventually consumers in the market. The profits estimated would be brought to the company with nearly 2,788,567 euro in the adoption period of first year and 34,413,864 euro in explosion period of next two years.

3. Market Situation Analysis

3.1 Introduction of the technology

Zonadvanced-Technology is software integrated into a fixed phone with camera. It enables people to see each other without being together and also offer additional application to people, such as checking traffic and weather condition, ordering Pizza and so on. The whole realization of those functions requires the video fixed phone with this software of Zonadvanced-Technology and broadband access to connect. In the market, the competitors offering similar performance are mainly mobile video phones and video communication using computers such as Skype. Compared to mobile video phones and computers (Appendix 2- Feature comparison), the key features of this fixed video phone with the software over them are including as followings:

- The price is much cheaper than computers and mobile video phones: the price of getting either a computer or mobile video phone is much higher than the fixed video phone.

- Easier to operate than computers and mobile video phones: one only needs to press the button to have the function you need

- Easier to understand than computers and mobile video phones: one does not need high education level to use it

- Higher quality and more stable video image than mobile video phones: the effect of video image is better.

3.2 SWOT/TOWS analysis

The internal and external aspects about the technology were studied as illustrated on Table 1 by SWOT analysis (Appendix 3- SWOT analysis). In order to succeed, the match between external opportunities and threats with internal strengths and weakness should be done, as illustrated in the TOWS matrix below:

Table 1: TWOS Strategic Alternatives Matrix

	External Opportunities(O) ● No direct competitor ● Mobile phone calls' price up ● Increasing fixed line penetration	**External Threats(T)** ● Downward economic ● Replicate ● Increasing internet usage
Internal Strengths(S) ● Cheaper price ● Easier to operate and understand ● Better video effect	**SO ("Maxi- Maxi" Strategy)** ● Strategy emphasizes on price advantage over mobile phone calls. ● With fixed line penetration increasing, exploring the business basing on the benefits in terms of all strengths to deliver to customers.	**TO ("Maxi- Mini" Strategy)** ● With downward economic, the need for reducing cost increases which could be fulfilled by the cheaper price. ● Taking advantage of cheaper price to have fixed contract with operators to overcome the replication. ● Taking advantage of easiness to operate and understand to contend against the computers' use.
Internal Weakness(W) ● Not portable ● Not so powerful functions	**WO ("Mini- Maxi" Strategy)** ● With mobile calls' price up, catch the business opportunity of increasing fixed line penetration to minimize the weakness. ● No other products offer the same performance over fixed phones.	**WT ("Mini- Mini" Strategy)** ● Establishing its own patent to avoid replication. ● Developing other new innovative features over the fixed video phones such as live advertising to deliver added value

4. Strategic Triangle

To decide which potential market firstly to launch, some filters are necessary to be

used as shown on Figure 1.

The first step to narrow the target

market is proceeding by using three

filters which are directly related to the

foundations of this technology. They
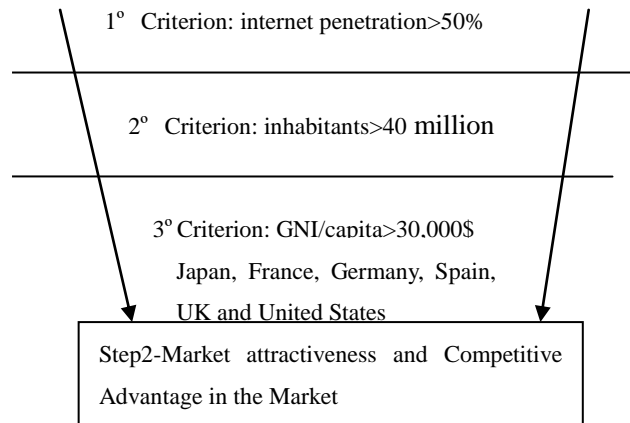
are the criterions of internet

1º Criterion: internet penetration>50%

2º Criterion: inhabitants>40 million

3º Criterion: GNI/capita>30.000$
Japan, France, Germany, Spain,
UK and United States

Step2-Market attractiveness and Competitive
Advantage in the Market

Figure1

penetration, inhabitants and GNI/capita. After this stage, with six underlying countries,

the market attractiveness and competitive advantage should be considered (Appendix 4-

Market selection).

In France, Germany and Spain there are no competitors supplying same service as this

kind of video fixed phone in markets, so they would be among the priority. Moreover,

as the fixed phone line penetration in France and Germany did not show an attractive

trend while it is increasing in Spain. With this stage of further narrowing down, **Spain**

would be most preferred (Appendix 5- Country description). Additionally; the language

of Spanish is much similar with Portuguese as their lexical similarity has been estimated

as 89%.This would be an advantage for the company to do the marketing

communication in the Spanish market.

4.1 Marketing segmentation and market size

Market definition: Zonadvanced could enter Spanish market by two ways that are Business to Business Market (B2B Market) and Business to Consumer Market (B2C Market).Based on the discussion with the company's CEO, the agreement was achieved that the company only focus on the B2B market where the company would sell the software of Zonadvanced-Technology to the telecommunication companies which directly supply the technology to the final consumers. However the analysis of B2C market is also necessary to learn more about the consumers' perception for telecom operators and the estimation of the market size.

Market size: Since the product is for households to use ultimately, the estimation of the market size will be depending on the demographic figures of households in Spain.

Spain-total number of households: 14,319,000 units

Segmentation:

Business market: demographic variables of operators' portfolio (the portfolio is about the services that operator provides to their customers) and size have been applied for B2B market as shown on Figure 2. Because those two variables directly related to decides operators' capacity on accepting this technology.
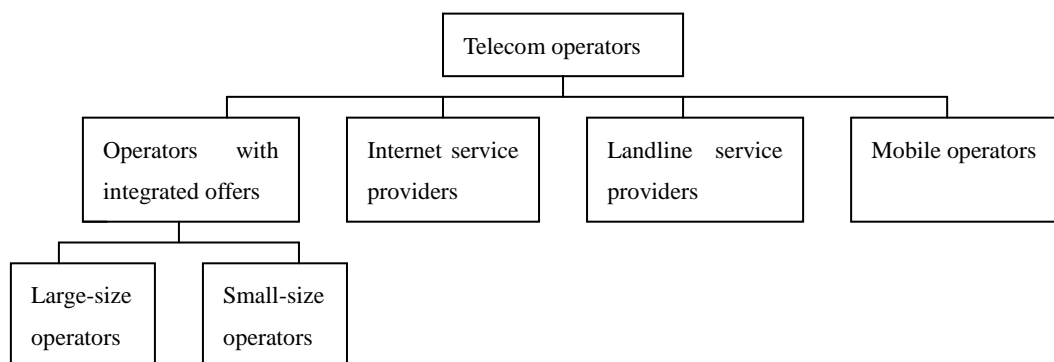

Figure 2

● **The first-demographic segmentation**: the portfolio is the variable firstly taken into account to divide the business market. The easiness of adoption of products varies across different operators with different kinds of portfolio. The operators with both broadband and fixed phone offerings are more easily to accept the technology and then to introduce the fixed video phones to their customers than others. Because these operators have all equipments required for the installation of fixed video phones. According to the portfolio, different operators in the market were shown on Table 2.

Table 2: B2B segmentation according to portfolio

Segmentation of B2B	Number
Operators with Integrated offers	7
Internet service provider	24
Landline service provider	24
Mobile operators	4

◆**Operators with integrated offers:** The integrated offers includes both broadband and fixed phone. Their customers are using their own network of both internet and landline services. With the specific needs of their customers, these operators would find it is easy to replace their customers' traditional home phones as they have all the installation regarding the realization of the products' usage. These operators are normally large-scale companies. With the competition in this industry, they are more likely to offer innovative products to their customers to keep their own

competitive advantage and occupy more of the market, ultimately to make their business more and more profitable in the long run.

◆**Internet service providers:** They are companies that only supply access to the internet. They do not have their own network but share network with the operators that have their own network. They are relative small-scale companies aiming to rather gain profit than increase the market share.

◆**Landline service providers:** They are companies that only offer landline service to their customers and they do not have their own network of landline. They also share the network with large operators that have their own networks. The same as internet service providers, they are relative small-scale companies and profit pursuers.

◆**Companies neither offering service of internet nor fixed phones:** They have their own mobile network. The core business for them is mobile telecommunication without any installation of broadband or fixed phone.

● **Sub-demographic segmentation:** the segmentation of operators with integrated offers has been sub-segmented in terms of the size of company (in this case size is measured by the number of operators' subscribers). This divide relies on the factor of investment that operators have to do for the adoption of this new technology. Obviously, large-size companies with more capacity and resource have more power to extend new products. Moreover the smaller size companies have more restrictions while deciding to invest on new products or not. For example, the limitation of capital budget would directly influence the demand for the new

products. Here, the size of the companies is measured by the subscribers each operator has which were illustrated on Table 3.

Table 3: Sub-segmentation of B2B according to size

Sub-Segmentation of B2B		Number
Operators with integrated offers	Large-size(subscribers > 1,000,000)	4 companies
	Small-size(subscribers < 1,000,000)	3 companies

The four large-size operators have broad own customers. Actually, with the deep research, the four large-size operators take up almost the whole market share of both internet penetration and fixed phone penetration as shown on Table 4.

Table 4: Market share of internet and fixed phone penetration

	Subscribers(person)	Broadband market share	Fixed phone market share
Telefonica	47,000,000	57%	87%
Vodafone	16,538,000	Less than 9.5%	Less than 4%
Orange	11,000,000	20.6%	
ONO	6,000,000	12.9%	9%

Consumer market: for B2C market, behavioural variables were applied to segment in terms of fixed phone owners or not, broadband users or not and video communication over computer heavy users or not, which have been presented on Figure 3.
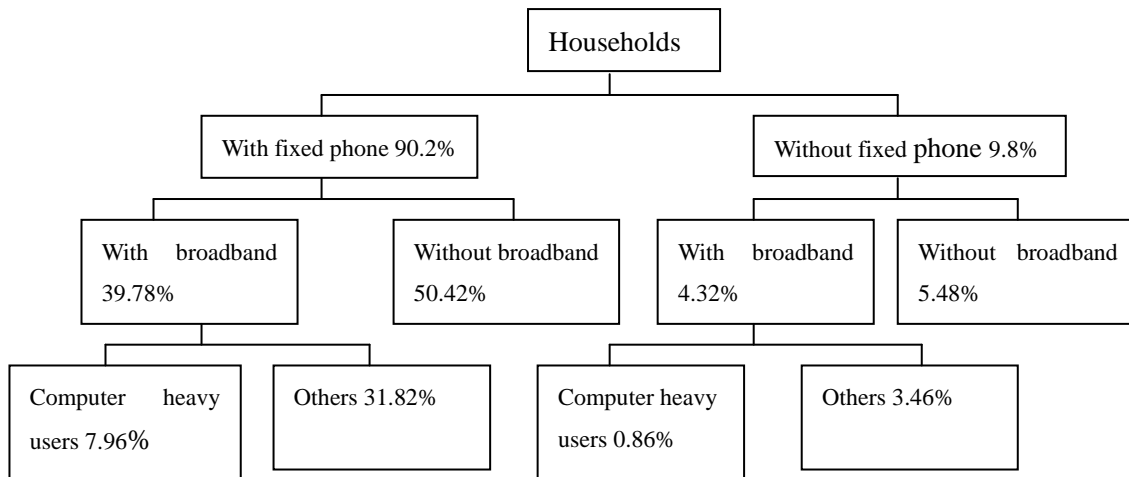
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                          ┌─────────────────┐
                          │   Households    │
                          └────────┬────────┘
            ┌──────────────────────┴──────────────────────┐
   ┌────────────────────┐                      ┌────────────────────┐
   │ With fixed phone   │                      │ Without fixed      │
   │ 90.2%              │                      │ phone 9.8%         │
   └─────────┬──────────┘                      └─────────┬──────────┘
      ┌──────┴───────┐                            ┌──────┴───────┐
┌───────────┐ ┌──────────────┐          ┌──────────────┐ ┌──────────────┐
│ With      │ │ Without      │          │ With         │ │ Without      │
│ broadband │ │ broadband    │          │ broadband    │ │ broadband    │
│ 39.78%    │ │ 50.42%       │          │ 4.32%        │ │ 5.48%        │
└─────┬─────┘ └──────────────┘          └──────┬───────┘ └──────────────┘
   ┌──┴────┐                               ┌──┴────┐
┌──────────┐ ┌──────────────┐      ┌──────────────┐ ┌──────────────┐
│ Computer │ │ Others       │      │ Computer     │ │ Others       │
│ heavy    │ │ 31.82%       │      │ heavy        │ │ 3.46%        │
│ users    │ │              │      │ users 0.86%  │ │              │
│ 7.96%    │ │              │      │              │ │              │
└──────────┘ └──────────────┘      └──────────────┘ └──────────────┘
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Figure 3

Households that do not have computers at home, which mean they do not have other access other than fixed phones to connect with their friends or relatives, would strongly have the needs to own a video phone. For that video communication over computer heavy users they have no need neither on the visual communication or the applications as they are normally heavy computer users. We assumed that the percentage of video communication over computer heavy users is the same as the percentage of heavy users of internet which was 20%. The market size of B2C segmentation was illustrated on Table 6. To learn more about the perceptions of households towards fixed video phones, telephone interviews would be done according to the questionnaire designed for representative households (Appendix 6- Telephone interviews)

Table 6: Market size of B2C

Segments of B2C	Market size in terms of household
S1: Video communication over computer heavy users with fixed phones	1,140,000 units (7.96%)
S2: Not video communication over computer heavy users with fixed phones and broadband	4,556,000 units (31.82%)
S3:Households with fixed phones but without broadband	7,220,000units (50.42%)
S4: Video communication over computer heavy users without fixed phones	123,143units (0.86%)
S5: Not video communication over computer heavy users with broadband but without fixed phones	495,437units (3.46%)
S6: Households without fixed phones and broadband	784,681units (5.48%)

4.2 Targeting

The target analysis is based on two major factors: Market segments themselves (external variable) and Zonadvanced's resources and competences (internal variable).

As it is a new technology in the market, no competitor supplies the same products to the operators in Spain yet. Zonadvanced would have the first-mover advantage; this could complement the fact that Zonadvanced is a small company. The main issue for the

company is to show its innovative concepts to fulfil the needs of consumers' and make the operators confident in the performance of the market. So for all the different operators analysed above, we focus on the analysis of market segments themselves in in terms of attractiveness, which is defined by their size, receptivity and brand image as shown on Table 7.

Table 7: Attractiveness evaluation of market segments

	Market size (Weight=0.5)	Receptivity (Weight=0.3)	Brand image (Weight=0.2)	Overall scores
S1:Large-size operators with integrated offers	5	5	5	5 **(Targeted)**
S2:Small-size operators with integrated offers	3	5	4	3.8 **(Targeted)**
S3:Internet service operators	2	5	3	3.1 **(Targeted)**
S4:Landline service operators	1	2	3	1.7
S5:Mobile operators	1	1	5	2.8

These three criterions are accordingly descended regarding the importance with the weight summed to 1. In terms of each criterion, each segment was evaluated by the score from 5 to 1 representing most attractive to lest attractive. The overall score represents the relative attractiveness of each segment which was calculated from the

weighted sum of three criterions.

The variable "Size" refers to segments dimension considering its capacity which is measured in the number of households operators can reach. It directly determines segments' business potential which was ascribed the most importance. From the Table 3, we know that more than 90% market share of both the fixed phone and broadband is dominated by the segment of operators with integrated offers. So this segment shows distinct attractiveness regarding this criterion.

Regarding receptivity, it is based on the aspect of installation which in other words means the easiness for the operators to extend the products to their households.

For mobile operators, they do not have any installation needed for the products' operation. They almost would not consider investing on new products that they do not have the equipment to support. So they are with the lowest receptivity to the new approaches.

For the segment of internet service providers, they have the installation of broadband to their households which make them high receipt ability with new approaches. Because as already shown on the table 6 of consumer market size, the fixed phone's penetration is 90.2% which indicates that almost all households have the fixed phones; it is easy for them to extend the products to their households.

Regarding landline service providers, they are with medium receptivity, as not all their households with broadband which has the penetration of 44.1%. If the household does not have broadband, it is relatively hard for the operator to extend the product. Since the

client has to additionally contact the internet service provider themselves and they would deem it troublesome except that the client has the strong need to buy the product.

Considering the segmentation of large-size and smaller-size operators with integrated offers, they are all with high receptivity. They are supplying both the service of fixed phones and broadband, no matter what kind of households, they can support the installation.

Finally, referring to the concept of brand image, it is based on the operators' brand awareness to consumers. Normally, extending new products with a well-known and good image operator, the company would correspondingly be accepted easily by the final consumers. Regarding this aspect, both the integrated offers operators and mobile operators have the competitive advantage on it.

After the analysis of segmentation attractiveness, large-size operators with integrated offers, small-size operators with integrated offers and internet service operators would be targeted. They are all segments with the overall score exceeding 3. Especially, the segment of operators with integrated offers shows distinct attractiveness with a overall score of 5. One thing needed to point out further, our products are easy to transfer as one family has the product, their friends or relatives would quickly to buy in order to have the visual communication, so although the market size of small-size operators with integrated offers and internet service operators is small, considering other competitive factors, they are also the segmentation with high business opportunity.

4.2 Market Strategy and Ideal Customers

Zonadvanced-Technology will attain a **Multiple Segments Strategy** considering the differences across the three targeted segments. The operators all have the objective of profit making from the purchasing of the new products. However with the difference of their company size, resource and competence, their purchasing behaviour would be different. This would drive us to make different strategies. The various across different segmentation rely on the average purchasing quantity, the products they would purchase and products' price they can accept.

Obviously, the large-size operators with integrated offers have the most consumers that they can reach. Not only with broad subscribers that have already been their customers but also more new customers to reach due to the good brand image. Relatively, small-size operators with integrated offers and internet service operators have fewer households to get. So the average purchasing quantity of the large-size operators with integrated offers would be much more than other two segments.

Secondly, large-size operators would normally have their own market department to do the marketing analysis. They would do deeper research on the customers' need for the application. If there are specific groups of people have different needs towards different application, the operators would find it is more profitable to divide the customers according to the specific needs. In this case, they would require more different products depending on the different set of application. For the other two segments, with the

limitation of their own resource and competence, they would not spend money on marketing research to find specific needs for specific groups. They would not require specific products with different application with the standardized products as it will increase their cost.

Considering the price, as smaller size operators do not have as much effect of scale-economic as large size operators, furthermore with the restriction of capital to invest, they would only undertake comparably lower price. The large-size operators with integrated offers would purchase larger quantity which makes the more effect of scale-economic.

Ideal Customer

The ideal customer is the operator with high potential market size, receptivity of new products and good brand image.

As analyzed before, the large-size operators with integrated offers are the ones that have the broadest customers to reach. They are with the highest potential to develop the market with large purchasing quantity. Moreover, they are more likely to adopt the new approaches to keep their competitive advantage in this industry.

Considering the receptivity to the product, as referred before, it depends on the installation operators has which directly influenced the easiness of them to extend the products. Without doubt, the large-size operators with integrated offers are the ones which have the highest receptivity. Additionally, they have good brand image and brand awareness among customers which make customers more convinced in the products'

quality.

4.4 Positioning and Differentiation

Positioning refers to the specific and intended meaning of a brand in consumer's mind, according to Tybout and Sternthal (2005, p11). The most relevant positioning attributes and competitors' analysis were studied to assure an accurate Zonadvanced-Technology's positioning. For that, an interview with product manager of AR Telecom Company was made to inspect the main factors they would perceive for our product (Appendix 7- Face to face interview with Product and Content Manager of AR Telecom Company)

Positioning attributes

The most essential attribute is obviously the **product quality**. Here the quality does not mean the fixed phones integrated with the software themselves but about the video image. For operators, the products' function that would be valued most for the final customers is the video communication for video conference or friends' and relatives' visual call. So the quality of the video image is the most required attribute lies on this function. Customers are more satisfied with products with better effect of video image.

Secondly, **price** is one of most important attributes to the target operators. It captures the most part of the cost that operators have to cover. It directly decides the price operators would charge to their customers for using this product. And they have to balance the price that most customers can accept and the profit. Additionally, most of the operators usual have fixed budget to new technology. The investment that would

exceed their budget would not be accepted.

Thirdly, **area coverage of linkage** is also very important, as most needs of visual communication resulted from the far distance between users. With broader area coverage, it would increase the geographic coverage of usage for the product. With limited area coverage, the extending of the product would be limited a lot.

Fourthly, the **easiness for operating** is also the factor measured much by the operators. They value this attribute from the customers' side which directly has an influence on customers' demand for the product. Without any doubt that much easier of the operating, more receptivity is of customers to the product. The easiness of operating combines two dimensions of both easiness to connect and easiness of technical handling towards the product.

Besides all factors referred above, **innovation** is another factor valued much by operators. Here innovation mainly embodies the new approaches and benefits offered. It represents benefits to both customers and operators themselves.

Competitors' analysis

There are no direct competitors offering the same service as Zonadvanced- Technology in the market of Spain yet. Competition exists mainly from the mobile video phones and video communication over computers such as Skype which have similar performance.

Basing on the attributes referred above, fixed video phones integrated with Zonadvanced- Technology and its competitors are evaluated by weighted average scores. Those five attributes are weighted according to its relative importance for operators.

Regarding each attribute, fixed video phones integrated with Zonadvanced- Technology and its competitors are scored from 5 to 1 where 5 representing the most attractive and 1 representing the least attractive. The comparison was presented on Table 8.

Table 8: Comparison among competitors in terms of each attribute

Attributes	Zonadvanced-Technology	Computer	Video mobile phone
Effect of video image (Weight=0.25)	5	4	3
Price (Weight=0.25)	5	1	1
Area coverage of linkage (Weight=0.2)	2	5	4
Innovation (Weight=0.2)	4	3	5
Easiness of Operating (Weight=0.1)	5	2	3
Final ranking	4.2	3.05	3.1

Differentiation

The major strengths of fixed video phones integrated with Zonadvanced- Technology

are undoubtedly lie on its quality of video image and its price, which is regarded as the most relevant factor (with sum weight of 50%). Easiness of operating is also the most attractive among competitors and that is explained at the introduction of the technology. Innovation is very favourable since it offers the video communication over fixed phones which have not existed in the market yet. Besides it offers other applications available over fixed phones.

Zonadvanced-Technology Positioning

Taking into account the relevance of each positioning attributes and competitors' analysis, as well as its own features, Zonadvanced-Technology should be viewed by operators as **positioning statement** of innovative technology with economic and high quality characteristics to gain competitive advantage over competitors in this industry.

For that, the **reasons to believe** firstly include the guaranteed high quality perception about the video image to assure a competitive advantage over the video communication over computers and mobile video phones.

Secondly, the price is balancing the cost and the benefits to operators. The price is not as high as its competitors for operators to set an economic price to their customers. Lower cost is a most important factor as referred before for operators.

Finally, about innovation, the company is the only unique one in the market supplying the technology of video and multi-function over fixed phones.

5. Marketing Mix

5.1 Product

With the low cost and innovative products, Zonadvanced-Technology aims to benefit both of the company and operators by offering the innovative technology. At its most basic level, Zonadvanced- Technology is the software that makes the video communication and other applications available over fixed phones. Besides the technology, the hardware of equipments for the whole process's realization is also needed. To the targeted operators in our B2B market, the company of Zonadvanced would offer operators technology, video server, content server and the hardware of the phone. The videophone server and content server are the equipments for the realization of video calls and access to applications. Each videophone server supports 10,000 users. This means each more 10,000 users; one more videophone server would be required by operators. Regarding the kinds of application, Zonadvanced-Technology can afford the customization and flexibility of diverse profiles to operators. For all the operators, they can have either uniform applications or specific application of their own (Appendix 8- Introduction of applications). For example, if Telefonica requires having an application of reviewing news for its subscribers while Vodafone does not need it. Additionally, to different operators the hardware of fixed phones could be different (Appendix 9- Hardware of fixed phones). Since the hardware of phones would follow each operator's own brand name. As mainly a service provider, the company of Zonadvanced would support after sales service to operators.

5.2 Distribution

For the Company of Zon-advanced to enter the Spanish market, international distribution channel structure is very important. Distribution channel structures are not only difficult to change but initial wrong decisions may lead to poor results. The distribution flow was illustrated in Figure 4.
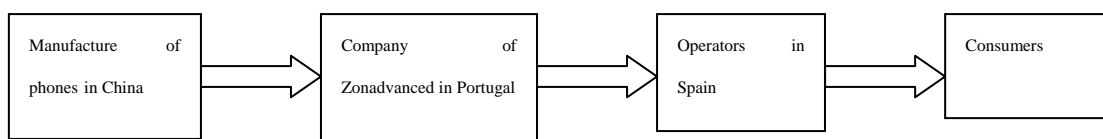
Manufacture of phones in China	→	Company of Zonadvanced in Portugal	→	Operators in Spain	→	Consumers

Figure 4

Before the whole set of fixed video phones providing to operators, the hardware of fixed phones have to be firstly integrated with software of Zonadvanced- Technology in Portugal. As the fixed video phones are not time sensitive and also considering the cost and a significant distance between countries, the shipment would be used to transport the hardware of fixed video phones from the manufacture of the company of Grandstream in Shenzhen of China to the company of Zonadvanced in Portugal. The company initially does not plan to set an office in Spain considering the capital budget. Every order from operators would be directly delivered to operators by trucks from Portugal to Spain considering the short distance between two countries. This distribution would be finished by a third logistic agent in Portugal. For the final customers, they reach the products through operators. Telefónica, Vodafone, Orange and ONO are the mainly four alternatives (Appendix 10- Operators' introduction).

5.3 Communication

The communication objectives would be to present and explain the new technology to operators to make them understand the concept of technology which would then increase the target operators' adhesion and finally promote sales. Before December of 2009, at least one contract would be signed though the communication with operators.

The marketing communication strategy for B2B will be **push strategy** making use of company's sale force to create operators' demand for our products. The communication plan would be directly to the target: the operators with integrated portfolio and internet service providers through a main communication tool of direct selling. The company would directly make an appointment of meeting with operators and give the presentation (Appendix 11- Agenda of presentation). The idea of competitive advantage of the technology should be well organized and delivered to operators. This direct selling hinges upon the right priorities, as it is a much efficient way to spread the knowledge of the technology though face to face communication. Meanwhile the business concentrates on the four main operators, direct presentation is more objective-oriented. Moreover, it is costless for the company. Print brochures would also be prepared with concrete explanation of the technology. They could be sent by mailing or directly face to face. From the CEO of the company's point of view, he also agreed that the communication would focus on direct selling as the communication tool for this new technology's launch.

5.4 Pricing

There are mainly two components of price would be delivered to the operators including both the software of the technology and the hardware of equipments that are required for the whole process's realization. For this kind of new technology which is the unique one in the market, the company would retain a **value-based pricing strategy** for the technology. After setting by the company, the operators would be charged at a one-off price of 241,000 € of the technology. This pricing of the technology is based on the value it creates for the customers. Considering the hardware of equipments that required realizing the whole process, the price that would charge is based on costs as shown on Table 9. One thing should be pointed out is that the price of hardware of fixed video phones would be sustained from the final customers so neither the company nor the operators pay this cost.

Table 9: Price of hardware of equipments.

Equipment	Price	Cost
Videophone serve **(For video communication)**	2000 € per unit (With the margin of 500 € per unite)	1500 € per unite
Content serve **(For service of different applications)**	5000 € per unit (With the margin of 3500 € per unite)	1500 € per unite

(Source: from the company of Zonadvanced)

6. Implementation and Control Plan

6.1 Men

Assemblers

As the fixed phones need to be integrated with software before sending to operators, this assembly process would be taken place in the office in Portugal. The company already has one person responsible for that task for the whole business in Portugal. Since it only requires few minutes to finish the incorporation and then do the packaging, the company now does not plan to have more people in charge of this task considering the first year's adoption period of fixed video phones.

Talent and staff for business in Spain

As the company initially does not plan to set new office in Spain considering the capital budget, the office in Portugal would be totally in charge of Spain's business. Now there are already two people responsible for the Portugal's business. Another two staff would be employed for the specific new business in Spain. One is Sales Director responsible for all the sales activities and report directly to the CEO of the company. The other person will take charge of all the administration affairs assisting the sales director to develop the Spanish market. Both people should be native Spanish language speaking and have good English speaking and writing. Moreover, it is mandatory to have experience in the telecommunication industry. After recruiting they would be both trained in to have a professional understanding with company's technology.

6.2 Money

Revenues forecast

The revenues would be generated from three main components: the selling of the technology, trade of videophone servers and content servers and the service margin of offering the applications' information (Part 1 of Appendix 12- Applications' service margin). A good estimation of the number could be reached from the forecasting of the fixed video phones' retention among final households. As each contract to be done is for three years, revenues in these three years would be forecasted. The first year would be the adoption period for this technology with retention of 4.5% (184,072 households)in all and the next two years would be the explosion period with retention of 27% (1,104,430 households) for all segments (Part 2 of Appendix 12- Segments' Retention). Basing on the number of households to use the fixed video phones, revenue forecast (Part 3 of Appendix 12- Revenue structure) from videophone servers, content servers and service of applications was shown on Table 10.

Table 10: Revenue forecast.

Revenue component	The first year (€)	The next two years (€)
Videophone server	38,000	222,000
Content server	5000	15000
Service of applications	9,365,583.36	112,386,796.8
Total	9408583.36	112623796.8

Cost structure

The cost structure (Part 4 of Appendix 12- Cost structure) for these three years is as followings on Table 11.

Table 11: Cost structure

Cost component	The first year (€)	The next two years (€)
Technology investment	125,000	0
Videophone server	28,500	166,500
Content server	1500	4500
Applications' service cost	4682791.68	56193398.4
Distribution cost	93655.83	2247735.936
Administration cost	120,000	240.000
Total cost	5051447.51	58,852,134.336

From the history of company' operation, the distribution cost is nearly 2% of the total revenue of that year. This level of distribution cost has been assumed for the Spanish market. The administration cost includes the staffs' cost and their related travel costs for the negotiation with operators in Spain.

Profit structure

Table 12: Profit forecast

	The first year (€)	The next two years (€)
Net profit after taxes	2,788,566.944	34,413,863.977

(Note: 25% of tax rate has been assumed.)

6.3 Time

The timing of different market activities in different periods are illustrated on Table 13:

Table 13: Timing of marketing activities.

	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Dec 09	Nov 09	Jan 10	Feb 10	Mar 10	Apr 10	May 10	The next two years
Recruitment of staff for Spanish business	■												
Training for staff		■											
Negotiations with Operators			■	■	■	■	■	■	■	■	■	■	■
Sign at least one contract						■							■
Assembling products and distribution						■	■						■
Install servers in Operators' headquarters							■	■					■
Reliability and Quality testing in operators' headquarters								■	■				■
Product launch									■	■	■	■	■

As soon as at least one contract done with the operator, the activities proceeding would be arranged accordingly. Once after the first year' going of new business, the next two years' activities would be similar.

6.4 Entry Strategy and Further Developments

As an entry strategy, Zonadvanced should mainly focus on its efforts on delivering its competitive advantage of the technology to operators. Then the delivered aspects convince operators that this technology would benefit them from gaining competitive advantage over their competitors in the market. Zonadvanced-Technology is the unique one in the market; however, it is a small company, so it has to do a lot to access the trust from the targeted large-size operators to be a business partner with them.

The products must be with high quality and innovative enough to catch the attention of operators. Once building business relationship with operators, after this effort, it will start distributing the product. Afterwards, it will be crucial to create stronger bonds with operators to manage and improve their loyalty for the business development. Especially, the company must assure its service level.

In the long run, for the further developments, the company should consider the direct competitors emerging in the market. As the improvements is very quick in this industry, other companies would fast detect Zonadvanced's new technology and if they find it is very profitable they would replicate similar technology and entering this business. So the company should develop a strategy for new entrants.

7. References

- Wood, Marian (2008) The marketing Plan Handbook 3rd ed. Person, Prentice Hall, Upper Saddle River New Jersey

- O'Shaugnessy, J. 1995. Competitive Marketing, A Strategic Approach. 3rd ed. Routledge London & New York.

- Kotler, P. Keller, Kevin L. 2006 Marketing Management. 12th 3d. Pearson Prentice Hall, Upper Saddle River New Jersey.

- Johnson, Gerry & Scholes, Kevan & Whittington, Richard (2005), Exploring Corporate Strategy 7th ed. Essex: FT Prentice Hall

- Tidd, J., Bessant, J., Pavitt K. 2005. Managing Innovation- Integrating Technological Market and Organisational Change. 3rd ed. Wiley.

- Trott, P. 2005. Innovation Management and New Product Development. 3rd ed. FT-Prentice Hall.

- Zonadvanced Portugal (www.zonadvanced.pt) (March 2009)

- www.ine.es (March 2009)

- Wiki (http://en.wikipedia.org/wiki) (March 2009)

- Internet World Stats (http://www.internetworldstats.com/eu/es.htm) (March 2009)

- FBBVA (www.fbbva.es) (March 2009)

- IntoMobile (www.intomobile.com) (March 2009)

- Mobile burn (www.mobileburn.com) (April 2009)

- PBS (www.pbs.org) (April 2009)

8. Appendixes

Appendix 1- Company introduction

Company- Zonadvaced

Available services

- **VCMS**- video call mobile services- Just make a video call from your mobile and get a customized video portal, a live video agent, participate in multi-conference, etc

- Video call fixed phone services which is developing now and was introduced in this market transfer plan.

Innovation-As an innovative company, Zonadvanced is at the leading position of the mobile technology with services that can be innovative and different to the clients. The company evidences itself in the market for its innovation. With the launch of video portals in the mobile phone it is going to be easier to access to the information in the mobile phone. Today, there already different contents in the cell phone, but people have to navigate, which makes difficult the access to information most of the times. With Zonadvanced, those barriers are gone, making access to all the information in video just by dialing a phone number on the mobile phone. Instead of visualizing the person with whom you are contacting, there is a menu with several contents that can be selected by you. This content goes from live information, such as traffic, television to recorded information, such as comedy videos, ad videos and so on.

Appendix 2- Feature comparison

Attributes	Fixed video phones integrated with Zonadvanced- Technology	Video communication over computers	Video mobile phones
Effect of video image	√		
Price	√		
Powerful application		√	√
Easiness of operating	√		
Easiness of understanding	√		
Portable			√

Note: the symbol of "√" means the competitive advantage the product has over other competitors regarding each attribute.

Appendix 3- SWOT analysis

From internal side, the **strengths** of the phones with Zonadvanced-Technology compared to the main direct competitors have been described in the **Introduction of the technology** in terms of cheaper price, easier to operate and understand and better video effect.

However, some **weakness** is going along with:

- It is not portable; one can not walk around when talking on the phone as mobile phones.

- Meanwhile it does not have so powerful functions as computers and mobile video phones.

Externally, as **opportunities**:

- There are currently no direct competitors offering the same software incorporated in the fixed phone which leaves a "blue ocean" to be explored.

- Also, the mobile phone calls' price up creates much chance as the top 3 cell phone companies probed for collusion. In this case more people would turn to other alternatives to make calls.

- Moreover the fixed line penetration in Spain shows a growing trend. This is a good term for people to adopt this kind of video fixed phone.

Finally, as main **threats**:

- There is downward performance of Spanish economic.

- Also it is not difficult to replicate the technology, immediately other investors find this technology is profitable, they would invest on replicate it.

- Besides, the internet usage in Spain is increasing which lead to more people may learn about the usage of Skype.

Appendix 4- Market selection

Market Selection

Stage1: Country Requirements for the technology

1º Criterion: Countries with more than 50% of Internet penetration in the population.

(Data sourced from the internet world stats site)

From Asia:

Hong-Kong, Japan, South Korea, Macao, Malaysia, Singapore, Taiwan

From Africa: No country met this parameter

From Europe:

Austria, Belarus, Belgium, Bulgaria, Denmark, Estonia, Faroe Islands, Finland, France, Germany, Guernsey & Alderney, Iceland, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Norway, Portugal, Romania, San Marino, Slovenia, Spain, Sweden, Switzerland and United Kingdom

From Middle East:

Israel, United Arab Emirates

From North America:

Bermuda, Canada, Greenland and United States

From South America:

No country met this parameter

Oceania and Australia:

Australia, New Zealand and Niue

2º Criterion: Countries with more than 40million inhabitants (source: Wikipédia)

From Asia: Japan (~130M), South Korea (~48M)

From Europe:

France (~62M), Germany (~82M), Italy (~58M), Spain (~40M) and United Kingdom (~61M)

From Middle East: No country met this parameter

North America: United States (~303M)

Oceania and Australia: No country met this parameter

3º criterion: Countries GNI/per capita superior to 30,000\$(source: Wikipédia)

From Asia: Japan

From Europe: France, Germany, Spain, and United Kingdom

North America: United States

2Stage: Market Attractiveness and Competitors

	Fixed line trend	Competitors offering the same services	Language
Japan	− (↓)		
France	− (↓)	+ (not yet)	
Germany		+ (not yet)	
Spain	+ (↑)	+ (not yet)	+ (similar)
UK	+ (↑)		
United States			

Appendix5- Country description

Country -Spain

- Households: 14,319,000 units

- Languages: Spanish and Portuguese's lexical similarity has been estimated as 89%

- Fixed phone penetration: 90.2%

- Broadband penetration: 44.1%

Now, Spain is the 8th largest economy in the world. Its economy experienced a long and remarkably intense period of steady growth since the mid 1990s.This trend has been interrupted and eventually reversed starting with the 2008 financial crisis.

- GDP (PPP) - 1.362 trillion (2007)

- GDP growth- 2.4% (2008)

- GDP per capita -$33,700 (2007)

Technical environment

Spain Research and Innovation has opened up a new dimension in the sphere of technological and research works that earned international accredits for the country. Organizations dedicated to such activities take the country on the paths of development and progress and Spain ranks itself as one of the most developed country in terms of the scientific and technological innovations.

Appendix 6- Telephone interviews

<u>**Questions:**</u>

1. Do you have Internet at home?

   o Yes

   o No

2. Do you know what the Internet Speed that you have at home is?

   o Yes

   o No

3. If yes, is it?

   o 8Mb

   o 12Mb

   o 18Mb

   o 24Mb

4. How often do you use home telephone?

   o Less than 5 calls

   o 5 to 10 calls

   o More than 10 calls

5. Have you ever seen and/or done a Video phone call?

   o Yes

   o No

6. Would you use Video Telephone calls if you could?

   o Yes

   o No

7. Could you please rank these applications in order of your personal interest?

   o Pizza ordering

   o News reviewing

   o Traffic condition checking

   o Weather information

   o Sports highlights

8. Would you like to have the contents that you value the most on your telephone?

   o Yes

   o No

9. If you had the possibility of having a service that would enable you to make Unlimited Video Calls as well as Voice Calls with the contents mentioned above, would you be interested in it?

   o Yes

   o No

10. At what Price?

11. Between 10€, 15€, and 20€ which is the most adequate price for you?

   o 10€

   o 15€

   o 20€

12. If the Hardware cost 250€ would you prefer to buy it in one only payment or follow a 3 year loyalty program paying 11€ per month?

   o Pay All

   o Loyalty

13. Would you accept advertising on the screen of the Videophone?

   o Yes

o No

14. If not, would you accept advertising if it gave you benefits in the payment of Telephone

Calls?

o Yes

o No

Gender:

Age:

Composition of Household:

Location:

Appendix 7- Face to face interview with the Product and Content Manager of AR Telecom Company

<u>Interview at AR Telecom with the Product and Content Manager</u>

Friday, 6th of March 2009

On the beginning of the meeting, The Product and Content Manager aid that AR Telecom had already thought about launching in the market a similar but yet different product. Their idea was to couple hardware to the TV set to make videoconferencing with the TV set screen. Additionally to this, a small camera would do the filming, so that the hardware coupled to the TV could transmit the video to the person on the other side of the line. The problem was related to the camera's interoperability, different cameras would have different protocols, so the person on the other side of the line would have guaranteed compatibility only if the

<u>Camera and the hardware operated under the same protocols</u>. These issues made the company give up on this service, they have a geographically concentrated clientele (about 22.000 clients concentrated in Lisbon) and therefore they thought that the service was only viable if they had clients all over the country. From their point of view, this service was useful for people who wanted to call each other but were very distant geographically if not this service lost a lot of interest.

<u>Low barriers to entry:</u> The Manager alleged that if the consumer has to pay a big price to have access to the service he will skip it because this is a new product and the consumer isn't shore that it will be useful. He gave us an idea of how sensible consumers are by giving us ideas of prices. He proposed that the 280€ of the hardware could be dissolved with an entrance fee of

around 50€, and a monthly fee of 10€ to 5€ for the monthly fee. If the monthly fee was 10€ would pay each call separately, paying   30 cents per minute for a mobile network and 20cents to other   fixed networks.

Interoperable with other countries: This attribute is essential in a product like this. Interoperable means that the technology can operate and is compatible with other systems like for example a different hardware or other software protocols. This is important for the usability of the technology from one country to another. The Manager considers that if a costumer cannot make a video phone call to a relative in a foreign country this service looses a lot its usability.

Low/ Medium investment requirement: Considering that every company is slowing down because of the world crisis, the manager warned us that if the investment required to put this product on the market was very high, then no company would be willing to incur on the risk of losing money on a new project.

Testing /good quality: The product would have to be tested in the company before being used by the final consumers. The objective of this testing procedure is to be sure that the service quality provided by Zonadvanced would be good.

Have focus groups tests: Have a confirmation that consumers really find this type of service interesting. A new product is interesting on the condition that its potential in client volume is high. These focus groups would give more security to the company. Women are the priority when it comes to convince the consumer that the service is useful.

Share the investment: The Company will feel more secure if Zonadvanced participates in the initial investment. This participation will be acknowledged as a signal that Zonadvanced really

believes that this product will succeed on the market.

Income added features: If the product can be bundled with additional features like advertising on the screen of the video phone while it is not being used it makes it even more interesting although these features should not be on the base of the offer because at this stage we can't tell if companies are willing to pay for advertising in Telephone screens. The Manager added that this feature can be hurt by the advertising cost cuts from the companies.

Appendix 8- **Introduction of applications**

The applications available for operators are as followings:

Traffic condition checking: Before going out, people can check the traffic condition of the streets they want to know with this application. It can help them avoid the traffic jam and arrange time more efficient.

News reviewing: Especially for business people, this application enable them quickly know the main events happened during the week.

Trailers of movies: People can check what movies are available in different cinemas with this application. So they can choose the favourable movie they want to watch and go to the relevant right cinema.

Information of open pharmacies: To find the nearest pharmacies near people's house.

Sports highlights: To learn about the main sports events to be held on.

Meteorology: People can check the weather condition of the place they want to know.

Appendix 9- Hardware of fixed phones

Feature Specifications of the hardware

SIP Compliant and Protocols	Support SIP 2.0,TCP/UDP, RTP/RTCP, HTTP/HTTPS, ARP/RARP, ICMP,DNS, DHCP(both client and server), PPPOE, TFTP, NTP, TLS(pending)
Networking interfaces	Support dual 10M/100M auto-sensing Ethernet ports, 2 USB (2.0) host ports, 1 audio and 1 video output jack and headset jack.
Advanced Video	Powerful video DSP with advanced adaptive jitter control and packet loss concealment technology to ensure superb audio and video quality
Video Codec	Support H.263 and advanced H.264 base line real-time video codec(at CIF or QVGA resolution and up to 30 frames/second) Anti-flickering, auto focus and auto exposure, zoom, PIP (Picture-in-Picture), audio mute and camera block (for privacy), still picture capture/store/send (VGA Resolution)
Advanced Features	Support popular telephony features including 3 line indicators, full-duplex hands free speakerphone, 3-way conference, voicemail, video/audio conference, and transfer, mute. Etc
Management, configuration and administration	Support device configuration via LCD, Web browser or central secure configuration file

One sample of hardware of fixed phones:

Appendix 10- Operators' introduction

The mainly four operators targeted are Telefónica, Vodafone, Orange and ONO. Specially, Telefónica alone has the broadband market share of 57% and fixed phone market share of 87%. Orange secondly dominates the broadband market share of 20.6%.

Telefónica España: Its core activity is the exploitation of fixed and mobile telephony and broadband in Spain.

Telefónica España continues to drive market growth, consolidating its competitive positioning with more than 47 million accesses under management (+3.3%). At the end of September 2008, Telefónica España managed 47.2 million accesses, a year-on-year increase of 3.3%, boosted by the 4.5% year-on-year growth in wireless customers to over 23.4 million and 16.8% growth in retail internet broadband accesses to over 5.1 million in wireline business.

Orange: Spain represents one of the group's strategic markets. All of the activities offered to clients as an integrated operator in Spain – fixed, mobile, internet, ADSL TV – have been grouped together under the Orange brand since October 2006. On 31 December 2008, Orange had more than 11 million clients in Spain.

On convergence, the Spanish version of the first fixed and mobile telephone unik was launched in December 2006 under the name of "unico".

On the fixed-line network, Orange is pushing ahead with the development of unbundling – with 55% of its ADSL customer base unbundled at the end of 2006 – while facilitating the migration of its customers over to broadband. On the mobile network, Orange has ramped up its mobile broadband coverage, with over 70% of the Spanish population covered at the end of 2006.

Appendix 11- Agenda of presentation

To achieve the communication objective, the presentation by the company of Zonadvanced to operators should include main topics as following:

Technology description: brief introduction of the research and development of the technology

Needs the technology can satisfy: introduction of its functions of video communication and other applications available to show the operators what kinds of needs this technology can fulfil for final customers.

Survey from households: the feedback from the households about their perception towards fixed video phones to ensure operators business potential.

Costs: introduction of cost components of accepting this technology for operators. The costs include both the software and hardware aspects that are required for the whole process's realization.

Profits to operators: basing on the costs operators have to take, the estimated profits operators can gain should be finally shown to them.

Appendix 12- Money

Part 1: Applications' service margin

Regarding the service of applications, the price for each application in terms of each household

per month the operator should pay to the company of Zonadvanced would be as followings:

Content	Price (per month, per household)	Margin for the company
News	1 €	0.5 €
Traffic	1 €	0.5 €
Info of open pharmacies	0.04 €	0.02 €
Sports Highlights	1 €	0.5 €
Meteorology	0.20 €	0.10 €
Trailers	1 €	0.5 €
Total	4.24 €	2.12 €

(Source: from the company of Zonadvanced)

From above information, we can know that for each household per month with the service of

applications, the company of Zonadvanced has the revenue of 4.24€ with the margin of 2.12€.

Part 2: Segments' Retention

At the beginning of business, there would be a small percentage of households as early adaptors

to the products. With these earlier users extended and also the better-known of the products,

there would be a relatively big percentage of households accessing the product. Then when the

business goes into a mature phase, the increase of new adaptors would be small but stable. The

retention rate of each segment in each period has been shown in the following table.

	Early adoption(first year)	Explosion (the next two years)	Total
S1: Video communication over computer heavy users with fixed phones	0	0	0
S2: Not video communication over computer heavy users with fixed phones and broadband	1.5%	9%	10.5%
S3: :Households with fixed phones but without broadband	1.5%	9%	10.5%
S4: Video communication over computer heavy users without fixed phones	0	0	0
S5: Not video communication over computer heavy users with broadband but without fixed phones	1.5%	9%	10.5%
S6: Households without fixed phones and broadband	0	0	0
Total	4.5%	27%	31.5%

The specific numbers of users in different phases of these three years are as followings:

	Early adoption(first year)	Explosion (the next two years)	Total
S1: Video communication over computer heavy users with fixed phones	0	0	0
S2: Not video communication over computer heavy users with fixed phones and broadband	68340 units	410040 units	478380 units
S3: :Households with fixed phones but without broadband	108300 units	649800 units	758100 units
S4: Video communication over computer heavy users without fixed phones	0	0	0
S5: Not Video communication over computer heavy users with broadband but without fixed phones	7432 units	44590 units	52020 units
S6: Households without fixed phones and broadband	0	0	0
Total	184072 units	1104430 units	1288502 units

Part 3: Revenue structure

Revenue component	The first year (€)	The next two years (€)
Videophone server	38,000	222,000
Content server	5000	15,000
Service of applications	9,365,583.36	112,386,796.8
Total	9408583.36	112623796.8

Videophone serve: as each videophone serve is for 10,000 users, for the 184,072 units of households in the first year, 19 servers would be needed with revenue of 38,000 euro (19 times 2000 euro for each videophone server). The calculation for the next two years' revenue from videophone serves could be attained in the same way.

Content server: in the first year, at least one contract would be signed with the operator according to the timeline; at least one content server would be needed with the revenue of 5000 euro. The next two years of explosion period, suppose another three operators will sign the contract with the company, the revenue from content server will be 15,000 euro.

Service of applications: from Part 1- Applications' service margin, each household per month contributes the margin of 4.24 euro, with 184,072 units of households in the first year; total revenue from this would be 9,365,583.36 euro (4.24*184,072*12). The calculation for the next two years could be attained in the same way.

Part 4 - Cost structure

Technology investment: this cost was raised from the research and development of the technology, the cost was 125,000 in all from the information of the company.

Videophone server, content server and applications' service cost: these three components' cost was calculated in the same way as the revenue from these three parts which has been introduced in Part 3- Revenue structure in terms of the cost price of each component.

Distribution cost: from the company's last years performance, the distribution cost is nearly 2% of the total revenue of that year. In this case, the same rate is expected, so the distribution cost in the first year would be 93655.83 euro (2%*9,365,583.36). The calculation for the next two years' distribution cost would be done in the same way.

Administration cost: the assistor would be paid 1500 euro per month and Sales Director would be paid 3000 euro per month. On average, the travel costs for them to Spain to do the presentation or negotiation and other related costs would be 5500 euro per month. In all, 10,000 euro per month would occur. So in the first year, the administration cost would be 120,000 euro (12*10,000).

Cost component	The first year (€)	The next two years (€)
Technology investment	125,000	0
Videophone server	28,500	166,500
Content server	1500	4500
Applications' service cost	4682791.68	56193398.4
Distribution cost	93655.83	2247735.936
Administration cost	120,000	240.000
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