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Development of a Marketing Plan for a Handset Security Offer

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Management summary

With the arrival of the so called “smart-phones”, which integrate Internet and computer technology on a mobile phone, security issues such as viruses are likely to swap over into the world of mobile communication. The first mobile virus has been created around a year ago, but was mostly harmless. Nonetheless, it is only a question of time, when serious incidents will happen, because smart-phones share the same vulnerabilities as PCs. That is why financial analysts predict high growth rates for the emerging mobile device protection industry.

For any mobile operator the appearance of mobile viruses can be seen a real threat, which may lead for instance to large number of non-functioning phones, wrong invoices and dissatisfied customers. However, the diploma work has identified three excellent opportunities for Orange, a Swiss mobile operator, on how to benefit from that development nonetheless: First of all a revenue opportunity of around SFr. 500'000 for 2006 and SFr. 2'500'000 for 2007. Secondly an opportunity to differentiate the normal Orange mobile phone offers by bundling them with an innovative security service. And thirdly, to use the public interest into the subject in order to position Orange as helpful, trustful and competent partner.

We found that Orange's strengths and weakness are apt to exploit this opportunities effectively. However, amongst the issues to be addressed is the effective distribution of software onto the phones, where Orange have no experience so far.

How to target the market concretely? To begin with, we have segmented the market in two dimensions. One, emotional axis shows the different levels of safety, which people desire, i.e. the risk-averse people on the one side and adventurous ones on the other. The second, rational dimension is about the real dependency on the phone, i.e. from people, who strongly rely on a working handset, towards those, who could easily live without it for some time. Consequently our target segment are customers, who depend on the phone and demand a personal feeling of safety at the same time. Orange shall position themselves within that segment as trustful, helpful and competent partner.

What is the strategy on the marketing mix? First we identified the need for a robust, effective security product from a third party that is easy-to-use and can be managed remotely. Moreover, it has to be fully “mobile” in a sense that all functions such as installation, activation or updating can be done by using the mobile network only and do not require a PC for instance. Services such as billing and customer support will be provided by Orange and the antivirus software by F-Secure Inc., a specialized company in that field, who have a clear strategy on partnering with mobile operators.

Secondly, we have analyzed the available sales channels and found that the Orange retail stores (“Orange centers”) and a download from the mobile portal are the most effective options. In the centers Orange will bundle the service with phones and sell it to new Orange customers, whereas the mobile download is targeting on existing ones.

Thirdly, the promotion shall be emotional about the protection on the one hand, i.e. “Feel safe with Orange and F-Secure”. On the other hand rational about the risk and strictly avoid that people feel scared. As most important promotion medium we have identified SMS direct mailing, because it comes at a very low cost and allows precise targeting. Moreover it can be linked with the antivirus software, so that customers can directly install the product with only a few clicks after having read the SMS.

Fourth, the pricing has the goal to drive volume rather than profit. It has been based on the perceived value of the service, which is primarily linked to the value of the phone to be protected. Having identified an inelastic demand and monthly cost per customer of SFr. 2.32 the optimal price is been calculated at SFr. 4.00 per month.

Those marketing strategies have been broken down into concrete action plans. Moreover, detailed financial forecast of customers, channels, revenues, costs and profits are available. Financial ratios, most importantly the NPV of ca. SFr. 1'300'000 suggest clearly to invest into this new service.

Finally, controls have been developed in order to steer the service, first of all for monitoring the sales channels. Contingency plans are ready for twelve different scenarios such as price pressure or a spate of serious infections.

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1 Introduction

With the convergence of mobile telecommunication, Internet and IT into devices like the “Pocket PC” from Microsoft, the “Treo” from Handspring, the “Communicator” from Nokia or other phones with open operating systems (open OS), security issues known from the PC world are about to swap over into the world of mobile phones.

The scenario of a virus, worm or another malicious code that spreads around on mobile phones and that causes direct or indirect financial damages to customers and mobile operators seems only to be a question of time. Worst case scenarios include large numbers of non-functioning phones, unintentional phone calls, SMS or MMS, loss of billing integrity and loss of reputation and trust. But even, if those scenarios could be avoided, the risk of a mobile virus can not be ignored anymore.

Therefore Orange Communications SA Switzerland (“Orange) have a great opportunity to position themselves as an operator that understands those risks and – even more importantly - helps its customer along with the protection. This may differentiate us from competing operators and handset manufacturers that traditionally play down security problems and ignore that customer need.

The goal of this diploma work is to develop a sound marketing plan for a mobile antivirus offer for our customers. With the offered “mobile security service” customers shall be able to protect their handsets against viruses and other sorts of malicious code. It would be the first offer of this kind in Switzerland, i.e. a real innovation. To develop that marketing plan we will use the 7 step approach that is described in [KOTLER 2003, page 115-118]

In the first step we will describe and analyze the current marketing situation, including products, channels, competitors and media aspects. This information will be used to conduct a SWOT analyses, which will feed into step two, the opportunity and issue analyses. Here we will review the identified opportunities in detail and list the issues that have to be addressed.

In the third step we will use the results of the opportunity and issue analyses in order to set and justify our objectives in terms of sales, market share, customer experience and public relation.

In a fourth step - the main focus of this work - we will set our marketing strategy that shall deliver those objectives. We will propose a segmentation of the market along appropriate parameters, select target segments and position the product effectively within it. Furthermore we will set appropriate product and service, distribution and pricing strategies. Special attention will be given to the delicate promotion of security services without “scaring” the customers.

Step number five is the creation of an action plan, which breaks down the strategies from the previous step into concrete actions.

Step six will consolidate forecasts of customers, revenues, costs and profits in a 2 years business case. We will use the method of discounted cash flows and calculate the NPV next to other financial ratios.

The final step seven will describe the controls that are needed to steer the offering in an effective way. Moreover, several scenarios that might impact the plan are discussed and appropriate contingency measures are provided

2 Current marketing situation

2.1 About “Orange Communication SA Switzerland”

Orange Communications AG, Lausanne, is 100 % owned by Orange SA/France Telecom Group. On the 29th May 1998 the Federal Communications Office (BAKOM) granted Orange a license to build and operate an 1800 MHz GSM mobile network. On 29th June 1999 Orange entered the Swiss market as a provider and its network now covers almost 99% of the Swiss population. In December 2000 Orange acquired one of the four UMTS licenses. At the end of 2004 Orange achieved a total revenue of 1'288 million francs and earnings before interest, tax, depreciation and amortisation (EBITDA) of 395 million francs. By the end of March 2005 Orange had 1'126'000 customers, had invested over 3 billion francs and employs 1400 people. For more information on Orange, go to www.orange.ch

2.2 Marketing background and trends

Before we describe the concrete Swiss market for an Orange device security offer, we regard, as a first orientation point, the global market for mobile device security technology, such as antivirus, encryption or firewalls.

This emerging market is typically split into enterprise and consumer segments. For the later, revenues of around 96 million dollars are estimated for 2006, whereas in the enterprise segment worldwide sales is supposed to be at around 284 million dollars according to a Goldman Sachs study. [GoldmanSachs 2005]. For 2007 the same study predicts 542 million dollars (enterprises) and 329 million for consumers, representing a significant growth of 91% and 242% respectively. That indicates a clear trend towards a strong demand for mobile device protection.

Now, our plan, as a mobile operator, is to enrich this pure security technology, namely the antivirus protection, with our own services and bring it to our own customers respectively acquire new mobile customers with the security service as differentiator.

The market for that offer will be limited

- geographically to Switzerland, because of Orange license obligations
- technically to those phones that support installation of a software, i.e. phones with an open operating system (OS), and
- from an Orange policy point of view to existing and new Orange customers, i.e. not to customers of our Swiss mobile competitors Sunrise and Swissom.

What is the size of that market in terms of customers and revenues? Currently around 5% of our customer base (1'200'000 customers planned for end of 2005) have a phone with an open OS, i.e. Palm OS; Symbian or Pocket PC. The share of those phones within newly sold devices is around 30%, so three out of ten new customers buy such a phone. Assuming a churn rate of 25% (like in the last years) for 2006, i.e. 300'000 new customers, we come to a market potential of ca. 135'000 customers in 2006 (30% of 300'000 plus 5% of 900'000) and 191'000 in 2007.

Looking at the average revenue per unit (ARPU), we find that customers with an open OS phone generate currently 75% more revenue than the average customer. That is,

why we assume at that stage a yearly potential of SFr. 50 per customer resulting in a potential market size for our offer of about SFr. 6'750'000 in 2006 and with the same assumptions SFr. 9'500'000 for 2007. However, as of today no significant amount of mobile antivirus installations have been observed yet.

The competition can be split into three categories:

1. Swiss mobile operators
That is Sunrise and Swisscom, from whom we want to differentiate with that offer primarily. Sunrise has apparently no plans to go in that direction, whereas Swisscom has already an antivirus trial version installed on one device.
2. Handset manufacturers
Companies like Nokia, who might want to offer their own security services together with their phones. Although they have only sporadically signed up contracts with antivirus providers to protect selected device, a clear strategy to go in the direction of security services can not be seen at the moment.
3. Mobile security suppliers
Technology providers, who seek direct contact with our customers. Some of them, e.g. Symantec, want to leverage on their own customer base in the traditional PC virus protection field and cross-sell the mobile phone protection as an extension. Others, e.g. trend micro, place aggressive offers on the Internet and try to approach the customer directly.

Suitable channels include

- the download from a mobile portal directly on the phone,
- the download via Internet,
- phone manufacturer pre-installation,
- retail outlets like the Orange Centres,
- installation package for a PC or
- installation package on a memory card for the phone.

The currently available products work mainly like the antivirus solutions known from the PC world. That is, a software that is installed on the phone and updates automatically the virus definitions. The software scans the phone permanently and alerts the user, if a suspicious activity is detected.

Public interest has been rising in the last months after series of minor outbreaks that have been reported in the press. So, although the risk is quite low at that stage, we assume that the sensational press will fuel the demand, once a real problem occurs.

2.3 SWOT Analyses

The outcome of the SWOT analyses will be opportunities and issues, which we will analyze further in the next chapter. As a reminder, we want to take advantage of the trend of increased virus infections of mobile phones and the high media interests plus the demand for protection that will come with it.

One straightforward opportunity for Orange as mobile operator is to grab a share of the revenues generated by new mobile security solutions. As we have already a customer relation, selling will be relatively easy. Furthermore, we could leverage on the call center and our wide spread retail network in CH. We believe that the success

probability is high, because we will mainly offer to existing customers. The attractiveness is high given the increasing competition in our core business.

A second opportunity for Orange lies in the differentiation of the normal phone offering. In other words, a security service could serve as USP for new customers and increase satisfaction of existing ones.

A third attractive opportunity, probably the most attractive at all, is to position Orange as a helpful and trustful partner in the public. Leveraging on the public interest into the subject, we can relatively easy get a positive impact on our image, especially as our brand serves as mayor differentiator in the consumer market already. Figure 1 shows the opportunities assessment in an overview.

		Success probability	
		High	Low
Attractiveness	High	Enhance Image Differentiate phones Extra Revenues	
	Low		

Figure 1: Opportunity matrix

The biggest threat that we see is a loss of revenue due not working phones. If customers cannot make phone calls anymore and cannot be reached this will directly impact our revenues and profits.

Secondly, we see a big risk in loosing reputation in the public and a decrease in brand equity as a consequence.

Thirdly, we would have much higher customer support costs, e.g. calls to the call center, des-infection of phones, correction of false invoices and so on. Nonetheless, we believe that all in all we could more or less digest this increase, so that we judge the severity of that threat as relatively low.

Finally we might have a drop of customer satisfaction potentially resulting into churn. As we believe that all operators will be impacted similarly, the probability of occurrence is relatively low. Figure 2 shows all threats in an overview.

		Probability of Occurrence	
		High	Low
Severity	High	Revenue loss Loss of reputation	Customer dissatisfaction
	Low	Additional cost	

Figure 2: Threat matrix

In order to answer the question, if we can effectively deliver those opportunities identified above, we will analyze the relevant internal environment in terms of strengths and weaknesses. We will do so by using the checklist proposed by Kotler in [KOTLER 2003, p. 105]. The following table 1 contains the assessment of Orange's performance relative to the effective exploitation of the identified opportunities.

Topic	Orange Performance			Importance <i>High,med,low</i>	Comment
	<i>Strength</i>	<i>Neutral</i>	<i>Weakness</i>		
Marketing					
Reputation	Excellent brand			HIGH	Security business is a question of trust and directly linked to an excellent reputation.
Market share		Number 2 (out of 3)		HIGH	Good market share is needed to penetrate the market with this innovation as fast as possible.
Customer satisfaction		x		med	
Customer retention		x		med	
Product Quality		x		med	
Service Quality		x		med	
Pricing effectiveness		x		low	

Topic	Orange Performance			Importance High,med,low	Comment
	Strength	Neutral	Weakness		
Distribution effectiveness			Mainly retail stores & resellers	HIGH	Distribution, i.e. bringing the antivirus software on the phone is clearly an Orange weakness. Namely because Orange's channels have not been designed for distribution of mobile phone software.
Promotion effectiveness	Good direct Marketing facilities			HIGH	Especially the fact that Orange – as a mobile operator – knows precisely, which customer has which phone model, allows very targeted SMS promotion.
Sales force effectiveness			X	low	
Innovation effectiveness		x		med	
Geographical coverage		x		low	
Finance					
Cost of capital		x		low	
Cash Flow		x		low	
Financial stability		x		low	
Manufacturing					
Facilities		x		low	
Economies of scale		x		low	
Capacity		x		med	
Able, dedicated workforce		ca. 1500 employees		HIGH	Experience in the field of mobile software is available, but overload hinders better dedication.
Ability to produce on time		x		low	
Technical Manufacturing skills		x		med	
Organization					
Visionary, capable leadership		Focus on short-term results		HIGH	This new type of business clearly demands visionary leadership, whereas current focus is on the traditional "voice" business
Dedicated employees		x		med	

Topic	Orange Performance			Importance <i>High,med,low</i>	Comment
	<i>Strength</i>	<i>Neutral</i>	<i>Weakness</i>		
Entrepreneurial orientation		Strong focus on processes		HIGH	Orange is an organization in a consolidation phase. Process optimization and cost control are first priority and innovation initiatives have a difficult stand
Flexible or responsive	x			med	

Table 1: Checklist for Orange's Strengths and Weaknesses in relation to a mobile device security offer

To conclude, we believe that reputation, market share, distribution and promotion effectiveness as well as an able and dedicated work force, visionary, capable leadership and entrepreneurial orientation are the most important strengths that a company would need to take advantage of the identified opportunities. Looking at Orange's performance we believe that we have a profile, which is overall quite good, namely the outstanding brand and the promotion effectiveness. However, distribution in that new field of business, i.e. distribution of software and services, is clearly a weakness.

3 Opportunity and issue analyses

As output from the SWOT analyses from the previous chapter we found that we have three main opportunities, that we will analyse one after the other and summarize all identified issues at the end.

3.1 Revenue increase from mobile security service

Customers will only be willing to pay for a security service and generate revenues, if they recognize a risk. The customer's value perception consequently is then the mitigation of that risk. As a result he will be objectively safer with the security service and, more importantly, *feel* safer.

Now, the probability to get infected by a mobile virus is rather small at that point in time. And therefore only a few people will be ready to pay for a protection. In fact, looking at the current situation, even one year after the first mobile virus has been created, we see only a very few amount of mobile viruses, fortunately mostly harmless.

However, we know that mobile phones have similar vulnerabilities as PCs and we have to expect a equally severe problems one day. So, the real issue here is the timing. Nobody can tell today, if we will have a serious virus still in 2005 or even not before 2008. That makes revenue projections a difficult task.

Because we cannot be sure about the timing of security events, it is worthwhile to have at least a look at the probable development as illustrated in figure 3. At the moment the risk perception is low, because no serious events have happened so far. Let's imagine this event takes place. There will be big stories in the press. There will be huge confusion in the customer base. There will be huge pressure on the operators. And there will be huge pressure on phone manufacturers.

As a result, the risk perception will accelerate and very soon be even higher than the objective risk. We know for example that people are more scared about natural disasters and terrorist acts than they are about car accidents. But as a matter of fact, still far more people lose their lives on the streets. The point is that there will be an over perception of risk for a certain period of time, because of the reporting.

Consequently there will also be an over perception of value for a security services. So, in principal we have a dependency on external security events, which we cannot control, but which impacts significantly the value of our offer. This value will increase sharply after a event, but decline over times without incidents. That is another issue to be addressed.

The next issue is that security suppliers and phone manufacturers might form alliances and sharing the "cake" between themselves leaving the operators outside. In that case commercial pressure would to be used in order to fight such a constellation.

Finally we clearly have an issue with the ease of use. As a matter of fact, mobile customers usually do not know more about their phones other than the dialing of a number. Big parts of the customer base even cannot handle commodity applications such as SMS and or voice mail boxes. That presents a considerable challenge, if we want customers installing and using an antivirus software.

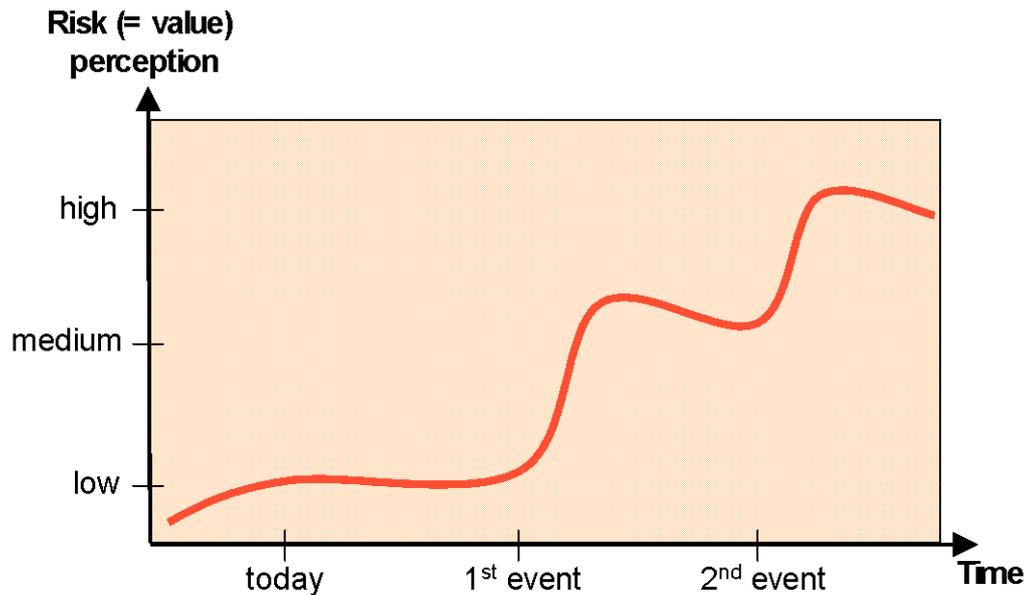


Figure 3: Development of risk and value perception for a mobile security offer over time

3.2 Security services as differentiator

The opportunity to differentiate against the competition in the Swiss mobile communication market is obviously linked to the extra revenue opportunity described in the previous section. Consequently we find the same issues that need to be addressed.

In addition, we have to consider more deeply the positioning and the reactions of our competitors. Clearly, if the offer is a success and allows effective differentiation in the mobile market, competitors will try to copy it. We assume that this will take 3-6 months to copy the offer. So, permanent effort would be required to keep that leading edge.

Another issue is the distribution of a mobile software. As identified in the SWOT our channels have not been foreseen for that kind of business model. For the time being we are mainly selling phones bundled with a communication service. Now, we have to sell a mobile service, which will demand a new approach.

Finally the whole internal organization has to adapt to the new kind of business model. Especially as it will be the blueprint for other true mobile services in the future.

3.3 Enhance public image

The main issue is that people might become scared about mobile viruses and associate the problem with Orange. Therefore promotional activities have to address this with a factual and neutral form of communication. However, already the fact that we offer a protection might suggest that there is somehow a problem.

3.4 Conclusion of review

In order to take advantage of the identified opportunities of extra revenue, a differentiator in the mobile business and an enhanced public image, we need to address a series of issues. First of all, the timing of the demand. Demand will take off

only after the happening of a 1st real security event, which cannot be predicted precisely. Furthermore, we need to manage the ease-of-use and effective distribution to ensure a pleasant user experience. Finally, we have to avoid to be identified with the problem in the media and make sure that manufacturers don't work with antivirus suppliers on the cost of Orange.

4 Objectives

We will define our business objectives for each of the opportunities we want to exploit. In the absence of a complete set of data, we will work with assumptions.

4.1 Extra revenues

We plan to have 10'000 customers in 2006 and believe they shall spend around SFr. 50 per year on the service, because those customers are high value customers. This will be resulting in a yearly revenue of SFr. 500'000. Although profits are not the primary target, we plan to cover the cost at least.

For 2007 assuming serious security events have happened on the way, we target for some 50'000 customers with an annual spending of SFr. 50. That would result in SFr. 2'500'000. Profits margins shall be at 50% representing a gain of SFr. 1'250'000.

Moreover, we plan to be the market leader for our own customers, i.e. 90% of antiviruses installation shall be provided by Orange and leaving 10% to others.

Compared to the other Swiss mobile competitors, Orange shall have the highest share of installations in its customer base.

4.2 Security services as differentiator

We plan to have 2000 gross adds to the customer base. i.e. 2000 new customers that join Orange because of the security service in 2006. For 2007 we target 10'000 gross adds.

Furthermore we want to retain 2000 customers by offering security services, i.e. customer that intend to leave will stay due to the offering. For 2007, 10'000 customer shall be retained.

In terms of customer experience we plan to be the mobile operator that offers a service that is most easily used, because we believe that this is key in the security market. In other words, we want to be the leader in terms of customer satisfaction.

4.3 Enhanced image

Orange shall be widely seen as the leading provider of mobile security services. In other words, Orange is in the public perceived as the market leader in the mobile security field.

Secondly, Orange wants to stand for the most helpful, trustful and competent solutions amongst the Swiss mobile operators.

The third objective is to align the image with the current Orange brand, ensure consistency and avoid contradicting messages towards the market.

4.4 Overview

The following table 2 shows an overview of all objectives.

Topic	2006	2007
<i>Customers</i>	10'000	50'000
<i>Revenues</i>	SFr. 500'000	SFr. 2'500'000
<i>Profit</i>	SFr. 50'000	SFr. 1'250'000
<i>Market share (Orange customers)</i>	90%	90%
<i>Gross Adds</i>	2'000	10'000
<i>Retention</i>	2'000	10'000
<i>Customer Experience</i>	Ease-of-use	Ease-of-use
<i>Public Image</i>	Most helpful	Most helpful

Table 2: Overview of objectives

5 Marketing strategy

In this chapter we will segment the market, select a target segment and position the mobile security offer within it. The optimal marketing mix will be defined around the 4 Ps, product, promotion, place (or distribution) and price.

5.1 Effective market segmentation and targeting

We segment the market of Orange customers, who own one of the open OS phones, as follows:

The *first dimension* is the level of safety that customers are looking for. In general we know that some people are much more risk averse than others. Those risk-averse people are usually more afraid about things than it would be objectively justified. Fuelled by the media, who are purposely addressing their fears, they are typically worried about things like rare diseases, catastrophes, disasters and crimes.

Furthermore they are sceptical about new things and people they don't know. Often they are "over-insured" and try permanently to detect new risks. In other words, they are looking for a feeling of safety that they can never reach completely.

If we take the success of the insurance industry in Switzerland, we can assume that about 50% of our customers fall into that segment.

The other 50% usually react only *after* something has happened. They will surely ignore the risk of being infected with virus, until they have really experienced a negative impact themselves. The same people will drive 150 km/h on a highway, until they are flashed or have an accident.

In short, as a first dimension the personal demand of safety is a decisive criteria for the antivirus offer.

The *second dimension* is the dependency on the phone. Clearly, if permanent connectivity is needed for a person or a business, people will value the integrity and availability of the mobile device.

On the other hand, if people can accept that their phone is not available for some days or even weeks, they might not be interested in protection it in the first place. For example, if you don't process confidential data on your PC and only surf the Internet from time to time, you will not invest into anti-virus software. In the absence of figures, we assume a 50/ 50 share in this dimension as well.

Assuming furthermore that those two dimensions – level of safety needs and level of dependency – are mutually independent and equally distributed, we have a market segmentation into four equal parts, i.e. 25% of customers in each segment (see also figure 4).

Please note that we do not specifically distinguish between business and consumer markets, as we believe both markets share the same segmentation. That means, companies – as consumers – are divided into dependencies on mobile devices, e.g. a taxi firm vs. an engineering office, and into adversity towards risk, e.g. a start-up vs. mature businesses.

Looking at the segmentation from above, we will target those customers first that are risk-averse and depend on the phone, i.e. in the upper left corner of figure 4. Clearly they will value the emotional aspects of feeling safe, plus the rational elements of having a better availability of their phone; and in consequence be ready to pay for it.

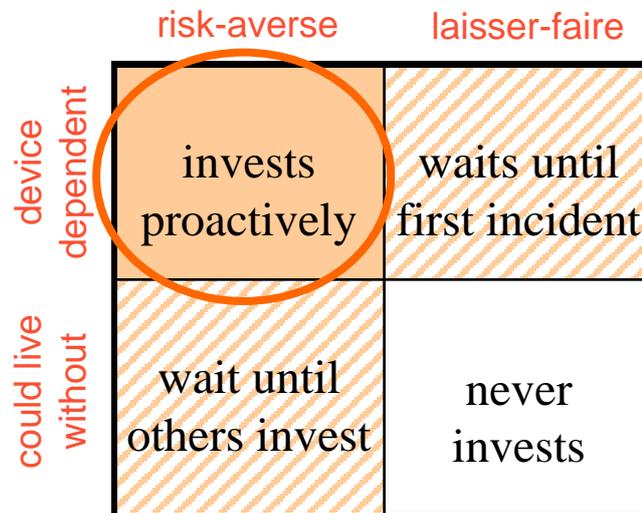


Figure 4: Market segmentation for mobile device security

5.2 Competitive positioning in target segment

As Orange is an emotional brand we want to leverage on the emotional aspects of the offer like we do for most of our offers. Especially as the *rational*, added value of an antivirus offer is difficult to quantify at this point in time.

Now, one “easy” and common way of selling security - for instance an insurance policy or a helmet protection - is to “scare” people. The logic is simple and effective in the short run: The more people are scared the more they demand protection.

The downside is that you lose credibility and trust in the long run, when you blow up the risk artificially. Furthermore it is not in the interest of Orange at all to scare their customers, as we want them to have confidence in our services.

Another important element is the media. As we can see in figure 5, even the serious BBC is reporting in a way that is apt to foster discomfort. That means that the sensational press will play on the fear and therefore the demand for security will be created rather quickly. In other words, there is even no need for Orange to scare people or to be emotional about the risk, because of the role the media play here. Consequently Orange will be always *extremely factual about the risk*.

Nonetheless, an emotional positioning is still required. Therefore we align the positioning with the overall Orange positioning that is “Orange provides surprisingly helpful services”. That means we take on the role of the player that can help along. “You are afraid about mobile viruses after having read an article in the newspaper, you depend strongly on your phone, you don’t know what to do? Orange is pleased to help you along...”.

That is also giving a good differentiator to the competition, who traditionally is playing down the risk. Their approach is more to shift the liability towards the customer and

negate that there are real problems. Again, Orange will gain trust, when being factual and open about the risk.

The last aspect to be looked at is the security expertise. Actually the Orange brand does not stand for security. Moreover it stands for openness, freedom and flexibility, which are typically seen as the opposite of security. So taking the Orange brand for a security offering would dilute the brand value and would not be seen as credible. That's why we want to leverage on the brand of our mobile anti-virus partner and go for a co-branding.

So the positioning statement has to take into account the results from the above analyses, namely

- underpinning the emotional customer value, i.e. feeling safe
- being factual about the real risk, i.e. showing real competence
- not scaring people, but offering help
- building on the security expertise of a partner

In other words:

“Orange (and their partner) want to be the most helpful, trustful and competent provider of mobile security solutions in Switzerland.”

is the concluding positioning statement.



Figure 5: BBC reports on first mobile phone virus

5.3 Product and Services

The actual product, i.e. the antivirus software, is provided by a third party, because Orange has no expertise in that field, whereas the complementing services around are provided by Orange themselves. The product & service design has to fulfil the following requirements in order to fulfil the customer needs of “feeling safe”:

- a) Effective against viruses
Obviously that is the core functionality of any protection.
- b) Easy to install
Many customers are not used to install applications on a phone at all. Here simplicity is key.
- c) Easy to use
First of all the tool shall protect the phone effectively *without* user interaction. Moreover, the user should be informed, when a virus has been detected and removed. Finally the software should update itself automatically via the mobile network so that the protection is always a jour.
- d) Self-explaining status
The customer shall always see the actual status of the protection, for example indicated by an icon. He shall always be able to perform a manual scan of the phone. So, if he has a doubt about the integrity of the phone, he can run a scan promptly and feel safe as a result.
- e) Not impacting other phone functions
The impact on other phone functions and the overall performance of the phone shall be minimal. The product shall work silently in the background.
- f) Central software management by the operator
A key functionality is the central software control by the operator. That is needed in order to guarantee a certain quality of service. For instance the software and antivirus definitions have to be always up-to-date. In other words, we want to offer a managed security service instead of simply distributing a software to our customers.
- g) Installation, distribution, provisioning, activation and de-activation are fully “mobile”
It is important that all steps of the customer life cycle can be performed by using the mobile network only. That means there is no need for a PC, nor for a fix line or an Internet connection.
- h) Additional Security Functions
Spam filter for both SMS and Email, data encryption as well a personal firewall could complete the device protection in the long run.
- i) Emergency patching (push SMS)
In case of a bigger virus outbreak, the operator or the antivirus provider shall be able to push the new virus definitions remotely.

- j) SMS alerting
Customers should be regularly alerted, when a new mobile virus has been detected somewhere.



Figure 6: Screenshot of user interface of the F-secure antivirus software

We have analysed the potential suppliers and have chosen F-secure¹, because they have a long experience in the antivirus business. Moreover, they have a declared business strategy that builds on mobile operators as partners. In other words, the strategies match best and the product quality assessed as optimal. A screenshot of the user interface is shown as illustration in figure 6.

Services will be provided by Orange, i.e. mainly the billing and 1st level support (Call Centre) and 2nd level support (back office support team). 3rd level support (engineering level) will be provided by F-secure respecting the typical Orange Service Level Agreements.

5.4 Distribution

The following ways of controlled distribution are practically available and will be analysed for efficiency and strategic fit:

- a) *Orange Centers*, i.e. the customer can buy the product in an Orange retail shops
- b) *Customer Download on the phone*, i.e. download from either from the mobile portal or over the Internet side (orange.ch) directly on the phone

We will analyse those two channels in terms of efficiency and cost. Efficiency for us means mainly the quality of customer experience from the installation up to the actual service activation. Other channels, namely indirect channels or Internet downloads on a PC, are not seen as valid options at that point in time, because of lack of control of or a bad customer experience respectively.

The ca. 40 *Orange Centers* - scenario a) - are primarily used to sell mobile phones and Orange subscriptions across Switzerland. Due to the lean staffing and the complexity

¹ Mobile security has been a focus area of F-Secure for years. The company today has content security solutions available for both mobile terminals and mobile infrastructure. F-Secure Mobile Anti-Virus, which provides real-time, on-device protection for mobile terminals, is the world's first mobile operator antivirus service. F-Secure Mobile Anti-Virus is also available to phone users through mobile phone manufacturers and F-Secure eStore.. Founded in 1988, F-Secure has been listed on the Helsinki Exchanges since 1999.

of the offers, price plans and the variety of phone models, the learning capacity of personnel is at the limit. Furthermore, intensive training of sales staff seems not to be effective anyway looking at the comparably low expected volumes per sales person. In other words, we suggest not to sell the product independently in that channel.

As a consequence, we will go for a bundled solution, where the antivirus is part of the mobile phone offering. Although this approach limits sales to new customers only and excludes existing ones, it prevails over the separate offering, because

- mainly new customer enter the shop anyway and
- the value perception is linked to the new phone.

In order to package the antivirus software into the phone offering we have five different options. Firstly we can organize a *pre-installation* of the software with the phone supplier. That comes at the cost of additional phone testing and, as a result, a potentially longer time-to market for new models. Moreover, the different phone manufacturers have to be involved in the discussions, which adds to the overhead costs. The big advantage, however, is that the customer has not to install the software himself, but can use it straight away. That avoids calls to the call centre and limits customer dissatisfaction.

Secondly, we can add a *bookmark* on the web-browser of the phone and some instructions. Costs are much lower than for the pre-installation, as no testing is required. However, the risk of an unsuccessful installation by the customer is still present.

Thirdly, we can include a *memory stick* containing the software and some short instructions in the phone package. The costs for those sticks are rather high (ca. SFr. 8.00) and they differ from model to model. Moreover, logistics are not trivial and we depend on the competence of the customers to install the software correctly.

Fourth, we can put the software on cheap PC-device like a *CD* and add it to the package. As that form of distribution would require a PC, we dismiss that option because of incompliance with the mobile strategy.

Fifth, we could add a *flyer only*, which contains the unlock code and a link towards the download area. The software is – different to option 1 – not pre-installed. The customer would have to enter the link manually, different to option 2. Advantage of that solution is the low cost and the independence from electronic storage media.

Option	Description	Customer Experience	Cost	Comments
a.1	Pre-installation	good	high	Longer time to market for the phone
a.2	Bookmark	medium	medium	Demands technical skills
a.3	Memory stick	medium	high	Demands technical skills
a.4	CD	low	medium	Demands PC
a.5	Flyer only	low	low	Demands typing the URL

Table 3: Overview of packaging options for Orange Centres

Comparing those options (see table 3), while bearing in mind our positioning statement about “feeling safe”, we decide to put the customer experience first, and other things second. That means we opt for the pre-installation for the way of distribution in the Orange centres and we will sell it bundled with the mobile phone to new customers.

Different to pre-installation, the direct download on a phone – scenario b) – is also available to existing customers. We analyse the mobile portal first. The Orange mobile portal (mobile.orange.ch) is similar to a typical web-portal with the following differences:

- access to the mobile portal is restricted to Orange phones. That means access from the Internet or from any other mobile network is not possible,
- the portal is optimized for the small screens of mobile phones, i.e. mainly text based, short and concise,
- the portal can detect the phone and optimize the content for it. That is very useful, because the software version depends on the phone as well. That means, that we can ensure that the correct software is downloaded on the requesting phone,
- download speed is limited to 40kbit/s (GPRS) or max. 300kbit/s (UMTS). That means, we have to limit the size of the file to some 500k meaning less than 2 minutes of download time,
- the volume of the mobile download can be charged for as normal GPRS/ traffic. However, we intend not to do so, as we want to link the pricing to the perceived value (see chapter “pricing”)

Assuming the size of the download file is not too long, the customer experience is supposed to be better on a mobile portal. The reason is the better adaptability to the phone’s small screen and the automatic detection of the phone type, which allows a targeted distribution of the right software version.

Compared to the Orange center the cost of the electronic channel, mobile or Internet, are rather low. Table 4 compares the two options and clearly favors the mobile portal. Consequently we opt for the mobile portal as our favorite electronic channel.

Option	Description	Customer Experience	Cost	Comments
b.1	Mobile Portal	medium	low	Limited to Orange customers
b.2	Internet side	low	low	Not optimized for mobile phones

Table 4: Electronic channels

To conclude, we distribute the service to *new* customers in the Orange centres bundled with the phone. The software will be pre-installed and a flyer will be packaged with the phone. Existing Orange customers will be able to download the software from the mobile portal directly on their device.

5.5 Promotion

In order to promote our offer effectively we decided to apply the 5 Ms methodology, i.e. “mission, message, money, media, measurement” as described in [KOTLER 2003, chapter 20].

The outcome of the issue analyses in step 2 has shown that the sensational press will play on the fear (see for example figure 7). So, we have to avoid by any means to be

associated with the problem ourselves. Furthermore we do not want to scare people, as discussed in the positioning section above, which would put our credibility at stake.

These two insights will guide us in the design of the promotion strategy.



Figure 7: Europeans biggest sensational paper, the German “Bild”, reporting on mobile viruses (22.11.2004) and alarming their readers in their online edition.

5.5.1 Mission

Our defined objective is to be widely seen as the leading mobile operator in providing mobile security services. As a result our mission is to position Orange in the media as the most helpful, trustful and competent provide amongst the Swiss mobile operators. Concretely, we want to

- inform our customers about the antivirus solutions,
- present Orange as trustful, helpful and competent partner and
- bring 25% of directly targeted customers to download, install and use the service.

5.5.2 Money

The budget for the promotional activities is very small given the fact that the sensational press will do the essentially part of the promotion work out of their own interest. Consequently we will primarily have to use our own communication channels such as SMS mailing, customer newspaper, web page, sales material, which are available to Orange at a low cost.

5.5.3 Message

The message has to fulfill the following criteria:

- support the positioning statement of Orange being a helpful, trustful and competent partner.
- not scaring people, but being factual about the risk
- being emotional about the added value

Therefore we propose the following statement as “message” to be communicated:

***“Feel safer with Orange and F-secure.
Although the risk is still low, we help you in protecting your phone already today.”***

It fulfils the criteria from above, because it is emotional about the value (“Feel safe ..”), factual about the risk (“...the risk is still low...”) and transports the positioning statement of being helpful (“...we help you...”), trustful (mainly the phrase “protecting your phone *already today.*”) and competent (by referring to the partner F-secure).

5.5.4 Media

We will use the following media to pass through the message:

- a) Existing information channels towards our customers base
As cheapest and most effect means to inform our customer we will use the following media
 - the Orange newspaper “notes”,
 - the Orange web page (orange.ch),
 - the mobile portal (mobile.orange.ch)
 - the Orange fact-sheets for our sales-force and
 - the letter, which comes with the monthly customer invoice

The primary purpose will be to constantly repeat the message – at the least once a month – and to inform regularly about our mobile security services.

- b) SMS direct mailing
For Orange as a mobile operator, this media is also available at a very low cost. However, different to the information channels from above, this channel has two very useful features that we want to take advantage of:

Firstly via SMS we can contact the customer individually and make the link to our existing customer knowledge base. This will make us very effective in getting a good understanding of our customers and allow to target only those customers, where we know they have an open OS phone for instance.

Secondly we can link the SMS with a software download feature. In other words, it needs only one click from the customer to download the software via the mobile channel, after he has read the SMS. This is a very useful combination, as it allows precise measurements and also eases up distribution.

As a rule of Orange the same customer should not be contacted more than twice a year per SMS mailing. That is why we plan with two “waves” of SMS mailings, one in January, one in July.

- c) A flyer in the phone bundle
As part of the mobile phone bundle, a dedicated flyer has to be designed, produced and packaged according to the respective guidelines. This represents probably the most expensive media and cost have to be watched at closely. Moreover we opt for a co-branding to underline the competence of F-secure. As in other comparable cases, on we will use mainly the design of the supplier and add the text “powered by Orange”.
- d) Press Release
Regular press releases will be issued together with the partner as a low cost mean to keep the media up-to-date.
- e) Specialized press, external presentations and conferences
Regular articles in the specialised press, presentations on exhibitions and events as well as on security or mobile conferences and other activities are leveraging on the internal expertise and will help to underline the security competence of Orange. The goal is to have one sort of communication per month.

5.5.5 Measurement

To keep things simple and effective, we will concentrate on the electronic media. Here we can measure - most importantly - the number of downloads triggered by an SMS promotion. Moreover, the hit-rates of the mobile portal and the web-page will give a good indication about the general interest into the topic.

All other, paper based, promotional activities are very difficult and expensive to measure, because there is no clear link between the promotion and a customer action. Nonetheless, we will monitor the press regularly and observe, how the Orange security services are seen, and review our promotional activities, if there is a perception in the public, which is different to our positioning statement.

5.6 Pricing

The pricing strategy is developed in a six step approach as described in [KOTLER 2003, p. 470ff]. Guidance is given by the overall objectives from above and from the positioning statement.

5.6.1 Setting the pricing objectives

As the mobile antivirus market is an emerging market, we want to get a *high market share and high customer volumes* very quickly. That means that profits have to stand back for later phases.

Another reason to go for volumes instead of short term profit is the fact that marginal cost of software production are very small so that the unit costs will fall significantly with volume.

Furthermore, an extremely high price would threaten our overall objective to be seen as a trustful partner.

Finally we have an interest – as a mobile operator – that the phones of our customers are working. If they do not, that will threaten revenues from other services such as voice or SMS, which underpins again the goal to maximize the installations in the customer base and go for volume.

5.6.2 Determining the demand

In the absence a real market today, we try to estimate the future demand based on assumptions. Starting point are the targeted 10'000 customers (see chapter “objective”) and we will look into its elasticity next. We believe the demand is rather inelastic for the following reasons:

- a) As a we expect a price of only a couple of francs per month, we can generally expect prices to be rather inelastic, because customers are generally indifferent for small amounts.
- b) It is in the human nature that security is strongly demanded, *after* something “bad” has happened. For example, demand for house insurances will go strongly up, *after* a series of break-ins. In that case, customers are usually not looking at the price at the first place. So, demand is not primarily driven by price cuts, but by security incidents. In other words, customers are not particularly sensitive to prices.
- c) Another driver for demand are the reports is the media. As the press is constantly looking for sensations – such as security incidents for example – the risk perception of the public is generally much higher then the real risk. So, a series of reports about mobile viruses will also lift the demand significantly, almost regardless the price.
- d) At the moment and in the near future, a mobile antivirus offer is a real innovation and far away from being a commodity. Therefore, we expect people to be less price-sensitive as well.

Figure 8 transfers the given arguments into an estimation of a demand curve.

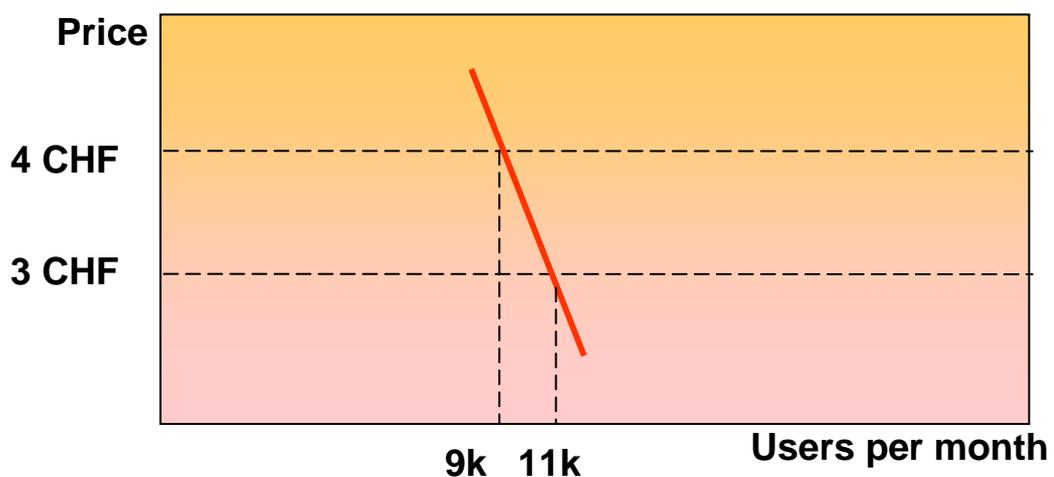


Figure 8: Estimated demand

5.6.3 Estimating the cost

The monthly cost of serving the customer is composed out of five elements.

- a) The license fees (or product cost).
That is the monthly price charged by F-secure to Orange for their software. This includes the right to use the software and to update the virus definitions.
- b) Support Cost
That cost is mainly driven by the calls to the call centre, when customers have questions about the service or the software itself. In that case they will contact the free of charge Orange call centre. Experience shows that we can assume 5% of the customers calling per month.
- c) Promotion cost
As we plan to use mainly our own, existing communication channels like the SMS mailing for instance the promotion costs are limited. We calculate around SFr. 1'500 per SMS mass mailing, which are *independent* from the number of targeted customers. We assume two campaigns resulting into costs of SFr. 3'000 per year or SFr. 250 per month. Moreover production cost of the flyer, plus all the other promotional activities make us estimate the total monthly cost of promotion at SFr. 1'500, i.e. SFr. 18'000 per year.
- d) Distribution cost
The software gets distributed only once at the beginning of the service. In order to get the impact on the monthly unit cost, we assume customers rest in average 2 years. In consequence, the monthly distribution cost for a customer is $1/24^{\text{th}}$ of the actual distribution cost.
Moreover the actual distribution cost, averaged over the Orange Center channel and the mobile download channel (see also chapter "distribution"), can be estimated with around SFr. 1.00, i.e. the monthly cost is ca. SFr. 0.04.
- e) Overhead Cost
Those are the internal costs of maintaining the service and include activities such as 2nd level support, contract management, internal reporting, small enhancements of the service, testing of new versions and so on. We assume here 5 man-days per month at a rate of SFr. 750 per day.

Cost element		Total Cost	Cost per customer
Customers	10000		
Cost per licence	SFr. 1.50		
License fees		SFr. 15'000.00	SFr. 1.50
Calling Customers	5%		
Total Calls	500		
Average Cost per Call	SFr. 5.00		
Support Cost		SFr. 2'500.00	SFr. 0.25
Promotion Cost		SFr. 1'500.00	SFr. 0.15
Distribution cost		SFr. 416.67	SFr. 0.04
Internal Mandays	5		
Employee cost per day	SFr. 750.00		
Overhead Cost		SFr. 3'750.00	SFr. 0.38

TOTAL	SFr. 23'166.67	SFr. 2.32
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Table 5: Monthly costs of service delivery (10'000 customers)

The monthly cost structure is illustrated in the table 5 and shows that in average we have a monthly cost of around SFr. 2.32 for serving a customer, assuming a customer base of 10'000. The variation of that costs depending from the amount of customers is shown in figure 9.

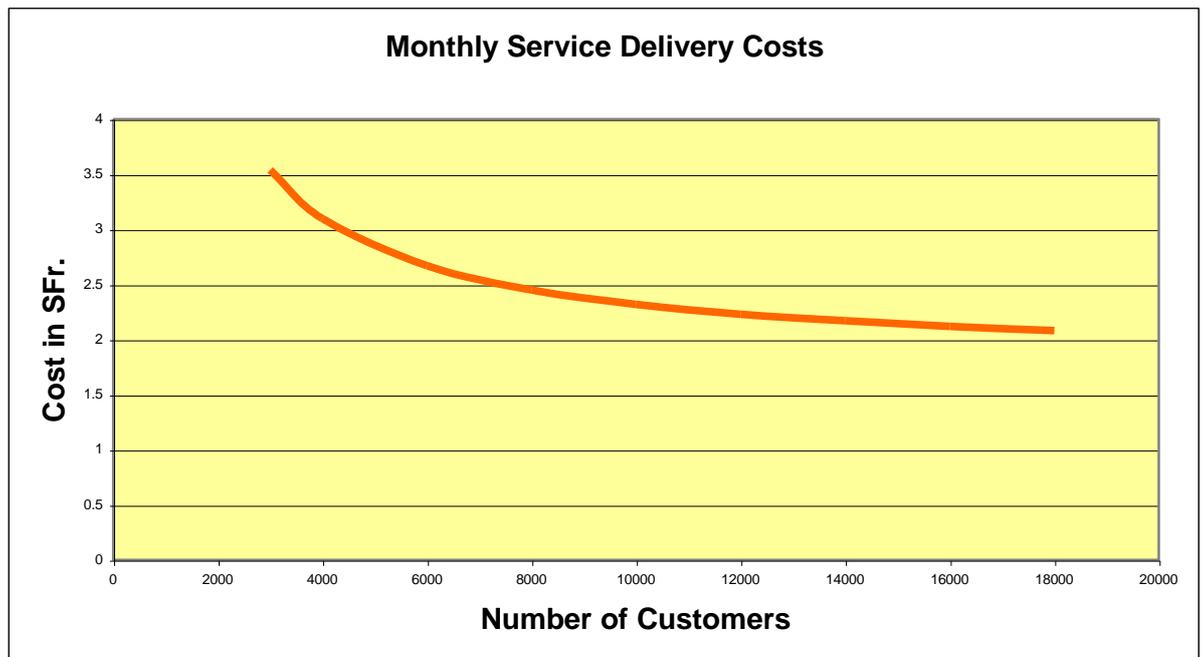


Figure 9: Monthly Service Delivery Costs as function of number of customers

The curve shows clearly that we have an over-proportional cost risk, if we do not achieve the customer numbers of 10'000. On the other hand we have a "normal" profit opportunity, if we overachieve the sales predictions.

5.6.4 Analyzing competitors costs, prices, and offers

As we have an emerging and diffusive market, relevant data is almost impossible to get, especially in absence of direct competition in CH.

Looking into the Internet, we find that the F-secure software is available for 28.65 euro (one year subscription, i.e. ca. SFr. 3.83 incl. VAT per month) as shown in figure 10.

Trend Mirco, a competitor who has been late in entering the market, offer the first version of their software even for free. Obviously, the reason is to get market share as fast as possible and get back into the race, especially as they have announced to charge for version 2. So we take this manoeuvre not as sign of a price war, but more as an indicator that the market of mobile security protection is indeed about to take off.



F-secure Mobile Anti-Virus

Scanning mode
Real-time scanning

Status

- ✓ Updates
- ✓ Subscription
- ✓ 0 Infections

Options Done You can continue your existing subscription or buy a new 12 month subscription. Please select the appropriate button below.

Price: 12 month subscription: 28.65 € (+VAT)

[Renew subscription](#) [BUY NOW](#)

Figure 10: Offer from the F-secure Internet e-store

Symantec Inc. offer their protection software for phones for 44.96 euro (2 years subscription) over the Internet, i.e. SFr. 2.81 per month (see figure 11). So we will take those prices as an orientation points.



Symantec[®]
Mobile Security 4.0
for Symbian[™]

[BUY DOWNLOAD](#) 44,96 EUR

Figure 11: Online offer from Symantec

5.6.5 Pricing method

We select the “perceived value pricing” method as described in [KOTLER 2003, page 482-484] to support our emotional positioning statement of “feeling safe”, which is being communicated to the market (see chapter “Promotion”). The advantage is that we can link directly the perceived value of the offer with the pricing method.

Now, the value perception is twofold. On the one hand, the value of the protection is linked to the value of the phone. In other words, the more you value your phone, the more you value its protection. In that case an antivirus installation is apt to differentiate the phone further. So, we would bundle it with the original sales package and sell it together with the phone.

Example: A high value phone costs around SFr. 750. People would be ready to pay 5% per year to protect it. Moreover, they will change the phone anyway after one year in

average to keep up with latest developments. That means the perceived value is around SFr. 37.5 per year or SFr. 3.13 per months. It also means, that for a phone, which is worth less than SFr. 556, we will not cover our own costs of SFr. 2.32 anymore.

On the other hand, value is perceived from the connectivity that is provided by a phone, e.g. to be able to call and to be reachable. In that case, the value can be linked to the connectivity costs, e.g. the monthly bill as an indicator.

Example: A high value customer spends around SFr. 150 per month for mobile services. We assume he would pay 2% of that amount in order to have best in class availability, i.e. an antivirus on his phone. That means, he would be ready to pay SFr. 3 per month for that perceived value.

In the following table 6 we have added up the perceived values for both the protection of phone and the protection of connectivity for typical cases.

		Monthly Bill		
		SFr. 150	SFr. 100	SFr. 50
Phone price	SFr. 750	SFr. 6.13	SFr. 5.13	SFr. 4.13
	SFr. 500	SFr. 5.08	SFr. 4.08	SFr. 3.08
	SFr. 250	SFr. 4.04	SFr. 3.04	SFr. 2.04

Table 6: Perceived monthly value (2% of monthly bill + 5% of phone price per year)

5.6.6 Selecting the final price

Resuming from the previous sections we know that the monthly product cost is SFr. 2.32 for 10'000 customers. Moreover, the Internet download version of the same software, which comes without Orange services and without integrated billing, is currently at SFr. 3.00. And the most expensive competitor in the Internet (Symantec Inc.) is even at SFr. 4.58, which apparently is apt to skim the market.

Therefore we believe we can ask for at least SFr. 3.00 without impact on the demand. At the same time we should not ask for more than SFr. 5.00, because the difference against the Internet offer (SFr. 3.00) has to stay reasonable.

Now, we will look inside the band of SFr. 3.00 and SFr. 5.00 and use the help of the perceived values (see table 6). We find that the average customer (100 CHF monthly bill and a SFr. 500 phone) would perceive the value as SFr. 4.08, suggesting a price of SFr. 4.

To confirm this suggestion we are taking into account the demand curve (figure 8) and the cost curve (figure 9) and calculate the size of the customer base, the sales volume and the profit for each possible, integer price (see table 7)

Price	Customers	Sales	Cost	Margin	Profit
SFr. 3	11'000	SFr. 33'000	SFr. 2.27	SFr. 0.73	SFr. 8'030
SFr. 4	9'000	SFr. 36'000	SFr. 2.38	SFr. 1.62	SFr. 14'580
SFr. 5	7'000	SFr. 35'000	SFr. 2.54	SFr. 2.46	SFr. 17'220

Table 7: Customer numbers, sales and profit per price

Whereas a price of SFr. 3 leaves a significant amount of money on the table, a price of SFr. 5 does not deliver the expected volumes. So, as we want to go for integer SFr. prices for the sake of simplicity and clarity, we will opt for **SFr. 4.00** as optimal price for our purposes.

6 Action plan

The purpose of this section is to break-down the marketing strategy and the identified issues into a high level action plan. They are grouped around the 4 P's The target is to have the offer ready for 1.1.2006.

Abbreviations for the relevant items, especially the involved entities, which are assigned to carry out an action, are listed at the beginning of each plan. The purpose it to optimize readability.

6.1 Product related activities

Topic	Who	When	Cost
Abbreviations - PM = ProductManager - Proc = Procurement Team - Tech = Technical teams - CAT = Customer Acceptance Testing Team - Fsec = F-secure Inc. - CRel = Customer Relation division - MD = Man Days, i.e. one working day	Entity	Finish date	Rough estim.
Integration of suppliers technology - Sign up Contract with supplier (F-secure) - Setup SMS alerting service - Setup automated up-date service - Functional product testing on each supported phone - Customer acceptance testing on each supported phone - Official Product launch	PM PM/ Proc Tech Tech Tech CAT PM	12/05	10 MD
Support services - Instruct and train call center staff (1 st level support) and back office (2 nd level)Train customer support teas - Test 3 rd level interface with supplier	PM/ CRel CRel CRel/ Fsec	12/05	10 MD

Table 8: Product related activities

6.2 Promotional activities

Topic	Who	When	Cost
Abbreviations <ul style="list-style-type: none"> - PM = ProductManager - MarCom= Marketing Communications Team, who is in charge of execution of promotional activities at Orange - WebT = Web Team, who is in charge of programming and issuing web pages - MD = Man Days, i.e. one working day - F-Sec = F-secure Inc. - Log = Logistics - SecT = Internal Security Team - CAT = Customer Acceptance Testing Team - 10k = SFr. 10'000 	Entity	Finish date	Rough estim.
Orange newspaper "notes" <ul style="list-style-type: none"> - Contact "notes" editorial staff and plan the publication - Create article about mobile virus - Review and translate in 4 languages - Final approval - Publish article 	PM/ MarCom PM PM MarCom PM MarCom	01/06	5 MD
Orange web page (orange.ch) & Orange mobile portal (mobile.orange.ch) <ul style="list-style-type: none"> - Define the content of the of the page - Design the page according to internal policies - Review the page - Translate page into 4 languages - Final approval of pages - Program the page, setup up the hit-rate reporting and publish 	PM/ MarCom PM MarCom PM MarCom PM WebT	12/05	5 MD
Flyer in the phone bundle. <ul style="list-style-type: none"> - Propose flyer layout according to Orange guidelines - Review, translate and approve flyer - Inform handset manufacturers - Produce flyer - Package Flyer with phone bundle 	PM/ F-Sec F-Sec MarCom PM MarCom Log	01/06	5 MD 10k
Fact sheets for sales force (pdf format only) <ul style="list-style-type: none"> - Propose content - Review and translate content - Approve - Produce fact sheets 	PM/ MarCom PM MarCom PM MarCom	12/05	5 MD
Specialized press, external presentations and conferences	PM/ SecT	monthly - 12/06	10 MD

Topic	Who	When	Cost
<ul style="list-style-type: none"> - Agree on annual plan with security team and on the overall message - Execute the plan 	PM/ SecT SecT		
Letter with the monthly invoice <ul style="list-style-type: none"> - Define content - Review and translate letter - Approve letter - Send letter 	PM/ MarCom PM MarCom PM Log	03/06	5 MD
SMS Direct Mailing (2 waves) <ul style="list-style-type: none"> - Define SMS message (160 characters only) - Review and translate message - Test SMS mailing with internal “customer acceptance” testers - Approve final text - Identify potential target customers warehouse - Send SMS wave - Review rate of new customers after the mailing 	PM PM MarCom CAT PM PM MarCom PM	01/06 and 07/06	
Product Launch <ul style="list-style-type: none"> - Press release 	PM PM/ Marcom	01/06	2 MD

Table 9: Promotion related activities

6.3 Distribution related activities

Topic	Who	When	Cost
Abbreviations <ul style="list-style-type: none"> - PM = ProductManager - Tech = Technical teams - Sales = Sales division - Log = Logistics - PhMan = Phone manufacturer - CAT = Customer Acceptance Testing Team - MD = Man Days, i.e. one working day - 10k = SFr. 10'000 	Entity	Finish date	Rough estim.

Topic	Who	When	Cost
Phone bundle distribution in Orange Centers <ul style="list-style-type: none"> - Agree on pre-installation with phone manufacturer - Test the software on each phone type - Deliver phones with software pre-installed - Package phone with flyer and deliver to Orange Centers - Training Orange Center sales staff based on fact sheet - Agree on sales targets, setup reporting and channel controls 	PM/ Log/ Sales PM Tech PhMan Log Sales PM/ Sales	12/05	10 MD 10k
Mobile portal distribution <ul style="list-style-type: none"> - Link antivirus download file to mobile page and web page respectively - Test the download and the ease of installation - Approve the download process - Setup hit-rate reporting to be able to count the number of downloads - Publish the download file 	PM Tech CAT PM Tech Tech	12/05	5 MD

Table 10: Distribution related activities

6.4 Pricing related tasks

Topic	Who	When	Cost
Abbreviations <ul style="list-style-type: none"> - PM = ProductManager - Tech = Technical teams - CAT = Customer Acceptance Testing Team` - MD = Man Days, i.e. one working day 	Entity	Finish date	Rough estim.
Implement billing <ul style="list-style-type: none"> - Compare effectiveness, customer friendliness and cost of available options and select best - Implement billing and make functional test - Customer acceptance tests - Production 	PM/ Tech PM Tech CAT Tech	12/05	10 MD

Table 11: Pricing related activities

6.5 Remaining Issues from opportunity and issue analyses

Ease-of-use, effective distribution and public image have been addressed already in the chapter “marketing strategy”. The only remaining issue from the opportunity and Issue analyses is therefore the timing of the demand (see chapter “)

Topic	Who	When	Cost
Abbreviations - PM = ProductManager - SecT = Internal Security Team - MD = Man Days, i.e. one working day	Entity	Finish date	Rough estim.
Timing of demand - Review alerts from antivirus providers - Exchange information with other mobile providers - Follow up the specialized press - Monthly review the threat level	PM SecT SecT SecT PM/ SecT	ongoing	10 MD p.a.

Table 12: Issue related activities

7 Financial forecasts

This sections wraps up all relevant financial aspects in the offering and provides also a detailed tabular financial overview in table 13 below.

7.1 Customers

We start with the prediction of the total Orange customer base, which is planned to rise semi-annually by 50'000 towards 1'350'000 by the end of 2007. We estimate a semi-annual churn rate of 12.50%, i.e. 12.50% of the customer base will leave within 6 months.

Moreover, we believe that the share of open OS phones amongst the newly sold devices will increase linearly from 20% in H1/06 to 35% in H2/07 following a trend that we observe already today. The calculation made in table 13 shows that this will result into sold open OS units of 40'000 (H1/06) to 76'563 (H2/07). We assume that the antivirus software has been installed on all of them and is ready for activation as planned.

We have to differentiate between the two sales channels, i.e. the Orange centres, which sell phone bundle with the pre-installed, ready to activate software to new customer, and the and the download from the mobile portal for existing customers. The reason for the separation of the channels is that they differ significantly in efficiency and cost. We will try to estimate the amount of customers per channel.

We assume that 10% of new customers that buy an open OS phone in H1/2006 will also activate the antivirus service and become a customer of the service. This activation rate will increase linearly up to 25% in H2/07 following the increased risk perception. That means we will get 4'000 antivirus (AV) customers in H1/06 and ca. 19'000 in H2/07 from the retail channel.

For the mobile download channel we assume the activation rates at 50% of the retail channel, because installation is more complicated and there is no sales person available in case of questions. Nonetheless, this channel is also open to existing customers, who have an open OS phone. This number is to adjusted taking into account the number of customers that have become customer already via the other channel. If we apply the channel acceptance rate to the adjusted figures we come to 2'625 AV customers in H1/06 rising to 21'285 in H2/07, mainly driven by the success of open OS phones.

If we add up the new customers from those two channels and cumulate them assuming the standard semi-annual churn rate of 12.5% we end up with 62'400 AV customers in H2/07, i.e.4.6% of the whole customer base.

7.2 Revenues, costs and profits

We assume a monthly average price of SFr. 4.00 as discussed in the pricing section and simply multiply it with the number of customers in order to have the revenues.

Additional, indirect positive impacts on revenue like the improved public image or the additional gross adds have not been calculated, as they are practically not measurable. In other words, the business case is calculated conservatively.

Costs are split up into product cost, distribution cost, promotion cost, customer support cost and overhead cost. The figures are built upon discussions of previous sections, namely in the “pricing” and “action plan” chapters.

Profits are simply calculated in terms of semi-annual cash flows by subtracting respective costs from revenues.

7.3 Financial ratios and conclusions

As we can see from table 13 below the NPV is clearly positive (ca. SFr. 1'300'000) indicating that we should go for that offering. Also profit margins of up to 57% in 2007 look very attractive. The biggest cost driver is the product cost with up to 92% end of 2007.

That's a very comfortable situation for Orange. Let's imagine the worst case of prices for mobile antivirus solutions are coming down significantly. Although this would impact our prices to our customers and therefore our revenues as well, we would benefit with a significant reduction of production cost at the same time. In other words our profit margins are robust, even if prices are falling.

For example, if we cut prices in 2007 by half from SFr. 4.00 to SFr. 2.00 assuming that also the license cost drop from SFr. 1.50 to SFr. 0.75, we still would keep a profit margin of 53% in H2 2007(!)

7.4 Financial overview

Topic	H2 2005	H1 2006	H2 2006	H1 2007	H2 2007
Customers					
<i>Total Orange Customer Base</i>	1'150'000	1'200'000	1'250'000	1'300'000	1'350'000
<i>Semi-annual Churn rate</i>	12.50%	12.50%	12.50%	12.50%	12.50%
<i>Absolute Churners</i>	143'750	150'000	156'250	162'500	168'750
<i>New Customers</i>	n/a	200'000	206'250	212'500	218'750
<i>Percentage of open OS phones from new customers</i>	n/a	20%	25%	30%	35%
<i>Number of sold open OS (software preinstalled)</i>	n/a	40'000	51'563	63'750	76'563
<i>Semi-annual activation rate (pre-installation)</i>	n/a	10%	15%	20%	25%
<i>AV New Customers (Orange Centre channel)</i>	n/a	4'000	7'734	12'750	19'141
<i>Share of open OS phones in total customer base</i>	5.00%	7.71%	10.87%	14.41%	18.28%
<i>Absolute numbers of OS phones</i>	57'500	92'500	135'872	187'394	246'839
<i>Absolute numbers of OS phones (without pre-installation)</i>		52'500	84'310	123'644	170'276
<i>Semi-annual activation rate (mobile portal channel)</i>		5.00%	7.50%	10.00%	12.50%
<i>AV New Customers (mobile download channel)</i>		2'625	6'323	12'364	21'285
<i>AV New Customers (Total)</i>		6'625	14'058	25'114	40'425
<i>AV Customers cumulative (incl. semi-annual churn)</i>		6'625	19'854	37'415	62'400
Revenues					
<i>Price per months</i>		SFr. 4.00	SFr. 4.00	SFr. 4.00	SFr. 4.00
<i>Semi-annual revenues</i>		SFr. 159'000	SFr. 476'508	SFr. 897'955	SFr. 1'497'606
<i>Annual revenues</i>			SFr. 635'508		SFr. 2'395'561
Cost					
<i>Cost per ManDay</i>	SFr. 750				
<i>License cost per unit and month</i>		SFr. 1.50	SFr. 1.50	SFr. 1.50	SFr. 1.50
<i>Total license cost</i>		SFr. 59'625	SFr. 178'690	SFr. 336'733	SFr. 561'602
<i>Internal activities (in ManDays)</i>	20	10	10	10	10

Topic	H2 2005	H1 2006	H2 2006	H1 2007	H2 2007
Total internal manpower cost	SFr. 15'000	SFr. 7'500	SFr. 7'500	SFr. 7'500	SFr. 7'500
Total Product Cost	SFr. 15'000	SFr. 67'125	SFr. 186'190	SFr. 344'233	SFr. 569'102
Orange Channel: Distribution cost per new customer		SFr. 1.50	SFr. 1.50	SFr. 1.50	SFr. 1.50
Orange Channel: Total distribution cost		SFr. 6'000	SFr. 11'602	SFr. 19'125	SFr. 28'711
Mobile download channel: Cost per new customer		SFr. 0.10	SFr. 0.10	SFr. 0.10	SFr. 0.10
Mobile download channel: Total distribution cost		SFr. 263	SFr. 632	SFr. 1'236	SFr. 2'128
Set-up activities (in ManDays)	15				
Set-up cost	SFr. 11'250				
Total Distribution Cost	SFr. 11'250	SFr. 6'263	SFr. 12'234	SFr. 20'361	SFr. 30'839
Initial design of sales material	SFr. 10'000				
Internal activities	10	10	10	10	10
Total internal manpower cost	SFr. 7'500	SFr. 7'500	SFr. 7'500	SFr. 7'500	SFr. 7'500
Total Promotion Cost	SFr. 17'500	SFr. 7'500	SFr. 7'500	SFr. 7'500	SFr. 7'500
Average cost per call		SFr. 5.00	SFr. 5.00	SFr. 5.00	SFr. 5.00
Calling customers per months		5%	5%	5%	5%
Total Customer support cost		SFr. 1'656	SFr. 4'964	SFr. 9'354	SFr. 15'600
Internal overhead (in ManDays)	10	10	10	10	10
Total Overhead cost	SFr. 7'500	SFr. 7'500	SFr. 7'500	SFr. 7'500	SFr. 7'500
Total Cost	SFr. 51'250	SFr. 90'044	SFr. 218'388	SFr. 388'948	SFr. 630'542
Profit & Loss					
Cash Flows	-SFr. 51'250	SFr. 68'956	SFr. 258'120	SFr. 509'007	SFr. 867'064
Financial management ratios					
NPV (14.5%)	SFr. 1'305'382				
IRR	273%				
Semi-annual Revenue per Customer		SFr. 24.00	SFr. 24.00	SFr. 24.00	SFr. 24.00
Semi-annual Profit per Customer		SFr. 10.41	SFr. 13.00	SFr. 13.60	SFr. 13.90
Semi-annual Margin per Customer		43.37%	54.17%	56.69%	57.90%
Share of Product Cost	29.27%	74.55%	85.26%	88.50%	90.26%
Share of Distribution Cost	21.95%	6.95%	5.60%	5.23%	4.89%
Share of Promotion Cost	34.15%	8.33%	3.43%	1.93%	1.19%

Topic	H2 2005	H1 2006	H2 2006	H1 2007	H2 2007
<i>Share of Customer Support Cost</i>	0.00%	1.84%	2.27%	2.40%	2.47%
<i>Share of Overhead Cost</i>	14.63%	8.33%	3.43%	1.93%	1.19%
<i>Sum of all shares</i>	100.00%	100.00%	100.00%	100.00%	100.00%
<i>AV customers (in % of total base)</i>		0.55%	1.59%	2.88%	4.62%

Table 13: Financial overview

8 Controls and contingency

8.1 Channel controls

It is essential that the channels work effectively and therefore we will control them on a monthly base. Apart from the customer figures will look at a couple of other indicators.

In the mobile download channel we will also look at the hit rate of the page and the downloads. This can tell us, how many customers look at the page and start the download and how many finally install the software and activate the service. This can help to detect problems with the download or the installation process at an early stage.

For Orange Centres we will also look at the share of AV customers within all new customer, i.e. how many of the new customers activate the service. This indicator will serve to measure the attractiveness of our service, for example 10% for H1/06. Moreover, it will show us the relation to the over all Orange performance, which impacts also our offer. If the overall sales goes better than predicted, we will also benefit from it. The same is true, if overall sales goes worse.

<i>March 06 (Example)</i>	Actual	Target	Deviation	YTD	Target	Deviation	H1 Target
Mobile Channel							
Hit-rate of mobile page	632	550	14.91%	1'838	1'650	11.39%	4'000
Mobile Downloads	523	500	4.60%	1'633	1'500	8.87%	3'000
Number of AV new customers	505	438	15.43%	1'150	1'313	-12.38%	2625
Orange Center							
Number of AV new customers	604	667	-9.40%	2'123	2'000	6.15%	4000
AV Activation Rate	11.34%	10.00%	13.40%	9.21%	10.00%	-7.90%	10%
Total Customer	1109	1'104	0.44%	3273	3'313	-1.19%	6625

Table 14: Channel control matrix

On top of the figures, we will regularly visit centres in order to get also a direct feedback from the sales staff.

8.1.1 Other Controls

We will also have to monitor cost elements that might vary significantly, mainly the number of calls to the call centre. This will allow to feed customer inputs back to the product management to initiate further actions. The biggest cost element, the license fee is fixed in a contract and not exposed to unforeseeable changes.

Obviously competitors and the media have to be monitored as well. Here we do not create a specific control, but advise the responsible market intelligence and public relation teams to contact the product manager directly, when ever the observe any issues related to mobile viruses.

Finally, actual and potential suppliers have to be monitored and compared regularly to detect trends in mobile device security at an early stage

8.2 Contingency plans

We have identified the most likely and most severe scenarios and will propose counter measures for each scenario.

8.2.1 Price pressure

The scenario of price pressure on mobile security services can never be excluded. As shown in the financial analyses our cost structure depend mainly of the license cost of the software (> 90% in H2/07). This gives us the big opportunity to pass on the potential price pressure directly to our technology supplier, i.e. F-secure.

In order to keep this option, we have to make short-term contracts only. This will allow us to react quickly and to enable the competition between security technology suppliers, in case F-secure does not want to cut their prices charged to Orange.

8.2.2 Negative press

Orange might face bad press, because journalists believe that Orange is making up mobile risks and overcharging its customers. In other words, the real virus risk is seen so low that paying for a mobile antivirus service is presented as a waste of money.

In that case, all we can do is to underpin the objective and factual risk assessment that was intended initially. This will help to correct the image and mitigate the wrong perception.

8.2.3 Ineffective protection leading to customer dissatisfaction

It might happen that customers get infected with a mobile virus, although they have paid for the security service. Obviously the antivirus software can only guarantee to help against known viruses. And new virus in contrast might hit a protected phone nonetheless. In that case the result would be a significant dissatisfaction of customers.

Although we are legally on the safe side, we should foresee a symbolic compensation. Especially high value customers should receive a gift, while explaining them at the same time the limits of technology.

8.2.4 Large number of infections

We might have a huge virus outbreak leading to a high demand in a short time. It will be impossible to des-infect and protect all mobile phones, especially not in a short time frame.

In that scenario, the whole business case must be reviewed. Most likely it would pay off to give the antivirus for all customers for free and see the costs as "overhead costs" of a mobile business.

8.2.5 Service too complicated

Customers might find the product too difficult to use. As discussed earlier, we know that the technical skills of a normal customer are quite limited. As a consequence the service will not take up as planned.

As counter measure we propose to shift that risk towards the technology provide, i.e. F-secure. The contract has to be designed in a way that costs for Orange occur only, when the service really sells. As a consequence the remaining financial risk for Orange is very limited.

8.2.6 Competitor offer services service for free

A scenario, where one of the competing mobile operators offer the mobile security service for free, would destroy the market completely. The competitors ratio could be to buy market share.

In that case, we would have to differentiate further, e.g. with additional security features.

8.2.7 New alliances

Some of the players could form alliances to the disadvantage of Orange. If for example a phone maker like Nokia, co-operates with a security technology supplier like Symantec, mobile operators would be left out.

Generally, in that scenario the high number of possible alliances make it impossible to have a precise contingency plan for each case. We would have to try to play on our market power towards the phone manufacturer and eventually change the security supplier in order to adopt to the new market situation.

8.2.8 Cost “explosion”

The biggest cost factor is the license cost for the security software, which we control per contract. So, the highest cost risk on our side is the support cost. If, we get a spate of calls to the call centres for whatever reason, this could inflate our own costs.

In that case, we would have to think of charging for the support or trying to improve the simplicity of the service.

8.2.9 “Nothing happens”

One scenario is that mobile viruses will never become a real threat, at least not in the next years. In that case, the need for a mobile antivirus service would not materialize. In other words, there would be no demand, no revenue, no profit.

In that case, we would keep the offer in the market and minimize the support. The reason not to cut the service off completely is that we can never completely exclude mobile viruses. So, we will be still better off, if we stay prepared.

8.2.10 Bankruptcy of supplier

As we count on only one supplier for the security technology, we would face a problem, if that supplier is not available anymore, for example because of bankruptcy. All installations in our market would not be supported anymore. Even worse, our image of competence that has been built on the competence of the supplier would suffer. In other words, we would have a serious reputation problem in the market as well.

To mitigate the impact in that case, we will keep good relations with other suppliers and regularly discuss switching scenarios with them. In terms of reputation, we could stress that a lot of competencies of F-secure have been transferred to Orange in the mean time. Moreover, the new supplier can be presented as adequate replacement.

8.2.11 New technical solutions

We base our strategy on a security software solution, which is installed on the phone. In theory, also other technical, potentially more effective solutions are thinkable. For example, the phone could be scanned automatically, when it is connects to the mobile network. That would make our current offer redundant.

Obviously, we keep technology investments on a rather low level. So, we could follow technology changes rather easily. Moreover, we keep the planning horizon relatively short, so that we can adapt quickly, once a new technology has prevailed.

8.2.12 New entrants

Another scenario to be considered is a new entrant, most probably from the phone manufacturer industry. For example the mobile OS provider Microsoft (Pocket Windows) has announced a strategy change recently for PC OS (Windows), where they also provide antivirus solutions themselves now. Hence, there is no reason, why they should not enter the mobile antivirus market, too. Especially, when the market will really grow like predicted.

Orange contingency plan would be to keep a balance between the suppliers. In other words, we would change to a multiple supplier strategy.

9 Bibliography

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