Teaching business plan negotiation: How to foster entrepreneurship with engineering students

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Teaching business plan negotiation: How to foster entrepreneurship with engineering students

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Abstract

Though negotiations are an imperative aspect of business dealing, most university students do not receive the necessary training to acquire adequate skills in this area. Role plays are a suggested teaching tool to enhance the learning experience by creating an environment that more closely resembles life situations. The business plan negotiation uses this to assist students in gaining experience in the area of business negotiations. The negotiation involves students playing as a startup IT company, trying to negotiate funding from venture capitalists. The negotiation adds their experience with the observations of other students and experienced negotiators.
Need for a Different Approach

From personal relationships to complex business dealings, negotiations are involved in many aspects of everyday life and play an essential role in communication. Although the skill of negotiating is one of the most frequently used, it is often one of the most neglected. Scores of students are leaving universities (even graduate universities) never having had a component in negotiations, much less an entire course. Though a competency in negotiations is a requirement for survival in today’s business world, it is often under-emphasized in education. One reason for this is the difficulty for effectively teaching negotiations. Unlike concrete courses (e.g. accounting or mathematics), negotiations cannot be learned simply by being taught the underlying theories and principles. The pencil-and-paper method won’t work here, as it does not account for the individual differences in the students themselves. Although the principles and theories are important, they are applied differently by students depending on differences in their individual personalities and styles of communication. Thus, another method is needed.

On the whole, negotiation training tends to be very general and seldom emphasizes several relevant areas, such as negotiations on innovations, e.g. the IT or biotech sectors in existing firms or on business plans to start new firms, so that teaching materials from such cases are not readily available. One of the reasons for this lack of focus may be that most engineering and business subjects are still taught as a presentation of theory first (pencil-and-paper) before applying it to a wide variety of case studies, which is not necessarily in line with the priorities of the work environment of the students after graduation which might place entrepreneurship and innovation to a higher rank than it is done up to now. At first sight there is nothing against this order: theory first, application later or Telling, doing and showing as proposed by Lempereur (2004) in line with what Kurt Lewin said: There is nothing more practical than a good theory! The negotiation theory presented by Ulijn and Strother (1995), Chapter 7, might serve as an example, but how does it apply to the real world of business and technology?

In the following case; however, engineering and business students are taught to become more entrepreneurial and innovative, as a new culture (see Ulijn & Fayolle (2003) for a French, Dutch and German comparison), Doing, showing and telling as a strong sensitization concept might have more effect: Just jump in the deep of every-day's business practice or Sink or swim. Presented is a role play BUSINESS PLAN NEGOTIATION (Copy righted by Ulijn et al) which purports to promote entrepreneurship and will be developed and
evaluated through several stages (see the acknowledgements section) and conclude for future
drop to optimize such training and teaching materials, and possibly for intercultural use. In
doing so, the IT sector will be chosen as an important global source of innovation and new
enterprises with a specific impact on human communication and culture as well (see recent
and upcoming special issues of the *IEEE Journal of Professional Communication* (2001,
2002) and *International Negotiation* (2004). The latter special issue demonstrates the special
relationship between innovation and negotiation, not only by a medium, such as IT, being
innovative for negotiating, but also by pinpointing the importance of negotiation on the
decision making stages of innovation management within a firm following up the funnel
proposed by Wheelwright and Clark (2001).

**Role-plays**

An obstacle often encountered in learning negotiations in the classroom is that
negotiating is largely experiential; it is learned through doing. And life-like experiences can
be difficult to create in a classroom setting. An often-used tool to aid in overcoming this
deficiency is roleplays. Roleplays attempt to simulate real-world situations by creating a
setting for students to interact within. Through creation of this artificial environment,
roleplays attempt to take students “out of the classroom” and help them come into contact
with the actual experience of negotiating.

Needless to say, in all this the same general principles of proposal writing, oral
presentation and negotiation apply, and have been well defined on the basis of solid literature
by Carolena Lawrence (2002) in this same column. The checklists she uses in her favorite
assignment could very well be combined with the principles mentioned above, particularly on
the points of team negotiation and avoiding pitfalls such as talking too much and listening too
little, arguing instead of influencing, and ignoring conflict. Though conflicting interests are a
given fact, they can be used to transform the negotiation into a truly win-win situation, as is
the case of the business plan negotiation; further developing the entrepreneurial and
innovative skills of students.

There are; however, a few insufficiencies of roleplays. Firstly, students may not feel a
connection to the role they are being asked to play, and thus not exert effort upon or gain
benefit from the experience. Secondly, most roleplays do not account for, or give a skewed
sense of, time-pressure, which is often a factor in most business negotiations. Thirdly, the
creation of a business relationship should be considered (St John, 1996), which is often not
the case. Fourthly, the limits of simulating short one-issue negotiations should be borne in
mind (Weiss, 1996). The current paper aims to address some of these deficiencies in order to suggest how to create effective teaching tools.

The Business Plan Roleplay

The business plan negotiation roleplay aims at simulating a real-world situation, presenting students with the opportunity to exercise the negotiation skills and strategies learned in class as well as providing an interactive learning experience that offers expert feedback. For the business plan negotiation role-play to be effective as a tool for teaching this style of negotiating to university students, the environment must be as realistic as possible to enable students to behave as they would if the negotiation were real and not an enactment.

The Business Plan Roleplay puts two students in the position of young entrepreneurs, trying to create their own business: the start-up company Best for Customer (BFC) is a recently found enterprise in the ICT sector. The business idea is to improve customer relationship management within a company by using new software developed by BFC for communication and information exchange between the company and its customers. A functional demonstration version exists and has been tested in a large company. This company is interested in buying the full version. But BFC still needs some development time to prepare the software for the final customer. Therefore the start up business needs further funds and contact with other potential customers. The contacts are prospective users (i.e. businesses) of the new software product and are necessary to further test and potentially purchase the product. Two other students are placed in the role of venture capitalists: Xtra Money (XM), a venture capital company that mainly has a share in enterprises in the ICT sector, is BFC’s potential financer. XM is very experienced in this field and knows that the business idea of BFC is promising. They also possess contacts to other companies who might agree to test or purchase the software. The roleplay is the meeting between the two parties, BFC and XM, and is the negotiation for financial support and business contacts.

Preparation

Four students are chosen (either voluntarily, or by selection). The other members of the class will act as observers. In the actual role-play reported here, in addition to the student observers, two experienced negotiators attended the planning session and roleplay. The professor should not serve as an experienced negotiator, but should monitor the time of the planning session, the roleplay and the timeouts. The four participants are given a general description of the roleplay (Appendix A) and each one receives the description for his/her particular role (Appendixes B through E). They also receive the BFC financial plan...
Teaching business plan

(Appendix F). All observers should receive the general description and the financial plan (Appendixes A and F). This plan contains an outline of the financial situation of BFC, and cost estimation and expected income for the first five years. Material should be made available at least one class period (approximately 2 days) prior to the roleplay so that participants can become familiar with the roles and issues. Spending time preparing the material enables participants to more accurately behave as if the negotiations were genuine. Several issues may be decided beforehand about their assumed roles, such as technical or marketing background, work experience, etc.

Before the start of the role-play, both the start-up company BFC and the venture capitalist XM have a planning session. This lasts for approximately 15 minutes. As the planning session is not long, all participants and observers should be familiar with the material beforehand. The observers are divided in two, one half to attend and aid in each party’s planning session. One experienced negotiator is also present at either session. With the common knowledge of the financial plan, both parties have to decide on the two negotiation issues: the amount of money invested by the venture capitalist and the degree of control of the venture capitalist in the start-up company.

For both issues the parties decide on an aspiration level and on a satisfaction level. The aspiration level is the amount of money or shares desired in the negotiations, and the satisfaction level is lowest acceptable output to finish the negotiations successfully. In addition to the two negotiation issues, both parties have to decide on the negotiation strategy. How will they handle the negotiations to maximize the result? This is also done during the planning session. Examples of the goals chosen by each party are given below:

- The goals of XM: to try and obtain a 51% share in BFC, at least for the first 5 years. XM also wants codetermination and management authority within the company and to guide the young entrepreneurs in developing more products. Their initial strategy was to be “tough,” as they felt the power in the negotiations lay with them.

- The goals of BFC: to get the money necessary to start the company successfully and business contacts, confine the right of codetermination of XM to marketing decisions, and to keep the overall control of BFC. The adopted strategy to reach this goal is to keep as much management responsibility as possible in BFC, while XM accepts to pay the needed funds for the first year of operation. The maximum amount of shares
XM could acquire in return should be 49%. And they agreed to stress to XM that investing in BFC is a golden opportunity, which should not be missed.

**Performing the Roleplay**

The time allotted for the roleplay should be approximately 30 minutes. The objective should be for the two parties to reach an agreement based on the aspiration and satisfaction levels decided upon during the planning session. The roleplay should ideally take place with the four participants in the center of the classroom and the observers on the outside. A table is needed, and four chairs. A round table may serve better than a rectangular one as it does less to physically divide the parties.

A unique aspect of this roleplay is the inclusion of timeouts. These are called for by the monitor (professor). During a timeout, the two parties separate and may receive advice and suggestions from their observers, both expert and student. Timeouts are used handling stalls in the progression of the negotiations or if one or both parties are off base. The timeouts should last for 3-5 minutes and should be limited to three throughout the roleplay.

After the time allotted for the roleplay has expired, the monitor should call for an ending whether or not an agreement has been reached. Occasionally, the proceedings of a particular negotiation preclude a conclusion. Although the objective is to reach an agreement by the end of the roleplay, this is not always realistic and not absolutely necessary for the learning experience.

After the negotiations, the observers are given a chance to make comments on the proceedings and the participants’ performances. This should be a structured process. Start with one of the parties and ask specific questions pertaining to negotiation style, concession-making, etc. The observers present for a particular party’s planning session should discuss whether or not the party stayed with their chosen strategy and if it was successful. It may also be helpful to have the student observers comment before the expert observers.

The business plan roleplay incorporates all the learning advantages of simulating a life-like negotiation allowing students to learn from experience, and additionally lets them learn from their mistakes and from the observations and suggestions of other students and experienced observers. The preparation time helps give them a sense of ownership of their respective roles and enables them to assume a more natural behavior. While it is not possible to accurately model the pressure of time in a roleplay, the need to reach an agreement within the allowed time facilitates this impression.
Suggestions

While the current business plan negotiation offers a valuable learning opportunity to students, there are several improvements that could be made to enhance the experience and make it into an invaluable teaching tool. The following are a few suggestions for improvement, based on an interview with Ir. Jos Deliën and Ir. Bart de Jong, the two field experts that participated in the original negotiation (see Acknowledgments section).

In analyzing the role-play, it was seen that there was a great imbalance in the power distribution between the parties, with nearly all authority lying with the venture capitalist party. Realistically, students would not have the necessary background or experience to accurately portray this role. Having an experienced venture capitalist play this role offers several advantages to the role-play. Many business professors have experience or knowledge in the field of venture capitalism and could easily fill this role.

Currently, the instructions specify that a business agreement must be attained within the half-hour time frame of the negotiation; BFC desires management support (but not loss of control) from XM, and XM desires a leading share in BFC. Besides being a strain on students acting in the role-play, this requirement is not realistic in the sense that a business deal is not reached during the first meeting between entrepreneurs and venture capitalists. A simple yes/no decision on whether further business will be done at the end of the first meeting should be sufficient for this negotiation situation. One of the issues where improvement could be made is in the financial plan used in the negotiation. Usually, the venture capitalist has a complete business plan describing the product and detailing the background of the entrepreneurs in advance of the negotiations. This leaves more time for the actual negotiations, freeing the time used in establishing background. For this purpose, a simplified business plan could be acquired (e.g. on the internet), or the BFC participants could fill out a questionnaire to provide to XM prior to the negotiations. This would also serve to increase the ownership felt for the start-up company by the participants.

These suggestions may assist tailoring the business plan negotiation to individual class needs and enhance the learning experience for students. Students should be made aware in this context that for the most part, definitions of ‘bargaining’ as used by social psychologists have deferred to game theory in suggesting that it is a process in which both parties aim to get the maximum payoff with the minimum amount of concession, as opposed to ‘co-operative negotiation’ which implies a mutual effort to reach a solution that is fair to all parties involved’ (Martin, 2001).
Conclusion

The evaluation of the role play was used in a rather American way: DO, SHOW and TELL, which means that implications were drawn by the professor (in this case: Jan Ulijn) post hoc: what was learned from this role play that could give general insight into the theoretical process and its application to business practice? How could students become successful entrepreneurs by effectively presenting and negotiating a business plan?

For a future use of the role-play, the TELL, DO and SHOW (Lempereur, 2004) might be effective as well in entrepreneurship teaching and training. Moreover, this role play was done with students from about 11 countries and experts from 3 additional ones, but no attempt has yet been made to observe whether DO, SHOW and TELL would work better with Anglo-Germanic and Nordic students and TELL, DO and SHOW still better with Latin and Asian students, as the data by Ulijn (1993) from the University of New Mexico Business School in Albuquerque (US) suggests. A negotiation class was taught there for both broad cultural categories in the above two ways using a scrambled design to control for an order effect, and evidenced the first option as being a favorite for American students and the second privileged by French and Mexican students.

Do international students still have different learning styles in an ever-increasing global IT-directed world? How can they be assisted to become more entrepreneurial and innovative negotiators by adequate study materials?

We kindly invite the readers of the Business Communication Quarterly to use this copyrighted role play for their own educational, non-commercial purpose and to share their experiences with audiences of different cultural backgrounds with us to optimize this tool in our classes. Your reactions are very welcome to j.m.ulijn@tm.tue.nl (see also www.tm.tue.nl/vakgr/ok/ulijn under scientific publications and www.tm.tue.nl/ecis under working papers for research materials on international negotiation for free downloading).

Acknowledgements

This article results from an international cooperation in the field of teaching entrepreneurship with different people whose efforts we would like to acknowledge here:

1. the students of the International Negotiation class of Darmstadt University of Technology in the Summer Semester of 2002 (Germany), in particular Christian Engau, an industrial and mechanical engineering student who developed the role play, based upon a given
format evaluated in a 15 year's teaching experience on the matter by one of us (Jan Ulijn) at several universities in Europe, the US and China,

2. the colleagues and experts of CLUSTER Taskforce VI on *Entrepreneurship and Innovation*, who were so kind to evaluate this role play during their meeting at the Stockholm Royal Institute of Technology (Sweden), July, 2002, which led to the definitive text of the role play parts, which is evaluated here.

3. last but not least, the students of the *International Negotiation* class of Eindhoven University of Technology in the Fall quarter of 2002 (The Netherlands), representing countries, such as the US, Canada, South Africa, The Netherlands, Germany, Norway, Sweden, Finland, Russia, France and Italy and above all Ir. Jos Deliën, an entrepreneur with start up experience in the ICT sector himself and Ir. Bart de Jong, director of EUTECH, a center of technology entrepreneurship and incubator of the same university with venture capital experience.

The valuable contributions of all those people made it possible to both develop and evaluate the role play of concern on crucial check points of validity for the real life business plan negotiations within start up development and for promoting entrepreneurship and as a teaching tool to develop entrepreneurship with engineering students and others.
References


Appendix A. General instructions

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The start up company Best For Customer is a recently founded enterprise in the ICT sector. The business idea is to improve the customer relationship management within a company by using new software developed by BFC for communication and information between the company and their customers. A functioning demo version already exists and has previously been tested in a large company. This company is interested in buying the full version; however, some developing time is still needed to prepare the software for the final customer and to ensure that all the bugs are solved. Therefore the start up business needs further money and additional business contacts with other potential customers. These contacts are necessary for further product testing and possible sales.

Their potential financer is Xtra Money, a venture capital company that mainly has a share in enterprises in the ICT sector. Therefore XM is very experienced in this field and knows that the business idea of BFC is very promising. They also have contacts to other companies who might agree to test the software.

The members of BFC want XM to support them in accessing the market by providing financial help; the venture capital company wants as high a commission as possible and a co-determination with all decisions within the start-up.

During the following roleplay, you will take the part of one member either of the start up or the venture capital company. Both teams consist of two delegates each and you will have some time to prepare your negotiation strategy with your partner prior to the main meeting.

Before the role play BFC should submit a specific business plan to XM in euros. XM will provide a "technical" chairperson from a financial background who will host the meeting and make sure that decisions are taken within 30 min. The location of the negotiation is the XM office of that person.

More specific instructions depending on your role will be provided on an extra sheet.

Good luck!
Appendix B. Roles of BFC: The Information Specialist

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You are a young information specialist and just passed your final university exam. You have always been interested in programming and participated in several courses referring to this topic. During your most recent time at the university you even occupied yourself with the development of a new software program. In your final thesis you examined the implementation of industrial application programs.

Throughout your research work for this thesis you visited various companies and realized that some of them might be interested in the kind of program you were designing. But as you have neither experience nor detailed knowledge of marketing processes and you little background in the economic arena, you talked to your friend who will receive her/his degree in economics and marketing soon. You asked him/her for an opinion and s/he agreed that you should improve the software in order to commercialize it.

The program is to support the customer relationship management within a company. The customers get the possibility to obtain product information via a special access code and the whole system is harmonized with their specific needs. They can check which articles are available at once or how long they have to wait for a delivery. General information or direct orders are possible 24 hours a day. This system saves time and money for both producer and customer. There is no need for large call centers and answering times are shortened as the information is displayed directly on the customer’s screen. Additionally, the system enables the producer to make the task processes more efficient and to coordinate product offerings with the needs of the customers. You know that your program is very good and that it can be a big success if you do the right things now.

Though you have enough knowledge of programming and you have written the whole software yourself till now, in the course of starting up you now want to employ two programmers who shall support you in improving the software. You already have in mind how to make your program better and which additional functions you intend to implement. As the whole thing is your idea, you want to keep the overall control over BFC, but you understand that it is very important for the business to have a stronger financial background than the one that is available at the moment.

Your friend wants to get the money that is necessary to successfully launch from a venture capital company. S/he told you that this company would claim a right of co-determination, but you and your partner decided to confine this to the marketing sector. You want to manage the development of the software and its design on your own.

Your family and that of your friend made enough money available so that you can do without extra income for one year. The technical equipment for the first period is also available. You still need the wages for the two programmers you want to employ, for the rent and the maintenance of your office and a budget for the introduction of the software into the market. The graphical design of the software and other advertising material can be done by some friends who own a design business. This is an option the venture capital company doesn’t know yet.

You know that venture capital companies normally want as high a commission as possible and a co-determination with all decisions within the start-up. You also know that you need the money and perhaps even some support in some management questions. That’s why you decided to contact XM as they have enough experience with start ups in the ICT sector.
For the final meeting with XM, you should prepare a business plan with your friend in which among other things you should list an outlook of your future plans, your marketing strategy and of course the money you need and define your clear aspiration and (hidden) aspiration levels here below. What will be the highest total sum you would go for, at which lower sum would you probably settle and why would this probably be acceptable for you and your friend? Make reasonable and realistic demands.

Aspiration level: €______________

Satisfaction level: €______________
You are studying economics and marketing and will soon receive your degree. Your friend told you about her/his business idea and you decided to found a company together.

In this company your field is marketing. You used your contacts to the company you are actually writing your final thesis with in order to get the possibility to test the demo version of the software. As they were quite satisfied with this new kind of program you convinced your friend that it could be the right time to start up and to commercialize this program.

The program is to support the customer relationship management within a company. The customers get the possibility to obtain product information via a special access code and the whole system is harmonized with their specific needs. They can check which articles are available at once or how long they have to wait for a delivery. General information or direct orders are possible 24 hours a day. This system saves time and money for both producer and customer. There is no need for large call centers and answering times are shortened as the information is displayed directly on the customer’s screen. Additionally, the system enables the producer to make the task processes more efficient and to coordinate product offerings with the needs of the customers. You know that your program is very good and that it can be a big success if you do the right things now.

You want to get the money that is necessary to start up successfully from a venture capital company. Though you know that they will claim a right of co-determination, you and your partner decided to confine this to the marketing sector. The development of the software and its design shall be managed by your friend.

Your family and that of your friend made enough money available so that you can do without extra income for one year. The technical equipment for the first period is also available. You still need the wages for the two programmers you want to employ, for the rent and the maintenance of your office and a budget for the introduction of the software into the market. The graphical design of the software and other advertising material can be done by some friends who own a design business. This is an option the venture capital company doesn’t know yet.

You know that venture capital companies normally want as high a commission as possible and a co-determination with all decisions within the start-up. You also know that you need the money and perhaps even some support in some management questions. That’s why you decided to contact XM as they have enough experience with start-ups in the ICT sector.

For the final meeting with XM, you should prepare a business plan with your friend in which among other things you should list an outlook of your future plans, your marketing strategy and of course the money you need and define your clear aspiration and (hidden) aspiration levels here below. What will be the highest total sum you would go for, at which lower sum would you probably settle and why would this probably be acceptable for you and your friend? Make reasonable and realistic demands.

Aspiration level:  €

Satisfaction level:  €
Appendix D. Roles of XM: The technical expert

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You are a former bank director and now working for Xtra Money, a company that provides venture capital to start up enterprises especially in the ICT sector. During your time with XM you have gathered a lot of experience in evaluating innovative ideas and their potential for a commercialization and therefore now take the function of the technical specialist in the meetings of XM.

You have some information about the business idea developed by BFC and it seems to be very promising to you. You haven’t seen the program yet and therefore you can’t judge its quality, but you know that the reaction of the company in which the software was tested was really positive. Though you need more details you think that there is a potential for such a program and that the BFC programming team has the ability to meet the demands of the market. BFC submitted a business plan to you to get the money they need from you.

During the meeting with the representatives of BFC you want to ask some critical questions referring to the program. Especially the period beyond the introduction is probably too short to make the company successful if it sticks to just one good idea: more strategic thinking in the long run is required. Do they have alternatives to this one time shot which are acceptable to you? Depending on their answers, what would be your first bid on granting money (aspiration level) and at which level would you finally settle (satisfaction level) if BFC meets your conditions?

As the location of the negotiation is your XM office you will host the meeting. Please make sure that decisions are taken within 30 min.

Aspiration level: €

Satisfaction level: €
Appendix E. Roles of XM: The marketing expert

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You are the marketing expert of XM. You are responsible for financial aspects and all the marketing questions and already accompanied several start ups during their founding period.

The information you have about BFC and their product sound very promising to you. You know that the potential market is not overcrowded yet so that even a start-up with little experience has the chance to realize its idea successfully. You know that the company that tested the software reacted very positively and you have contacts to further companies where the software could be tested as well.

You and your partner decided to support BFC if they offer a reasonable commission. Both of you think that during the first months naturally there won’t be much profit and you agreed that you should have an option to increase your share in the company if it develops well. Additionally to the money you want to realize a co-determination with all decisions within the start-up. As you know that especially young entrepreneurs are always uncomfortable in making important decisions you want to reach this by offering not only financial help but also some support in management questions.

The BFC representatives have submitted their specified business plan in euros. You ask them to give a preview of their plans beyond the introduction period of the first program, their marketing strategy and a further specification of their financial needs. Especially the period beyond the introduction is probably too short to make the company successful if it sticks to just one good idea: more strategic thinking in the long run is required. Do they have alternatives to this one time shot which are acceptable to you? Depending on their answers, what would be your first bid on granting money (aspiration level) and at which level would you finally settle (satisfaction level) if BFC meets your conditions?

Aspiration level: €

Satisfaction level: €
### Appendix F. Financial plan for BFC (Best For Customer)

**J.A. Deliën**

1st year costs:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1* director’s wage (+soc. securities, retirement costs, etc.)</td>
<td>48,000</td>
</tr>
<tr>
<td>1 * € 40,000,= * 1,2</td>
<td></td>
</tr>
<tr>
<td>2* programmer wage (+soc. securities, retirement costs, etc.)</td>
<td>72,000</td>
</tr>
<tr>
<td>2* € 30,000,= * 1,2</td>
<td></td>
</tr>
<tr>
<td><strong>WAGES:</strong></td>
<td>120,000</td>
</tr>
<tr>
<td>rent for housing</td>
<td>9,000</td>
</tr>
<tr>
<td>60 m² * € 150= / (m² . year)</td>
<td></td>
</tr>
<tr>
<td>workspace &amp; office supplies</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>HOUSING:</strong></td>
<td>19,000</td>
</tr>
<tr>
<td>graphical design (house style)</td>
<td>4,000</td>
</tr>
<tr>
<td>corporate paper and printing</td>
<td>5,000</td>
</tr>
<tr>
<td>advertisement</td>
<td>5,000</td>
</tr>
<tr>
<td>other</td>
<td>3,000</td>
</tr>
<tr>
<td>1x lease car</td>
<td>9,600</td>
</tr>
<tr>
<td>1 * € 800= / month * 12</td>
<td></td>
</tr>
<tr>
<td>fuel</td>
<td>6,500</td>
</tr>
<tr>
<td>1/13 * € 0,85 / liter * 100,000 km.</td>
<td></td>
</tr>
<tr>
<td><strong>COST OF SALES:</strong></td>
<td>33,100</td>
</tr>
<tr>
<td>computers &amp; back-up</td>
<td>17,500</td>
</tr>
<tr>
<td>(2 servers, 3 desktop clients, 2 laptops): 7 * € 2,500=</td>
<td></td>
</tr>
<tr>
<td>software</td>
<td>15,000</td>
</tr>
<tr>
<td><strong>COMPUTERS &amp; SOFTWARE:</strong></td>
<td>32,500</td>
</tr>
<tr>
<td>insurance</td>
<td>7,500</td>
</tr>
<tr>
<td><strong>INSURANCE:</strong></td>
<td>7,500</td>
</tr>
<tr>
<td><strong>TOTAL PROJECTED COSTS 1ST YEAR (2003):</strong></td>
<td>212,100</td>
</tr>
</tbody>
</table>
• Let’s assume sales on software are variable between € 10,000= and € 250,000= per customer, with an average sales amount of € 50,000= per client;

• Every client pays an extra 15% per year (including the first year) maintenance fee over their initial investment;

• Per employee the total costs in the first year are: € 212,100= / 3 = € 70,700=. Let’s assume that the total costs per average employee starting in the 2nd year sums up to € 75,000= per employee;

• Let’s assume that the following growth pattern can be realized for the start-up in the next 5 years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of employees</th>
<th>Number of extra clients per year</th>
<th>Total number of clients</th>
<th>New clients per employee</th>
<th>Total clients per employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003 (1)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2004 (2)</td>
<td>5</td>
<td>8</td>
<td>11</td>
<td>1.6</td>
<td>2.2</td>
</tr>
<tr>
<td>2005 (3)</td>
<td>8</td>
<td>15</td>
<td>26</td>
<td>1.875</td>
<td>3.25</td>
</tr>
<tr>
<td>2006 (4)</td>
<td>12</td>
<td>20</td>
<td>46</td>
<td>1.67</td>
<td>3.83</td>
</tr>
<tr>
<td>2007 (5)</td>
<td>17</td>
<td>25</td>
<td>71</td>
<td>1.47</td>
<td>4.18</td>
</tr>
</tbody>
</table>

Resulting in the following projected income statement:

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales-total (new clients + maintenance fees)</th>
<th>Total costs</th>
<th>EBIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003 (1)</td>
<td>€ 172,500=</td>
<td>€ 212,100=</td>
<td>( € 39,600= )</td>
</tr>
<tr>
<td>2004 (2)</td>
<td>€ 482,500=</td>
<td>€ 375,000=</td>
<td>€ 107,500=</td>
</tr>
<tr>
<td>2005 (3)</td>
<td>€ 945,000=</td>
<td>€ 600,000=</td>
<td>€ 345,000=</td>
</tr>
<tr>
<td>2006 (4)</td>
<td>€ 1,345,000=</td>
<td>€ 900,000=</td>
<td>€ 445,000=</td>
</tr>
<tr>
<td>2007 (5)</td>
<td>€ 1,782,500=</td>
<td>€ 1,275,000=</td>
<td>€ 507,500=</td>
</tr>
</tbody>
</table>
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