

Start Up Enterprise – Preparation for Putting into Practice a Business Idea through its Simulation

Gabriela Oprea

Faculty of Economic Sciences, Petroleum-Gas University of Ploiești, Bd. București 39, 100680, Ploiești, Romania

e-mail: management_gabi@yahoo.com

Abstract

A business idea should be tested before being put into practice as much as possible to avoid inconvenience caused by any failure. This is possible, in certain areas by the respective business simulation. Thus, we can see that the likely effect would produce a certain decision in a given context, namely an accumulation of decisions made in the business. It is obvious that a single test, only one a simulation is not enough, but it should be repeated in order to take into account as many responses as possible of the business decisions taken in business.

Keywords: *start-up; enterprise; business simulation*

JEL Classification: *E27; E37; M10*

Introduction

We all thought we would start a business to ensure financial independence. But before putting this plan into practice, the question arises: Would my idea be successful? There are other questions, including: How long will it take to recover my investment? What are the elements that we have not taken into account but will affect my business? Will I find the right people to carry out my idea? How can I see the effects of certain decisions without wasting money and time?

First Step for Business

According to efin.ro regardless of the activity, a startup path to success involves making smart decisions¹. There are three common mistakes that entrepreneurs need to avoid when establishing a business:

1. Too many jobs, too soon. For most startups, hiring people before it is an absolute necessity, may lead to disaster. Delegation of authority is an important function for a leader, but before doing so, it is recommended to wait until you truly need a new employee. Besides the fact that you save money, you also have the advantage of spending precious time to get familiarised with the ins and outs of your business.

¹ http://www.efin.ro/imm/consultanta_startup/cele_mai_frecvente_3_greseli_la_startup

2. An unidentified target market. We all would like to develop a product that fits the needs of all consumers, but this is almost impossible. It is essential to identify the target market for your startup in the early planning stage.
3. Adoption of decisions in haste. One may receive feedback from consumers about what they like and suggestions for amending certain activities. Making changes to meet customer needs is crucial, but it is important to determine how to evaluate the proposals. Will this change bring you closer to the ultimate goal or will it lead you in the wrong direction? It is necessary to assess the long term impact of a decision.

According to WallStreet.ro, there are seven mistakes you may make as entrepreneurs²:

You do not understand your customer needs

If the services or products offered by your company are not consistent with what the potential customers want, think about how you could give them the desired articles. Find out as much information about them, about their preferences and characteristics. You may relate to your competitors and realize what they lack and fail to please their customers.

You choose an inappropriate partner

According to Inc.com, even if you “share the same passion for your business idea”, if your partner does not know the best way to manage his own resources, you should not invest time and capital in such a partnership. It may happen to find a partner lacking the necessary qualities, although you may feel that you get along well with him. In this case you must find someone else.

You let feelings overwhelm you

It is quite obvious that your emotions play an important role in your business because its base is your passion for this area. But a good entrepreneur does not let the emotional side to affect the decisions he takes to optimize his business. When the business becomes a personal obsession, you probably do not take the best decisions.

You do not keep in touch with your clients

To invest in what works for your business, you should take into account the feedback from your customers. Cultivating a relationship with your customers helps you figure out what changes need to be done for your company to reach its full potential. If you do not keep in touch with them regularly, your business could be heading in the wrong direction.

You are constantly distracted

According to Entrepreneur.com, if you are like most entrepreneurs, you have so many ideas that you cannot concentrate on your initial plans. If you want to concentrate better at what you do, take a list with all the ideas that come to you and see which of them can be put into practice as soon as possible to encourage the evolution of your company.

You expect quick results

Usually, good results do not appear immediately, so your expectations should not be too high at first. It may take even years until your business will have the success that you desire. Therefore, it is likely that most of the businesses will fail; you must be prepared to face many ups and downs and be willing not to give up too easily on your plans, even though the obstacles appear.

² <http://www.wall-street.ro/articol/Start-Up/184689/7-greseli-pe-care-le-pot-face-antreprenorii.html#ixzz3iZl3arI8>

You do not handle the budget properly

The fact that you lack money at some point in time can be a sign that you do not know exactly how to manage your budget. A successful entrepreneur always finds a way to make more money to fill the gap created by the loss he faces, and always has always a financial backup plan. Besides, you should answer the following questions: Why should I invest more and what is the amount of money that I am willing to assign to this project?

Business Simulation

Once these challenges are solved, the following questions arise: Will my business generate the expected profit? How long will it take until I have profit? What decisions should I take to be sure that I get the highest profit? And many other questions, that are, at least partly, answered using certain software created by specialized companies to simulate and manage the business environment. In such software, certain input parameters are introduced, the business conditions and the environment are selected, and after that the actual simulation begins. This is based on the principle *if... when...*, in the way in which the simulation software creators have defined the answers to those programs corresponding to the possible choices of the users.

Why Business Simulation to Prepare a Business Idea?

I chose to discuss this topic because I think many future entrepreneurs fail before actually starting their business because of the lack of practical knowledge and business skills. Given that most people retain most from what they did, rather than from what they read or heard (according to the Cone of Learning - fig. 1), the simulation business seems to me to be the best tool for training in the sense that participants in these simulations actually make decisions that respond to the changes in the external simulated environment as if it may be real. In these cases there is no question of reading material and a story to it, but of the practical application of knowledge formed and inspired by decisions required in a competitive environment at a given time and in a given scenario. Using simulations in which the input parameters can relatively easy be modified, participants can be placed in situations as varied as possible in order to prepare as well for their future business.

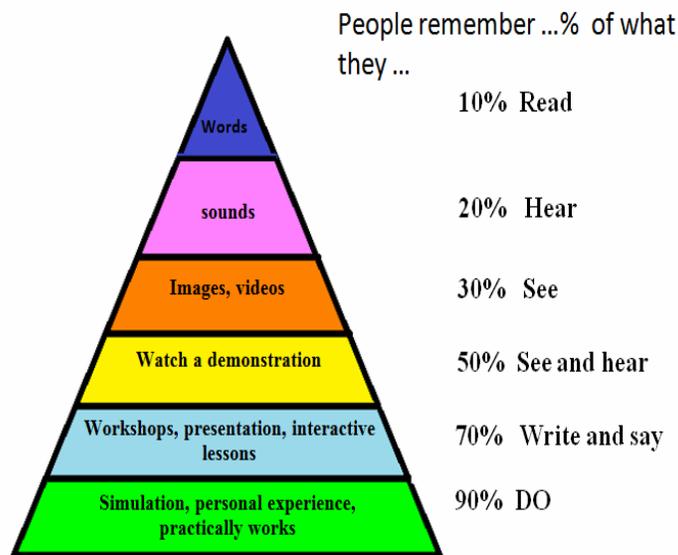


Fig. 1. What we remember...

Source: Dale, E., Cone of learning, from *Audio-Visual Methods in Teaching*, 3rd ed., Holt, Rinehart & Winston, New York, 1969, p. 108

As you can see in the figure above (Figure 1), people remember almost all (90%) of what they did, even simulations, as opposed to a much lower percentage (10-20%) in which they retain what they read or just heard.

Not many future entrepreneurs know about this software and how to access them, even if many of them are free, available online. Therefore, I consider that their greater visibility is welcome, especially in organizations that support the creation of SMEs and encourages young people to become entrepreneurs. Such business simulations are a good teacher for future managers even if the software is not strictly designed for the business that a certain future entrepreneur wants to develop.

Experience teamwork can provide to all participants the possibility of understanding the role of leadership in a company simulated showing how, starting from several points of view related to establishing the business strategy given the financial constraints and the time, it reaches the adoption of a single strategy. Also, here they can see how personal factors influence making – decisions process (e.g., a good mood and relaxation of each of the co-team members leads to a positive synergy of the team, while tension, erroneous assumptions or foolish pride of one or more of the team members can lead to poor results of the team, and the examples can continue). A very interesting feature of simulation is that participants can focus on interpersonal relationships and dynamics of team. The case studies represent the team and the experiences of its individual members. The game's coordinators are watching these situations and may intervene to correct any problem if they lose the control of the Team Players (they can give specific suggestions to the students on how to work with one another in order to achieve organizational and personal goals). At the end of the simulation, team coordinators may make recommendations to develop personal action plans to contribute to the improvement of future performance.

Practical Example

Exelo Company (EXELO Training & Development, Partner in Romania of Global Knowledge is the training company that addresses the development cycle of business solutions through a combination of instruments related to the areas of expertise: Business Analysis, Project Management and Skills for Business) allows those interested to practice on a simulator business owned by it to acquire knowledge and skills of business.

Product

Product SimTeam is a business simulation platform which shapes the operation of a knowledge enterprise. It allows participants to understand the operational challenges of a project – based on an enterprise, such as the complexity and interrelationship between different corporate positions or the consequences of managerial decisions. The software simulates a competitive market where different management teams – representing different types of companies - compete. The simulation follows a game based on educational approach. The SimTeam simulation environment is provided as software – as service where users (like trainers, business school teachers or HR specialists) can shape customized training, educational or assessment programs on the platform or can use pre-set simulation case studies. SimTeam partners are provided with continuous technical support.

Who Needs to Attend: Seniors Managers, Middle Managers, Supervisors, Project Managers, Business Analysts, Sales People, PMO's leaders, Senior Project Managers, Team Leaders, IT Project Managers, Project Analysts, Project Leaders, Program Managers.

Scenario

Alpha Ltd., Beta Ltd., Gamma Ltd. And Delta Ltd. are young companies. They are competitors at the same market. They all have completed one financial year (four quarters). The companies reached different results.

During the first financial year, a company is a company with low image, other is a company with HR issues, the third is a company with cash flow issues and the fourth is a company with sound positions.

The owners of the companies have decided to appoint new managers (the participants of the course) and ask them to:

- Review the strategies of the companies according to the instructions.
- Ensure that the companies have secured liquidity positions.
- Stabilize the operation and set the companies on a growth path.
- Complete the goals set by the owners (and communicated by the trainer).

Objectives

There are many goals for the different teams:

- Establish a strategy for counter balancing the difficult image position.
- Improve the image of the company and target to reach the market average image indicator level.
- Reach a profitable operation by the end of the next calendar year.
- Stabilize the cash flow position and set the company on a growth path.
- Review the strategy and set the company on a growth path with cash positive and profitable operation.
- Stabilize the cash flow position of the company.
- Re-structure the HR structure and review the HR and sales strategies.
- Reach a profitable operation by the end of the third calendar year (8 quarters from now).
- Stabilize the cash flow position and set the company on a growth path.
- Remain highest know-how company at the market.
- Defend the market share of the company and remain the market player with the largest turnover.
- Keep the net profit margin above 25%.

Every team must:

- Prepare and present the new strategy of the companies! Use a presentation tool (e.g. Power Point or Keynote)!
- Prepare a cash flow forecast (after 2Y2Q) with a minimum outlook of 4 quarters in Excel spreadsheet.

Description of the Study

Any business game or simulation of managing a business starts with an presentation held by the leader of the study (game) to familiarize participants with the business model and simulate the work of all departments (research - development, commercial production, personnel, finance - accounting) and the way of access to the company's database, company decision making, how to do their testing followed by simulation of evolution of the company based on these decisions and viewing the reports containing the result of this simulation, operations performed using specialized software in this matter, many available only online. The game coordinator presents the general circumstances in which the study is conducted, the characteristics of the enterprise to be managed by each team of participants, the objectives of the study, how to develop the

decisions and startup mode and the main software used commands. During the presentation, the coordinator will insist for possible mistakes and confusion that might be committed by participants during the course of the game. At this stage of the study participants can ask questions about any concerns about the models used for each function of the company, to ask details concerning the use and interpretation of reports provided by the simulation software used. Further, the study's leader divides the participants into groups of 3-5 students, forming teams related to the leadership roles for a company. During our personal experience in this regard, we found that if the number of players forming a team is too small, individual decisions are prevalent and the phenomenon of synergy in the team do not appear. Conversely, if the number of team members is too large, decisions are taken with more difficulty especially for the teams that have more leaders who want to take the decision, all of these leading to difficulties in achieving simulation. Thus, I consider that a total of 3-5 people is optimal, but also this can be adapted optimally depending on the type of simulation.

The Dialogue between Management Teams Coordinator and Game Businesses

The dialogue is conducted following the next:

- clarify misunderstandings about the operation of the organization whose leadership has assumed a deployment modules and study how to improve the decision-making during the study;
- Simulation exchange of information between the company's management team and board of directors regarding the establishment of plan, possibilities of supplying and selling products on the market, investment etc.
- Simulation information exchanges between enterprise and other units regarding on the pricing of products and services unit, the bank loans etc.

If simulations are available online, this is accomplished only through the HELP software used.

Individual and Team Study

Each participating team works according to the algorithm given by the coordinator of the game. In some simulation software available on line there are 1-2 steps preparatory course in which participants actually understand the simulation, after that it starts the real competition between the participating teams. Personally, when I work with students for the first time in this sense, I let the simulation run one or two times to familiarise the participants with it. It is possible that the participants, who are grouped into one team, enter into competitive situations with enterprises invisible for which decisions have already been stored in the database for some next steps. The objective at this stage is to capture the main correlations between the different functions of the enterprise and to have the opportunity to correct decisions and resume the simulation for any quarter whenever needed.

The next step in simulating a business or computerised or not, possibly on-line, consists in analysing the results of the own company during the previous period, in the study reports generated automatically or based on the intervention of the coordinator of the simulation, in analysing the tasks set and in developing a strategy for the next period, in adopting the decisions for each period originally defined, in the current simulation, in analysing the results and identifying the causes of deviations, in correcting any erroneous decisions etc., i.e. participants conducted a number of management exercises within a learning environment default .

There is the possibility that simulated business to be done in an environment which simulates situations of competition existing in a market economy - precisely the defined environment for the participating teams. All participating teams are working under competitive conduct, so that

they analyse the existing situation of permanent items and elements in their own company and elements existing on the market, they analyse and reshape their own strategy and develop elements of decisions that will be run in competition with other participants. The objective at this stage is to develop the managerial skills of each participant by tracking the dynamics of competition under management exercises. The information provided by the management game, the database and software simulation of the modelled company is a constant generator of similar information and enterprise data coming from the real economic environment for participants in the business game.

The Analysis of the Simulated Enterprise during the Past Quarters

Each team must have assured access to the database of the company through software. Study Coordinator may, if appropriate, provide information sheets containing enterprise development model, but it is recommended that the learner to find all the information he needs in the form of reports or documentation viewed on a computer screen. For each quarter, the team members can study the decisions taken by the former management team and consequences of these decisions on the subsequent evolution of unity on the production, marketing, personnel, production costs, any new products resulting from research etc. via software. A clear picture of enterprise evolution is emerging by comparative analysis of decisions and results on the N previous quarters. Based on the study reports, the management team can form an image on the current situation of the company he is responsible of and he can decide on the direction in which this unit can evolve. Therefore, these reports provide useful information to guide later decisions as accurate. Of course, one should not forget that in the evolution of the enterprise various random factors intervene permanently (considered in runtime patterns associated functions of commercial, personal, research by generating random numbers that occur depending on the decisions of other participants. So the decision taken by the team for a quarter is not the only one which determines the results of the company in the quarter. The same decision may have different implications depending on the actions of other participants and intervention from the random factors represented in the model by generating random numbers. Thus, it becomes obvious the need for team leading enterprise continuous monitoring progress, correcting decisions every quarter if necessary, guiding enterprise development in the desired direction.

Making Decisions for the Next Quarter

After analysing the objectives received from the board of directors (or management game), the management team of the company sets the strategy for the coming year and prepare decisions for quarter $N + 1$. Such decisions shall be completed either on standardized forms or it will be introduced by one of the team members into the computer. The models screens of taking decisions shall be identical with those forms and any information typed wrong can be corrected by correction procedure existing in each screen. A form can be decisions on staff (employment, settlement, holidays, training courses hourly earnings), decisions on production (production plan for each car group, the structure of employment, maintenance expenses). Another formulation contains decisions on types of raw material supply, quality expenditures, overtime granted, products made in the previous quarter and those in the factory warehouse, advertising expenses and market information, price selling, research expenses.

Analysis of the Results

Decisions for each new quarter fall in the formulation of decisions, either on paper or on computer. After running the simulation procedures, the results are obtained for the quarter under review. These results are presented in the form of reports that can be viewed or listed and that have the same structural information as the previously analysed historical reports. The

management team will analyse the results of the simulated company and determine to what extent they deviate from the goals proposed. Further, based on the new situation of the organization and on the basis of the content of reports of history, the leadership team elaborates decisions for the next quarter. The simulation is conducted in the same manner, quarter by quarter, and provides new reports at the end of each quarter, reports that can be accessed anytime by decision makers.

Conclusions

Business simulations are, in fact, business games that allow you to put participants in charge of a marketing division or of an entire corporation. They get to test their skills in a fun interactive game and they become totally immersed in the learning process. The strategy business game environment attracts them and adds a whole new level of excitement to participants. Business simulations allow students to experience the business strategies and compete with other student companies. The competitive spirit is developed by the game environment of the business simulation. The participants focus on outsmarting their classmates in a friendly game and the competitiveness drives in the learning. Learning occurs as a necessity to master the exercise and to be better than the other teams. Researches show that students remember only 20% of what we teachers tell them during classes. But when they learn practicing, they retain about 80% of the information. When the students make realistic business decisions in a business simulation and immediately see the results of their actions, the important business principles become a part of their natural thinking.

Simulations connect in a very constructive mode the theoretical concepts with practice applied by introducing competition in learning through simulation. This fact generates much enthusiasm for all business simulation participants, stimulate emotions and amplify the volume of retained knowledge. Simulations help to create links between coordinator and participants, between teachers and students and are very relevant for the research domain. Simulations have concrete effects in practice: they develop critical thinking, the possibility of initiating business strategies, help improve group relationships, team spirit in every organization, develop skills to assess the financial position of a company. Participants observed effects of/on the simulated firm management decisions that they have taken in a very dynamic way. They test their managerial skills in a safe environment without the danger of losing the resources (financial and material, but not only), they can learn from their mistakes and repeat simulation whenever needed to get the best results. Students understand the impact of decisions made by all departments of the organization; they can see the work as a whole and the cumulative effect of all decisions taken. In short, the simulations are extremely interesting and useful!

References

1. *** *Annals of entrepreneurship education and pedagogy*, Edited by Michael H. Morris, George and Lisa Etheridge, University of Florida, US 2014.
2. Buzoianu, D.A., *Economia și gestiunea întreprinderii*, Petroleum-Gas University of Ploiesti Publishing House, 2013, ISBN 978-973-719-494-7, pp. 68-71, 77-78.
3. Buzoianu, D.A., *Managementul firmei în contextul globalizării, Globalizarea încotro? Realizări, tendințe, consecințe*, 1st Edition, Cartea Studentească Publishing House, Bucharest, 2006, ISBN (10)973-8952-53-0, ISBN(13)978-973-8952-53-9, pp.175-180.
4. Cadotte, E. R. *Business Simulations: The Next Step in Management Training*, chapter from *The Management of Strategy in the Marketplace*, online version, 2015.
5. Dale, E., *Audio-Visual Methods in Teaching, 3rd ed.*, Holt, Rinehart & Winston, New York, 1969, p. 108.
6. Popescu, C., Gogoș, G., Oprea, M. & Oprea, D. *Simulation - an alternative of initiation for business success*, The 20th International DAAAM SYMPOSIUM "Intelligent Manufacturing & Automation: Theory, Practice & Education" 25-28th November 2009, Vienna, Austria.

7. Paraschiv, D. M., Slavescu, E., Belu, G., The Online Business Simulation – An Innovative Method of Learning Economics, *Romanian Journal of Business Simulation*, Step from College to Real Life. The Way to Build Future Leaders June 2013, vol 1.
8. <http://www.marketplace-simulation.com> , accessed on 28 July 2015.
9. <http://www.wall-street.ro> , accessed on 1 august 2015.
10. <http://oaktreesim.com> , accessed on 10 august 2015.
11. <http://openi.nlm.nih.gov> , accessed on 12 august 2015.
12. <http://www.efin.ro> , accessed on 1 august.
13. www.exelo.ro , accessed on 25 July.