ICOPEV 2014, Guimarães, Portugal

COMMERCIAL ANALYSIS IN PROJECT APPRAISAL

Nuno Moutinho¹, Helena Mouta ^{1*}

¹ School of Technology and Management, Polytechnic Institute of Bragança, Portugal

* Corresponding author: hmouta@ipb.pt, IPB, Campus de Santa Apolónia, Apartadao 1134, 5301-857 Bragança, Portugal

KEYWORDS

Project appraisal, Commercial analysis

ABSTRACT

An adequate analysis of investment projects should provide a knowledge of the commercial factors that are critical to the success of the project. The evaluation of a project should identify the problems associated with the market where the project will be placed and develop the relevant market competencies to allow the project to meet the market's expectations and face its competition. As such, project appraisal should analyse the aspects associated with the project's commercial dynamic and, therefore, this work supports the idea that project appraisal should include an analysis of the commercial area.

INTRODUCTION

In investment project appraisal it is common to only use financial evaluation techniques. However, investment decision process is complex and should consider qualitative aspects which are difficult to measure. Financial techniques should only be used as a guide and other factors that can influence the uncertainty analysis should also be taken into account. Moutinho and Mouta (2013) present a brief reflexion about the main aspects to consider in project appraisal: financial and non-financial aspects, capital structure, agency problems, governance, real options, stakeholders and other situations. Moutinho and Lopes (2011b) show the importance of non-financial aspects for investment projects. Skitmore et al. (1989) present a list of factors which influence the success of construction projects, and they mention a lot of non-financial factors beyond the financial aspects. Meredith and Mantel (2000) suggest that there is a need for diversified information and they come up with a list of production, marketing, financial, administrative and personal factors. Moutinho and Lopes (2011b) show the importance that companies attribute to the commercial area (75%), considering it the third most important analysis dimension for projects and presenting it as a critical area for the projects' success.

The commercial analysis in project appraisal studied by Savvides (1990, 2000) refers to the application of the strategic principles of marketing. In fact, the commercial aspects seek not only to perceive the probability a project will survive the competitive forces in its market, but also to investigate how these aspects can help to make financial adjustments that increase the project's viability.

An adequate analysis should bring a knowledge of the commercial factors that are critical for the project's success, that is, it should find the elements of competitiveness that can lead the project to success. A project's evaluation should identify the deficiencies in the company's performance, in the market where the project will seek to place itself, and develop the relevant markets competencies in order to outperform the competition and meet the market's expectations.

This paper is organized as follows: first there is an analysis of the main aspects of commercial analysis which requires the study of the following four sides – the definition of the market, the market analysis, the strategic evaluation and expected performance (that is, cash flow projection). Next are the commercial risk factors, followed by the ways to minimize these risks. In chapter 4 is a description of how these aspects can be incorporated in the project appraisal. Before presenting the conclusions, there is an analysis of the importance companies attribute to commercial aspects in project appraisal.

COMMERCIAL ANALYSIS

Savvides (1990; 2000) studies the commercial aspects in investment projects in detail and presents four relevant situations that must be approached in any project. First, in the market definition, the evaluation process is based on the market needs the project intends to satisfy, identifying and selecting the potential competitors and clients and doing market research to assess the project's competitiveness and obtain a prediction of market penetration.

From this analysis comes the project's relevant market, defines as the part of the total potential market that is competitively accessible to the project. It encompasses all the markets served by the project and its competitors, except for those only remotely related, considering the

ICOPEV 2014, Guimarães, Portugal

possibility of appearance of a substitute product and possible change in its positioning. It is also necessary to estimate the expected market size to know the volume and value expected to be used, as well as its possible changes through time.

Next, there should be a market analysis in three interdependent and interconnected stages where research in one causes changes in the others: market segmentation, competition and project capability. Market segmentation allows the understanding of the market's expectations and the needs of potential clients, since it identifies groups of clients with homogenous characteristics and needs. The goal of market segmentation in project evaluation is to identify potential clients with special market needs that can be better served by the project. Therefore, market segmentation allows the selection of the project's target market.

After defining the relevant market for the project, it is necessary to study the main competitors and their products. The goal is to study the current suppliers and deduce the market profile of the main industry competitors, as well as to identify differences in potential capabilities where the project may develop competitive advantage. It is also necessary to analyse the possibility of new competitors and/or substitute products surfacing on the market, with the changes to the relevant market they may bring.

There is also the need to identify the project's capability for the relevant market, through the analysis of different dimensions such as human resources, organization and technology, among other. The market analysis should lead to the construction of alternate projects that may combine the limited resourced and available capability of the project so as to best aim at the basic needs identified in the relevant market.

Another important consideration is the formulation and evaluation of the product's strategy. Firstly, the selection of a target market for the project that allows it to explore its potential competitiveness through the production and distribution of products that are better than those of the competition for market segments that are substantial and potentially rewarding. The project should choose the most appropriate market segment aiming to only employ resources in that segment that it may best serve, according to its capabilities and available knowledge and depending on the needs and behavioural characteristics of the market segment. Basically, this is the choice of the market positioning for the project. Positioning consists of the selection of the target market, among the various different market segments that exist, and the identification of a unique placement for the project product in the consumer's perception map of the competing products in the market. Then there should be a listing of the ways that the project's capabilities are used, considering the opportunities presented by the market segmentation and the analysis of the competitors, so that the project may achieve its maximum potential performance.

A project's competitive strategy, namely the prediction of commercial activity and sales, depends on the marketing-mix of a competitive product. The marketing-mix strategy is based on four pillars (Lindon et al., 2000): the product policy; the price policy; the placement policy; and the promotion policy.

Finally, aiming at emphasizing the expected performance, the marketing results are transformed into quantitative cash flow projections. In order to do this, the analysis must focus on determining the quantitative size of the market, the market's expansion, the market share the project's product has or will gain, the projected price and costs of marketing (Savvides, 2000). Sales are projected as a percentage of the market share in the total market size. Note that the competitiveness of the project affects the size of the market and the market share that can be gained by the project (Andreou et al., 1991).

COMMERCIAL RISK FACTORS

There are several risk factors associated with the four commercial aspects considered above. The inexistence of or incorrect market definition, whether at the market needs level or at the size level, creates uncertainty (Savvides, 1990). For Cooke-Davies (2002) the risk factors are related to the understanding of the consumer and the company and their respective needs.

As for the market analysis, the inadequacy of the project's capabilities to the needs of potential clients, considering the characteristics of the current and future potential competition is a key issue (Lindon et al., 2000; Savvides, 1990). As for potential clients, there may be difficulties not only in their descriptios, but also in the understanding of their needs, creating a deficiency in the understanding of the global project market (Savvides, 1990). In what concerns competitors, they pose a serious risk since they may have substitute products or potential capabilities to positively differentiate the product from the project's product, apart from the fact that there may be other potential competitors in the future.

As for the strategic evaluation, one important mistake in the definition of the project's placement is to adopt several segments of the total relevant market. Therefore, when the relevant market has various heterogeneous segments, if it cannot separate different products for each segment, there is the risk of being unable to satisfy the customers (Savvides, 1990).

Consider, as well, that an erroneous choice of the marketing-mix policies may lead to a loss of viability for the project, because the commercial activity (with direct impact on performance) may not reach the minimum necessary level.

Finally, when determining market performance it is possible to encounter as risk factors: the expected growth rate of the relevant market; the expansion of the

ICOPEV 2014, Guimarães, Portugal

market caused by changes in demand; unexpected changes in market share; price, which should be attractive for a large number of potential clients; and the costs with the formulation of the marketing strategy (Savvides, 1990).

MINIMIZING COMMERCIAL RISKS

In what concerns the market definition, it is important to verify the degree of substitution of products and of the potential competitors of the project. On the other hand, there should also be an analysis of the tendencies that may affect the importance of the potentially competing products (Savvides, 1990).

As for potential clients, the strategy should involve the segmentation of the market based on demographic, geographic, socio-economic, psycho-graphic, personality, lifestyle, behavioural and psychological criteria (Lindon et al., 2000; Savvides, 1990). There should be a search for information about the clients that allows the project manager to make decisions with full knowledge of its competitors' positioning.

As for the project's capabilities, it is necessary to analyse its potential in various functional areas and verify the available knowledge in order to adopt an adequate strategy.

Savvides (2000) refers that the selection of the target market, in a project, should be: focused, promote a concentration of efforts in the business, trying to find a good product or service that is well adjusted to the needs of the main market segment, rather than trying to attain all possible clients; consistent, not trying to serve a second or third market segment causing a constraint to the project's ability to serve the main market segment well; and flexible, selecting a strategic positioning that is relatively easy and inexpensive to change, should things not go according to plan. The author adds that in order to optimize a product's placement in the market, it is necessary to understand the existing products consumer map. Alternatively, it is possible to check the criteria on which the clients base their choice of a market brand and how the main competitors and brands approach the principal dimensions of choice. On the other hand, the chosen market segment should be the one that best uses the project's assets and plays to the strengths of its potential capabilities (Savvides, 1990).

The company should develop product, pricing, placement and promotion policies that are consistent with the goals defined for the project, but also established together and consistently with each other, considering the behaviour of the target clients and the desired level of sales (Soares et al., 1999).

Given that the marketing-mix is the concrete translation of the orientations defined in the previous steps – namely those respecting the product placement and priority actions in the strategy – it is necessary to analyse whether the marketing plan allows the

attainment of the general goals defined by the marketing strategy (Lindon et al., 2000).

Qualitatively, the analysis should focus on four golden rules: coherence of each component of the marketing-mix with all the others and with the positioning that sustains them; adaptation of the marketing-mix to the market and the project; ensuring at least one relative advantage of the project over its competition; obtaining acceptable results even if some of the assumptions are not fully verified. Quantitatively, it is desirable to attempt to predict the effects – in terms of sales and market share – that will be obtained and the results that can come of it. Alternatively, it is possible to determine the point beyond which there is a positive return. In this way, adopting adequate strategies for the variables of the marketing-mix takes a key role in the analysis.

The existing skills in the company should allow a market analysis, through the evaluation of its strengths and weaknesses. The need to determine the viability of the project makes it necessary to calculate projected sales using projection methods (Lindon et al., 2000). As for the market environment, it is important to verify the market tendencies, changes in lifestyle and recent technological developments that determine opportunities and threats.

Apart from delays and additional spending which negatively influence the commercial success of the project (Wateridge, 1998), the uncertainty about the price of output also negatively influences the choice to invest (Nakamura, 1999).

EVALUATION OF THE COMMERCIAL ASPECTS

The analysis of commercial factors should be performed preliminarily, that is, before the project is implemented, since only through a knowledge of the project's commercial performance is it possible to determine its viability. However, continuous revisions should be performed with the intention of incorporating eventual adjustments that might be necessary.

Although it may involve the main functional managers of the company, the marketing specialists are better equipped to ensure the adoption of an adequate commercial policy. Given the importance of these decisions, they are analysed from a strategic perspective. In this way, Skaates and Tikkanen (2003) stress that the project manager and the project owner may also play a crucial role in defining the project's commercial policy. Without the commercial perspective, the company is unable to identify and respond to opportunities and threats in its market environment (Andreou et al., 1991).

THE IMPORTANCE OF COMMERCIAL ANALYSIS IN PROJECT APPRAISAL

Moutinho and Lopes (2011b) observe that commercial analysis is the third most important area in project

ICOPEV 2014, Guimarães, Portugal

appraisal, following the strategic and technical analyses. These findings support the theory that non-financial factors are at least as important as financial ones in project appraisal. Companies from the commercial sector and that have implemented expansion projects attribute more importance to commercial analysis. Companies where the CEO's education is lower and CEO tenure is higher, attribute more importance to commercial analysis. Note also that companies with expansion projects also attribute a greater importance to commercial analysis. Moutinho and Lopes show that the commercial issues are among the main critical success factors in project evaluation.

Moutinho and Lopes (2011a) present the most important factors in project appraisal: studying market needs (81,3%), ability to seize opportunities (76%), analysing the company's capacity (72%), defining the relevant market (69,3%), selecting market (69,3%), estimating the market's size (68%) and product policy (68%). These results confirm the studies of Savvides (1990; 2000). Those authors also report that manufacturing and commercial companies attribute a greater importance to identifying and analysing competitors that other companies, whereas the promotion policy is more important for large than small companies. When analysing the type of project, the authors find that expansion projects tend to consider studying market needs, defining the relevant market and identifying and analysing competitors more important whereas in large projects there is a greater importance attributed to studying market needs, placement policy and promotion policy. Another result indicates that identifying and analysing competitors is more important when administration owns a participation in the firm, the project manager is young, has little experience and has a fixed reward, and also that the more successful the project, the more important it is to analyse the company's capacity.

As for risk factors, Moutinho and Lopes show all companies consider commercial return, business volume, competition and market size as very important, although they find that commercial companies consider the commercial return more important than other companies. Market size is considered more important for long-term projects than short-term ones, inadequate commercial capabilities have a greater importance when managers are owners of the firm, the project manager is inexperienced and has a fixed reward, and when the CEO does not have a college graduation, and competition is a more important consideration when the decision-maker belongs to the firm's administration. Lastly, the project tends to be more successful when business volume and commercial return are more important.

To minimize the risks associated with the commercial area, the companies use the following procedures: understanding the client's needs, careful customer analysis, analysing the product's market, understanding

the company and its goals and product differentiation. Moutinho and Mouta (2011) show that although there is a greater probability of performing the commercial analysis in expansion projects, manufacturing companies are less likely to perform it.

CONCLUSION

In project appraisal all the factors that may influence the project's success should be analysed, rather than just the financial aspects. It is well to remember that the financial forecasts that determine the projects financial viability are based on estimates which, in their turn, are based on commercial decisions. Meredith and Mantel (2000) and Moutinho and Lopes (2011b) show the importance of the commercial area in project appraisal. The analysis of a project should consider commercial factors that are critical to the project's success and find the competitiveness elements that can lead the project to a positive outcome. In this area of analysis, it is important to know and adequately define the market the project intends to serve. It is, then, relevant to segment the market with the goal of identifying potential clients and perform the competitors and their products. In the next stage, a target market for the project should be selected, choosing the market placement intended for the project. Given the outlined goals and selections, a marketing-mix strategy should be formulated for the project that will lead to a viable outcome. As such, there should be sales and cash flow projections that permit the evaluation of performance associated with the project.

This paper highlights the importance of the commercial analysis in investment projects. Moutinho and Lopes (2011b) observe that the commercial analysis is the third more important area in project appraisal, following the strategic and technical analyses. Moutinho and Lopes (2011a) present the most important commercial aspects in project appraisal and show that the analysis should encompass studying market needs, the ability to seize opportunities, analysing the company's capacity, defining the relevant market, selecting the market, estimating the market's size and defining the product policy.

To minimize the risks associated with the commercial area, companies use the following procedures: understanding the client's needs, careful customer analysis, analysing the product's market, understanding the company and its goals and product differentiation.

REFERENCES

Andreou A., G. Jenkins and S. Savvides. 1991. "Market Competitiveness, Risk and Economic Return: The Case of the Limassol Juice Company". *Development Discussion Papers*, No.330, Harvard University.

Cooke-Davies T. 2002. "The "Real" Success Factors on Projects", *International Journal of Project Management*, Vol. 20, No.3, 185-190.

ICOPEV 2014, Guimarães, Portugal

- Lindon D., J. Lendrevie, J. Rodrigues and P. Dionísio. 2000.
 "Mercator Teoria e Prática do Marketing". Lisboa: Publicações Dom Quixote.
- Meredith J. and S. Mantel. 2000. "Project Management: A Managerial Approach", USA: John Wiley & Sons.
- Moutinho, N. and M. Lopes, 2011a. "The Relative Importance of Financial and Non-Financial Analysis in Project Evaluation Evidence from Portuguese Firms", FMA European Conference, Porto (Jun.).
- Moutinho N. and M. Lopes. 2011b. "Non-financial Analysis in Project Appraisal – An Empirical Study". 2011 Annual Conference of European Financial Management Association, Braga (Jun).
- Moutinho, N. and H. Mouta, 2011. "Which Project Characteristics are Important? What are the Project Success Factors?". *International Conference on Project Evaluation ICOPEV*, 2011, 28-29 April, Guimarães.
- Moutinho N. and H. Mouta. 2013. "Project Appraisal: A reflection". IO 2013, XVI Congresso da Associação Portuguesa de Investigação Operacional; Bragança (Jun.).
- Nakamura T. 1999. "Risk-Aversion and the Uncertainty-Investment Relationship: A Note". *Journal of Economic Behavior & Organization*, Vol. 38, No.3, 357-363.
- Savvides, S. 1990. "Marketing Analysis in Project Evaluation". *Development Discussion Paper* No.341, Working Paper, Harvard Institute for International Development, Harvard University.
- Savvides, S. 2000. "Market Analysis and Competitiveness", Development Discussion Paper No.755, Working Paper, Harvard Institute for International Development, Harvard University.
- Skitmore R., S. Stradling and A. Tuohy. 1989. "Project Management Under Uncertainty". Construction Management and Economics, Vol. 7, No. 2, 103-113.
- Skaates, M. and H. Tikkanen. 2003. "International Project Marketing: An Introdution to the INPM Approach", International Journal of Project Management, Vol. 21, No.7, 503-510.
- Soares J., A. Fernandes, A. Março and J. Marques. 1999. "Avaliação de Projectos de Investimento na Óptica Empresarial". Lisboa: Edições Sílabo.
- Wateridge J. 1998. "How Can IS/IT Projects Be Measured for Success?", *International Journal of Project Management*, Vol. 16, No.1, 59-63.