SME Projects:  
A Software for the Identification, Assessment and Management of Risks  

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Abstract

SMEs often experience difficulties accessing financing to support their activities in general, and their R&D and innovation activities in particular. Lenders tend to be risk adverse vis-à-vis SMEs because of their diversity and the assessment difficulties this entails. Establishing the risk levels of innovation activities can be quite complex and there is no formalized tool to help financial analysts assess them and implement compensation and financing terms that will satisfy both lenders and entrepreneurs. This situation creates a lot of pressure on the cash resources of innovating SMEs. The appropriation and application of more effective risk assessment methods represent an excellent solution to SMEs’ financing problems. This could allow SMEs to manage more strategically the various components of risk. Institutions assisting SMEs in their projects could more effectively develop programs and services closely linked to the essential mitigation and coverage measures. Lenders and investors could more precisely assess the real risks involved in funding SME projects, allowing them to offer more attractive financing terms. Based on our expertise with SMEs and on the contribution of several experts that constantly deal with SME development projects, we have implemented a state-of-the-art, Web-based software called eRisC. It identifies, measures, and allows managing the main risk factors that could compromise the success of SME development projects including expansion, export and innovation projects, each of which is the object of a separate section of the software. We thus present eRisC, which was developed for and validated by entrepreneurs, economic agents, lenders and investors, to identify the main risk factors of SME projects in order to improve their success rates and facilitate their financing. As of now, various organizations are starting to put eRisC at use in real life situations.
1. INTRODUCTION

The new global environment is characterized by the acceleration of technological change, more demanding customers, the reduction of products’ life span and a more diversified product offer. In such an environment, innovation is a key element in businesses’ efforts to maintain their competitiveness (Chapman et al. 2001) and to the creation of a dynamism capable to sustain local and regional development. This dynamism is more and more supported by SMEs since they have the required flexibility to quickly adjust to this new business context, despite their deficiencies of various kinds. SMEs can more easily respond to changing customers’ needs, in a timely fashion, mostly because of their proximity with markets (Menkveld and Thurik 1999; Roper 1997). However, even if SMEs possess potential characteristics to favour innovation, they often have trouble finding the appropriate financing (Beaudoin and St-Pierre 1999; Guinet 1995). Financing offer from venture capital or financial institutions is sufficient for most projects, but those with a clear innovative aspect have greater difficulties (Lachman 1996).

Innovation is intrinsically associated with uncertainty. Consequently, the success of genuine innovation activities can hardly be guaranteed. Moreover, uncertainty evolves during an innovation project, typically shifting from high technological uncertainty, during the first phases of creation and feasibility study, to commercial uncertainty as the project nears market launching. Uncertainty increases the risk that lenders do not get the anticipated return on their investment, which leads them to burden entrepreneurs with a high-risk premium or with restrictive constraints in their financial contracts, or prompts them to offer entrepreneurs only a reduced (eventually nil) amount of financing (Beaudoin and St-Pierre 1999; Lachman 1996). With this “penalizing” approach to innovation projects, financial markets contribute to the reduction of SMEs’ innovation capacity (Freel 2000) without noticing that the heart of the matter is risk identification and assessment. Yet, a better risk assessment of SMEs’ innovation projects would, on the one hand, favour SMEs’ development through more effective management and decision taking and, on the other hand, increase the probability that the project will be a success.
This is the subject matter we address in this paper. We present a software tool we have developed to deal with the identification, assessment, and management of risk in SME projects. We also explain the methodology we used to establish the foundations on which the software is based. The tool, called eRisC, is intended for entrepreneurs, economic advisers, and lenders. We think these various actors can all benefit from such a tool, especially lenders who could increase their SME portfolio’s return on investment, as it facilitates risk management.

2. SME PROJECT RISK ASSESSMENT: FROM THE NEED TO A SOLUTION

Risks identification, assessment and management are fundamental elements of businesses’ environment and they have a significant impact on their capacity to gain access to adequate financial resources to sustain their development. However, because risk evaluation is a complex activity, and because of their heterogeneity, unique and private nature, SMEs are often severely judged by financial markets, which tend to impose on them financing conditions that do not correspond to the actual risk level they constitute (St-Pierre 1999). Thus, as discussed in Section 1, a major problem for SMEs is the difficulty markets experience in accurately evaluating their risk level by performing extensive identification of risk factors and reliable appraisal of their magnitude.

A broad review of literature on bankruptcy, innovation process, export activities and SMEs growth was conducted. It revealed the lack of formalized, SME-oriented risk evaluation tools appropriate for lenders and investors (Beaudoin and St-Pierre 1999). Tools for risk measurement do exist, such as the @Risk software, but they are inappropriate for SMEs as they require rich historical data that are usually not available in typical circumstances. The @Risk tool measures the intrinsic risk associated with a project, but it does not consider the specific environment in which the project takes place. For large businesses that have portfolios of projects to manage, this could be a valid approach since the evaluated projects are generally independent from each other and their failure or abandon does not put in jeopardy the business’ survival. However, the situation is different for SMEs. They are more easily influenced by changes to their environment and they rarely deal with several development projects at the same time.
Lenders consider SMEs as riskier entities than large businesses particularly because of the difficulty SMEs have in the production of complete and reliable information on their situation. Lenders blame entrepreneurs for not giving them access to all the relevant information to carry out a complete project evaluation when financing is needed. This is often referred to as the asymmetric information problem (Binks et al. 1992). Indeed, the entrepreneurs’ strong motivation and enthusiasm to realise their project, along with suspicion towards financial markets, may lead them to neglect many elements of risk and, consequently, to unveil only partial information to lenders. Furthermore, typical entrepreneurs do not have adequate management expertise to perform a global and credible evaluation of the risk involved in their project, especially from an outsider’s perspective, even less from a lender’s perspective. This fact was part of our design considerations in the development of the eRisC tool.

The identification of the need for such a tool, and the importance it might have on SMEs and, consequently, on the economy of numerous countries, is a key research result that gave birth to the eRisC project. In partnership with an important government agency, we set ourselves the goal of developing a software for risk evaluation that would be entirely adapted to SMEs and their reality, and which would not suffer from the salient weaknesses we had identified during our review of literature. That tool is the eRisC software [https://oraprdnt.uqtr.uquebec.ca/erisc/]. Since any type of SME project containing uncertain aspects can be associated with a certain level of risk, and thus a certain difficulty in obtaining the adequate financing, we have considered not only innovation projects but also export and expansion projects in the design and development of eRisC.

eRisC’s contents was developed by combining various sources of information, knowledge and expertise: the literature on business failure factors and the one on project management, our colleagues’ expertise on SMEs, and invaluable information from various agents dealing with these issues on a day-to-day basis, such as lenders, investors, entrepreneurs, economic advisors and experts. Based on this precious and abundant information, we first assembled a long list of potential risk factors that could disturb or influence significantly the development of SMEs projects.
In a second phase, we had to reduce the original list of risk factors which was simply too long to be considered in its entirety in a real-life practical situation where human limitations still dictate what can be expected in any realistic human-computer interaction. In order to do that, we considered the relative importance and influence of risk factors on the failure of evaluated projects. Once this pruning was completed, and after we ensured that we had not discarded important factors, the remaining key factors were grouped into meaningful generic categories. We then developed sets of questions and sub-questions that would support the measurement of the actual risk level of a project. This also allowed us to add a risk management dimension to our tool by inviting the user to identify with greater precision facets that could compromise the success of the project, and thus allowing a better control with the implementation of appropriate corrective measures.

In a third and final phase, the contents of eRisC was validated with many potential users and their feedback was taken into consideration to make adjustments on several aspects such as question formulation, term definition, confidentiality of information, etc. At this point, the tool was still “on paper”, as an extensive questionnaire (grid), and had not been implemented yet. Section 3 explains why we decided to implement the tool as a Web-based software. In Section 4, we explain the main features of eRisC’s assessment questionnaire. In Section 5, we present an actual example showing the assessment and results produced by eRisC. Section 6 reports on the evaluation of eRisC by users, and Section 7 concludes the paper and presents some future work avenues.

3. DESIGN ISSUES: FROM A PAPER-BASED TO A WEB-BASED APPROACH

Not only did we begin work on this project using a paper-based tool, namely an extensive questionnaire formatted as an Excel® spreadsheet, but we were told that people performing actual SMEs-related risk evaluations also work on paper most of the time. And since they do not have access to a systematic tool or an adequate software to perform this task, they often do it in a rather cursory manner. So an important design decision had to be made at the very beginning of the implementation phase: how to convert the on-paper, large, and static questionnaire into an adequate form to be implemented into the eRisC software?
Although having a paper version of an adequate questionnaire is already a gain, such an approach would not go far in terms of user adoption, if only for practical reasons. The paper questionnaire, due to its intrinsic complexity, would simply be too tedious and awkward to be of any interest to real human users. Moreover, such a questionnaire would only be potentially useful as a reminder, or a checklist, but would never be able to provide any kind of quick informative interaction of the kind we expect nowadays with modern software. But there is more to the story: we had to consider design decisions from two distinct, and sometimes opposing, perspectives: on the one hand, from the researcher’s and the user’s point of view, we wanted to develop the most elaborated and efficient software tool; on the other hand, because our team was responsible for the software development, implementation, operation and maintenance, we had to take into consideration many practical and management aspects that made the project even more challenging.

As we examined various possibilities for the implementation of the questionnaire, we gradually came to look at it more and more as an interactive and dynamic document. In this dynamic perspective, the questionnaire would be adaptable to the users’ needs for the specific project at hand. In a sense, the questionnaire is at the meeting point of three complementary dimensions: the risk evaluation model as defined by domain experts, the user’s perspective as a domain practitioner; and the computerized rendering of the previous two dimensions. Moreover, from a down-to-earth, practical viewpoint, users would only be interested in the resulting software if it proved to be quick, user friendly, and better than their current non-automated tool. In terms of the high-level architecture and choice of technologies for the implementation of eRisC, two options were considered: the so-called “personal model” and the Web model.

The personal model could have been implemented as a Visual Basic application, based on a Microsoft Access® database, and distributed to the user on a CD or downloadable from a server via the Internet. Each user would have had to install her/his copy of eRisC on her/his own personal computer(s)—users could only have used eRisC on their own computer(s). This greatly complicates software maintenance, not mentioning potential problems of various types such as installation, configuration, security, and confidentiality problems. But more than anything else, the personal
model would have imposed a severe limitation on the potential exploitation of eRisC’s database by our research team. Indeed, a centralised (vs personal) database on risk evaluation constitutes a great potential for data mining and, thus, to push further the state of our knowledge on risk and SMEs. Fortunately, this is easily achievable with the Web model.

In the Web model, since the software is installed on a centralized server accessible via the Internet, all the user needs to have installed on her/his computer is an Internet browser. As a matter of fact, the user does not even have to use her/his own computer: any computer connected to the Internet and running an Internet browser will do, as long as the user has a user account and a password. In terms of ease of accessibility, this represents a great advantage over the personal model. This also eliminates all problems related to software installation and maintenance on the user’s side.

Another major advantage of the Web model is the fact that the software is simultaneously accessible by several tens of users, while being connected to a centralized database where all information related to eRisC’s project evaluations is securely kept and easily amenable to exploitation by data mining means, the latter being of the utmost importance to researchers. As far as the software’s user friendliness is concerned, both the personal and the Web models offered similar capabilities, both having their own set of technologies that are quite competitive.

In conclusion, although both models could in principle have supported the requirements for the development and implementation of the eRisC software, we opted for the Web model for practical reasons. It offers everything needed to comply with users’ needs and it greatly simplifies several crucial aspects of software maintenance, while allowing a tighter control of the centralized database and its exploitation from a research viewpoint.

With regard to the technological architecture, eRisC is based on the standard 3-tiered Web architecture for which we selected Microsoft’s Internet Explorer® (Web browser) for the client side, the Tomcat Web server for the middleware, and, for the data server, the Oracle database server (Oracle Internet Application Server 8.1.7 Enterprise Edition) running on a Unix platform available at our University in a secured environment. All programming was done with JSP (JavaServer Page) and JavaScript. A great advantage of the 3-tiered model is that it supports dynamic Web applications in
which the contents of Web pages to be shown on the user’s (client’s) Web browser is computed “on the fly”, i.e. dynamically, from the Web server and the information it fetched from the database server in response to the user’s (client’s) request.

4. eRisC: A FULLY DYNAMIC WEB-BASED QUESTIONNAIRE

The original paper questionnaires on SME risk evaluation developed by our team have been transformed into dynamic documents within a highly interactive and user-friendly environment. The only residual characteristic from the paper questionnaire is the general physical layout of the central part of eRisC’s computerized questionnaire. Otherwise, the questionnaire has now become a highly dynamic object that sets it completely apart from any traditional paper-based questionnaire. In fact, since eRisC can handle risk evaluation of three types of SME projects (expansion, innovation, and export), the software contains three different questionnaires, one for each of these three types. But fortunately for the user, all three questionnaires have been modeled and implemented consistently throughout all aspects of the software. So what we discuss here in this section applies equally well to every questionnaire.

Great care was taken to design and develop an intuitive user interface that is both pleasant and efficient to use for all targeted user categories, i.e. bankers and lenders, entrepreneurs, investors and agency advisors and consultants. Most recent user interface techniques were put to use, including a judicious mix of character sets, colors, hyperlinks, menus, tabs, icons, and so on, all this thanks to the capabilities and flexibility of JSP. For instance, we adopted the green √ symbol to clearly identify sections of a questionnaire that have been completed and validated, and the red × symbol to identify sections that have not yet been completed. As to the questions, they are dynamic in themselves. Indeed, in order to minimize the burden imposed on the user when dealing with relatively complex questionnaires, we used an interesting characteristic of Microsoft’s Internet Explorer® allowing the dynamic management of objects to be displayed in the user’s Web browser. Sub-questions associated with a certain question will be shown to the user only when appropriate, depending on the user’s
answer to the question. In other words, the questionnaire will gradually unfold, according to the user’s answers, never showing more then necessary, thus avoiding overflowing the user with superfluous questions. Also of importance to keep the questionnaires quick and easy to use is the fact that they all consist of “closed questions” for which the only authorized answers are Yes, No, Don’t know (DK) and Not applicable (NA): see the right-hand, middle side of Figure 1 in appendix. Another important aspect of the questionnaire’s interface is its cascading (embedded) questions which are designed to identify as precisely as possible risk factors and their specific potential mitigation elements—see left-hand, middle side of Figure 1. A contextual help mechanism also presents definitions for potentially ambiguous terms: see Figure 1 where the definition of major (problem) is shown.

A question’s indentation level depends on the complexity of the requested information and the relative importance of the risk element referred to by the question. For instance, one of the components of entrepreneurship risk is associated with the owner’s management competencies. A first question asks if she/he has received training to develop her/his management skills and knowledge? If the answer is YES, the user will then be questioned on another aspect of entrepreneurship risk. If the answer is NO, this does not mean that the entrepreneurship risk factor should be set to its maximum value. The user is instead asked if the enterprise’s management operations are under the responsibility of a qualified person? This time, if the answer is NO, there is no way to reduce the risk identified initially which will then be set to the maximum value. However, if the answer is YES, an existing risk does remain since this person could leave the business in difficult times, leaving it at potentially great risk. It is thus important to find out whether retention mechanisms have been established to keep this person with the enterprise? This represents the last element used to measure the risk associated with the owner’s management competencies. The risk rating (or mark) of the first question is 40 points. Eventually it will be gradually reduced, depending on the solutions (i.e. mitigation elements) implemented in the SME. It is the set of questions to which risk ratings have been given, and weighted with their relative importance within the underlying risk model, that will determine the project’s overall risk rating.
The five (5) main phases of processing involved in a project risk evaluation with eRisC are: 1) dynamic creation of the questionnaire, according to the initial options selected by the user; 2) project evaluation (questions answering) by the user; 3) saving of data (user’s answers) to the database; 4) computation of results; and 5) presentation of results in an online and printable report. Once phases 1 to 3 are completed, after some 30 minutes on average, eRisC only takes a minute or so to produce the final results, all this taking place online. Final results include a numerical value representing the risk rating (a relative evaluation between 0 and 100) for the specific SME project just evaluated, combined with the identification of at least the five (5) most important risk factors within the questionnaire’s sections used to perform the evaluation, plus a graphical (pie) representation showing the risk associated with every section and their respective weight in the computation of the global project risk rating—see Figure 2 in appendix. The user can change these weights to adjust the evaluation according to the project’s characteristics, or to better reflect her/his personal view on risk evaluation. Indeed, risk is always measured *ex ante*, so it is always established according to the evaluator’s perception, which depends on the person’s background—for instance, and as reported in Saravathy *et al.* (1998), entrepreneurs tend to attach more importance to production aspects of their business, while bankers attach more importance to financial aspects. These “personal” weights can also be saved by eRisC in the user’s account so that the software can reuse them the next time around. When sufficient data will have been accumulated in eRisC’s database, it will be possible to establish statistically-based weight models for every type of user. Amongst various possibilities, this will allow entrepreneurs to evaluate their projects with weights used by bankers. This could help entrepreneurs to better understand the bankers’ viewpoint when evaluating a project, thus providing a partial solution to the information asymmetry problem mentioned above. This could have a significant impact on entrepreneurs (and bankers) since this problem is the main source of difficulty in the financing of SME projects (St-Pierre 1999).

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1 The number of questions ranges from 59 to 93 for an expansion project, from 58 to 149 for an export project, and from 86 to 216 for an innovation project.
Finally, mitigation elements are associated with many risk factors listed in eRisC’s output report. Typically associated with the most important risk factors, these mitigation elements suggest ways to reduce the risk rating just computed. The user can even re-compute the risk level with the hypothesis that the selected mitigation elements have been put in place in order to assess the impact they may have on the project’s global risk level. A new graphic will then be produced showing a comparison of the risk levels before and after the mitigation process—see Figure 3 in appendix.

5. eRisC: AN EXAMPLE

In order to illustrate how eRisC works, we have prepared the simple fictitious example of a mature SME in which management has been taken over by a new owner. The firm’s market is declining and the new owner’s main goal is to evaluate the competencies of the production personnel and, in addition, to measure the production capacity for the development of new products based on the same production processes and similar materials. Because of its declining market, this business has experienced low profitability and cash flow problems that have prevented it from meeting its financial responsibilities. The new owner enjoys a good reputation and possesses excellent experience in the management of other businesses and in the marketing of new products. The firm has a good production team, efficient equipments, and good relations with its suppliers. However, the firm Achilles’ heel is the absence of new product development activities in order to replace those that are declining.

The new owner is using eRisC to identify the firm’s weaknesses and define a strategy to revive this once prosperous company. This is an expansion project and its components in eRisC are, with their respective weight in parentheses: commercial risk (23%), operational risk (25%), management risk (20%), financial risk (15%), and entrepreneurship risk (17%). These default weights have been determined by our research team and are also compatible with the literature on the failure factors of SMEs. In the particular example at hand, the default weight attributed to commercial risk has been changed from 23% to 40%—the other weights are readjusted proportionally to maintain a total of 100%. After having completed eRisC’s questionnaire, the user
obtains a risk ranking of 42.22 (see Figure 2 in appendix). eRisC also lists the most important (i.e. “heavier”) risk elements in the project and, as expected, commercial aspects contribute 18.89 of the 42.22 global risk ranking. The four salient commercial risk elements are: reduction in demand for the enterprise’s products, possibility of losing other important clients, inability to ensure replacement of products, and lack of future growth of the market in which the enterprise currently operates. The risk ranking value (42.22 here) is not overly explicit in itself and is currently the object of further work. As more and more data will be cumulated in eRisC’s database, including feedback from the users, we plan to establish a relatively objective scale along which a project’s risk ranking will be matched in order to produce some sort of “low/medium/high” risk level classification. For the time being, the higher the ranking, the riskier the project is.

Finally, eRisC produces a mitigation section that gives hints to the user as to how she/he could reduce the project’s risk level by implementing adequate measures (see Figure 3 in appendix). Actions, which are more or less complicated and more or less costly, are associated with major risk elements. These actions could be implemented in collaboration with lenders or economic advisors, thus contributing to eRisC’s main raison d’être, i.e. allow various actors to use a common language when assessing SME projects. In the example, the user (the owner) is asked whether she/he can identify the causes of the loss of major clients, invest in R&D to develop new products, or develop commercial watch activities to gather strategic information on client needs. If these measures are implemented, the mitigation shows that it will reduce the risk ranking from 42.22 to 39.02. The importance of risk reduction on global risk depends on the type of mitigating action and its capacity to make improvements to the situation. Each mitigation element has been attributed a specific weight by a team of experts.

6. EVALUATION OF eRisC

At the time of writing, we are planning to put eRisC in service on a large scale in the next few months, in accordance with our funding partner’s agenda. So far, we have conducted two different evaluations of eRisC with potential users, and a third and final one is currently in progress.
In the first two evaluations of eRisC, two groups of testers containing respectively ten (10) and eight (8) people were selected. These people included many SME-project risk evaluation specialists, both from our partner’s organization and outside. The testers were given online access to the eRisC software and were asked to experiment with it and rate it according to a relatively detailed evaluation grid. Following their evaluation of eRisC, meetings were held to discuss the key points and draw the principal conclusions. Here are the major aspects of eRisC that were evaluated by the testers, most of them expressed with several sub-questions in the evaluation grid submitted to the testers:

- Quality of the questionnaires’ questions in terms of formulation and comprehensibility;
- Average time to complete the risk assessment of one project;
- Clarity and usefulness of contextual “information bubbles” and online help;
- Quality and completeness of the questionnaires’ risk assessment contents;
- User friendliness and efficiency of the software;
- Comprehensibility and usefulness of risk assessment results, including mitigation elements; and
- Interest to eventually provide feedback on eRisC’s results, after a certain period of time, in order to substantiate assessment results and adjust eRisC’s assessment model if necessary.

In terms of results, testers’ comments were generally very positive in both evaluations of the eRisC software. If we put aside minor adjustments that are unavoidable when a software is put to the final test by its (intended) users, no major problem was uncovered. However, we identified two areas where improvements could make eRisC’s results easier to understand and even more useful from the user’s viewpoint. The first is the meaning of the risk rating. As mentioned above, and this is an important point for future work, the rating is a numerical value ranging between 0 and 100 but for which there is yet no absolute scale on which the risk level could be measured. For instance, a certain project can have a risk value of 45 but eRisC cannot, at this time, determine whether this 45 value corresponds to a relatively low, medium, or high risk level. The second area of improvement is that of mitigation elements. Many more could be added and their potential effect on the overall project.
risk assessment must be clarified and made easier to figure out for the user. In fact, we were not at all surprised by such comments and we consider them very relevant. But at the same time, we know that significant improvements in those two areas will require further research work and this is exactly what we intend to do with eRisC’s database as it gradually collects more and more data on risk assessment. We will be able to base future improvements to eRisC on empirical data collected from actual SME projects risk evaluations.

7. CONCLUSION

The appropriation and application of more effective risk assessment methods constitute an excellent strategic solution to SMEs’ financing problems:

- For SMEs: it motivates them to manage more strategically the various components of risk, by taking the necessary mitigation or coverage measures to reduce risk and make it more acceptable to lenders and investors.

- For institutions that assist them: it motivates them to develop programs and services closely linked to the mitigation and coverage measures so they can more effectively meet the needs of clients in this regard.

- For lenders and investors: it motivates them to assess the real risks involved in funding SME projects so that they can offer them more attractive financing terms, without creating undue pressure on their cash resources which could increase their total risk and adversely affect other projects. This can also increase the probability of projects’ success through a precise evaluation of their main risk factors, eventually contributing to the creation of a true business partnership with entrepreneurs.

Risk assessment of projects carried out by SMEs is a major challenge for most agencies and organizations dealing with them. This situation can sometimes lead to disaster when undue financial pressure negatively affects innovation projects put forward by SMEs. Clearly, a tool that supports the accurate identification and assessment of risk involved in those projects, and that also provides means to evaluate the impact of risk-reducing measures, thus allowing entrepreneurs to make
relevant management decisions, is undoubtedly useful. This is what we have accomplished with the eRisC software, a first serious step in that direction. Despite the complexity of its contents, eRisC is easy to use and initial feedback from testers and actual users is quite positive.

Future work avenues are numerous. Amongst many others, let us mention the exploitation of eRisC’s centralized database in order to extend our understanding of SMEs and their innovation, expansion and export projects, and more specifically to advance our knowledge on risk determining factors in SME projects. Another promising avenue is that of developing domain-specific modules that would allow eRisC to perform in-depth risk assessment of projects in certain industries or sectors (e.g. information technology, biotechnology). Yet another possibility would be the support by eRisC of user communities that would allow them to share project evaluations, exchange their expertise and, eventually, define and adopt risk assessment standards.

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9. REFERENCES


Available: [http://www.DEC-CED.gc.ca/fr/2-1.htm](http://www.DEC-CED.gc.ca/fr/2-1.htm)


Figure 1: General Outlook of eRisC’s questionnaires.
Risk assessment report

This report presents the total risk scoring for the project assessed as well as the score for each component of the total risk. Each component refers to a section in the questionnaire. It also lists the main risk factors that could compromise the project’s success.

Expansion project: Irlande
New owner, development of new products

Total project risk: 42.22

A. Commercial risk (18.89)
- Reduction in demand for the enterprise’s products and/or lack of activities to improve and develop products/markets.
- Inability to ensure replacement of products having reached maturity.
- Lack of future growth of the market in which the enterprise currently operates.

B. Operational risk (3.40)

C. Management risk (8.40)

D. Financial risk (7.41)

E. Entrepreneur’s risk (4.13)
- Vulnerability of the enterprise due to the lack of a successor to replace the head of the enterprise.

Mitigation:
For a simulated mitigation of project risk factors, click on the following button.

Access mitigation

Number of statements:
To change the number of risk statements displayed in this risk assessment, enter the desired number, then click on “Submit.”

Section weights:
Section weights refers to the relative importance of each section in the project’s total risk. You can alter the weight of sections according to the...
Figure 3: Mitigation Report and Risk Assessment Simulation in eRisC.