

# 1 Methodology for conducting third-party 2 risk-based due diligence in the construction 3 and civil engineering industry

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## 9 Abstract

10 This paper aims to propose a methodology for conducting third-party risk-based due diligence in  
11 an engineering and construction company. A case study will present the methodology for a  
12 multinational firm. Due diligence is necessary and often mandatory, depending on the client or  
13 project. It protects a company in case of an ill-intentioned third-party conducting misconduct while  
14 under contract or relationship with the company, but has been overlooked in many industries,  
15 resulting in ethics and compliance-related misconduct. This study reveals that risk-based due  
16 diligence methodology has been widely applied and discussed by brokers and accountants, but that  
17 no research has verified whether the methodology applies to the construction and engineering  
18 industry. The case study also highlights the importance of knowing and understanding the  
19 company's business model, its appetite for risk, and its global interactions within its industry. The  
20 proposed methodology enables risk assessment and due diligence covering integrity-related risks  
21 among third parties. By adapting the model to their reality, construction and engineering companies

22 manage third parties' risks related to corruption and bribery, antitrust and competition, human  
23 rights, conflicts of interest and compliance with regulations. The expected result of the  
24 methodology is a risk-tailored and resource-efficient process for conducting third-party due  
25 diligence in the construction and engineering industry.

26 KEYWORDS: Integrity, Construction, Engineering, Third party, Risk-based due diligence

## 27 Introduction

28 Construction and engineering companies face major challenges and must adopt strict compliance  
29 measures. For many industries, corporate social responsibility has become a key success factor  
30 (Liao, Xia et al. 2017), forcing companies to implement a company-wide ethical culture, which is  
31 extremely challenging for them. To regulate their activities, these companies develop and draft  
32 codes of conduct and ethics, and must proceed with integrity and according to their codes of ethics  
33 in their business activities, in order to walk the talk. In the present study, four codes of conduct and  
34 ethics obtained from major Canadian construction and engineering companies were used to identify  
35 the main integrity-related risks in industry (SNC-Lavalin 2017, Stantec 2017, Cima+ 2018, WSP  
36 2018). Corruption and bribery, collusion and competition, conflict of interest, conformity to tax  
37 laws and sanctions, and human rights were identified as the five biggest integrity risks.

38 Organizational identity is often defined through these codes, and when the identity is congruent  
39 with the company's reputation, trust develops among stakeholders and the general public (Joshi  
40 and McKendall 2018). The importance of partnerships in the construction and engineering industry  
41 is gaining increasing attention. The size and complexity of projects will often force organizations  
42 to combine their assets to form partnerships, which while increasing the projects' performance,  
43 also increases third-party-related risks (Gadde and Dubois 2010, Sedita and Apa 2015). Risk-based

44 due diligence is therefore de rigueur for construction and engineering companies wanting to stay  
45 competitive and protect their assets. Organizations that only focus on minimizing or reducing their  
46 risk management-related costs tend to experience a higher stock price volatility, while those that  
47 adopt a comprehensive approach, which takes both positive and negative impacts into account,  
48 have a higher firm value (Ittner and Keusch 2017). Construction and engineering organizations  
49 have a lot of business partners due to the projects' unicity. Indeed, unlike manufactured goods and  
50 others, construction projects are all unique with their own design, team, suppliers and constraints.  
51 This means that construction companies have shorter-term partnerships while having more  
52 business partners compared to other industries.

53 The global construction market is expected to grow by 8 trillion USD by 2030, for a total of 17.5  
54 trillion USD (Oxford Economics 2015). It is estimated that by that year, construction will represent  
55 almost 15% of the global Gross Domestic Product (GDP), as compared to 12.4% in 2014. It has  
56 been argued that the construction industry is prone to corruption (Hess 2018) and that construction  
57 companies working abroad rely mostly on international third parties in new markets (Watson and  
58 Serra 2016). These International third parties do not necessarily share the same perspective with  
59 respect to business behavior, morality and ethical responsibilities as Western stakeholders, thus  
60 resulting in a greater risk to not comply with the company standards (Hamilton and Knouse 2001,  
61 Gaughan and Javalgi 2018).

62 Third-party-related incidents are on the increase, and impact companies' reputation and finance  
63 (Watson and Serra 2016). In a 2016 global survey grouping 170 organizations, over 85% of the  
64 respondents claimed to have faced at least one disruptive incident attributable to the actions of third  
65 parties in the preceding 2 or 3 years (Deloitte 2016). In the same survey, over 90% of the  
66 respondents had a low to moderate levels of confidence in technology used to manage third-party

67 risk and over 85% had a similar level of confidence for the quality of the risk management process.  
68 In this context, this research aims to contribute to the literature by proposing a methodology for  
69 conducting third-party risk management among construction and engineering companies, using a  
70 format based on the financial sector.

71 The content from an internal survey conducted in a multinational construction and engineering  
72 firm about third-party risks will be used (Roy, Desjardins et al. 2021). The survey was conducted  
73 among integrity, ethics and compliance experts at SNC-Lavalin (referred to as “the company”)  
74 and highlighted the need for an improvement of the company’s business partner compliance  
75 process. A business partner can be defined as an entity who has some involvement with another  
76 entity’s business activity. The process, in the form of a tool, was mostly designed to cover  
77 corruption risks without necessarily integrating those related to integrity. It was implemented in  
78 2014 following corruption misconducts and prosecutions in Canada, Libya and Bangladesh.  
79 Thousands of potential partners are screened annually using the business partner compliance tool.  
80 The study was motivated by a desire for continuous improvement. The company is a major player  
81 across five industries (Infrastructure, Mining & Metallurgy, Clean Power, Oil & Gas, and Nuclear),  
82 and has offices in more than 50 countries, with worldwide projects. With the company having over  
83 50,000 employees, the business partner compliance tool needs to be effective and comprehensive  
84 since people with different functions, seniority and culture will use it, while assuring the company’s  
85 integrity. A case study of the company will demonstrate the risk-based due diligence methodology.

## 86 Literature review

### 87 Implementing a corporate ethical culture

88 Corporate culture is one of the most influential factors on decision-making and on strategy (Schein  
89 2010). It is linked to leadership and the organization structure. While culture can represent a  
90 competitive advantage, it can also contribute to destructive behaviors such as excessive rivalry,  
91 intolerance of failure, secretiveness, propensity for risk taking and persecution of whistle-blowers  
92 (Drew, Kelley et al. 2006). Companies face many leadership and organizational challenges when  
93 implementing an ethical culture.

94 Leadership often has a dark side (Conger 1999, Johnson 2018), and in fact, the skills and traits that  
95 push a leader to the top may also lead to the adoption and implementation of unrealistic and  
96 inappropriate strategies (Vries 1993). Charismatic and visionary leaders are often less willing to  
97 entertain competing viewpoints, which results in a sense of omnipotence due to uncritical and blind  
98 obedience of their “followers” (Khurana 2002). However, a 2004 study demonstrated that  
99 charismatic leadership enhances support from external investors, especially in difficult economic  
100 conditions (Flynn and Staw 2004). Researchers suggest seven leadership mechanisms to establish  
101 an ethical climate in organizations (Grojean, Resick et al. 2004):

- 102 1. Using values-based leadership;
- 103 2. Setting an example;
- 104 3. Defining ethical conduct;
- 105 4. Providing feedback and support regarding ethical behavior;
- 106 5. Recognizing and rewarding behaviors supporting organization’s values;
- 107 6. Considering individual differences among employees;

108 7. Establishing leadership training.

109 Adopting an appropriate organizational structure to implement an ethical culture is primordial. As  
110 an example, the roles of CEO and chairman used to be (and are still so in many organizations)  
111 combined, leading to a large number of insiders on boards (Drew, Kelley et al. 2006). Some  
112 authorities emphasize the positive effects of a combined role, such as specific knowledge and  
113 commitment to the company's affairs, but a study by Uzan et al (2004) revealed a correlation  
114 between the increasing number of outsiders on a board and the reduction of corporate wrongdoing  
115 by analyzing fraud incidents in the United States from 1978 to 2001 (Uzun, Szewczyk et al. 2004).  
116 The common pattern in many corporate scandals is the abuse of power at the top. Therefore, the  
117 case has been made for a greater decentralization of power and a more interactive and democratic  
118 management approach. Participatory systems are ethically better than autocratic organizations  
119 (Collins 1997). While participation across the organization is a factor enabling sustainable  
120 governance, it is important not to completely sacrifice leadership for inclusivity (Belle 2016).  
121 Challenges regarding participatory governance are mostly related to maintaining a balance between  
122 inclusivity and efficiency (Petschow, Rosenau et al. 2017). Indeed, inclusivity would require  
123 organizations to assess which stakeholders participate, depending on the reasons for initiating the  
124 participatory procedure. Thus, to maximize both efficiency and inclusivity, corporations should  
125 start by developing inclusivity procedures for common decisions or events and decide which  
126 business units will need to participate in which context and to what extent they should participate.

127 Risk-based due diligence

128 Risk-based due diligence is defined as the process by which an organization determines the level  
129 of due diligence necessary based on the business partner's level of risk (TRACE 2018). Third

130 parties include sales agents, lobbyists, business development, consultants, customs or visa agents,  
131 joint venture and consortium partners, etc.

### 132 Third-Party Risk Management

133 In today's business world, companies must deal with third parties, as they will often need to team  
134 up with others in order to be competitive and win major projects. Such partnerships carry many  
135 external risks which are complicated to manage for companies. Six steps are suggested for an  
136 effective third-party risk management program (Ernst & Young 2018):

- 137 1. Establish a governance structure to set the tone from the top;
- 138 2. Establish the scope of third parties for your organization;
- 139 3. Establish risk models according to the organization's risk aversion;
- 140 4. Establish the organization internal regulatory framework for partnerships and risk  
141 management;
- 142 5. Execute the process;
- 143 6. Improve the process constantly with reports, technology and research.

144 Companies need to periodically review and improve their process, especially with respect to risk  
145 models since data, the regulatory framework under which they operate and the geopolitical  
146 situation are constantly evolving. The risk modeling process usually comprises three steps  
147 (Loosemore 2006):

- 148 1) Risk identification. The first key success factor (KSF) is the combination of many different  
149 analyses (Gudienė, Banaitis et al. 2014). Past projects, interactions between company  
150 stakeholders and activity breakdown are all part of this KSF (Liu, Zhao et al. 2016). The  
151 second KSF is to identify which risk belongs to whom. The accountability is divided among

152 the partners and it provides a better understanding of which third-party should manage each  
153 risk identified (Iqbal 2015). Risks need to be properly identified before a decision is made.  
154 To this end, objectives and performance indicators must first be identified (Loosemore  
155 2006). While identifying hundreds of risks could seem impressive, a shorter list of risks is  
156 in fact recommended in order to limit the administrative workload (Fraser and Simkins  
157 2016).

158 2) Risk assessment. To include uninsurable risks in the assessment, a comprehensive approach  
159 is needed. The first KSF in this step is the inclusion of intuition, professional experience  
160 and personal judgment in the risk assessment process (Taroun 2014). Through an individual  
161 interview or survey, experts can share information they would not be comfortable sharing  
162 in a group (Fraser and Simkins 2016). The second KSF, related to the emergence of  
163 sustainability issues, is the assessment of uninsurable risks and using a holistic approach  
164 (Drennan 2004, O.C. Ferrell 2015). Third-party risk assessment often covers more than one  
165 risk, and an organization can assess the overall third-party risk or each risk separately  
166 (Table 1) (NAVEX Gobal 2018).

167 3) Risk mitigation. The first KSF in this step is choosing the appropriate response to the risk.  
168 Possible actions include avoiding/eliminating, transferring, reducing, exploiting (positive),  
169 sharing or accepting the risk (Mhetre 2016). Another KSF consists in properly evaluating  
170 the company's risk management performance by carrying out regular internal audits (El-  
171 Sayegh 2014). For third-party risk management, the organization carries out due diligence  
172 before choosing how to respond to the risk. Due diligence allows to dig deeper into the  
173 potential partner's investigation according to its risk assessment.



174

*Risk-based approach*

175 The level of scrutiny required to be confident that a company is engaged in a legitimate partnership  
176 varies with the partner’s risk level (PACI 2013). This risk level therefore determines the scope of  
177 the due diligence required and how much scrutiny should be exercised. The risk-based due  
178 diligence process is shown in Figure 1.

179 Key risk indicators for integrity risk assessment are the geographic location, the type of industry,  
180 the partner profile, the proximity to public officials, the reasons for the partnership, the type of  
181 remuneration and the type/complexity of the contract (PACI 2013, Dow Jones Risk & Compliance  
182 2018, NAVEX Gobal 2018, Roy, Desjardins et al. 2021). The evaluation of these indicators  
183 determines the appropriate risk level, and therefore, the level of scrutiny necessary. Having a well-  
184 balanced and safe risk assessment process is necessary to render the due diligence program  
185 manageable and effective (PACI 2013).

186

187

Due Diligence

188 Corporate governance and due diligence are two important concepts in the real business world.  
189 Both have evolved over time, and now encompass not only economic behavior, but also social and  
190 environmental aspects. To date, there is hardly a consensus on the definition and the actual scope  
191 of the term *due diligence*. *Due* implies payable or immediately enforceable, whereas *diligence*  
192 implies attention, care and applications (Spedding 2009). The United States Securities Act of 1933  
193 is widely considered to be at the origin of the concept of due diligence (Taylor 2009). The Act  
194 provided a defense for brokers/dealers and protected them from legal liability. The due diligence  
195 process consists of an investigation of facts and an evaluation of findings by a designated,  
196 responsible person. Entities may be liable for negligence if insufficient or inadequate resources are

197 assigned to the due diligence process. Also, according to a survey, mature programs for third-party  
198 risk management apply risk-based due diligence (NAVEX Gobal 2018). Due diligence processes  
199 can be specific or general (Table 2), but according to the above survey, mature programs tend to  
200 combine different approaches of risk-based due diligence. Laws and procedures regulate and shape  
201 due diligence programs.

202 *Laws and procedures*

203 Laws and procedures bring up the importance of due diligence programs for companies. Besides  
204 protecting companies from poor decision-making, due diligence programs are also required in  
205 many laws, rules and regulations. Failure to implement adequate due diligence to prevent related  
206 ethical misconduct can lead to corporate criminal liability. Under the UK Bribery Act, strict  
207 penalties for active and passive bribery by individuals as well as companies are included. Any  
208 failure by commercial organizations to prevent bribery is an offense of strict and vicarious liability  
209 (United Kingdom 2010). This means that the defendant is legally responsible for the consequences  
210 of an activity even in the absence of criminal intent, and is responsible for the acts of his  
211 subordinate. One major incentive in this context is the reduction of fines and sentences if a liable  
212 company has an effective compliance and ethics program and conducts due diligence (United  
213 States Sentencing Commission 2018).

214 Moreover, international funding institutions also require effective due diligence measures to end a  
215 sanction or debarment after misconduct (The World Bank 2010). Previous laws and procedures  
216 required due diligence on solely economic and financial matters. Now, human rights due diligence  
217 is addressed, among others, by the United Nations in their document to achieve the “Protect,  
218 Respect and Remedy” framework which widens the initial due diligence scope (United Nations  
219 2011).

220 *Integrity-Related Due Diligence*

221 The laws, procedures and risk indicators mentioned above contain information respecting  
222 economic/financial and social/human rights due diligence. Each risk indicator is graded or an  
223 overall risk evaluation is done based on the preferences of a manager or of a company. Usually, an  
224 investigation of low-risk third parties is carried out by the company department that requested the  
225 partnership, and consists of investigations and an internal questionnaire. By contrast, medium- or  
226 high-risk third parties usually require an investigation and supervision by the legal or compliance  
227 department, and an external questionnaire is sent to the potential partner (PACI 2013).

228 *Economic Due Diligence*

229 In recent years, many organizations have established standards and procedures for economic due  
230 diligence. Economic topics related to integrity include corruption and bribery, collusion and  
231 antitrust, conflict of interest, and compliance with tax laws and sanctions. The three steps for a  
232 third-party economic due diligence are (PACI 2013, NAVEX Gobal 2018):

- 233 • Data collection: information about the organization, its ownership and operations, its  
234 reputation and capacity to counter integrity-related risks, and the contract terms and  
235 suitability of the business partner.
- 236 • Verification and validation of data: should involve an independent business function (legal  
237 or compliance) for medium or high risk. The responsible person should look for gaps or  
238 anomalies and ask for clarification if necessary.
- 239 • Evaluation of results: information collected should be reviewed against red flags which  
240 indicate a higher risk. Also, a verification should be carried out to see if the information  
241 provided reflects a complete picture of the current situation.

242 Once the due diligence process is completed, an effective approval system is the last barrier to  
243 protect organization's integrity. It is a crucial step that determines whether the relation is accepted,  
244 modified or denied. It is recommended to have at least two departments involved for medium or  
245 high risks (e.g., ethics and compliance department and business units employing third party) (PACI  
246 2013). Finally, post-approval measures, such as a specific contractual language, training of third  
247 parties and ongoing monitoring, are suggested to protect companies.

#### 248 Social Due Diligence

249 The process for social and economic due diligence are similar since it is about protecting integrity,  
250 not profitability or other classical business risks. Social topics related to integrity include human  
251 rights and working conditions. For organizations, human rights risks can be defined as potential or  
252 actual harm to people in violation of internationally proclaimed laws (Taylor 2009). Interestingly,  
253 financial crimes are closely connected to human rights. Indeed, they are a significant obstacle to  
254 the improvement of human rights in developing countries (Hess 2018). Corruption often ends up  
255 landing on the backs of the poor, and this fact has led to a massive anti-corruption movement. Since  
256 many countries experience political and socioeconomic conditions, corporate accountability is seen  
257 as a solution to prevent labor and other abuses (Rodríguez, Montiel et al. 2014). The Guiding  
258 Principles on Business and Human Rights (number 13) specify that business has the responsibility  
259 to (Bonnitcha and McCorquodale 2017):

- 260 • Avoid causing or contributing to adverse human rights impacts through their own  
261 activities, and must address such impacts when they occur;
- 262 • Seek to prevent or mitigate adverse human rights impacts that are directly linked to  
263 their operations, products or services by their business relations, even if they have  
264 not contributed to those impacts.

265 Moreover, the United Nations has established ten principles for a more inclusive economy through  
266 responsible business practices (Hemphill and Lillevik 2011). A 2017 survey revealed that  
267 contractual terms and codes of conduct are the two most widely used factors to address human  
268 rights in different industries (McCorquodale, Smit et al. 2017). Indeed, in an engagement with a  
269 third party, contractual provisions act as warranties and leverage in case of misconduct. Other  
270 factors are external inspections and training carried out in the partnership.

#### 271 References for Third-Party Risk-Based Due Diligence

272 Nowadays, being socially responsible is mandatory for companies. Many organizations have  
273 sprung up to provide educational services on conducting business ethically and controlling third  
274 parties. These companies produce annual reports that share insights and tips on third-party risk-  
275 based due diligence and provide data for the different risk indicators. The contents of these reports  
276 originate mostly from data produced by non-governmental organizations, which act as references  
277 for risk assessment and due diligence (Table 3).

#### 278 Applicability to construction and engineering industry

279 There are many organizations that provide third-party management solutions. Companies purchase  
280 the models produced by these organizations, and in some cases, adapt them to their reality. The  
281 organizations designing and providing these solutions are mostly accounting and brokerage firms  
282 specialized in financial activities (Dow Jones Risk & Compliance 2018, Ernst & Young 2018,  
283 NAVEX Global 2018). Few studies have addressed the adaptation of these solutions to the needs  
284 of construction and engineering companies. Moreover, some organizations provide prescriptive  
285 models for specific risks such as corruption and bribery (Ethisphere 2018, TRACE 2018), but do  
286 not address all integrity-related risks under a single model. Construction and engineering

287 companies enter into a significant number of partnerships annually, but in the scientific literature,  
288 many questions remain unanswered regarding their third-party risk management:

- 289 • How can these models be adapted to the construction and engineering reality?
- 290 • What content obtained from the different prescriptive models should be modified, and how  
291 should this be done?
- 292 • How can construction and engineering companies sustainably improve their third-party  
293 management processes?

294 The next section proposes and advances a methodology for a risk-based due diligence program for  
295 construction and engineering companies based on a case study from the company.

296 Proposed methodology for risk-based due diligence through a case study  
297 in a major construction and engineering company

298 The proposed methodology will enable the design of a third-party risk-based due diligence tool for  
299 construction and engineering companies. For the purpose of this study, content for the tool will be  
300 proposed. The steps, content and format were determined following a review of the literature and  
301 of references, as well as from an internal survey previously conducted at the company's Integrity  
302 department (Roy, Desjardins et al. 2021). The company previously experienced corruption-related  
303 misconduct, which ultimately led to a complete change in its ethics culture. Since then, the  
304 company has become an innovation-driven organization in terms of ethics and compliance. It  
305 graciously agreed to sponsor the present research to allow the continuous improvement of its  
306 business partner compliance tool. To allow a full understanding of the case study, the measures  
307 used to implement an ethical culture used by the company are discussed. Then, the six steps are  
308 proposed to build a third-party risk management process proposed in the literature, and these are

309 based on the company's current process. The company started from the top by tackling leadership  
310 challenges, and used the following seven mechanisms to establish an ethical climate:

- 311 1. The addition of integrity as one of their four values (safety, innovation, integrity and  
312 collaboration).
- 313 2. The company has been awarded the Compliance Leader Verification from Ethisphere  
314 Institute an independent center for research, best practices and thought leadership. The  
315 company's CEO is also co-chair of the Partnering Against Corruption Initiative (PACI).
- 316 3. The annual publication of a code of conduct and ethics.
- 317 4. The implementation of an ethics and compliance hotline operated by an independent third-  
318 party service provider.
- 319 5. A period offering of integrity awards to employees displaying an outstanding ethical  
320 conduct.
- 321 6. To represent its great diversity, use of images or examples with people from different  
322 genders, ages or races (statistically equal) within its training and documents. It also uses  
323 fictitious country names in order to avoid reinforcing any stereotypes.
- 324 7. According to their tasks, employees must follow many trainings on money laundering,  
325 facilitation payments, corruption, bribery, and other ethical issues.

326 For the organizational structure, 10 out of the 11 members of the board are outsiders of the  
327 company. The CEO is the only insider, and does not occupy the chairman's position. Participatory  
328 governance is also frequently used. As an example, the Policy Oversight Committee (POC) is a  
329 group composed of employees from all corporate functions who propose and revise governance  
330 documents, policies, procedures, statements, etc. Also, considering employees' answers to the  
331 survey to improve their business partner compliance tool is a form of participatory governance.

332 Part of establishing an ethical climate is to protect it. Indeed, even if the company were to proceed  
333 internally to a complete change of culture, it would still face the same external threats mainly  
334 coming from business partners and suppliers. To preserve that ethic culture, the company must  
335 manage integrity-related risks. The following are the six proposed steps for the third-party risk  
336 management process according to the company:

- 337
- 338 1. Establish a governance structure to set the tone from the top: The Integrity department is  
339 responsible for the code of ethics and business conduct, integrity-related risk management,  
340 and internal investigations. It also manages the business partner compliance process and  
341 tool.
  - 342 2. Determine the scope of third parties for your organization: At the company, a business  
343 partner is defined as any third party who acts on behalf of or is partnered with the company  
344 for the purpose of undertaking a specific task.
  - 345 3. Design risk models according to your organization's risk aversion: uses a tool for business  
346 partner compliance, which it established in 2014, and which covers integrity-related risks  
347 such as corruption, bribery, antitrust and compliance. It is an adapted prescriptive model  
348 obtained from a third-party management consultant firm.
  - 349 4. Draft the internal regulatory framework around third party's partnership and risk  
350 management of your organization: The company established its own regulatory framework  
351 for the business partner compliance process with Standard Operating Procedures (SOP)  
352 which cover levels of approval, business partner rehabilitation programs, etc.
  - 353 5. Execute the process: The company has assessed thousands of business partners since 2014.



354 6. Improve the process constantly with reports, technology and research: Recent audits have  
355 suggested possible improvements for business partner monitoring.

356 The methodology focuses on the improvement of the risk model. Data and technologies are  
357 constantly evolving and the risk model is subject to periodical changes. Figures 2 and 3 show the  
358 process and where this research contributes.

359 Risk model

360 Risk identification and assessment, as well as due diligence, are covered in this research. For the  
361 format adopted for risk assessment and due diligence, as mentioned earlier, it is suggested by  
362 renowned ethic and compliance service providers that mature programs tend to combine different  
363 approaches. Therefore, a hybrid version of the risk assessment and due diligence format (Table 4)  
364 is suggested.

365 Risk identification

366 As mentioned above, risk identification is based on the company's code of ethics and business  
367 conduct (SNC-Lavalin 2017). Five major risks associated with integrity were highlighted:  
368 corruption & bribery, competition & antitrust, conflict of interest, human rights and compliance  
369 with regulations. These are the major threats to the company's integrity. Many analyses by the  
370 Integrity department also led to the actual structure of the code of ethics and business conduct. This  
371 code reflects the company's objectives. For integrity assessment, the main performance indicator  
372 would be whether or not employees are complying with the code since having integrity represents  
373 walking the talk with the image the company projects (Roy, Desjardins et al. 2021).

375 As discussed in the case of risk assessment, a Key Success Factor (KSF) in the present research  
376 was the inclusion of experts' experience and personal judgment, and a second was the inclusion of  
377 sustainability issues in risk management. An internal survey was recently conducted at the  
378 company among 14 ethics and risk management experts. The respondents were asked to identify  
379 the strengths and weaknesses of the current business partner compliance process and to identify  
380 threats and positive developments in their fields of expertise regarding integrity management (Roy,  
381 Desjardins et al. 2021). They were also asked to score six different risk indicators according to the  
382 five integrity-related risks. The study identified the different types of third parties, indicated the  
383 indicators that could reveal integrity-related risks, and collected experts' perception on the  
384 company's current assessment process. Results revealed that the weighting for the risk assessment  
385 questions should draw from the survey's results and that a strategic use of data is recommended  
386 (get more details about each risk with each question. As an example, it is possible to assess  
387 corruption, tax evasion and human rights risks with location information instead of only  
388 corruption). Following this research, the questions suggested for each risk and the survey's score  
389 for each indicator are shown in Tables 5 to 9. A score of 0 means that the indicator will not detect  
390 the risk and a score of 6 means it is a great indicator in terms of detecting the risk. This survey  
391 revealed experts' perception and gaps regarding sustainability issues such as human rights, conflict  
392 of interest, etc. Questions to assess the five integrity-related risks are proposed at Table 10. The  
393 content and weighting of each question are based on a past research (Roy, Desjardins et al. 2021).  
394 A score is associated to each answer. The sum of all the scores enables integrity-risk level and  
395 overall partner risk-level assessment (Figures 4 to 6). Risk indicators with a score of 3 or less, and  
396 having no literature linking them to the risk are not considered. The past research (Roy, Desjardins  
397 et al. 2021) also highlighted the Integrity Check as one of the major strengths of the current process.

398 The Integrity Check is a process involving different research engines to look for past events,  
399 sanctions and others about the potential partner and its employees. It is recommended to keep using  
400 the lists regarding Politically Exposed Persons (PEP), adverse media coverage and the watch lists  
401 from the development banks. Also, it is suggested to add the list from the business & human rights  
402 resource center mentioned in Table 3.

403

404 Due diligence

405 Once the business partner's risk level is assessed, SNC-Lavalin must then conduct due diligence.  
406 As mentioned in the literature review, three steps comprise integrity-related due diligence for social  
407 and economic concerns:

408 • Data collection: Tables 11 to 13 show a series of questions about the organization, its  
409 ownership and operations, its reputation and capacity to counter integrity-related risks, the  
410 contract terms, and the suitability of the business partner. Also, using a hybrid format, a set  
411 of questions based on the answers for the risk assessment is proposed in Table 14. The  
412 content of these questions is based on the literature review and the results of a past internal  
413 survey (Roy, Desjardins et al. 2021).

414 • Verification and validation of data: As mentioned above, medium and high-risk partners  
415 should involve an independent business unit. the company already has a Standard  
416 Operating Procedure (SOP) for the approval process. The survey and the literature review  
417 show that this process is efficient:

- 418 ○ Low-risk partners can be approved within the business unit;
- 419 ○ Medium-risk partners require approval from the business unit's head and a review  
420 by an integrity officer;

- 421           ○ High-risk partners require approval from the sector’s president, a review from the  
422           integrity officer, and clearance from the chief integrity officer.
- 423       • Evaluation of results: As mentioned earlier, if the information collected refers to  
424       circumstances suggesting a strong risk, the assessment will be modified. A few exceptions  
425       suggesting a strong risk are listed below. These are subject to change and evolution, and  
426       should be reviewed periodically.
  - 427           ○ If the partner has a high risk of conflict of interest and will interact directly or  
428           indirectly with public officials, his overall risk assessment must be medium or  
429           higher;
  - 430           ○ If the business partner is directly recommended by the government in a corrupt  
431           country (score 40 or below), his overall risk assessment must be high;
  - 432           ○ If the business partner requested unusual payment terms in a country with strong  
433           financial secrecy, his overall risk assessment must be high;
  - 434           ○ If the partner conducts its activities in a country with specific sanctioned industries  
435           (e.g., Oil & gas in Venezuela or Russia).

436   Once the due diligence is completed, the company has to decide whether it accepts or refuses the  
437   partnership. No universal rule exists regarding this aspect. Indeed, the company may refuse a low-  
438   risk third party or accept a high-risk one. As an example, a low-risk third party for a very small  
439   contract could still represent too much risk when compared to the plus value of having that third  
440   party (or even that contact). Conversely, a high-risk third party for a vital contract in a risky region  
441   could be accepted if the company judges that there is no other choice, in order to proceed with their  
442   activities. A workflow summary of the risk assessment and due diligence process can be found in  
443   Figure 7.

444 Risk mitigation

445 As mentioned earlier, as part of their third-party risk management, companies can accept or decline  
446 the partnership. In some cases, such as Joint Ventures or Consortiums, companies could suggest  
447 that their potential partners modify their management process to comply with the companies' codes  
448 and standards. The partner approval procedure is efficient at the company and reflects what is  
449 included in the literature. However, some projects will always be riskier, and mitigation measures  
450 are the best way to protect the company and to pursue projects. Mitigation measures include, but  
451 are not limited to:

- 452 • Specific training for the employees working with a risky partner;
- 453 • Designation of a responsible person to operationalize and monitor the partner;
- 454 • Follow-up by an independent business function related to integrity or compliance.

## 455 Discussion

456 Integrity management is not an exact science. This research proposes a methodology for  
457 engineering and construction companies who want to comply with their code of ethics and business  
458 conduct and to be more socially responsible when entering into new partnerships. Being able to  
459 protect their reputation while partnering across the globe is a value-creating process for  
460 international construction companies (Petrick and Quinn 2000). Corporate sustainability can be  
461 defined as the obligation to limit the risk of harming other individuals (Krysiak 2009). Within this  
462 context, innovation in integrity risk management fosters an ethical culture, which in turn, enables  
463 product and service innovation (Riivari and Lämsä 2019). For the tool specifically, content needs  
464 to be reviewed periodically. Databases are constantly evolving and are necessary for an automated  
465 process. The references mentioned in Table 3 publish new content periodically and managers

466 should subscribe to their newsletters. Global Slavery, Tax Justice Network and TRACE provide  
467 useful information, tips and insights to control the risks associated with integrity. Companies  
468 conduct business in a dynamic environment leading to uncertainty, hence the need to be resilient  
469 (Slagmulder and Devoldere 2018). The current state of mind at the company must also be fully  
470 grasped. The company just got out from a major political scandal regarding its debarment from all  
471 federal business in Canada (Snyder 2019). Furthermore, unlike many engineering companies, the  
472 company also undertakes the construction phase in many projects, and in some case, even finances  
473 them in public-private partnerships. Events such as this scandal and particularities such as being  
474 involved in the construction phase or in public-private partnerships alter the company's risk  
475 aversion and exposure. Inexact science needs understanding and adjustments. To apply this third-  
476 party risk-based due diligence methodology, it is recommended to have completed the six proposed  
477 steps for implementing an ethical culture. Furthermore, it is important to have a global portrait of  
478 the company and collect the key employees' perception about the different issues the risk-based  
479 due diligence is trying to cover. This allows employees to be part of the process and creates a sense  
480 of belonging among them, which is a significant aspect of ethical leadership.

481 From a practical and applied point of view, a few questions remain unanswered. Indeed, one could  
482 ask if this process will be more cost- and time-intensive than the current third-party risk assessment  
483 process. There could be as many third parties representing lower risks than one representing higher  
484 risks, meaning that cost and time intensiveness could go in both directions. Indeed, the current  
485 process is more or less the same for every potential partner, meaning that the company spends too  
486 little resources on high-risk partners and too much on low-risk partners. The proposed risk-based  
487 process could spend the same total amount of resources than the current process, but targets the  
488 right amount of resources for low- or high-risk partners. The real benefit to be derived from using

489 this process is in terms of resource efficiency. Also, even if the process is time- and cost-intensive  
490 for the organization in the short term, it could prevent nationwide scandals potentially leading to  
491 bankruptcy and closure in the long run.

## 492 Conclusion

493 A methodology was proposed according to a past research study and financial prescriptive models.  
494 The tool created was designed to improve a company's third-party risk management. The content  
495 is adapted from a case study of the company. Companies wishing to use the tool must conduct  
496 internal data and information collection before proceeding with the methodology. Construction and  
497 engineering organizations have a lot of business partners due to the projects' unicity as mentioned  
498 earlier. Third parties represent a main source of disruption in case of misconduct for a company's  
499 activities, and must therefore be managed properly. Regular monitoring of data from non-  
500 governmental organizations, governments and references in risk management is recommended  
501 since integrity-related risks are constantly evolving.

502 Further research can focus on monitoring the different partners and finding affordable and efficient  
503 ways to do so. Having a profile for each partner with its score for the five risks would be a great  
504 start. This allows efficient monitoring and a more precise way of investigating business partners.  
505 As indicated above, risk accountability is very important. Sending a second questionnaire to the  
506 company originator after a year could be a means of ensuring that the relation or the risks did not  
507 evolve or increase. Other studies could also focus on environmental issues related to integrity.  
508 Indeed, to date, there are very few environmental laws on the books, and the environment is often  
509 disregarded. It is often cheaper for companies to pay fines than to comply with the laws that exist.

510 Governments and legislators need to hold companies accountable with stricter laws. Further risk-  
511 based due diligence could then include these environmental risks.

## 512 Data Availability Statement

513 All data, models, and code generated or used during the study appear in the submitted article.

514

## 515 Acknowledgement

516 This research was fully supported by SNC-Lavalin and the Mitacs Acceleration program. We thank  
517 our colleagues from the Integrity department who provided great expertise in the research. The  
518 author would also like to thank Professor Marc Tassé, member of the Canadian Centre of  
519 Excellence for Anti-Corruption and of the University of Ottawa, for his insights and precious  
520 support throughout this research.

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## 523 References

- 524 Belle, S. (2016). "Organizational learning? Look again." *The Learning Organization* **23**(5): 332-341.
- 525 Bonnitca, J. and R. McCorquodale (2017). "The Concept of 'Due Diligence' in the UN Guiding Principles  
526 on Business and Human Rights." *European Journal of International Law* **28**(3): 899-919.
- 527 Business & Human Rights Resource Centre. (2018). "Business & Human Rights Resource Centre."  
528 Retrieved 2018-12-13, 2018, from <https://www.business-humanrights.org/>.
- 529 Cima+ (2018). Code of ethics and conduct: 32.
- 530 Collins, D. (1997). "The Ethical Superiority and Inevitability of Participatory Management as an  
531 Organizational System." *Organization Science* **8**(5): 489-507.
- 532 Conger, J. A. (1999). "Charismatic and transformational leadership in organizations: An insider's  
533 perspective on these developing streams of research." *The Leadership Quarterly* **10**(2): 145-179.
- 534 Deloitte (2016). Third party governance and risk management: The threats are real. *Global survey*. D. UK:  
535 38.
- 536 Dow Jones Risk & Compliance (2018). Third Party Risk Management - Uncover emerging trends: 7.
- 537 Drennan, L. T. (2004). "Ethics, Governance and Risk Management: Lessons From Mirror Group  
538 Newspapers and Barings Bank." *Journal of Business Ethics* **52**(3): 257-266.
- 539 Drew, S. A., P. C. Kelley and T. Kendrick (2006). "CLASS: Five elements of corporate governance to  
540 manage strategic risk." *Business Horizons* **49**(2): 127-138.
- 541 El-Sayegh, S. M. (2014). "Project risk management practices in the UAE construction industry."  
542 *International Journal Project Organisation and Management* **6**(1/2): 121.
- 543 Ernst & Young (2018). Can you transform your third parties' risk into a competitive advantage? EY.  
544 United Kingdom: 15.
- 545 Ethisphere. (2018). "Develop an Ethics & Compliance Roadmap." Retrieved 2018-12-06, from  
546 <https://ethisphere.com/what-we-do/program-assessments/>.
- 547 Flynn, F. J. and B. M. Staw (2004). "Lend me your wallets: the effect of charismatic leadership on external  
548 support for an organization." *Strategic Management Journal* **25**(4): 309-330.
- 549 Fraser, J. R. S. and B. J. Simkins (2016). "The challenges of and solutions for implementing enterprise risk  
550 management." *Business Horizons* **59**(6): 689-698.
- 551 Gadde, L.-E. and A. Dubois (2010). "Partnering in the construction industry—Problems and  
552 opportunities." *Journal of Purchasing and Supply Management* **16**(4): 254-263.
- 553 Gaughan, P. H. and R. G. Javalgi (2018). "A framework for analyzing international business and legal  
554 ethical standards." *Business Horizons* **61**(6): 813-822.
- 555 Global coalition against corruption (2018). Transparency International Corruption Perception Index.
- 556 Grojean, M. W., C. J. Resick, M. W. Dickson and D. B. Smith (2004). "Leaders, Values, and Organizational  
557 Climate: Examining Leadership Strategies for Establishing an Organizational Climate Regarding Ethics."  
558 *Journal of Business Ethics* **55**(3): 223-241.
- 559 Gudienė, N., A. Banaitis, V. Podvezko and N. Banaitienė (2014). "Identification and evaluation of the  
560 critical success factors for construction projects in Lithuania: AHP approach." *Journal of Civil Engineering  
561 and Management* **20**(3): 350-359.
- 562 Hamilton, J. B. and S. B. Knouse (2001). "Multinational Enterprise Decision Principles for Dealing With  
563 Cross Cultural Ethical Conflicts." *Journal of Business Ethics* **31**(1): 77-94.
- 564 Hemphill, T. A. and W. Lillevik (2011). "The Global Economic Ethic Manifesto: Implementing a Moral  
565 Values Foundation in the Multinational Enterprise." *Journal of Business Ethics* **101**(2): 213-230.
- 566 Hess, D. (2018). "Corruption and the Multinational Corporation." *Ethical theory and Business -  
567 Cambridge University Press* **10th**: 14.
- 568 Human Rights Watch (2018). World Report. HRW: 600.

569 Iqbal, S. (2015). "Risk management in construction projects." Technological and economic development of  
570 economy **21**(1): 65-78.

571 Ittner, C. D. and T. Keusch (2017). Incorporating risk considerations into planning and control systems:  
572 The influence of risk management value creation objectives. The Routledge Companion to Accounting  
573 and Risk: 150-171.

574 Johnson, C. E. (2018). Meeting the ethical challenges of leadership, SAGE.

575 Joshi, M. and M. McKendall (2018). "Responses to the Discovery of Unethical Acts: An Organizational  
576 Identity and Reputation Perspective." Business & Society **57**(4): 706-741.

577 Khurana, R. (2002). Searching for a corporate savior: The irrational quest for charismatic CEOs.

578 Krysiak, F. C. (2009). "Risk Management as a Tool for Sustainability." Journal of Business Ethics **85**(3):  
579 483.

580 Liao, P.-C., N.-N. Xia, C.-L. Wu, X.-L. Zhang and J.-L. Yeh (2017). "Communicating the corporate social  
581 responsibility (CSR) of international contractors: Content analysis of CSR reporting." Journal of Cleaner  
582 Production **156**: 327-336.

583 Liu, J., X. Zhao and P. Yan (2016). "Risk Paths in International Construction Projects: Case Study from  
584 Chinese Contractors." Journal of Construction Engineering and Management **142**(6): 05016002.

585 Loosemore, M. (2006). Risk Management in projects. New-York.

586 McCorquodale, R., L. Smit, S. Neely and R. Brooks (2017). "Human Rights Due Diligence in Law and  
587 Practice: Good Practices and Challenges for Business Enterprises." Business and Human Rights Journal  
588 **2**(2): 195-224.

589 Mhetre, K. (2016). "Risk management in construction industry." International Journal of Engineering  
590 Research **5**(1): 153-155.

591 NAVEX Global (2018). Ethics & Compliance Third-Party Risk Management Benchmark Report: 56.

592 O.C. Ferrell, J. F. (2015). Business Ethics: Ethical Decision Making & Cases.

593 Oxford Economics (2015). Global Construction 2030. Oxford. London.

594 PACI (2013). Good Practice Guidelines on Conducting Third-Party Due Diligence, World economic forum:  
595 48.

596 Petrick, J. A. and J. F. Quinn (2000). "The Integrity Capacity Construct and Moral Progress in Business."  
597 Journal of Business Ethics **23**(1): 3-18.

598 Petschow, U., J. Rosenau and E. U. v. Weizsacker (2017). Governance and sustainability: New challenges  
599 for states, companies and civil society, Greenleaf.

600 Porcnik, I. V. T. (2018). Human Freedom Index. C. Institute: 406.

601 Riivari, E. and A.-M. Lämsä (2019). "Organizational Ethical Virtues of Innovativeness." Journal of Business  
602 Ethics **155**(1): 223-240.

603 Rodríguez, L. C., I. Montiel and T. Ozuna (2014). "A Conceptualization of How Firms Engage in Corporate  
604 Responsibility Based on Country Risk." Business & Society **53**(5): 625-651.

605 Roy, V., D. Desjardins, C. Ouellet-Plamondon and C. Fertel (2021). "Reflection on Integrity Management  
606 While Engaging with Third Parties in the Construction and Civil Engineering Industry." Journal of Legal  
607 Affairs and Dispute Resolution in Engineering and Construction **13**(1): 03720005.

608 Schein, E. H. (2010). Organizational culture and leadership.

609 Sedita, S. R. and R. Apa (2015). "The impact of inter-organizational relationships on contractors' success  
610 in winning public procurement projects: The case of the construction industry in the Veneto region."  
611 International Journal of Project Management **33**(7): 1548-1562.

612 Slagmulder, R. and B. Devoldere (2018). "Transforming under deep uncertainty: A strategic perspective  
613 on risk management." Business Horizons **61**(5): 733-743.

614 SNC-Lavalin (2017). Code of ethics and business conduct. Montreal: 50.

615 Snyder, J. (2019). Billions at stake for SNC-Lavalin — corruption conviction would bar firm from federal  
616 contracts for 10 years. National Post. Ottawa, National Post.

617 Spedding, L. S. (2009). Due diligence handbook - Corporate governance, risk management and business  
618 planning.  
619 Stantec (2017). Sustainability report: 78.  
620 Taroun, A. (2014). "Towards a better modelling and assessment of construction risk: Insights from a  
621 literature review." International Journal of Project Management **32**(1): 101-115.  
622 Tax Justice Network. (2018). "Financial Secrecy Index." Retrieved 2018-12-13, 2018, from  
623 <https://www.financialsecrecyindex.com/introduction/fsi-2018-results>.  
624 Taylor, M. B. (2009). "Due diligence for human rights: A risk based approach." Corporate Social  
625 Responsibility Initiative **53**: 25.  
626 The World Bank (2010). Debarment with conditional release & integrity compliance. W. Bank: 4.  
627 TRACE (2018). Risk-Based Due Diligence. T. international.  
628 TRACE. (2018). "TRACE Bribery Risk Matrix." Retrieved 02-21-2019, 2019, from  
629 <https://www.traceinternational.org/trace-matrix>.  
630 United Kingdom (2010). UK Bribery Act.  
631 United Nations (2011). Guiding principles on business and human rights. U. Nations: 42.  
632 United States Sentencing Commission (2018). Guidelines Manual. U. s. s. commission: 608.  
633 Uzun, H., S. H. Szewczyk and R. Varma (2004). "Board Composition and Corporate Fraud." Financial  
634 Analysts Journal **60**(3): 33-43.  
635 Vries, M. F. R. K. d. (1993). Leaders, fools and impostors.  
636 Walk Free Foundation (2018). The Global Slavery Index 2018. w. f. foundation.  
637 Watson, S. and J. Serra (2016). "Managing and creating value from third-party risk." Renewable Energy  
638 Focus **17**(3): 99-101.  
639 WSP (2018). Code of conduct: 28.

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642 Tables

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644 *Table 1 : Risk assessment overall and precise format comparison*

<b>Overall Risk Assessment</b>	<b>Precise Risk Assessment</b>
<i>Overall risk evaluation (one risk level)</i>	<i>Risk evaluation for each risk (one level/risk)</i>
<ul style="list-style-type: none"> <li>• Only one approval process</li> <li>• Originator of the relation has limited understanding of the result of the risk assessment</li> <li>• Harder to determine if a business partner needs to go through the process for a second project with the same company (less information)</li> </ul>	<ul style="list-style-type: none"> <li>• One approval process/risk (if levels are different)</li> <li>• Precise information on the risk assessment for the originator</li> <li>• Easier to analyze partner for a second project</li> </ul>

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646 *Table 2: Due diligence formats*

<b>Overall Due Diligence</b>	<b>Precise Due Diligence</b>
<i>Set of due diligence questions according to the overall level assessment</i>	<i>Due diligence questions based on the specific answers</i>
<ul style="list-style-type: none"> <li>• More questions covering all the risks</li> <li>• More information, second barrier if the process is poorly done</li> <li>• Same information required for all business partners</li> </ul>	<ul style="list-style-type: none"> <li>• Fewer questions only covering higher risks</li> <li>• Only information about medium- or high-level risks</li> <li>• Precise questions help dig deeper for higher risks</li> </ul>

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648 *Table 3 : References documents for integrity risk assessment and due diligence from international organizations*

<b>Organization</b>	<b>Document title</b>	<b>Description</b>	<b>Key elements</b>
Business & Human Rights Resource Center	Database (Business & Human Rights Resource Centre 2018)	Search engine providing information about business & human rights	Range by companies or by topics relating to human rights
CATO Institute	Human Freedom Index 2018 (Porcnik 2018)	Index and rating for each country with a description	The index measures the personal and economic freedom of individuals to provide a human freedom score

Global Slavery Index	Modern slavery: a hidden, everyday problem (Walk Free Foundation 2018)	Findings and scores by country	Prevalence, vulnerability and government response to modern slavery are considered. Importing risk for the G20 countries are listed.
Human Rights Watch	World Report 2018 (Human Rights Watch 2018)	Events report by country	2018 report focuses on authoritarian populist governments
Tax Justice Network (TJN)	Financial Secrecy Index (Tax Justice Network 2018)	Identifying the most important providers of international financial secrecy	20 different secrecy indicators are used to rank the different countries
TRACE Matrix	TRACE Bribery risk Matrix (TRACE 2018)	Score per country for corruption and bribery risk	Based on four domains: opportunity, deterrence, transparency and oversight
Transparency International	Transparency International Corruption perception Index (TICPI) (Global coalition against corruption 2018)	Annual data on corruption and ratings by country	Based on four elements: Freedom of speech, of the press and of assembly, and civil participation.

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650 *Table 4 : Hybrid format for assessment and due diligence*

<b>Hybrid Risk Assessment</b>	<b>Hybrid Due Diligence</b>
<i>Combination of overall and precise due diligence risk assessment</i>	<i>Combination of the overall and precise due diligence format</i>
<ul style="list-style-type: none"> <li>• Only one approval process</li> <li>• Assessment for each risk to provide more information to the originator</li> <li>• Overall assessment for the approval process</li> <li>• More information for analysis and precise due diligence</li> </ul>	<ul style="list-style-type: none"> <li>• Basic questions about social and economic themes for a second barrier</li> <li>• Precise questions regarding higher risks to allow greater scrutiny</li> <li>• Information for low, medium and high risk</li> <li>• Riskier partner leads to longer process</li> </ul>

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<b>Risk indicators</b>	<b>Scores</b>	<b>Literature review</b>	<b>Possible questions</b>
Proximity to public officials	2.4	NA	NA
Country	2.6	NA	NA
Partner Profile	3.3	Other similar contracts or agreements with other companies or clients	Does the partner have a similar agreement with another company?
Type of Relation	5.0	The partnership could affect market competition (joint venture or consortium)	What is the purpose of the engagement?
Type of Industry	3.7	Easier to identify if companies act like a cartel for monitoring, but no industry enables it more than others	In which industry does the business partner conduct his activities?
Contract Complexity	3.6	High value or complex contracts reduce the number of potential submissions	Please describe the project on which the business partner will be working (price, uniqueness, complexity, number of links).

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<b>Risk factors</b>	<b>Scores</b>	<b>Literature review</b>	<b>Possible questions</b>
Proximity to public officials	4.9	Many interactions with a corrupt government	For this specific engagement, will the business partner be directly or indirectly interacting with government officials?
Country	4.7	Corruption perception index or TRACE bribery risk per country (Table 3)	List all countries where the Business Partner is expected to perform his mandate with or on behalf of SNC-Lavalin.
Partner Profile	3.1	Past misconduct related to corruption & payment terms	How is the Business Partner compensated by SNC-Lavalin (payment or other benefit)? Integrity check
Type of Relation	3.7	Mandatory partnership and intermediaries are often involved in corruption cases	What is the purpose of the engagement?
Type of Industry	2.1	Data indicate that some industries are more likely to ask for bribes	In which industry does the business partner conduct his activities?
Contract Complexity	2.4	Project characteristics are related to corruption vulnerability	Please describe the project on which the business partner will be working (price, uniqueness, complexity, number of links)

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<b>Risk factors</b>	<b>Scores</b>	<b>Literature review</b>	<b>Possible questions</b>
Proximity to public officials	1.1	NA	NA
Country	4.9	Human freedom index (CATO), world report from Human rights watch and Global Slavery Index (Table 3)	List all countries where the business partner is expected to perform his mandate with or on behalf of SNC-Lavalin
Partner Profile	3.9	Past misconduct related to human rights	Integrity Check with the business & human rights database
Type of Relation	3.1	Partner with suppliers or subcontractors	What is the purpose of the engagement?
Type of Industry	3.9	Self-regulation and lower-skill sectors are riskier	In which industry does the business partner conduct his activities?
Contract Complexity	1.9	NA	NA

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<b>Risk factors</b>	<b>Scores</b>	<b>Literature review</b>	<b>Possible questions</b>
Proximity to public officials	4.6	Conflict between public duty and private interest	For this specific engagement, will the Business Partner be directly or indirectly interacting with government officials?
Country	2.1	NA	NA
Partner Profile	3.4	Different role in other projects	Does the partner have a similar agreement for another SNC-Lavalin project or company? Integrity check
Type of Relation	5.7	Accountability and relations with other third parties	Is there an actual or apparent conflict of interest in the business partner disclosure? What is the purpose of the engagement?
Type of Industry	2.0	NA	NA
Contract Complexity	2.7	Harder to detect if high number of other partners	Are there a lot of contractual links for this specific engagement?

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668 *Table 9: Results and content for compliance with regulations*

<b>Risk factors</b>	<b>Scores</b>	<b>Literature review</b>	<b>Possible questions</b>
Proximity to public officials	3.0	NA	NA
Country	4.7	Sanctions per country. Financial secrecy index per country (Table 3)	List all countries where the business partner is expected to perform his mandate with or on behalf of SNC-Lavalin. Has the business partner requested any unusual payment terms or rates such as cash only, payments to third party or to an account in a country other than either the one where the Business Partner is based or where the services will be rendered? Integrity check
Partner Profile	2.9	Payment terms and blocked persons list	
Type of Relation	3.7	Higher risk for partners who provide financial or legal services for SNC-Lavalin Easier to identify if sanctions for specific industries, but no industry enables it more than others	What is the purpose of the engagement?
Type of Industry	3.1		In which industry does the business partner conduct his activities?
Contract complexity	3.4	Harder to manage and comply if complex	Are there a lot of contractual links for this specific engagement?

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Questions	Possible answers	Risks covered and scores				
		Conflict of interest	Corruption & bribery	Compliance with regulations	Human rights	Antitrust & competition
1. Is there an actual or apparent conflict of interest in the business partner disclosure? If yes, provide details in textbox.	If actual	Mitigate				
	If apparent or potential	6	0	0	0	0
	If none	0	0	0	0	0
2. How is the business partner compensated by SNC-Lavalin (payment or other benefit)? Provide details in textbox.	Major portion is fixed (hourly rate, lump sum price)	0	0	0	0	0
	Major portion depends on successful completion (commission, success fee)	0	4	0	0	0
	No compensation	0	0	0	0	0
3. Has the business partner requested any unusual payment terms or rates such as cash only, payments to third parties or to an account in a country other than either the one where the Business Partner is based or where the services will be rendered? If yes, provide details in textbox.	If yes	0	0	4	0	0
	If no	0	0	0	0	0
4. In which industry will the business partner conduct his activities.	Oil & gas	0	1	0	1	0
	Mining & metallurgy	0	2	0	2	0
	Infrastructure	0	2	0	0	0
	Nuclear	0	0	0	0	0
	Clean power	0	0	0	0	0
5. All countries where the business partner is expected to perform his mandate with or on behalf of SNC-Lavalin must be selected. You should also add the home base country of your business partner. If the mandate is in multiple	If TRACE bribery risk higher than 65	0	0	0	0	0
	If TRACE bribery risk between 40 and 65	0	4	0	0	0
	If TRACE bribery risk below 39	0	6	0	0	0
	If prevalence of slavery is lower than 5 in the Global Slavery Index	0	0	0	0	0

countries, you can select them all	If prevalence of slavery is lower than 7 in the Global Slavery Index	0	0	0	1	0
	If prevalence of slavery is higher than 7 in the Global Slavery Index	0	0	0	2	0
	If secrecy score 65 or below in TJN Financial Secrecy Index	0	0	0	0	0
	If secrecy score above 65 and below 80 in TJN Financial Secrecy Index	0	0	1	0	0
	If secrecy score 80 or more in TJN Financial Secrecy Index	0	0	2	0	0
	If subject to sanctions (as per company's internal documents)	0	0		0	0
6. Please describe the project on which the business partner will be working with the choices below. Provide details in textbox.	If higher than 500 million USD	0	1	0	0	1
	If complex/unique	0	1	0	0	1
	If low number of contractual links	0	0	0	0	0
	If medium number of contractual links	0	1	1	0	0
	If high number of contractual links	1	2	2	0	1
7. What is the purpose of the engagement? Provide details in textbox.	Business development	0	8	0	0	4
	Sales agent	2	8	0	0	0
	Consortium	0	0	0	1	4
	Joint venture	2	0	0	1	4
	Local sponsor	0	8	0	0	0
	Customs or visa	0	1	0	0	0
	Legal or financial	0	1	1	0	0
	Lobbying	2	8	0	0	4
	Intermediary without business development	0	1	0	0	0
	None of the above	0	3	0	0	0
8. For this specific engagement, will the business partner be directly or indirectly interacting with government officials? If yes, provide details in textbox.	If yes	2	6	0	0	0
	If yes, and directly recommended by government	4	10	0	0	0
	If no	0	0	0	0	0

9. Does the partner have a similar agreement for another SNC-Lavalin project or company?	If yes	4	0	0	0	4
	If no	0	0	0	0	0

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682 *Table 11: Due diligence based on risk level – Questions for low-, medium- and high-risk partners*

Level	Due diligence questions	Risks covered
Questions for low or higher	Please give a detailed description of the actions, tasks and services the business partner will perform. In addition, please explain why the business partner has been selected and why the services cannot be provided by SNC-Lavalin.	General information
	Are the services that the business partner will perform consistently with its normal operations and previous experience?	General information
	Describe in detail the proposed compensation and all the benefits the business partner receives from SNC-Lavalin, directly or indirectly.	Corruption & bribery and compliance with regulations
	Does the business partner promise the success of an SNC-Lavalin bid or that SNC-Lavalin be granted any other benefit (license, permission, favorable business decision, etc.)?	Corruption & bribery and competition & antitrust
	Has the business partner requested secrecy or anonymity for any part of the agreement?	Corruption & bribery, competition & antitrust, conflict of interest and compliance with regulations

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684 *Table 12: Due diligence based on risk levels – Questions for medium- and high-risk partners*

Level	Due diligence questions	Risks covered
Questions for medium or higher	Please provide the date of the establishment and the country where the business partner is incorporated.	General information and compliance with regulations
	Please provide the local authority registration document for each country where you will be performing your services.	General information and compliance with regulations
	Please provide all the key elements of the compliance program (code of ethics or business conduct, anti-corruption policy, modern slavery policy, etc.).	Corruption & bribery, competition & antitrust, conflict of interest, human rights and compliance with regulations

	Please provide the names and functions of the company's key persons and perform an integrity check against the database.	Corruption & bribery, competition & antitrust, conflict of interest, human rights and compliance with regulations
	Did the company's name change in the last 10 years? If yes, perform an integrity check.	Corruption & bribery, competition & antitrust, conflict of interest, human rights and compliance with regulations
	Will the business partner use any third parties or subcontractors to provide the services? If yes, please provide reasons and documents (supplier code of conduct and others).	Corruption & bribery, competition & antitrust, conflict of interest, human rights and compliance with regulations
	Were any key employees involved in material litigation in the past 10 years or are there any pending litigation, judgments or government investigations against any of the key contacts?	Corruption & bribery, competition & antitrust, conflict of interest, human rights and compliance with regulations

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686 *Table 13: Due diligence based on risk level – Questions for high-risk partners*

<b>Level</b>	<b>Due diligence questions</b>	<b>Risks covered</b>
Questions for high	Is the business partner part of a group of companies? If yes, please provide the organizational chart.	Corruption & bribery, competition & antitrust, conflict of interest, human rights and compliance with regulations
	Please provide a written bank reference from the bank that confirms that your company is a customer in good standing.	General information and compliance with regulations
	Does the business partner have a previous or existing relation with SNC-Lavalin or one of its entities?	Competition & antitrust and conflict of interest
	Please provide the names of at least 3 business references who have retained your company in a similar purpose/work capacity.	Corruption & bribery, competition & antitrust, conflict of interest, human rights and compliance with regulations

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<b>If originator answered</b>	<b>To question</b>	<b>Add this question to the due diligence process</b>
Apparent or potential	1	How will the apparent/potential conflict be managed inside and outside of the partnership agreement?
Yes	3	Please provide the details of the bank to which the payments will be made, their latest audit and financial report, and a written reference from the bank.
A country with a prevalence higher than 5 for modern slavery	5	Provide the business partner's modern slavery policy.
A country with a prevalence higher than 7 for modern slavery	5	Provide details on how business partner will protect human rights throughout the contract.
A country with a secrecy score above 65	5	What are the biggest country threats according to the Financial Secrecy Index?
A country with a secrecy score above 80	5	Provide details on how these threats will be managed throughout the contract.
If high number of links	6	Evaluate the business partner's third-party risk-based due diligence.
Consortium or Joint Venture	7	Provide documents and details about the compliance and ethics program, and about the anti-corruption measures.
Joint Venture	7	Is the contract granted from a Special Purpose Vehicle regrouping one of the Joint Venture's companies? If yes, provide antitrust and conflict of interest management details.
Local sponsor	7	Why does SNC-Lavalin need a local sponsor (law, regulation, standard)?
Business development	7	Why does SNC-Lavalin need an agent for business development?
Lobbying	7	In which of the countries specified in question 5 will the business partner interact? Does the host region or country have laws requiring lobbyists to be part of a professional association or others?
Yes	8	In which of the countries specified in question 5 will the business partner interact?

Yes

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Describe the other agreements and if they could imply a possible conflict of interest or antitrust issue.

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