FOR BUSINESS ENTITIES WITH AN INTEREST IN EDNET

6 KEYS TO DIGITAL TECHNOLOGY ADOPTION

SUPPLEMENT TO THE PROMOTERS' GUIDE

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A REFERENCE TOOL FOR ACHIEVING BEST PRACTICES ON DIGITAL PROJECTS

This document, which was drafted specifically for Quebec's tourism businesses, presents the lessons learned following six years of services provided to small and medium-sized businesses (SMBs) as they transitioned to digital technology.

In support of business entities interested in submitting a project as part of the digital development agreement for tourism businesses (EDNET), CEFRIO has adapted tangible tools designed to help promoters in the initial stages of their digital project. These tools call for a digital planning process that takes into account companies' digital capabilities, their employees' digital skill sets, and their business model and vision.

Find out more by reading all about the 6 keys to digital technology adoption described below.

What is a digital company?

A digital company is a business entity that invests heavily in information and communications technology (ICT). It owns leading-edge applications and devotes considerable efforts to developing its employees' digital skill sets.

1. CONSOLIDATING YOUR DIGITAL FOUNDATION

Before you can decide where you want to go, you have to know where you're starting from! You need to know what the foundations of your future digital structure are. In other words, what is your company's current digital capability?

Ready to make a digital shift? Start by asking yourself a few questions!

Your company would never try to enter a new international market without:

- First making sure that its infrastructure will allow it to communicate effectively with its partners and with personnel sent to the target market abroad
- Assessing its employees' skill sets: "Will Roger's English-language [or Spanish-language] skills allow him to be effective at important meetings?"
- Adopting clear policies: "What criteria will we use to decide whether to enter into an agreement with a local retailer or take a step back?"
- Ascertaining that political and social conditions in the target country are favourable to your project

Similarly, your SMB should not attempt to make a digital shift without first clearly assessing its situation: determining its strengths and weaknesses with respect to information and communications technology (ICT) and understanding its operational context.

Establishing full digital diagnostics will allow your company not only to formulate its vision and set realistic digital objectives, it will also help it put together a well-thought-out and achievable plan to reach its objectives.

To help you get this process started, here are 20 QUESTIONS ON YOUR CURRENT DIGITAL CAPABILITY.

Carrying out full diagnostics is crucial and should be based on four main questions (be careful not to leave any out!):

1. WHAT IS THE CURRENT STATE OF OUR DIGITAL ASSETS? For example, are our digital infrastructure and tools compatible with our present circumstances or

are they out of date? Do we invest as much in ICT as other companies in our sector? Are our systems sufficiently integrated? Are they used to their full capacity? Are we using the potential afforded by emerging technology to enhance customer experiences?

2. WHAT IS THE STATE OF OUR ICT MANAGEMENT PRACTICES? For example, do we apply exemplary information-security practices? Would we be able to relaunch our transactional site quickly in the event of an attack or breakdown? Do we have a policy designed to protect the confidentiality of our customers' personal information? Do we have a separate and dedicated budget for ICT? Are our digital investments and business decisions based on structured planning initiatives?
3. HOW GOOD ARE OUR DIGITAL SKILL SETS? For example, do our employees know how to use the technology they are provided with effectively? Are they enthusiastic about the new tools we provide? Does our team have the required resources and skills or do we have to seek external support for our digital projects?
4. ARE THERE FACTORS THAT MAY HINDER OR FOSTER OUR ABILITY TO ACHIEVE OUR DIGITAL OBJECTIVES? For example, does our management committee have a good understanding of the potential provided by ICT? Are its members interested in this issue? Would a past project failure be an obstacle to getting staff buy-in for a new project? Conversely, would customer expectations or the company's culture of innovation create forward momentum for a new digital project?

By carefully considering and answering the four questions above, your company will have an accurate assessment of the strength of the foundation underpinning its digital projects. Taking into account diagnostics results will help you steer clear of projects you are not ready to undertake or, conversely, help you to be prepared and take charge.

CEFRIO recommends that you speak with an impartial advisor.

Without a doubt, you may be able to answer many of the questions above without outside help. Some of the questions, however, may require that you seek external expertise. In fact, CEFRIO recommends that you speak with an impartial advisor to evaluate the quality of your ICT assets and related management processes. This resource (who must not be associated with any of your suppliers) must be able to

understand your company's strategy fully and carry out his or her mandate in accordance with your priority needs.

2. ALIGNING YOUR DIGITAL OBJECTIVES WITH YOUR BUSINESS STRATEGY

Investments in technology produce better results whenever they are carried out not in a piecemeal or, worse, urgent fashion but instead in a concentrated and intensive manner or, even better, as part of a clear strategic plan.

What is your game plan?

Over the years, many Quebec companies have been able to stand out from the competition thanks to their ability to leverage their ICT in their business strategy.

If your company has not yet begun to examine how digital technology can be used to implement its business strategy not only to survive but to prosper in its sector, it is high time it did!

In fact, all senior managers should consider some of the following questions:

1. **DO YOUR COMPETITORS MAKE GREATER USE OF ICT THAN YOU DO?** Do your rivals appear to be quicker with regard to making deliveries, providing services, entering markets, and developing products?
2. **HAS THE RISE OF THE WEB AND OTHER TECHNOLOGY DEVELOPMENTS BROUGHT ABOUT CHANGES** in customer expectations? Has competition intensified in your industry?
3. **DO YOU NEED TO IMPROVE YOUR PRODUCTION CAPACITY** to maintain or improve your positioning in the market?
4. **DOES ICT APPEAR TO YOU TO BE KEY IN UPGRADING YOUR PRACTICES?**
5. **ARE YOU LOOKING TO ADD VALUE TO YOUR OFFER** by providing, for example, better customer service?
6. **DO YOU HAVE THE IMPRESSION THAT INFORMATION FLOW IN YOUR COMPANY IS INADEQUATE** and that your employees work in silos?

If you have answered "yes" to some of these questions, you would likely benefit from including digital technology in your company's strategic planning efforts.

Prior to planning

A **map of your business processes** can help you to establish priorities for your digital projects. This kind of tool casts light on the activities that need to be integrated more effectively and reveals redundancies as well as potential improvements. A map of your services is also useful for identifying your company's key processes – the ones that truly enable you to stand out. Your digital project roadmaps must take these key processes into account.

Conduct a little test to gauge the degree of alignment between your use of ICT and your business strategy:

1. Create a list of three priority strategic objectives for your company, for example, reduce pricing, improve service quality, optimize inventory management or enhance human resources management.
2. Create another list that states ten priorities with regard to ICT, for example, develop a virtual data centre or implement a new booking management system. Your ICT managers can create this list or help you to create it.
3. Using lines, try to connect your company's main strategic objectives and your ten ICT priorities.

Is there no line connecting a particular strategic objective or ICT priority? If so, you need better alignment between these two lists of company priorities.

CEFRIO has developed a tool designed to help you produce a DIGITAL PLAN FOR YOUR COMPANY. **Use of this resource will foster in-depth and strategic thinking with respect to ICT and its use in your company.**

Many participants and much effort are required to create an effective digital plan, but it is a worthwhile endeavour. A **good digital plan will help your company to establish a clear vision and strategic reasons for using ICT**. Your digital plan can also justify your future investments in digital technology.

3. ASSESSING YOUR TECHNOLOGY REQUIREMENTS

Many companies decide to engage in strategy shifts or introduce new systems without first considering the potential impacts of such decisions. By assessing your technology needs, you can quickly determine what your critical requirements are and

reduce the likelihood of wrong product selection, cost overruns, and conflict with suppliers.

Would you allow a salesperson to persuade you to buy a radio campaign targeting the general public when what you want is to advertise in a specialized magazine?

What do we need?

Would you purchase advertising space without knowing what to do with it or what your customers expect or what your marketing budget is?

Similarly, **your decision to acquire technology solutions to attain your business objectives should be based on your needs** – not on your suppliers' needs or anyone else's for that matter. That is why you must carefully assess your requirements. **And be sure to get answers to all your questions!**

Defining your needs accurately

The needs-assessment process includes three stages:

1. To begin, you need to **ascertain your company's current situation** by interviewing staff at the departments that will be affected by your project
2. **Identify your future goals**, that is, think about new requirements that your system may satisfy later on
3. Meet again with key staff members in each division to **review the list of requirements** resulting from stages 1 and 2 and determine what your priorities are

Consult the following document: GUIDE FOR ASSESSING REQUIREMENTS. While this guide was created for a fictional retail-sales project, it can help you to establish a list of main functionalities that the information systems you acquire in the short and medium term must include.

Carrying out this exercise will allow you to establish priorities needs and adapt your project's scope to your budget.

CEFRIO created a tool (*Analyser mes besoins technologiques*) to help you assess your technology-related needs effectively, including asking the right questions of suppliers

whose products may be of interest to you. Are you looking for ICT to manage your inventory? If so, the tool reminds you that you should check if the supplier's ICT can trace each product's country of origin. Are you in retail sales? Then you should find out if the system you're thinking of purchasing take layaways into account.

Should you conduct your own needs-assessment?

You should ask yourself if it is realistic and reasonable to assess your technology needs without external assistance. **The money you spend on an external and impartial expert to help you make the right decision may turn out to be the best investment you make on your digital project.** The expert can explore potential solutions available on the market and determine which ones will meet your requirements.

4. SELECTING A TECHNOLOGY SOLUTION

You may be tempted to choose a particular technology product or service because that is what other companies in your sector have done or because that is what your instinct tells you to do. Taking the time to evaluate several options as you carefully assess your technology-related needs may become an eye-opening exercise.

The results of CEFRIO's "PME 2.0" project, which was designed to boost Quebec SMBs' productivity and competitiveness through digital solutions, have shown that the successful integration of systems depends on the quality of the preparatory stages.

It is up to you!

As is the case with most companies, you would not hire new employees without:

- **Preparing and distributing a detailed job description**
- **Inviting the most promising candidates to an interview** or to take part in tests to demonstrate their skills
- **Getting key people to take part** (possibly the people who will work with the new employees) in the decision-making process

The selection process for a new information system must be undertaken with painstaking care. The approach recommended in this document is simple but it does

require that key people in your company spend time on it. Do not hesitate to devote both time and money to the process. Your return on investment is guaranteed.

Here are the four essential stages of the selection process:

1. **Prepare a specifications document** based on the results of your needs-assessment process
2. **List all the suppliers** whose products appear to meet your specifications and invite them to submit a proposal; invite some of them to **demonstrate** how their product works to your selection committee made up of future users (during the demonstration, do not be distracted by sales pitches that may have nothing to do with your specific situation)
3. To the greatest extent possible, **ask for more from the supplier you select**. Ask how the solution's functionalities can be adjusted to meet your requirements or how your processes must change to accommodate the tool's functionalities (do not hesitate to get all requested information in writing and ask for a demonstration of the ICT solution following adjustments to its settings)
4. **Align the project and sign the contract!** Ask for a complete and final pricing offer from the vendor (obviously, you want to prevent unpleasant surprises that would alter the project's cost and, potentially, its viability), have the contract checked by an expert, and put the project management structure into place

A "translator" can be of assistance

You need a robust selection process for your digital project's technology solutions. Do not rely on instinct and do not settle for the first solution you consider. Instead, you should call on in-house resources or impartial consultants who understand your business needs, know the ICT market and technical terms, and can play the role of "translator" for senior management at your company and potential suppliers. The translator can help you to align your ICT choices and your business strategy.

Use of the 4-STAGE GUIDE to select your software solution will help you to avoid the most common pitfalls companies face when looking for a supplier. Do not recruit suppliers without consulting with them first!

A good "translator" will help you to draft a high-quality call for proposals and interpret suppliers' bids.

Three criteria can help you in choosing the right resource to provide support on your project:

1. **Your technology service supplier is not an ideal "translator"**
2. **He or she fully understands your business needs** and the needs of companies in your sector
3. **He or she "speaks ICT fluently"** but also speaks your language and understands the things you say or leave unsaid

5. MANAGING A TECHNOLOGY PROJECT

As all studies have shown, well-planned and well-managed projects are twice as likely to be completed successfully. Professional project management allows you to eliminate or curb the most common problems.

On average, ICT projects cost 45% more than initially expected and generate 56% less in profits than anticipated.

The better prepared you are, the brighter your future!

Too many projects of all sorts fail because they were not sufficiently well planned and managed. According to an article by McKinsey, ICT projects cost 45% more, on average, than initially expected, require 7% more time for completion, and generate 56% less in profits than anticipated.

These problems may occur for various reasons. Research has also shown that senior managers do not always have sufficient knowledge of "exemplary ICT practices" to implement (a weakness this document is designed to correct).

Is your company ready to plan and manage its digital project?

Project managers sometimes make mistakes because they are under pressure and rush things. Also, decision-makers sometimes ignore data that should make them more cautious.

Professional ICT project planning and management will certainly help SMBs to avoid the most pitfalls they face (last-minute surprises, repeated delays, dissatisfied users, and more).

Manage your ICT project effectively:

1. **BEGIN BY ESTABLISHING THE GOAL OF THE PROJECT** and its scope (for example, what departments will be affected); and determine what the project cannot do or help you achieve (yes, some functionalities may have to wait until some future project)
2. **TRY TO QUANTIFY YOUR PROJECT'S OBJECTIVES AS ACCURATELY AS POSSIBLE**, for example, "increase sales by 33%" or "cut 7 hours a month from invoice-preparation tasks"
3. **PRODUCE A BUDGET** that takes into account how much time your employees spend on the project and that includes a contingency provision
4. **ESTABLISH A TIMETABLE** for carrying out required tasks (to set realistic deadlines, take into consideration how much time, on average, is needed to complete a project of this kind)
5. **CREATE A PROJECT TEAM** that will be in charge of carrying out these tasks, establish a decision-making method, define the roles and responsibilities of all team members, and so on
6. **NAME A PROJECT LEADER TO MANAGE THE TEAM:** this person must have strong technical as well as strong interpersonal skills. Your project leader will be the project's ambassador across your company's various departments. The project leader must be patient, gently overcome any resistance within the team, and facilitate interactions among or with employees, senior management, suppliers, and other stakeholders. To the extent required, the project leader must be relieved of his or her regular responsibilities so as to devote enough time to the project
7. **ASSESS THE RISKS** that your project faces and define how you will minimize or eliminate such risks. For example, a common risk is cost overruns. How will you prevent cost overruns? Through regular budget reviews, greater contingency provision, application a public assistance program or other means?
8. **IDENTIFY ALL PROJECT STAKEHOLDERS**, that is, the people who may be affected by it (for example, customers, partners, and suppliers), assess how the project may affect them, and find ways to mitigate negative impacts

9. **CREATE A COMMUNICATIONS PLAN AND A SKILL-DEVELOPMENT PLAN,** thereby allowing your staff to know what is coming and how to prepare for it
10. **CLOSELY MONITOR YOUR PROGRESS** as you develop your project and ensure that senior management and the board of directors review the project on a periodic basis

Do you want to prepare for change?

Is your company now dealing with change management and developing the skills your employees need to use the new systems resulting from your project? The PROJECT STATEMENT TEMPLATE will help you deploy and publicize your project.

Elsewhere on the web

Some years ago, *Direction informatique* published several articles by Suzanne Rivard, a professor at HEC Montréal, on the issue of project management. Take a look at these articles (in French) that contain useful information even though they do not focus on small and medium-sized businesses.

6. DEPLOYING DIGITAL CHANGE

It is a well-known fact that inadequate communications, unsuitable training and poor workforce planning can lead to a loss of productivity among employees, greater resistance to change, and financial losses for companies. Change management enables you to implement whatever changes you need with success.

To optimize the impact and value of digital change, companies must devote as much time and effort to transforming their processes and practices.

Digital technology is more than just a "techie" concern!

To ensure your information technology investment's profitability and optimize its impact and value, your company must **devote as much time and effort to transforming its processes and practices**.

Also, you must never undertake a major digital project without first considering how it would be perceived by your employees and how to persuade them to support it.

Accordingly, you should ask yourself questions like the ones below right from the start:

- What effects will the project have on our employees?
- Does the project raise specific concerns among the staff?
- What can we do to relieve these concerns?

Unless you are ready to deal with great resistance to change and the consequences such resistance can bring about, **you must absolutely avoid giving off-the-cuff answers to the questions above**.

Appointing a good project leader will help your company foresee problems and manage future change effectively. In addition to solid technical skills, the project leader must also have **strong interpersonal skills**, that is, be able to listen to colleagues attentively, motivate them, and help them overcome their resistance to change.

You must then **develop a training plan to provide your staff with the skill sets to adapt to change** and make the most of your new information and communications technology.

To prevent your training efforts from disrupting your business operations, you need to answer the following questions:

1. **WHICH SET OF EMPLOYEES SHOULD WE TRAIN? HOW? WHEN? WHAT DO THEY NEED TO LEARN?**
2. **HOW CAN WE LEVERAGE THE PRESENCE OF SUPER-USERS IN OUR ORGANIZATION**, that is, people who can answer employees' questions?
3. **HOW DO WE TRANSITION AWAY FROM OUR FORMER ICT** if need be? Will our employees use the old and new systems in parallel? For how long will they do this?

A means of managing change.

Would a "change lab" be an effective way of managing change as part of your ICT project? A change lab is a project-management method that allows staff to collaborate in the development and deployment of a technology project, thereby increasing its probability of success.

Tangibly, the change lab can help you to:

1. **GET YOUR STAFF TO TAKE PART IN MAPPING** your organization's production-management process
2. **INCITE YOUR STAFF TO THINK ABOUT THE NEEDS** your future system would be able to meet
3. **INVOLVE YOUR STAFF IN SELECTING THE DIGITAL TOOLS** that meet their needs most effectively
4. **ENCOURAGE YOUR STAFF TO CREATE TRAINING PROGRAMS** that enable them to get the most out of digital technology

WHAT EXACTLY IS A CHANGE LAB?

Watch this short video to find out how a change lab can help make a digital project a success.

You can also read a special report (in French) to find out more about the power of change labs. The report provides a detailed description of change labs as well as the results of their application at three distinct small and medium-sized businesses.

7. DIGITAL MATURITY MODEL

CEFRIO has developed a five-level digital maturity model that companies can use to assess and guide their digital progress. This resource was initially designed for manufacturing businesses; however, it can also help companies in the service sector – including tourism – to determine their development objectives and make strategic choices in efforts to optimize their business processes on the basis of their specific situation and priorities.

Artisanal
Intensive use of basic business software and isolated, non-connected digital tools to manage business processes.

Disciplined
Intensive use of dedicated software (accounting, project management, inventory, and other) to manage business processes.

Integrated
Intensive use of an integrated system (a single database) to manage business processes.

Predictive
Intensive use of digital tools to adjust course of action and decision-making in accordance with real-time access to historical data (for example, predictive maintenance).

Autonomous
Intensive use of robotic tools, integrated mobile applications, traceability technology, and more to manage business processes.

8. DIGITAL PROJECTS

Below are examples of digital project ideas and innovative technologies and uses.

Optimizing operations management at my company

- Acquiring and/or implementing an integrated management software solution (accounting, human resources, inventory, other)
- Automating booking and recall processes
- Using digital solutions to resolve workforce-recruitment issues (to foster the ability to mobilize candidates, manage seasonal challenges, retain employees, and more)
- Using tablets or smart phones to coordinate activities on site

Improving customer relationships and digital marketing

- Acquiring and/or implementing a customer-relationship management (CRM) software solution to create customer loyalty
- Optimizing the use of customer databases for a better understanding of points of contact and more effective communications
- Integrating artificial intelligence to facilitate business decision-making and personalize products and services to address customer preferences
- Building transactional functionalities into the web site (reserve time periods, sell products, and more) and implementing operations processes in support of e-commerce

- Optimizing digital marketing practices to enhance brand recognition and drive traffic onto the web site (social media, targeted search-engine advertising, newsletters, and more)
- Developing new online collaborative practices to add value to customer relationships and business partnerships

Enhancing service delivery and customer experiences

- Using augmented reality on mobile devices and VR helmets to conduct virtual tours for potential customers
- Using RFID and NFC technologies to foster interactions between customers and destinations via connected devices
- Providing a broad range of 3D souvenirs
- Using interactive kiosks to facilitate reception services and help visitors find their way around

INNOVATIVE TECHNOLOGIES AND USES

- Geolocation
- Augmented reality
- Virtual tour
- Chat bot
- Big data and connected data
- Robots and autonomous machines (virtual concierges and guides)
- Vocal and visual recognition
- Artificial intelligence
- Connected objects
- 3D printing

Contact us
CEFRIO
info@cefrio.qc.ca
www.cefrio.qc.ca