bdc

Profiting from Technology

A Guide for Entrepreneurs

Share

Table of contents

Accelerating your business success with technology

Investing in technology can be daunting for entrepreneurs, but it can also provide tremendous benefits for their businesses.

If chosen wisely and implemented to its full potential, technology can boost a company's productivity, capacity to innovate and profits.

Still, many entrepreneurs aren't sure of the benefits and are leery of the risks involved in technology investments. That was certainly the case for Larry Cox, owner of Polaris Transportation Group in Mississauga, Ontario. He was uncomfortable with technology before he invested in a vastly improved computer network.

His trucking business was seeing such colossal growth that his computers couldn't keep up any more. Polaris Transportation Group had grown to 40 trucks from three in a decade. But the company's hodgepodge of clunky old PCs had become a drag on growth.

Cox invested in a major systems upgrade with the help of an outside consultant. The new systems allowed Cox to update his business strategy—automating some order handling, trimming costs and offering clients real-time tracking of shipments. The investment helped Polaris more than triple sales to $55 million.

The experience went so well that Polaris embarked on another major technology upgrade, implementing a new enterprise resource planning (ERP) system in January 2012. The system integrates everything from accounting to order taking, billing, human resources, document imaging and operations. If all goes well, Cox sees sales almost doubling to $100 million annually in four years—with the help of the ERP system.

Cox is one of the many business owners in this guide whose stories will help demystify technology for entrepreneurs. All are current or former BDC clients.

This eBook will show you how you can plan, select and implement productivity-enhancing technology in your business.

Our goal is to help make technology pay off for you.

I've gone from fear and trepidation about technology to embracing it.

Larry Cox

1 Building your productivity

Information technology (IT) offers a vast array of powerful tools to increase your productivity and help you create a more competitive business. They can automate many core functions, including accounting, payroll, customer relationship management, inventory control and production planning.

The tools range from simple (accounting packages) to complex (full-blown enterprise resource planning systems). But regardless of the tool, they all aim to improve productivity by automating otherwise manual business functions, thereby freeing you and your people for other tasks, and ultimately reducing costs and errors, and increasing profits.

"An IT investment is no different from an investment in a piece of machinery," says Thammer El-Ramahi, Director of BDC's Technology Integration Services Group. "There is a return on investment, and you calculate that return based on the automation of functions within your business."

Many of today's tools also help businesses make better decisions and work smarter by using the information a company generates. Even smaller companies collect an impressive amount of data from various parts of their business—from suppliers and inventory to operations and customer relationships. In fact, many businesses have so much information that they struggle to make sense of it. Decisions on such things as purchases, production runs, budgeting and staffing are too often based on guesses, not data. That's where technology can help.

Accounting

Accounting is the first function many entrepreneurs think of when they look for technology to help in their business, and for good reason. Managing cash flow is one of the most critical challenges entrepreneurs face.

The good news is that many products exist to help improve cash flow management by accelerating bill collection and tightening expense control. They can also save time and reduce errors that come from manually inputting information.

"You're no longer manually crunching numbers or manipulating them in a spreadsheet," El-Ramahi says. "You now have a tool that can do all of this accounting for you."

Many accounting packages can track expenses and income, and prepare budgets, tax information and reports. Advanced versions include inventory optimization functions and project financial tracking, as well as in-house payroll support.

Here are some other accounting tools

- Online billing can help you build your cash flow. It not only speeds up collections, but it also saves money on printing, stamps and cheque processing. You can also sign up with an online billing provider. Some offer basic invoice processing and allow customers to pay online via a bank account or credit card. Others integrate into your accounting software and offer handy features such as a unique webpage for each customer account that allows clients to see their invoice history and make a payment.
- Smart phones and tablet computers are making invoicing and payment almost instantaneous for a growing number of companies. Today, you can log into a mobile billing service and enter transaction details and your customer's credit card information. The payment is processed on the spot, and your customer gets an electronic receipt. An e-invoice is also entered into your accounting system.

Customer relationships

Having a hard time keeping track of your customer information and sales leads? Is important information scattered in different systems across your company or on the computers of sales professionals? Do you wish you could give clients more personalized customer service to encourage repeat business?

If you have challenges such as these, your business may benefit from customer relationship management (CRM) software. These systems store all your customer information in a central, secure place—giving employees access to it with just a couple of mouse clicks. Using information already gathered, including sales history and trends, these tools help businesses serve customers better and generate more sales.

They run the gamut from simple contact management databases to more robust CRM systems that are integrated with your other business software, such as accounting and production-planning systems.

Think of how quickly customer reps at a call centre pull up your client data when you phone. They are likely using a CRM system to quickly access your sales history, account information, customer profile, and a record of interactions by phone, email or in person.

Here are some of the advantages of CRM

- It gives employees centralized, real-time access to information on existing and prospective customers, allowing better coordination of sales efforts.
- It helps companies to identify the best customers and market segments, and focus marketing campaigns and customer-service investments.
- It lets companies customize responses to clients—for example, sending employees a reminder to contact customers every six months and tracking whether they have done so.
- It helps companies track sales opportunities and how they are progressing, ensuring that leads aren't neglected. It also feeds into real-time sales forecasts.
- It helps new employees quickly get up to speed on customers and ensures information is passed along seamlessly when sales reps and other employees leave.
- It allows companies to monitor sales in real time on dashboards and through customized reports on sales performance and trends.

At the heart of any CRM system is information—piles of it. This includes customer profile information (who clients are, and their location, size and type of business), buying patterns (how often they buy and when) and buying preferences (what they buy and why). The system pulls it all together and gives you a more complete view of each customer.

Having all this information in one place helps you in these areas.

- **Sales:** It allows reps to align their pitch with a customer's buying profile and keep track of customers through the sales cycle.
- **Marketing:** It helps you understand your customers better, target marketing messages more efficiently and appropriately, and boost customer loyalty.
- **Customer service:** It lets reps review past interactions and resolve issues more quickly.

If you are considering a CRM system for your business, be sure to first develop a written CRM strategy. Its overriding goal should be to make customers feel like they have a one-to-one relationship with you.

Next, choose the right technology to support your business strategy (see part two—"Ensuring your tech investments pay off"). The least expensive are web-hosted CRM systems that you use on a monthly subscription. They're generally the easiest to implement and maintain but provide the least amount of flexibility. A higher price tag gets you customized, on-premises CRM systems that can be integrated with other applications within your business. Be sure to develop a privacy statement if you want to collect data on customers.

Mobile CRM is also available for use on smart phones and other mobile devices. It gives sales reps and other employees such as repair technicians access to client data when they're on the road.

"No more waiting for a laptop to boot up or fumbling through account notes before an important sales call," one mobile CRM retailer says on its website.

A mobile system can also feed customer emails received on a smart phone into your CRM system's client database. Mobile CRM can even be used to map service calls and optimize an appointment schedule based on the most efficient route.

Human resources

Human resources is another area where many businesses benefit from an investment in technology. The main attraction is automation. HR software can manage payroll and track benefits, such as vacation and sick days. Today, many payroll systems also integrate with banks and handle fund transfers.

"You can definitely save a lot of time by automating such tasks, instead of tracking these things manually and cutting cheques," El-Ramahi says.

Clock-in software is another potentially powerful application. If you're struggling to track employee and subcontractor hours, clock-in software replaces manual punch clocks and time sheets to ensure accurate and efficient tracking of hours worked.

On Vancouver's North Shore, Chris O'Donohue expects revenues to double over the next five years at The Great Canadian Landscaping Company. But O'Donohue needed his firm to be more organized and efficient to reach his ambitious goals.

His solution: Using information technology to enhance productivity. One of O'Donohue's first tech investments was mobile clock-in software for work crews. Instead of punching in at the office, workers are now clocked in at the work site by their foreman, who is equipped with a smart phone. They are also clocked in and out at lunchtime. O'Donohue estimates annual savings on wasted time and overtime are as high as $80,000.

Technology makes us more competitive, more effective and more efficient. This is what's allowing our company to grow.

Chris O'Donohue

Inventory

Many businesses are concerned about reducing inventory to cut carrying costs and free up cash flow. The key to effective inventory control is proper sales forecasting. That's why many of today's inventory control systems include tools to forecast demand and plan purchases. Many of these systems either integrate with or include CRM modules that track a business's sales pipeline. A company can fine-tune inventory levels so there is just enough stock to fill orders on time, reducing storage costs. More advanced systems will also detect and correct for seasonal purchasing trends and the probability of making the sales in your pipeline.

Many tools can also be integrated with point-of-sale software that instantly updates inventory records after each sale. Related technology products—such as bar-code scanners and radiofrequency identification tags—reduce errors and help to liberate staff from having to manually update records.

Dan Clarke ran into a serious inventory crunch at his company, Climate Technical Gear, a Dartmouth, Nova Scotia-based maker and distributor of cold-water survival suits and outdoor clothing.

When recession hit, a drop in sales left him with too much inventory. Clarke didn't want to repeat the experience. The solution: A new database system that allows the company to better plan inventory levels. Clarke also introduced a more efficient and manageable invoicing system. And he added new analytical reports and forecasting tools.

The result: Climate Technical Gear reduced its inventory costs by 33% and shortened its product development cycles by 40%. The tech upgrade helped boost sales 24% in 2012.

Clarke hasn't stopped there. He has gone on to implement new IT tools to help him keep up with fast-growing sales, including a server upgrade, a new warehouse management system, and improved dashboards and reporting tools.

"We have a solid niche market, but there are always bigger competitors trying to move into our space," Clarke says. "If we're not innovative, we're going to get run over."

If we're not innovative, we're going to get run over.

Dan Clarke

Irene Gillespie believes her business wouldn't have survived if she hadn't taken a major risk several years ago. Her homeware wholesale company, Indaba Trading Ltd., based on Vancouver Island, was growing fast. Her warehouse was bursting at the seams.

Gillespie gambled on a move to a much larger, better-equipped warehouse. Crucially, she also adopted an automated inventory management system as part of an accounting software upgrade.

Making all these changes at once cost an enormous amount of time and money. But they helped her survive a painful recession virtually unscathed. They also contributed to a twofold increase in Indaba's revenues.

The improved inventory management system allowed Gillespie to move her product catalogue online, saving on printing costs. Her web-based catalogue is updated automatically whenever there are changes in inventory from a sale or receipt of items. The system lets Indaba's sales reps check the real-time availability of any product while they're with a client. "We have more confidence that we're not flying by the seat of our pants," Gillespie says.

We have more confidence that we're not flying by the seat of our pants.

Irene Gillespie

Operations

Operations is another area that offers exciting opportunities to apply technology. The right tools for your business depend on its size, its complexity and the nature of its operations. For many businesses, project management solutions can help you estimate and plan projects, allocate resources, and track profit on individual projects.

Other businesses turn to tools to improve efficiency through enhanced manufacturing and material utilization planning. Many of today's more advanced tools help you manage all the steps involved in getting products to clients. They allow you to integrate and automate the supply chain, track materials, manage workflow, and stay on top of orders.

In Edmonton, Ray Turner invested in advanced machinery that includes technology to plan production at his company, Lenmak Exterior Innovations, which makes exterior wall cladding.

The technology slashed production time by 75% to 95% for many products and allowed Lenmak to cut its per-unit cost to between half and one-third that of its competitors. The machinery relies on 3-D imaging that Lenmak combines with animation on its website to showcase products—a boon for sales. Turner expects the efficiencies will allow him to double sales in two years with the same number of employees.

Because we can draw in 3-D, we can innovate more easily.

Ray Turner

Innovation

Innovation is an essential ingredient in keeping businesses competitive—but it can be difficult and costly to achieve. Information technology can help turn innovation into a more manageable challenge.

Here again, Lenmak Exterior Innovations is a good example. Turner acquired sophisticated machines that use 3-D imaging technology, which allows Lenmak to develop highly innovative new products, such as architectural exterior panels and curtain wall panels. “Because we can draw in 3-D, we can innovate more easily,” Turner says.

The technology also helps Lenmak to enhance its existing products. Drawing a design in 3-D lets customers visualize the product before manufacturing starts and it’s too late to make changes.

A critical source of innovation is employees, but few businesses have a systematic process for collecting and developing their ideas. Enter idea management software. The software offers a structured way to manage idea generation and development. It includes tools to help employees collaborate on and debate ideas, vote on them, and shepherd them into new products or improvements in business processes.

Communications

Communication technologies are evolving quickly and making businesses more productive than ever. For example, many small and medium-sized businesses are slashing communication costs with Internet-based phone calling (known as voice over Internet protocol, or VoIP). Instant messaging, video conferencing and company intranets can also save costs and encourage collaboration.

Combining technologies can enhance efficiency even more. Employees can access the latest version of important information with a smart phone or laptop while they’re on the road. They can also have a single interface to manage their email, instant messages, task lists and e-calendars.

Enterprise resource planning systems

An ERP system is all-purpose software with modules that manage several key business functions with a shared information database. ERP systems include such functions as accounting, customer relationship management, human resources, inventory and operations. With an ERP system, a business no longer struggles to integrate various tools in different departments and cross reference the data. An ERP system does it all.

Combining all these processes saves money and time, and can help ensure technology investments generate a higher return on investment. Costs are reduced because many functions are included on the same technology platform, thereby reducing acquisition, implementation, training and maintenance costs.

ERP systems can also offer powerful new insights into your business by allowing you to analyze data that is collected and stored in one place.

"Your company's leadership now has a view into the organization and its operations that it didn't have before," says BDC's Thammer El-Ramahi. "Strategically, you have a lot more information. You can look at your organization holistically and make better business decisions."

Larry Cox, owner of Polaris Transportation Group, says his company's ERP system has been a key to its success. "When you see the results, you become much more comfortable with technology. If we hadn't made this investment, our growth wouldn't have happened."

Implementing an ERP system can be daunting for many companies because of the time and expense required, and the large number of competing products on the market. As well, companies must continue operations as they test and launch their new ERP system. To make it pay off, experts say it's important to seek unbiased advice and to choose the right system—one that is aligned with your needs and strategic plan.

2

Ensuring your tech investments pay off

Technology investments can do much more than just satisfy basic business needs. With the right planning, they can play a critical role in boosting your company's competitiveness, growth and profits.

But when small and medium-sized businesses go shopping for technology, it's not unusual to hear about costly investments not paying off. Here are some common pitfalls.

- Tech purchases are often made hastily or in an emergency—not as a thoughtfully planned part of a business strategy.
- Businesses rely on product vendors for advice when choosing systems.
- Purchases tend to be carried out by staff with little IT expertise.
- Technology is often viewed as an expense rather than as a strategic tool.

Montreal entrepreneur Jack McDonald saw first hand how an IT purchase can go wrong without proper planning. A few years ago, McDonald and his business partner, Mark Hanna, needed to buy a major software package for their company, Leeza Distribution.

Leeza distributes branded surfacing materials, such as floor tile and countertops. It was growing fast but still using an off-the-shelf accounting system.

Without doing the right homework, McDonald bought an enterprise resource planning (ERP) system that was poorly suited to the company's needs. It cost five times more than budgeted and was still causing frustration years later.

Later, when it was time for an ERP upgrade, better planning helped Leeza avoid the same mistakes. McDonald called BDC Consulting, which did an in-depth assessment of the company's requirements and its strategic plan. With BDC's assistance, Leeza then formulated a detailed request for proposals for suppliers and conducted a rigorous selection process. The result: A new ERP system that has helped sales shoot up by 40%.

We realized that we required help in selecting an ERP system that would meet our business needs.

Jack McDonald

Training and implementation

You've gone out and invested in a major new technology system, but it's not working out the way you hoped. Benefits are taking too long to realize and employees are grumbling about the confusing new technology. What's gone wrong?

There's a strong chance the culprit is a lack of employee training. It's one of the most common challenges in implementing new technology, especially in smaller companies where training is sometimes not a priority. Yet training is especially vital as technology products become more robust.

Louis Carpentier agrees. His company, Innotex, is a manufacturer of firefighter suits in Richmond, Quebec. It has experienced rapid growth averaging 20% annually in the past five years, and Carpentier decided to implement an ERP system to ensure his business could keep up with all that growth.

He hired BDC consulting to advise the company on system selection. His firm also worked hard to involve employees at each step of the selection and implementation process. It held town hall meetings to give updates on progress, offered training sessions and appointed a "power user" in each department—an employee trained to use the ERP system who could coach colleagues.

You need the employees' full buy-in and confidence because, even with that, it's not easy.

Louis Carpentier

Despite these initiatives, there were still bumps. Many employees resisted the change, including some who were afraid of making mistakes with the new system. Two of the power users left the company during the implementation, and employees often couldn't attend training and practice sessions because they were so busy keeping up with a growing volume of orders.

"We didn't give them enough time to practise on the new system," Carpentier now acknowledges.

In the end, the system took 15 months to implement—instead of the five to seven months predicted by the vendor.

Still, Carpentier is happy with the new system, saying it will help ensure continued growth at the same pace. But he cautions that implementation can take longer than expected and you have to be prepared to go the extra mile to ensure employee involvement and acceptance.

Here are some other common technology implementation pitfalls to avoid

- Don't skimp on maintenance. Implementations often fail because businesses don't budget enough for maintaining the new systems.
- Don't use technology as a crutch to avoid dealing with problems with your business processes. Before making a major tech purchase, make an effort to streamline processes, cut waste and boost operational efficiency. You may then find that you don't need the technology after all or that a different system is more suitable.

"A lot of folks think an investment in technology will fix their process issues. That is typically not the case," says BDC's Thammer El-Ramahi. "With technology, you're going to do whatever you're doing more quickly and efficiently. If you're losing money at whatever you're doing, you're just going to lose it more quickly."

10 steps

to a successful tech investment

Before making a technology purchase, do your homework. Many major IT implementations go off the rails because the product isn't a good fit with a company's needs. The risks are also increased by the large number of products competing for your dollars.

Follow these 10 steps to help ensure your tech purchase turns into a profitable investment—not a money pit. If you lack the required expertise, hire an experienced independent consultant to advise you.

1. Prepare a strategic plan for your business, if you haven't already done so. The plan should include a vision for the future and an action plan for achieving it.
2. Make a list of problems with your current operations and technology solutions. Identify perceived opportunities for improvement.
3. Create a "needs assessment" for new technology systems. Be sure to base it on your strategic plan and to include implementation needs, such as employee training and any needed re-engineering of business processes.
4. Assess potential costs and available resources, keeping in mind that you will have to maintain your systems and update them in the coming years.
5. Use your needs assessment to create a request for proposals to send to vendors. Be sure to consider smaller players, not just major suppliers.
6. Assign scores to how well vendors meet each requirement, and determine the total cost of ownership of each proposal, including costs for licensing, professional services and maintenance. Get more information about the vendors by seeking references from other companies.
7. Invite your top picks to present their products. Provide them with a "demo script" covering the requirements they must address during their presentation.
8. Involve employees throughout the process to help ensure their needs are met and that they take ownership of the new system.
9. With employees' help, develop an action plan for implementing the technology you choose.
10. Monitor implementation and impacts.

Cloud computing and managed services

Cloud computing is catching on with many Canadian small and medium-sized businesses as a way to offload the burdens of buying and maintaining software and hardware.

The idea is simple: Instead of buying and managing your own IT assets, your company pays to use a system owned by a third party. A simple free version of the idea is Google Drive, which allows users anywhere to work and collaborate on word processing, spreadsheet and other applications hosted on Google's servers.

The cloud's key benefit is that it saves companies money because they don't have to purchase, implement, maintain and update hardware or software. For example, some experts estimate a company can save about 65% on an ERP system by implementing it through the cloud rather than buying the software.

Cloud computing vendors offer two main types of services.

- **Infrastructure-as-a-service:** Servers and network equipment that clients access via the web.
- **Software-as-a-service:** On-demand software that clients access online. For example, businesses can use such a service to run an ERP system or accounting software without needing to buy it.

Depending on the service, other benefits can include the following.

- The provider secures and backs up your data.
- Employees can have access to your company's computer systems from any location with Internet access.

In Vancouver, Doug Burgoyne relies on cloud computing at his fast-growing business, Frogbox, which rents eco-friendly plastic moving boxes to people changing homes. The company uses web-based applications for such office functions as email and personal scheduling, as well as for its customer relationship management system.

Burgoyne has 22 Frogbox franchises and plans to be operating in all of the largest Canadian and U.S. cities within three years. To help sustain such growth, Frogbox has designed a web-based system called Frognet that can be expanded as new franchisees come on board. For a monthly fee, franchisees share online systems for ordering, scheduling, billing and accounting.

"I like cloud computing because of its low upfront costs and scalability as the business grows," Burgoyne says. "I avoid the headaches of managing hardware. I don't want to be an expert in managing technology systems. I want to be an expert on managing my business."

Despite the benefits, many entrepreneurs remain skeptical. One of the main question marks is about hosting sensitive business data offsite. How secure will it be? Cloud computing vendors respond that data tends to be more secure "in the cloud" because small and medium-sized businesses often neglect computer security and data backup—two basic services that cloud computing offers.

But cloud computing can come with other drawbacks. These may include down-time if your Internet connection is disrupted and potential difficulties in moving your data to another service provider if you decide to switch.

I don't want to be an expert in managing technology systems. I want to be an expert on managing my business.

Doug Burgoyne

With these issues in mind, you should research vendors thoroughly to ensure you are dealing with a solid, experienced company that's going to be around for the long run. It may also be useful to get references from other companies in your industry.

Another form of IT outsourcing is increasingly popular: Managed services. This is the practice of outsourcing the management of IT infrastructure. Traditionally, smaller companies have either hired in-house tech staff or used an outside repair firm when things go wrong.

By contrast, managed services providers monitor and remotely manage IT infrastructure for a monthly fee. The managed services provider is responsible for the performance of the systems it manages. Many entrepreneurs consider that to be an important insurance policy, especially as technology becomes more complex and critical to a company's business.

Security

What's the biggest technology security problem that Canadian entrepreneurs face?

If you said computer hackers, guess again. The biggest problems by far come from a company's own employees. The good news: They're usually not doing it on purpose.

Most of the security breaches involve accidents: An employee mistakenly emailing confidential client information outside the company; a cashier leaving a customer's credit card information on a publicly viewable computer screen; or a manager inadvertently deleting important files.

One of the most common breaches: Accidentally downloading malware—those nasty computer viruses and Trojan horses that can cause mayhem in your computer network. Also very common: Neglecting to back up data regularly.

A 10-question IT security checklist for your business

(If these processes seem too complicated for your business to handle, you may want to consider hiring outside help.)

1. Do you have a security policy that covers acceptable IT use, password guidelines, security practices, and procedures for downloading and installing new software?
2. Do you centralize critical data (anything needed in day-to-day operations) on a server and back it up nightly to a remote location?
3. Do you centralize important data (anything important to the business but not updated frequently) on a server and back it up semi-regularly off site?
4. Do you have a firewall and intrusion detection on all web connections?
5. Do all computers have working anti-virus software, and the latest system updates and security patches?
6. Are all modem and wireless access connections known and secured?
7. Do you have a company privacy policy and confidentiality agreements for contractors and vendors?
8. Is customer financial information encrypted and accessible only to those who need it?
9. Are paper files kept in locked filing cabinets with controlled access?
10. Do you do a periodic audit (every six months at least) of your IT security checklist?

Making technology your ally

BDC clients featured in this eBook have used technology to fuel greater productivity, efficiency and innovation in their businesses. They've made technology a source of growth and higher profits, not of trouble and expense.

Dan Clarke brought in a new database system at Dartmouth, Nova Scotia's, Climate Technical Gear and managed to cut inventory costs by 33%.

In Richmond, Quebec, Louis Carpentier's company, Innotex, selected and implemented an enterprise resource planning system that will allow the manufacturer of firefighter suits to maintain its torrid pace of growth for years to come.

Ray Turner, at Edmonton's Lenmak Exterior Innovations, used a major technology investment to spark a whirlwind of product innovation.

For these entrepreneurs, technology has been a game changer. It can be for your business, too.

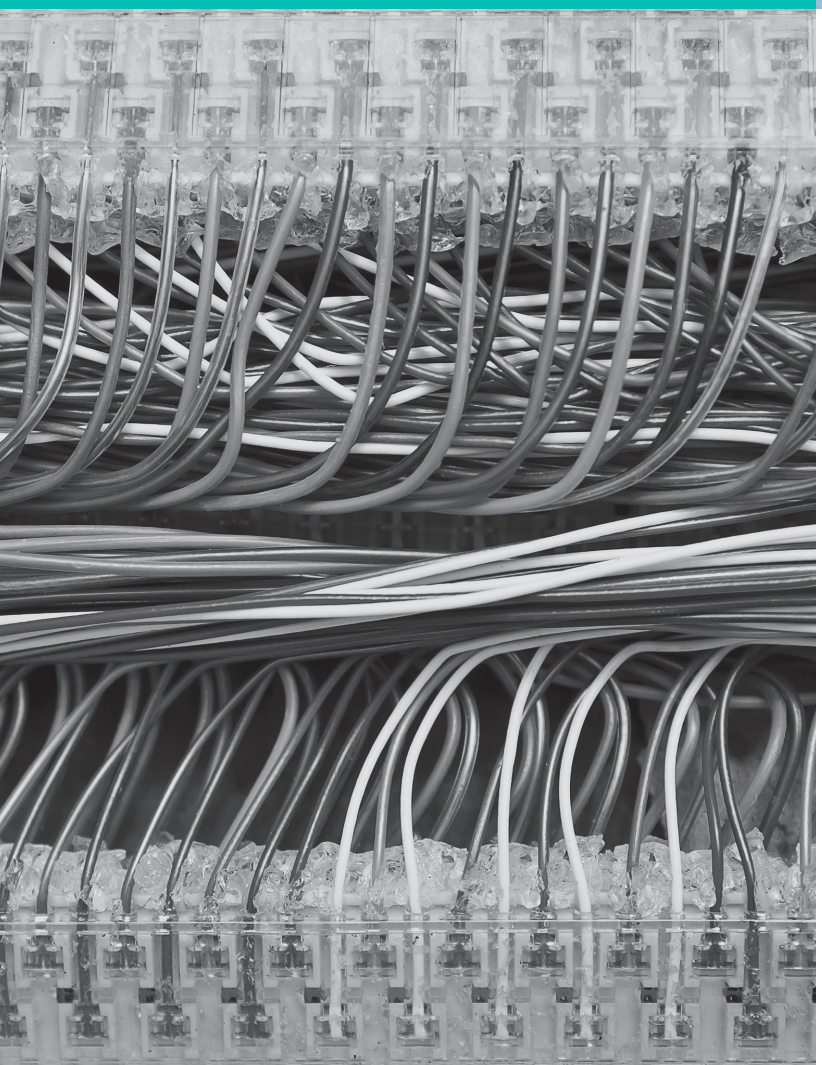
However, entrepreneurs often have difficulty coming up with a coherent technology strategy and implementing it by selecting the right tools for their business and finding the financing they need to pay for them.

The good news is that BDC can help you at every step of the way. From more than 1 business centres across Canada and online at bdc.ca, we offer easy access to technology financing and independent expert technology advice at a price you can afford.

Profiting from Technology: A Guide for Entrepreneurs

is published by the Business Development Bank of Canada (BDC). Content from this publication may be reprinted when permission is obtained and credit given to BDC.

For editorial information, please contact BDC Public Affairs at communications-bdc@bdc.ca.



bdc
financing.
advising.
smarts.

Share this eBook

bdc.ca