







## CREATE A LEANER, MORE PROFITABLE BUSINESS

A guide for entrepreneurs





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A GUIDE FOR ENTREPRENEURS

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## A NEW START

It's a frustrating and confusing situation for many entrepreneurs—your company is bringing in sales but your profits are falling short of your expectations. Maybe, you're just breaking even or even losing money. Why? And how can you turn things around?

The answer probably lies in waste and inefficiency lurking in your business and acting as a brake on your ability to generate profits. But figuring out how to make your company leaner and more productive isn't easy. In fact, many entrepreneurs have no idea of how much inefficiency has built up in their business.

You wouldn't think that would be the case for Alain Duclos. After all, Duclos is an industrial engineer with years of experience running the steel-cutting business he owns in Montreal. But when Duclos brought in an operational efficiency expert to help make improvements, he was shocked by the gains his company achieved.

That's not an unusual experience, says BDC Business Consultant Stéphane Chrusten, who advises entrepreneurs on how to boost operational efficiency. In his team's experience, only 15 to 20% of an employee's workday at a typical Canadian small and medium-sized business is spent on purely productive activities.

#### **LEAVING POTENTIAL ON THE TABLE**

That's no small problem in today's highly competitive marketplace. Businesses that fail to continuously improve their efficiency risk falling behind leaner competitors. Often, it's a matter of survival.

The good news is that with some straightforward improvements, you can slash waste, boost productivity and reap the benefits on your bottom line.

A leaner operation can lower costs, increase output, help eliminate quality problems, reduce space requirements and cut time to market. It can also improve employee morale. And almost any business can benefit—whether in manufacturing or services.

With proven tips from BDC's team of operational efficiency experts and stories from successful Canadian entrepreneurs such as Alain Duclos, this eBook shows you the steps to create a leaner, more profitable business.

## OI\_ GET STARTED

Before starting on an efficiency drive, it's important to make sure your business is ready.

First, take time to get your team on board. Their buy-in is crucial to your project's success.

Supervisors and employees must understand how important they are to making change happen at your company. Talk to them about your goals and get their feedback and ideas. Commit to providing them with the necessary training and tools to succeed.



#### **Discuss operational challenges**

Next, sit down with senior managers and key employees to consider operational problems in your business and how they impact production, staff, customers and your bottom line. Do certain problems keep cropping up? What opportunities could your business take advantage of if it was more productive?

Do you have operational efficiency expertise in-house, or is it time to invest in an outside expert?

Also, make sure to budget for your lean initiative. While your project should pay off fairly quickly, you'll need to make an initial investment to kick things off—and possibly additional investments later on to sustain your progress.

If you don't have adequate resources, <u>discuss your</u> <u>financing needs with your bankers</u>.

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#### **Know your numbers**

Finally, consider whether you have adequate information about your business. You'll need accurate financial and operational data to compare how well you're doing against similar companies and identify problems.

If you lack data, discuss your needs with your staff, outside advisors or an operational efficiency consultant.

#### Assess and benchmark your performance

Once you're ready to kick off your project, the first step is to carefully assess your current level of operational efficiency. Your goal should be to figure out how your performance compares to that of other companies in your industry and identify priority problem areas.

"The goal is to identify sources of waste," BDC's Stéphane Chrusten says. "Most entrepreneurs are heavily focused on their daily operations and often don't stop to look at what's not working in their business."

#### Target processes that add no value

Your aim is to get rid of waste wherever it can be found in your business, including the following:

- overproduction
- idle machines or employees
- unnecessary operations or employee effort
- excessive inventory
- poor product design or quality
- inefficient work station arrangement
- inadequate employee training

Avoid blaming your staff for problems and mistakes. Focus instead on how you can improve processes; eliminate obstacles and sources of error; and help employees do their jobs better.

#### **Explore reasons for problems**

To achieve these goals, <u>BDC operational efficiency experts</u> use two separate assessment procedures with clients. First, they sit with the entrepreneur and key managers to learn about the company. They ask about operational issues and explore reasons for the problems and options for addressing them.

Second, they tour the business and evaluate 25 key operational factors on a 0-to-5 scale. They look at such issues as workspace layout and organization, quality control, production planning, inventory management and equipment maintenance.

They also calculate the company's value creation index (see page 8) and benchmark it against the industry average in Canada.

#### Skeptical entrepreneur won over

Alain Duclos was skeptical when an efficiency consultant claimed his company was missing out on huge productivity gains and the accompanying profits.

After all, Duclos is an industrial engineer who has built a solid business at his Montreal-based company, CR Slitters, which cuts large coils of steel and aluminum into specific sizes for manufacturing clients.

Despite his doubts, Duclos decided to give the efficiency consultant a shot. Even if his business achieved half the promised gains, he figured it would still be worth it.

Duclos knew he had to make some kind of change. His customers were demanding quicker delivery times. And due to high shipping costs, he couldn't expand much beyond his existing clientele in Ontario, Quebec and the Maritimes and stay competitive with Ontario companies in his industry. Getting leaner seemed like a smart way to maintain profits.

#### Start with assessment

The operational efficiency consultant was BDC's Stéphane Chrusten. He first analyzed Duclos's business, then proposed some initial projects to eliminate waste and increase productivity. These included cleaning up workspaces, standardizing processes and creating a performance dashboard to monitor key performance indicators.

Duclos wasn't convinced about the need for a dashboard, but he was quickly won over when he saw it in action. "I look forward to seeing the dashboard every day," he says. "Everyone can see where the problems are and how to improve."

Chrusten also worked with Duclos on an <u>advanced efficiency project</u>—improving the coordination of pre-production tasks as a way to reduce machinery idle time. The steps cut the average set-up time for a job from 18 to 12 minutes—a huge gain that boosted the profitability of each order.

#### **Output shot up**

The results amazed Duclos. Idle time fell 30%, while output shot up 15% without any increase in hours for his 45 employees. The company broke its production record the next month. "It was shocking," Duclos says. "I always knew there were things we could improve, but I never thought we could make that much progress."

After his company's record month, Duclos organized a small celebration to thank employees. "They were very proud," says Duclos, who is planning more lean projects.

"They already had a good team spirit. I don't want them to work harder, just better."



I always knew there were things we could improve, but I never thought we could make that much progress.

- ALAIN DUCLOS

#### MEASURING YOUR PLANT'S EFFICIENCY

How efficiently is your plant turning raw materials into finished products? It's an important question for manufacturers.

You can find out by using a metric called the value creation index. It can be applied to your plant as a whole or to individual products.

To calculate it, take your sales and subtract the cost of raw materials and subcontracting. Then divide the result by the number of hours of labour. The result is how much value (in dollars) your business creates for each hour of labour.

Think of it as the value being added inside the four walls of your plant. Having such data in hand allows managers see the relative profit performance of their company against comparable Canadian businesses.

Typical values can range from about \$20 per hour for seafood companies to \$70 per hour for bread and bakery product makers and over \$150 per hour for chocolate companies.

An improvement in your number means your plant is becoming more productive and more profitable. You can use the data to better target efficiency initiatives, adjust your product mix and pricing if needed, and identify efficiency problems in individual product lines.

## 02 \_ TAKE ACTION

After assessing your company's efficiency, it's time to take action. BDC recommends that businesses start with three fundamental efficiency projects that are useful for most companies. They are setting up performance dashboards; improving supervisor performance; and initiating continuous improvement by cleaning up and standardizing workspaces.

These three lean initiatives are relatively easy and inexpensive to implement and can produce quick gains. They can also be a launching pad for more advanced or tailored productivity initiatives. (See more details in the next section, Go deeper.)

Here are details on each of the three fundamental efficiency projects.

#### CREATE DASHBOARDS

As the great management theorist Peter Drucker once observed, "What's measured improves." That's never truer than when you want to improve your company's operational efficiency.

By continuously measuring your performance in key areas, you can evaluate how you're doing compared to internal goals and external benchmarks, such as industry averages. Then, you can get started on improving your results.

A good way to introduce a measurement system is to focus on key performance indicators (KPIs) you identified in your initial assessment. Track them by creating performance dashboards.

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#### **Monitor your performance**

Dashboards let you compare your performance from day to day and see the impact of efficiency efforts. It becomes natural to start each day by looking at what you did yesterday and thinking about how you can do better today.

Choose indicators for your dashboard that are easy for employees to collect and understand. This will make it easier for them to keep up the work of collecting and recording the data.

Don't overload staff with too many KPIs to track. Select no more than four per department. Devote your energy to improving one or two areas at a time where you have major operational challenges, such as lead time, inventory management or product quality. Once you've attained your goals in one area, move on to the next.

#### **Employee training is critical**

It's vital to train your team on tracking your KPIs and using the dashboard. Without adequate training, this efficiency tool could slide into disuse or fail to achieve its potential.

The very effort of monitoring KPIs often prompts a business to take significant steps toward getting leaner—even before implementing additional efficiency projects.

It's important to capitalize on employees' desire to share their ideas and feedback. They're better positioned than anyone to know about operational problems and potential solutions.

#### **Get employees involved**

One way to do this is to invite employees to make suggestions and give feedback on ongoing efficiency initiatives, and offer their ideas for new projects to consider. You should encourage discussion at team meetings, where efficiency should be a regular agenda item.

Continuous improvement shouldn't end at the walls of your company, either. Seek input from your customers and suppliers, and involve them in your initiatives.

Their feedback can help you improve products to add more value. And keep an eye on your industry and the marketplace. Regularly benchmark your performance against that of your competition and companies in other parts of the world. Follow best practices and stay on top of trends.

#### MPROVE SUPERVISOR PERFORMANCE

Supervisors are critical to the success of your efficiency efforts. However, in many companies, there's a gap between senior management's goals and what's happening on the front lines.

To achieve your goals, you need supervisors who can control the floor and maintain continuous improvement initiatives. It's essential to empower supervisors to go beyond their regular duties and strive for improvement.

A key issue is that many front line managers don't spend enough time working to improve operations. Instead, they're tied up with administrative tasks, meetings, employee training or even getting their hands dirty with production tasks. It's not unusual for supervisors to spend just 30% of their time doing active supervision. Entrepreneurs should strive to get that number up to at least 50%—and, ideally, 70%.

#### **Encourage active supervision**

Active supervision means being on the floor and keeping everyone focused on achieving objectives and constant improvement.

One tool for boosting the performance of supervisors and their teams is to require them to track their daily activities on a performance scorecard that lists your company's KPIs. The scorecard should include a checklist of supervisor tasks and the time it took to complete each one. It should also identify specific production objectives for the day and any obstacles encountered.

Supervisors should also have a space on the scorecard to write down their observations, ideas for improvement and noteworthy events during the day. All these data can be invaluable for identifying operational bottlenecks and finding solutions.

Here are other tools to improve supervisor effectiveness:

- **Implement team meetings**—Supervisors should hold brief daily team meetings to discuss results on the dashboard, production objectives, problems, progress on efficiency projects and thoughts for new initiatives. Encourage supervisors to listen to ideas from employees.
- Appoint team leaders—You can free up your supervisors' time for higher-value activities by appointing employees as team leaders. These employees can be put in charge of ensuring work standards are respected. They can also replace absent employees, help with production problems and provide training.
- Reward supervisors—Give supervisors a stake in your efficiency campaigns by rewarding them for improvements, but also hold them accountable for unsatisfactory results.

Senior management should evaluate each supervisor to decide whether the right person is in the right position. Perhaps a shuffle of personnel will be necessary to achieve your objectives.



#### CLEAN UP AND STANDARDIZE WORKSPACES

A disorganized and untidy workplace is often a sign of an unproductive company—and an indication of deeper issues. One of the most basic efficiency exercises is to clean workspaces and standardize how they work using the 5S methodology developed by Toyota Motor Corporation.

The process can boost morale, reduce mistakes and help employees find tools and documents more quickly. The result will be a more productive, safer and better-organized work environment.

Here are the elements of the 5S approach.

- Sort—Sort items used daily, monthly and yearly, and keep on hand only what is immediately needed. The rest should be labelled and relocated.
- Straighten—Objects should be stored functionally, with visual aids such as labels to help staff put things away in the right place.
- Shine—Ensure a clean work environment by removing dirt, waste and scrap and implementing regular cleaning schedules.
- Standardize—Teams should establish rules and work standards on common operational issues, such as the type of materials and tools to use and how information is shared in the group.
- Sustain—An internal audit system should be used to ensure work processes
  are maintained, including regular inspections and solicitation of feedback
  on how to improve the process.

#### Business was in over its head

Shaun Fraser put many of these fundamental efficiency initiatives into action at his Moncton company, Pump House Brewery, an award-winning maker of craft beers.

Fraser's sales were growing rapidly and he wanted to increase production. But he faced challenges with downtime, inventory control and high labour costs. "We realized we were over our heads with issues such as flow of materials, distribution and production capacity."

Fraser hired BDC operational efficiency consultants, who assessed the business, analyzed profitability and waste, and audited key performance indicators. The consultants then worked with Fraser and his team to identify and prioritize the most effective optimization projects.



We saw a lot of positive gains, such as increased capacity, reduced labour costs and stronger managers.

– SHAUN FRASER

#### **Tackled lean projects**

The company's initiatives included introducing dashboards to monitor progress, implementing the 5S methodology to improve workplace organization, developing standard operating procedures, clarifying employee roles and providing continuous improvement training to employees.

The result was an 18% jump in revenue over the two years of the project. Average product yield moved to 94% from 77%. Morale and teamwork improved, and thanks to the better-organized shop floor, the company is now diversifying into wine and craft whiskeys.

"We saw a lot of positive gains, such as increased capacity, reduced labour costs and stronger managers," Fraser says. "Today, we have lean meetings on a weekly basis and are able to measure our productivity. When you start seeing real results, it's very encouraging."

# STEPS TO SOLVE OPERATIONAL PROBLEMS

Do you ever encounter the same problem over and over again in your business? Chronic problems waste time and resources, and fester into bigger headaches. As renowned management consultant William Edwards Deming once said, "If you do what you've always done, you'll get what you always got."

Implementing a problem-solving approach in your business can help you quickly zero in on fundamental causes of recurring issues and find solutions. The problem-solving approach can be broken down into seven steps.

#### Identify problems

Problems can show up as temporary setbacks, wasted efforts and/or interruptions in production. The first step is to be aware a problem exists and view it as an opportunity for improvement.

### 2 Describe the current situation

In order to fully understand a problem, you need to go to the source and find all the contributing factors. Ask yourself these questions:

- Who? (Who is concerned or needs to be informed?)
- What? (What are the processes, products or parts in question?)
- When? (When did the problem occur?)
- Where? (Where did the problem occur?)
- Why? (What changed recently? Are there new participants?)
- How? (Does the problem happen constantly or only occasionally?)

## Take temporary countermeasures on the spot

Don't look for the perfect solution at the outset. First, put out the fire. For example, if you notice you are missing resources to finish an order, possible countermeasures could be to borrow material from another team, move on to another order or transfer employees to another order.

#### 4 Find the root cause

Analyzing the fundamental causes of a problem is like pulling weeds. If you don't pull up the roots, they'll just grow back. Problems can be divided into two categories: simpleto-normal difficulty and complex.

Simple-to-normal problems can be analyzed with the "five whys" approach—asking "why" at least five times to trace the problem back to its ultimate source.

For example, if protective strips are coming off a machine, you would ask the following:

- Q. Why are the strips coming off?
- A. There isn't enough glue.
- Q. Why isn't there enough glue?
- **A.** The gluing equipment isn't working well.
- Q. Why isn't the gluing equipment working well?
- **A.** The glue reservoir is blocked.

ANALYZING THE FUNDAMENTAL CAUSES OF A PROBLEM IS LIKE PULLING WEEDS. IF YOU DON'T PULL UP THE ROOTS, THEY'LL JUST GROW BACK.

And so on for at least five whys. In this case, you might eventually trace the problems back to a new employee who hasn't had enough training on maintaining the machine.

More complex problems can be analyzed systematically using what's known as an Ishikawa diagram, a method of thoroughly evaluating a production process. This approach allows you to evaluate machines, labour, materials, methods, and the physical and human environment.

You explore all possible root causes of a problem by asking questions in each of these areas. For example, with machines, you would ask such questions such as the following: Does it meet production requirements? Is inspection adequate? Does it meet accuracy requirements? For each question, you answer yes or no and give supporting facts.

This focuses the team on causes and not symptoms.

#### 5 **Propose solutions**

Now consider solutions that address the fundamental cause of the problem. Fully examine different options, taking into account how other teams will be affected. Come to a consensus on the best solution. Plan alternatives in case the first solution doesn't work.

#### 6 Establish an action plan

Develop an action plan to implement your solution. Allocate sufficient resources and establish a timeline. Monitor progress and standardize the solution so you can apply it across your business.

#### 7 Check results

Collect data to evaluate your results. Consider measuring your progress with performance indicators, benchmarking against your initial situation and/or any applicable standards. Evaluate gaps between actual and anticipated results; keep team members informed; and adjust your plan as necessary.

Here are some examples of advanced projects that may be suitable for your business.

A. **Reorganize workspaces**—Many businesses waste a lot of effort because of inefficient plant or office layout that needlessly increases the amount of movement needed for people and material. Optimizing your facility's layout and the design of workspaces can improve production flow and capacity, promote teamwork and improve unity among departments.

This type of initiative can target your entire facility or a specific department.

- B. **Optimize office processes**—It's important to focus on optimizing your client-facing and back-office processes to reduce non-value-added activities, cut lead time, reduce errors and simplify information flow.
- C. **Master production planning**—Production planning is another key area where you can focus efficiency efforts. An initiative in this area can help you reduce labour and inventory costs, optimize equipment usage, increase capacity, improve on-time deliveries, eliminate wasted time and improve process flow.
- D. **Cut set-up time**—Reducing set-up time can help boost your production capacity and reduce employee and machinery idle time. This is critical in an age when customers are demanding more variety and ever greater levels of customization.

A common approach is to implement a methodology called SMED (Single-Minute Exchange of Die), also known as Fast Changeover. SMED is a way to reduce the time for tooling changes and eliminate wasted effort in the process. The method helps you identify counterproductive elements and determine which operations you can perform while equipment is running and those for which equipment must be stopped.

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E. **Optimize inventory management**—Excessive inventory is costly and can create a lot of waste in a business. One solution is to <u>implement just-in-time</u> <u>inventory management</u>, such as the Kanban system developed at Toyota. It dictates that production respond to actual demand (also known as a "pull" system) rather than forecasts (a "push" system).

Adopting such an approach requires a company to have a responsive supply chain and highly agile production capabilities. The benefits can include not only lower inventory costs, but also better responsiveness to customer needs and requirements.

- F. **Invest in other projects**—There are numerous other advanced efficiency initiatives you can undertake, including the following projects:
  - implement quality management methods
  - enhance health and safety standards
  - attain quality certifications
  - invest in productivity-boosting technology

#### Company needed help with growing pains

Craig McConnell embarked on an efficiency exercise after experiencing growing pains at his rapidly expanding company, Miller McConnell, which makes business signs in Ottawa. Salespeople were overwhelmed. The production process was inefficient, resulting in delays and the need to redo work.

"We tried a lot of approaches, but nothing seemed to click. We had to make changes," McConnell says.

For help, he hired a BDC efficiency expert who met McConnell's team, assessed the company's processes and benchmarked the results against those of similar companies.



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The assessment opened our eyes. We were shocked at what was uncovered.

- CRAIG MCCONNELL

"The assessment opened our eyes," McConnell says. "We were shocked at what was uncovered. It created an environment where questions were being asked that weren't asked before."

#### Salespeople overwhelmed

Among the inefficiencies identified was the fact that salespeople were responsible for too many tasks. Beside their sales responsibilities, they did everything from estimating jobs to calculating costs and preparing work orders.

Moreover, despite the need for constant communication between the sales department and production staff, the two departments weren't on the same floor, which meant constant travel up and down stairs.

With the consultant's help, McConnell reorganized roles to let salespeople focus on what they're good at—sales—and hand off other tasks to estimators and project coordinators. No new employees needed to be hired. As well, the sales staff was moved to the same floor as production.

#### **Morale boosted**

McConnell says employee morale is up and he is sure the project will pay off. He thinks it will permit even quicker growth and is already eyeing a new efficiency project.

"Everybody seems to be smiling," he says. "We're off to a great start."

## EMBRACE CONTINUOUS IMPROVEMENT

It's not always obvious how to make your business more efficient. The lesson of this guide is that there are tested methods you can follow to identify problems, implement solutions and move on to tackle other issues.

Your goal is to create a culture of continuous improvement that will make you an industry leader. Successful Canadian entrepreneurs profiled in this guide have done it and so can you.

Montreal industrial engineer Alain Duclos was amazed after an efficiency exercise sharply reduced machinery idle time, increased output and led to a production record at his sheet metal-cutting company, CR Slitters.

At Moncton's Pump House Brewery, Shaun Fraser saw an impressive revenue increase after he put in place performance dashboards, the 5S methodology and other basic efficiency initiatives.

In Ottawa, Craig McConnell's sign-making company, Miller McConnell, underwent an eye-opening efficiency assessment that led to simple changes that improved morale and set the stage for faster growth.

These entrepreneurs have embraced the three critical elements of operational efficiency:

- benchmark your performance
- identify and eliminate waste
- monitor and manage your progress

It's an approach that will allow you to create a business that is leaner, more agile and more profitable. It will equip you to set high goals and reach them, and to take on competitors and win.

With your ambition and the commitment of your team, there's no limit to what you can achieve together.



Looking to put a stop to your losses, boost your profits or meet increased demand? Our tested approach to operational efficiency could be the answer.

#### Our operational efficiency experts can help you:

- > Solve critical production issues and prevent them from happening again
- > Boost your capacity to respond to client and market needs
- > Implement a culture of continuous improvement
- > Foster employee engagement and improve collaboration
- > Pave the way for sustained growth and productivity

Give us a call to find out how we can help you turn things around. Call 1-888-463-6232 or visit bdc.ca





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