

Investment and People Practices for the Future of Work

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Future of Work



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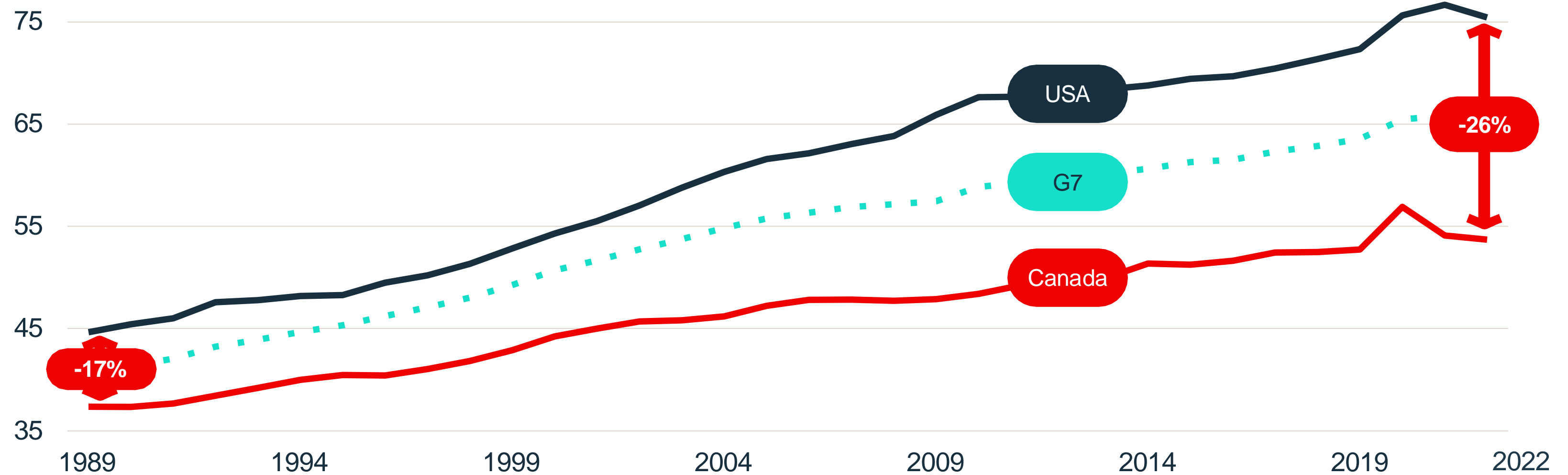


Bank of Canada says the country faces a productivity 'emergency'



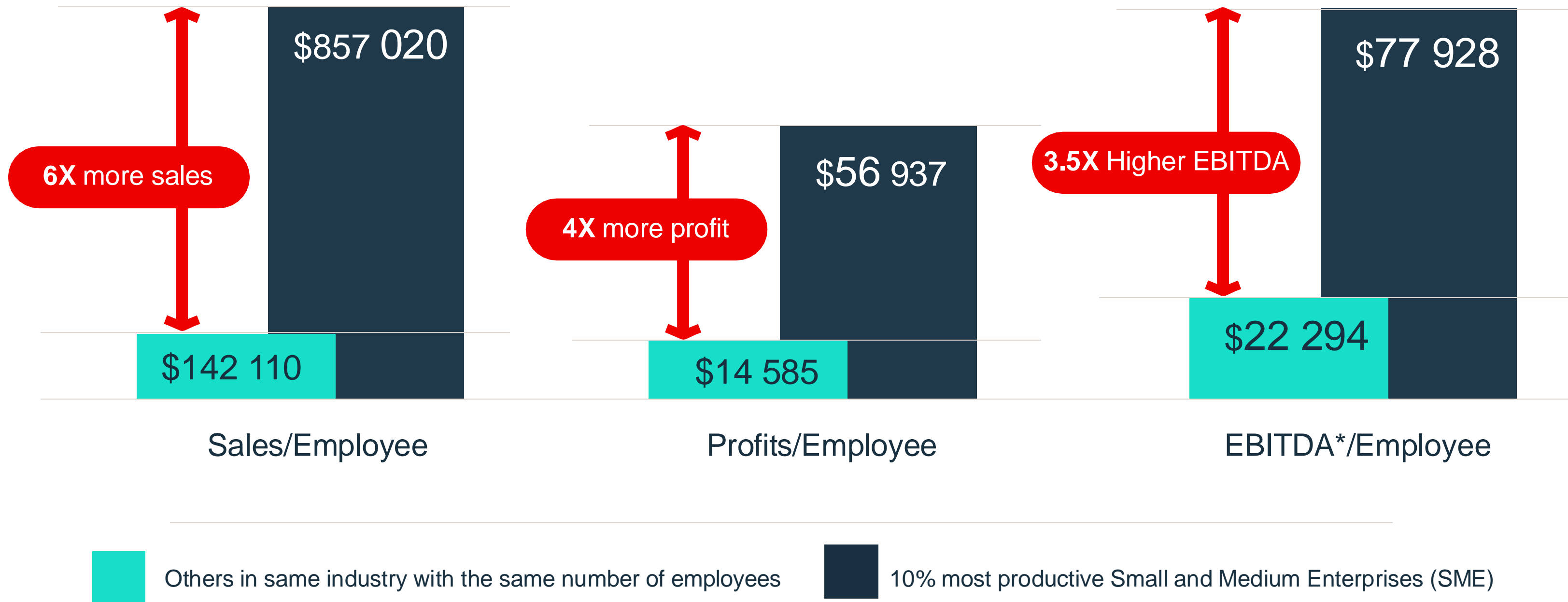
Canada has fallen behind most of its G7 peers

GDP per hour worked, US\$ at constant 2010 prices and with purchasing power parity

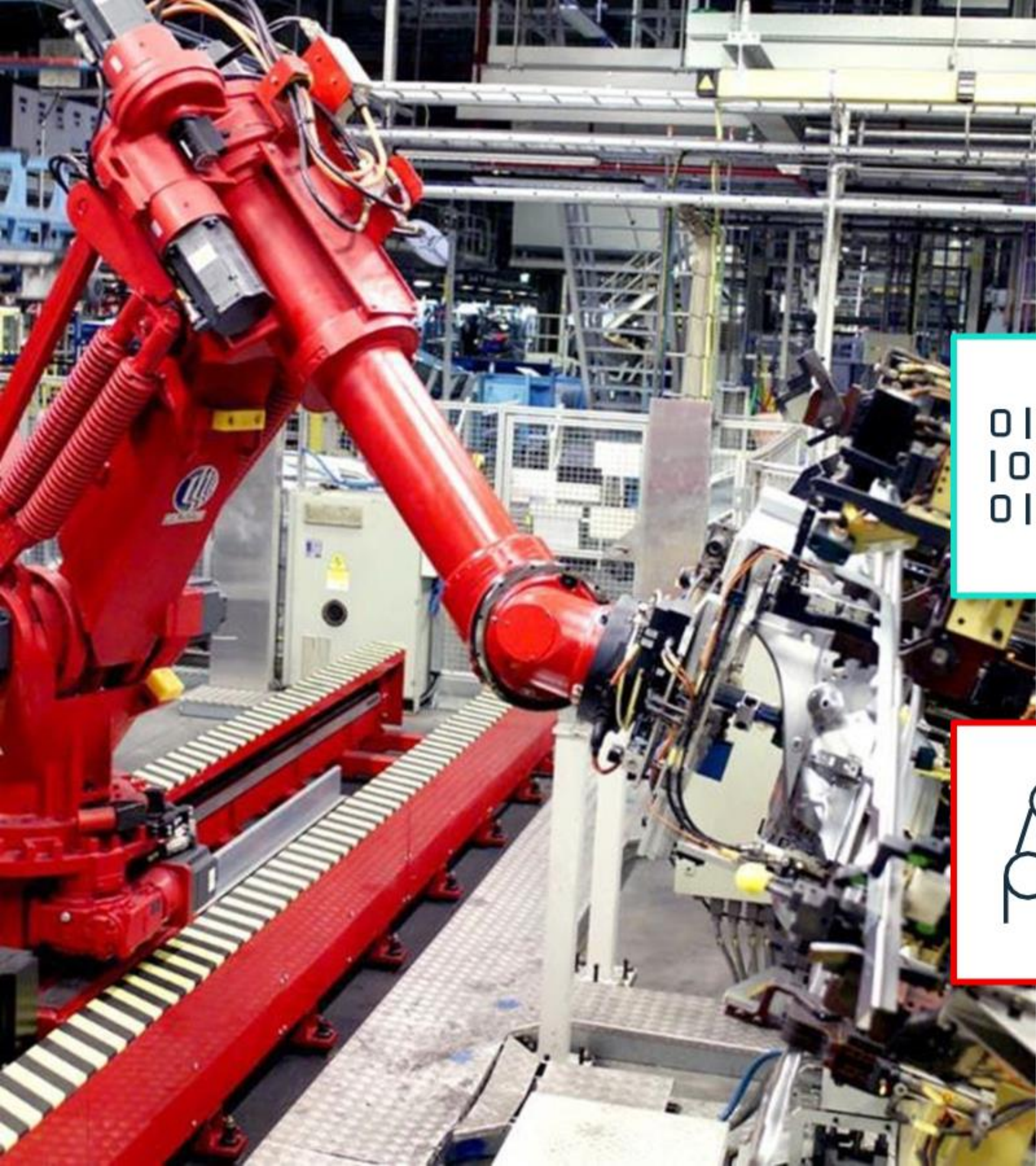




Investing in productivity sets companies apart and improve financial performance



Source: Statistics Canada, special compilation based on tax data; BDC calculations



Digital vs. Industrial Automation: Understanding the Distinction



Digital Automation

Focused on automating information flows in business processes and activities beyond the production floor.

Software-oriented



Industrial Automation

Focused on automating physical processes and activities on the factory floor, in warehouses, or on construction sites using physical equipment.

Hardware-oriented

Artificial intelligence

Refers to machines or computer systems that can simulate human intelligence processes to perform tasks that, until recently, only humans could perform.



AI analyzes data by simulating the neural processes responsible for:

- Reasoning
- Decision making
- Problem solving

Digital process automation and AI can help SMEs in many ways



→ Control costs

- Automating repetitive tasks
- Improving productivity
- Predicting equipment breakdowns

→ Increase sales

- Generating leads
- Contacting prospects
- Personalizing recommendations

→ Ease labour shortage

- Reducing number of redundant tasks
- Increasing engagement
- Facilitating recruitment

→ Navigate uncertainty

- Improving forecasting
 - Monitoring inventory
 - Optimizing resource allocation
-

Benefits for a More Accurate ROI Calculation



Tangible Benefits

- Labor Savings
- Increased Production
- Downtime Reduction
- Temporary Staff Costs
- Defect Reduction

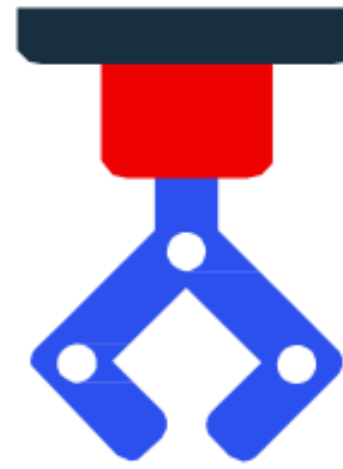
Intangible Benefits

- Improved Health and Safety
- Enhanced Brand Reputation
- Supplier Relations
- Employee Satisfaction
- Reduced Fork Truck Movements
- Accurate Production Output Measurement
- Marketing and Sales Opportunities
- Quality Improvement

Manufacturing

Key productivity facts

- -0.4% average annual productivity growth since 2019
- \$67 of real GDP per hour worked vs. an average of \$59 for all firms
- Low efficiency in the use of production inputs, weak capital productivity, limited skill upgrading
- Less than 9% of manufacturers use robots.



Solutions

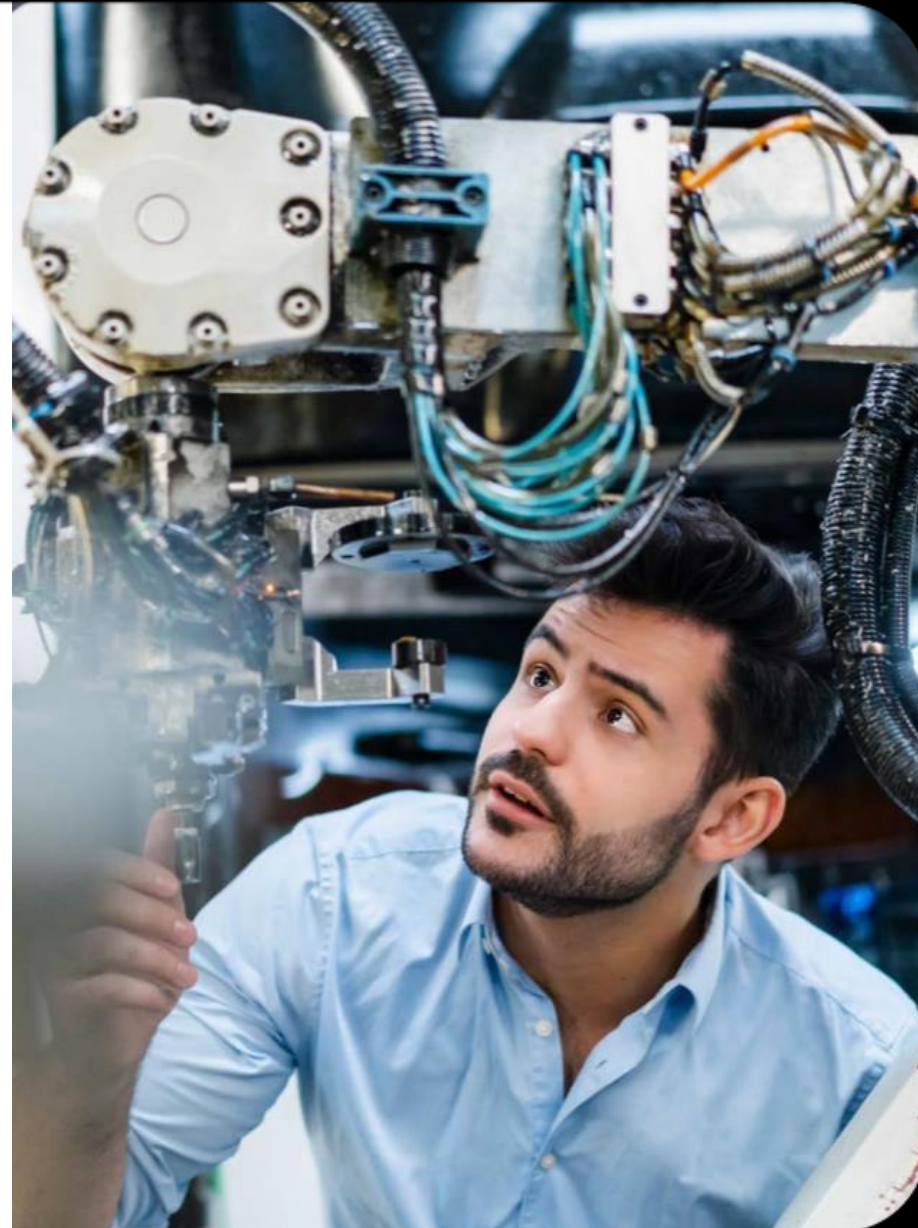
- Review workflow and reduce waste
 - Identify bottlenecks
 - Implement lean manufacturing (Six Sigma)
- Leverage technology and data
 - Implement real-time data analytics
 - Embrace automation, digitization and robotization
- Upskill employees so that they are more productive, flexible

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Appendix Materials

ROI Example



ROI example of investing in robotics and automation

Example Metal Inc. case study:

Cost of Robotic System (fully loaded) \$500,000

Annual Savings

Labour Savings \$100,000

Quality Savings \$30,000

Increased Throughput \$50,000

Staffing Savings (retention) \$10,000

Total Annual Savings **\$190,000**

$$\text{Payback Period} = \frac{\text{Cost of System}}{\text{Total Annual Savings}}$$

$$\text{ROI Calc (Year 1)} = \frac{\text{Total Annual Savings} - \text{Cost of System}}{\text{Cost of System}}$$



Simple Case Study Example

Total Benefits (5 Years)
+\$450k

Total Investment

\$500,000

Payback Period

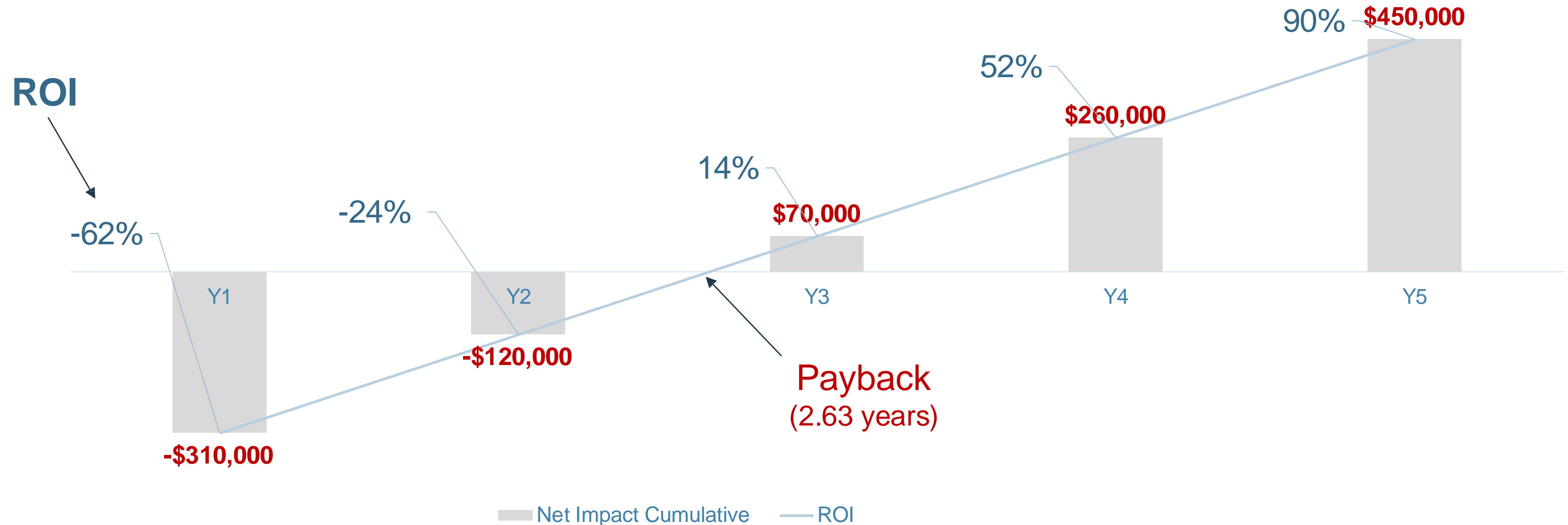
2.63 Years

5 Year ROI

90%

Cumulative Savings

\$950,000





Simple Cashflow Analysis with financed equipment

		Year	Payment	Interest	Principal	Loan Balance	Annual Savings	Cashflow Impact
Assumptions		1	-\$35.00k	-\$35.00k	-	\$500.00k	\$190.00k	\$155.00k
		2	-\$35.00k	-\$35.00k	-	\$500.00k	\$190.00k	\$155.00k
Loan Amount	\$500,000	3	-\$121.95k	-\$35.00k	-\$86.95k	\$413.05k	\$190.00k	\$68.05k
Principle Postponement	2 years	4	-\$121.95k	-\$28.91k	-\$93.03k	\$320.02k	\$190.00k	\$68.05k
		5	-\$121.95k	-\$22.40k	-\$99.54k	\$220.48k	\$190.00k	\$68.05k
Annual Interest Rate	7%	6	-\$121.95k	-\$15.43k	-\$106.51k	\$113.97k	\$190.00k	\$68.05k
		7	-\$121.95k	-\$7.98k	-\$113.97k	\$0.00k	\$190.00k	\$68.05k
Amortization (years)	5	8	-	-	-	-	\$190.00k	\$190.00k
		9	-	-	-	-	\$190.00k	\$190.00k
		10	-	-	-	-	\$190.00k	\$190.00k