



Improving Shop Floor Productivity

The IoT Quick Start Program

Top 5 Business Challenges for SME's

Availability of skilled labour

47%

Cost of labour

23%

Finding new clients

22%

Rising tax burden in Canada

18%

Cost of new machinery

12%

*CME - 2018 Survey

The Problem

Average Machine is down

70.9%

of every shift

*Industry Week Best Plants Survey 2018

Two Sides of Same Coin


Downtime



Productivity

Downtime Data Problem

- We don't know how much or why
- Lack of transparency & visibility of downtime
- What is the Truth?

06/01 Job Traveler					
WO: 000000154				SO: 0539	
Customer: Alpha Amplifiers			Due : 06/17/20		
Part Number: LOT-1122			Qty: 50		
Description: TEST 1 LOT CODE					
Work Center	Accept	Setup	Run	Total	Remarks
Material Staging	✓	1.000	0.400	21.000	26
AUTO INSERT-THT	✓	0.560	0.340	17.560	21

IoT Changes Things!

Then

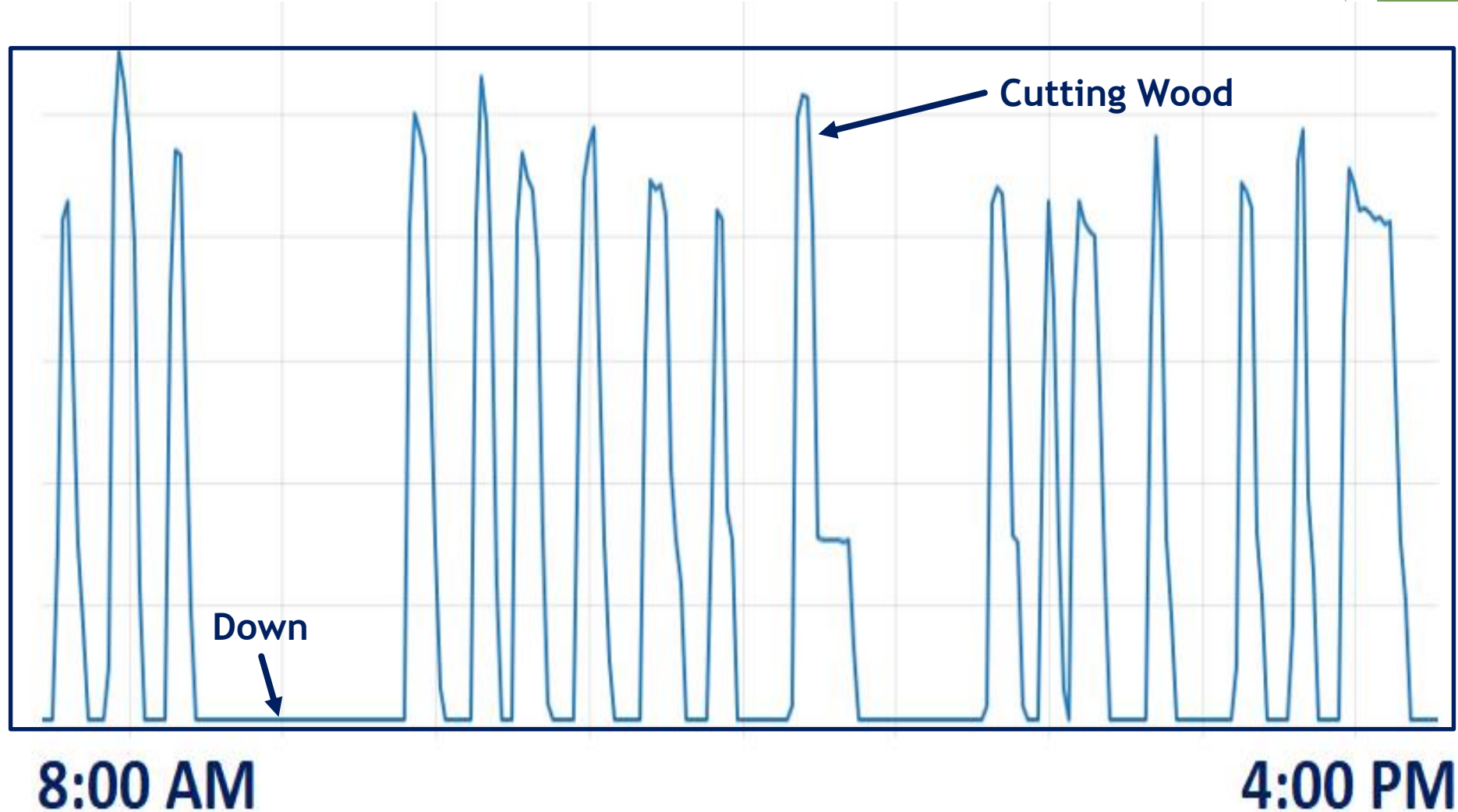
- ▶ Collecting machine data was expensive & complex
- ▶ Only for large companies
- ▶ Factories have older machines with limited or proprietary digital capabilities

Now

- ▶ Now everyone can monitor productivity
- ▶ Collecting real time operating data is simple and cheap
- ▶ Wireless devices are easy to install on existing machines

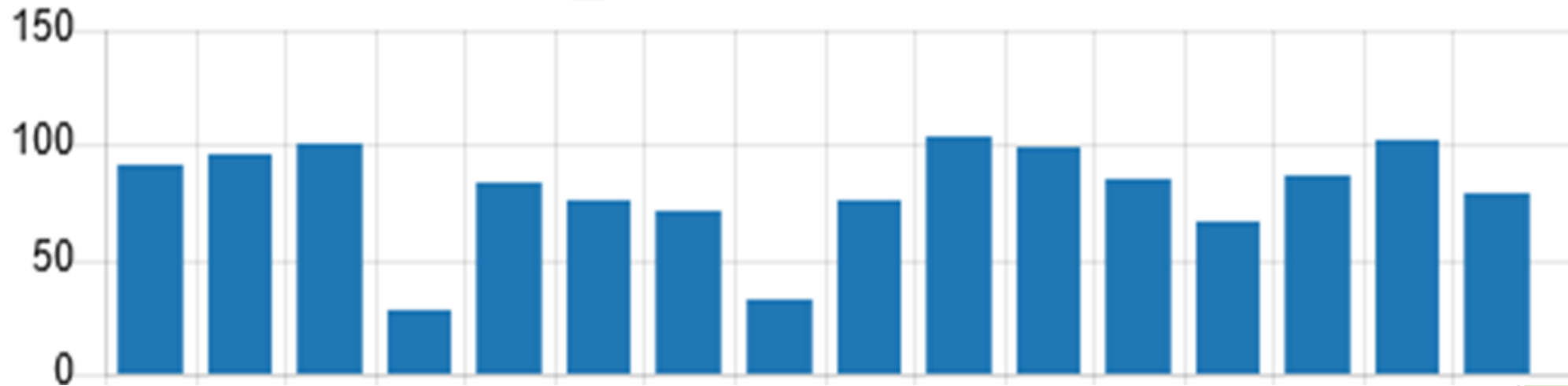
Shift Report - Shows Downtime

Power



Monthly Productivity Report Shows Downtime Trends

Run Time (minutes)



Factory View - Bottleneck Utilization

Select Date

< November 2017 >

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2
3	4	5	6	7	8	9

12:00 AM Today Clear

Shift	Day	Week	Month	Qtr	TTL	YTD
●	○	○	○	○	○	○

	6 am	7 am	8 am	9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm		
Laser Cut	88%	98%	95%	99%	93%	84%	67%	72%	96%	77%	73%	72%	75%	77%	●
Brake	62%	67%	70%	47%	10%	0%	17%	43%	61%	66%	45%	54%	65%	66%	●
Weld	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	●
Paint	67%	71%	74%	70%	51%	51%	56%	54%	62%	51%	49%	63%	60%	57%	●
Assemble	63%	71%	77%	67%	53%	54%	55%	52%	65%	55%	51%	67%	58%	61%	●

Benefits of the MTechHub IoT Quick Start Program

- ▶ Manage using the truth & facts
- ▶ Improve productivity
- ▶ Change the culture on the shop floor
- ▶ Empower Operators and Supervisors
- ▶ Drive and Measure Continuous Improvement

The IoT Quick Start Program Details

- ▶ MTechHub IoT Platform
- ▶ Program runs May - August 2020
- ▶ Trained Coop Students help you adopt
- ▶ Coop Student costs is funded 50-75% by ICTC
- ▶ You buy inexpensive devices
- ▶ Ongoing costs \$10/sensor per month

What it Costs

IoT QuickStart Cost Worksheet

Item	Cost	Funding	Net
Trained Coop Student	\$13,000	-\$6,500	\$6,500
Wi Fi to Shop Floor			
Monthly Subscription to MTech Members ** After program is complete**	\$10		
Sensor and device Costs			
Current	\$175 ea		
Pressure	\$325 ea		
Temperature	\$175 ea		
Air Flow	\$800 - \$2000 ea		
Average total Cost to the manufacturers:			Approximately \$5000-15,000

Contact MTechHub today to Enroll in the QuickStart Program!

Funding available for the first 10 companies

Send inquiry to info@mtechhub.com