



**CA**  
**CALDWELL & ASSOCIATES**  
— **LLC** —

**SALES GROWTH PLAN;**  
THE MISSING LINK IN MOST LEAN STARTUPS OR  
REVITALIZATIONS

**RC CALDWELL**

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All case studies data and information have been altered to maintain the confidentiality and proprietary materials of the companies involved.

## Why is a Sales Growth Plan Important to Lean Journey Startups?

I do not know how often a company leader has said to me, "don't use the word Lean here because it is a bad word in our company." One of the main reasons this happens is that the leadership team started a lean journey with a fabulous training program to educate their employees about Lean. Then the employees start providing their improvement ideas that eliminate waste from the process. The employees are happy because Lean made their job easier, and the leadership team is happy because the employees are more productive. It is a win-win scenario until the inevitable happens. Many processes have been Leaned out, and now the company has more employees than needed. The leadership team decides to layoff some employees. The remaining employees feel like their co-workers lost their jobs because of Lean, and the remaining employees stop making suggestions for improvements. Lean is now a bad word in the company. Many Lean consultants use this same approach when implementing Lean to their customers. I must admit that I have used this approach.

In 2009, I was asked by a Medical Device Original Equipment Manufacturer (OEM) to provide Lean Transformation consulting to one of their key component suppliers, a small Injection Molding Company. The company had sales of \$75M with 250 employees in two plants in West Chester, OH, and Phoenix, AZ. In the beginning, like a good consultant, I told the executive leadership team (ELT) that once we started their Lean journey that they could not lay off anyone because it would kill the journey. If they wanted to lay off workers, they needed to do it before starting their Lean journey. They agreed, and we went forward. The ELT was comprised of the executive team and key members from the Ohio plant where we started. I set up some Lean "Train-Do-Train-Do" workshops with the ELT (See Figure 1). I asked them for their "worst-case" processing problem (WCP). After I evaluated their WCP, I organized their Lean training to resolve the WCP first. Once we solved that problem, I trained them on other Lean concepts to solve different problems. We were applying their setup reduction training when we discovered an unsafe practice during the review of videotaping of the setup. So not only did we improve the operation for the employees, we made it safer.

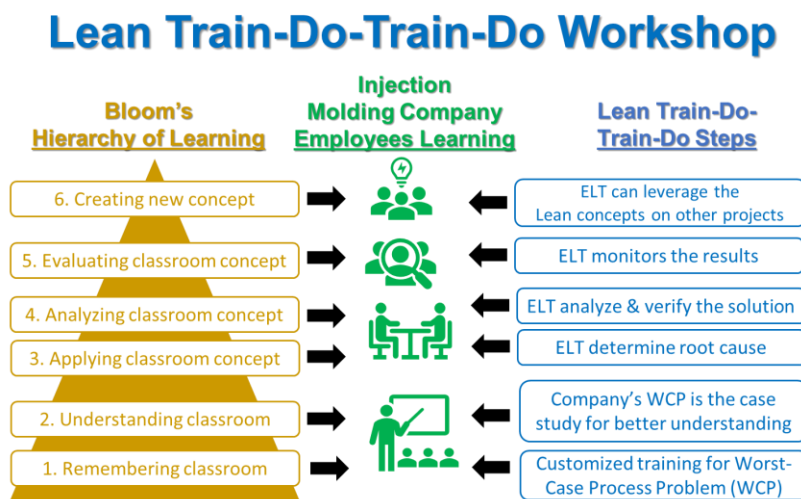


Figure 1 – Caldwell & Associates Train-Do-Train-Do Workshop Approach

I taught them Design for Manufacturing Group Technology and Cellular Manufacturing when one of their intelligent manufacturing engineers saw how those concepts could automate their main assembly line. The team worked on a couple of prototype concepts to prove his theory, and it did work. They designed a Lean Automated Cell. The current main assembly had 18 operators with 20 process steps and 20 days of work-in-process. The Lean Automation Cell had 2 operators with 2 process steps and 5 days of work-in-process. The improvement

saved \$2.9 million (See Figure 2). This type of improvement is common when employees know their products and then learn Lean principles and concepts. The Lean Automation Cell was the "Big Win" to boost their Lean journey.

## Medical Device Injection Molded Component Parts Cell Layout Comparison Analysis

### Lean Automation Cell - 2011

	<u>Current State</u>	<u>Future State</u>	<u>Delta</u>	<u>% Improvement</u>
• <b>WIP Inventory</b>	20 days	5 days	15 days	-75%▲
• <b>Annual Travel distance</b>	32 miles	2 miles	30 miles	-94%▲
• <b>No. of Transportation Steps</b>	20	2	18	-90%▲
• <b>Number of Operators</b>	18	2	16	-89%▲

### Lean Automatic Cell Annual Savings- \$2.9 million

*\*The Lean automation eliminated waste and made the job easier, which required fewer workers. Therefore, management must bring in more sales or new business to sustain a continuous improvement culture.*



**Figure 2 – Current State and Future State Data Comparison**

They continue making improvements and providing Lean training to all their employees. About six months in their Lean journey, the CEO and CFO inform me that they had to lay off some employees. It was inevitable. I started pushing them to increase their sales because they had not installed the Lean Automation Cell. They hired a new VP of Marketing and Sales, and the CFO implemented Lean accounting to align their cost structure with their Lean processes. They survived the layoff of some of the workforce and continued their Lean journey. The following year the company won the OEM's Lean Supplier Award, and that was their first-ever award from that OEM. In 2012, they installed a second Lean Automation Cell, and their leadership team continues the Lean journey.

### **Sales Growth Plan Approach**

My actions with the Injection Molding leadership team were a reaction to the layoff. It was too late for the laid-off people. That is when I realized how strong sales growth is necessary for a successful sustaining Lean journey. Now, when I start or revitalize a Lean journey for a client, I provide a Sales Growth Approach with our Lean Journey Approach. Both approaches are made simultaneously, and below I will depict the Sales Growth Plan Approach.

- **Current State Marketing & Sales Analysis**

The first step is to get the current state of the company's marketing and sales data. Fortune 500 companies have this information readily available, but small and medium-size companies may not have it available. If you didn't have current marketing and sales data, I recommend that the company hire a marketing research company to get it. In addition, the United States is starting to come out of the COVID-19 pandemic, and all markets are different and changing as we speak. Therefore, past years may not be beneficial for projections, but they still need to be

evaluated. For Tier 1, Tier 2, and Tier 3 suppliers, I recommend surveying your customer base and potential customers.

The Current State Marketing & Sales analysis should consist of the following minimum data and information:

- Past three annual sales performances with current year-to-date
- Past three annual market share performances with current year-to-date
- Recent data on customers likes and dislikes
- Current information on the latest innovation, technology, or trend in the market
- Information on next innovation, technology, or trend for the market
- Customer's unmet needs

A Current State Marketing & Sales Analysis should be conducted utilizing all the applicable information and data noted above. It is crucial not to solve problems or issues during the establishment of the current state because it may lead to incorrect actions or a quick patch fix that does not gain more customers. *Remember, the goal is to establish a thorough current understanding of the marketing, sales, and voice of the customers (VOC) then develop a practical Sales Growth Plan for the next three to five years.*

#### • **Current State VOC Analysis**

While the marketing & sales team is working on the current state of the Marketing & Sales Analysis, the engineering & production team is working on the current state of the VOC data. It should consist of the following minimum data and information:

- Complaints
- Returned products
- First Time Quality (FTQ) data
- Non-conformances
- Adverse events
- Recalls

Most companies have KPIs but are they internal KPIs, customers' feedback KPIs, or both? The ideal state is to have both. The customers' feedback KPIs are also called VOC Key Behavioral Indicators (KBIs) data that is utilized throughout the company where applicable. For example, if ABC Company Plant #1 was producing widgets and Plant #2 was producing ridgets, then the Customers' First Time Quality (FTQ) for widgets would be displayed and provided to workers in Plant #1. The Customers' FTQ for ridgets would be displayed and provided to workers in Plant #2. Both plants should show the combined FTQ for both products as an overall quality measurement. The Customers' FTQ data could be from the receiving docks at distributor warehouses, stores, OEM, and consumers who purchase the widgets and ridgets. The Customers' FTQ data are directly linked to the quality performance of the management and workers in the plants. Now, the Customers' FTQ results can be connected to the company's guiding principles, such as "Assure Quality at the Source." The Customers' FTQ goals of 100% widget and Assure Quality at the Source must be put into every employee performance appraisal in plant as a VOC KPIs/KBIs. Therefore bonuses, pay increases, promotions, and other recognitions are aligned to every employee performance appraisal and linked to the company's guiding principles and VOC KPIs/KBIs. Every employee has several common purposes and goals from the customers' and guiding principles perspective. These VOC KPIs/KBIs will drive positive and high-performance behaviors from the employees sustaining the Lean culture. If an employee is not motivated by the guiding principles or VOC KPIs/KBIs then that employee may not be a good fit for the company. Other examples of KBIs are 1.) Number of Days without OSHA recordable; 2.) Gemba 5S audits; 3.) Number of Team Continuous Improvements (CI) Implemented, and others depending on the company (See Chart 1).

ABC Company - VOC Key Performance Indicators (KPIs) & Key Behavioral Indicators (KBIs)							
Type of KPIs	Category Description	Aug	Aug Goal	Aug Delta	YTD	YTD Goal	YTD Delta
Safety	Safety OSHA recordable/year	0	0	0	2	1	-1
Safety	Days without OSHA recordable	455	0	455	182	0	182
Safety	Days without COVID-19 Case	122	122	0	0	100%	
Quality	Customers' First Time Quality	95.60%	99.99%	-4.39%	94.75%	99.99%	-5.24%
Quality	Customers' FTQ Parts Per Million	44,000	3	-43,997	52,500	3	52,497
Quality	Plant First Time Quality	98.05%	100.00%	-1.95%	97.93%	100.00%	-2.07%
Quality	Plant FTQ PPM	19,500	0	-19,500	20,700	0	-20,700
Quality	Customers' non-conformances	1	0	1	5	0	-5
Quality	Customers' adverse events or recalls	0	0	0	0	0	0
Delivery	Customers' Line Item Fill Rate	100%	100%	0	100%	100%	0
Delivery	Customers' Line Item Fill Rate (PPM)	0	3	3	0	3	0
Delivery	Inventory Turns	15	20	-5	12	20	8
Market Share	Market Growth	2%	10%	-8%	4%	10%	6%
Productivity	Ratio Sales to Work Hours	8	10	-2	9	10	1
Productivity	Gemba CDC 5S Audit Results	99%	100%	-1%	99%	100%	-1%

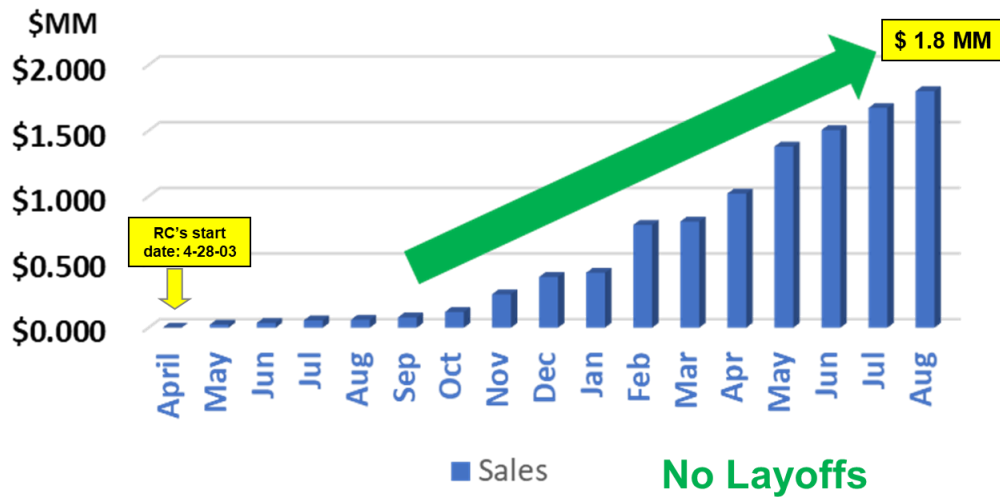
Chart 1 – ABC Company VOC KPIs & KBIs Sample

Aligning Key Performance Indicators (KPIs) must start with the customers' wants and needs provided in measurable data format. The dilemma is the customers do not have to provide feedback. Therefore, OEMs and service providers must ask the right questions about their products and services and make it easy and convenient for the customers. The most important thing is to get the customers' feedback to deliver world-class services or products to ensure business growth.

### Lean Journey Startup with Sales Growth Plan

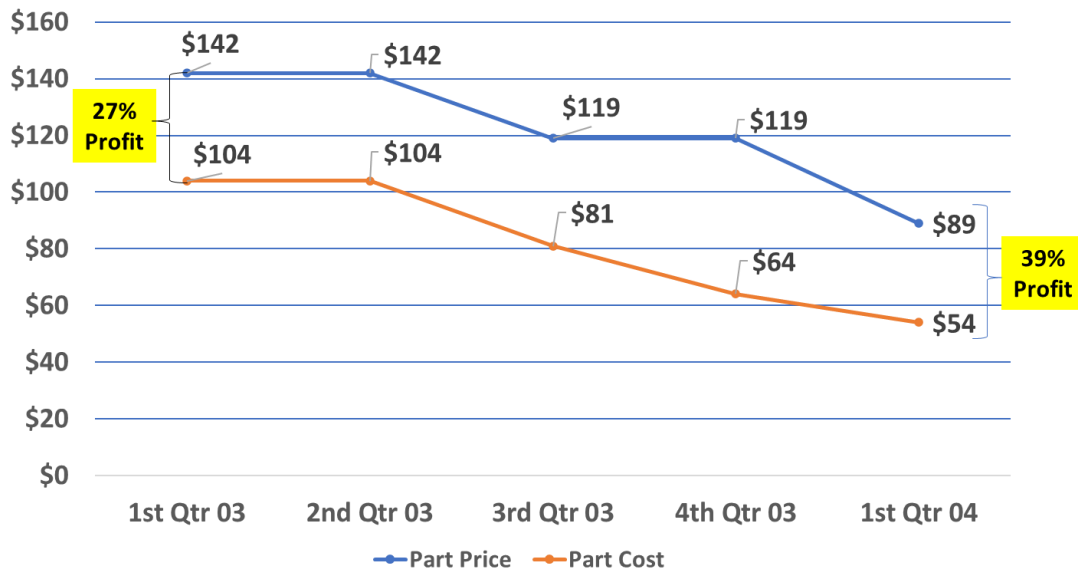
On April 28, 2003, I was hired as a general manager of a small rotary die cutter machinery company where I utilized the Current State Marketing & Sales and VOC Analysis with Lean Journey Startup. It allowed me to build the company from bankruptcy and zero sales to profitability in 14 months with total revenue of \$1.8 million (See Graph 1). Our Marketing & Sales and VOC analysis indicated that we needed to improve our quality and pricing on all standard spare parts for corrugated machines. We aligned our quality key performance indicators (KPIs) with our goals, Leaned-out the standard spare parts product line, and lowered the price while increasing the profit margins. The results were more sales with higher profit margins and increase market share with no layoffs (See Graph 2). We later added a sales rep to help drive more sales.

## Rotary Die Cutters Machine Company 2003 - 2004 Sales



Graph 1 – Rotary Die Cutters Machine Company 2003 – 2004 Sales

## Standard Spare Parts Unit Price to Unit Cost Example



Graph 2 – Lean out: Unit Cost and Unit Price Lowered for Increased Profit Margins and Market Share

Several other methods to grow sales can be determined by fully understanding the Current State Marketing & Sales and VOC Analysis. Each company and organization can develop their own Sales Growth Plan unique and specific to their industry while building their Lean Culture. The executive team must be committed to linking the guiding principles, KPIs/KBIs, customer feedback to performance appraisals, and rewards. They must provide real company examples to the employees of how the guiding principles play a significant role in high-performance results for the company. Their actions, delegations of responsibilities, and activities should reinforce productive behavior from the workforce and generate a sustaining Lean culture for the long run.

