As originally published in the SMTA International Conference Proceedings.

HOW EFFICIENT IS YOUR HIGH MIX EMS SUPPLIER

Dave Cesar
The Parkland Group
Cleveland, OH, USA
dcesar@parkland.com

Roy Starks
Libra Industries
Mentor, OH, USA
rstarks@libraind.com

ABSTRACT
Business and economic conditions continue to force business managers to seek out improvements and efficiencies. Customers are demanding more, competition is aggressive, and operational speed and flexibility are now as important to customers as technology and quality. Some managers have implemented Kaizen, 5-S programs, Six Sigma, and lean manufacturing for improvements. Industry leaders are at the next step, looking beyond the factory floor for a competitive business edge.

The information in this paper is from a business turnaround initiative at a tier three contract manufacturer. The management team selected an outside resource to analyze existing business processes, implement changes, and identify the proper management metrics to achieve the next level of performance. Some of the benefits included increased monthly shipments by more than 25%, an employee wide gain-sharing bonus program, a dashboard of Key Performance Indicators (KPI) , and a framework to grow sales and sustainable profitability improvements at the Company.

The objective of this paper is to describe the process of business reinventing which started with the realization that outside help was necessary (Who). Next, select an expert driven methodology to identify which processes to fix (How). Then, determine the necessary changes to be made (What). And finally, establish the specific metrics that would be used to measure success (Why).

The reader will benefit from an understanding of how a tier three contract manufacturer reinvented at a business level and looked beyond just the factory floor for a competitive business edge.

Key words: Strategy and Vision, Organization and Culture, Accounting and Finance, Responsiveness and Execution.

INTRODUCTION
In 2007, the economic conditions were positive and the Company was experiencing reasonable growth in market share and sales were good. The management team was working to raise the bar from good to great but was struggling, “Our business was not executing to the level we wanted”, “We couldn’t figure it out, or didn’t have the time”. They were too close to the issues to see the problems and felt industry experts might know where to look first. They were concerned their fast growth was causing a variety of issues, including late deliveries, that if not addressed would jeopardize the growth they had recently achieved. They needed a diagnosis of the company’s health to uncover new ways to improve execution and increase its’ bottom line.

The Company embarked on a business analysis that started with focus teams, guided by industry experts, and benchmarked against other companies. The recommended improvements were implemented, metrics were established, and the effects were measured three years later.

In the following paragraphs we will explain the process framework that was followed, the recommendations that resulted from the data, and the results the company experienced.

FRAMEWORK
(DISCUSSION OF METHODOLOGY USED)
Process
The Company retained The Consultant Group who had developed a proprietary and patent-pending process that quickly and cost effectively assesses the health of the business in four key areas which were then broken into 16 sub categories. The assessment is a team based collaborative process that had proven success with other companies. The data analysis, ratings, recommendations, and prioritization were done with benchmark data and a proprietary analysis software program. The first step was to assemble a focus group.

Focus Group
The focus group was comprised of employee representatives from each department, a mix of supervisors and associates. These associates were selected based on tenure and desire to improve the company. The group was divided into three teams that would answer some questions collectively as a

group, and some as individual. This mix allowed for a comfortable open dialogue and debate exposing some misperceptions as questions were answered and summarized. This was a powerful feature of The Consultant Group's process as the self –assessment feature built consensus among the participants on the strengths, weakness and opportunities of the Company.

Analysis

The analysis was divided into four categories: strategy and vision, organization and culture, accounting and finance, responsiveness and execution. Numerous questions designed to determine the company's strength or weaknesses in these areas were answered by the focus group. The following paragraphs explain the four categories, and their sub-categories.

Strategy & Vision

Successful businesses must pick a path that positions them to succeed and outperform their competitors. Hard work will not adequately compensate for a strategy that does not facilitate success.

Current Vision & Strategic Plan – determining whether the company currently has a comprehensive Vision & Strategic Plan that positions it for success.

Downhill Rides – determining whether the company is operating in an external environment that facilitates success without inordinate effort, luck or extraordinary skills.

Reasons to Thrive – evaluating whether the company has strengths that differentiate it from its competitors and enhance customer satisfaction.

Sweet Spot – does the company focus its efforts on ideal customers and ideal products--those customers and products that offer higher profitability and growth potential.

Organization & Culture

Determines whether the company has employees who are qualified, trained and motivated to turn the Strategy & Vision into reality.

Work Environment – assessing whether the company creates the right atmosphere to unleash the energy, motivation and talent of the employees to implement and achieve the Strategy & Vision.

Empowerment, Teamwork & Culture – determining how people work together and the degree of latitude employees have in implementing the company's strategic plan.

Effective Hiring & Training – assessing whether the company hires people who are appropriately qualified, trained and a good fit.

Performance Appraisal & Accountability – evaluating whether employees know their goals and objectives, are held accountable for attaining them and appropriately incentivized to achieve them.

Accounting & Finance

Assesses whether the company has information that leads to informed, relevant and optimal decision–making. In addition, determines whether the business has the cash resources, systems and controls that support the plan.

Accounting – determining whether the company has timely, effective and accurate accounting records and information.

Costing – assessing the extent to which the company accurately knows the costs of its products and services.

Financial Management – evaluating the adequacy of cash resources and the effectiveness of the management of the company's assets to optimize profitability and cash flow.

Systems and Controls – determining whether the company has adequate controls over its information systems and operations.

Responsiveness & Execution

Determines how well the company executes its plan and how responsive it is to customers–enhancing their satisfaction and loyalty.

Responsiveness – determining how well the company responds to its customers' needs.

Implementation of Planning & Goals – assessing how well the company sets goals and action plans for the organization and measures performance against those goals.

Continuous Improvement – determining the effectiveness of the company's programs to reduce costs and drive out non value–added activities.

Sales & Marketing – determining the company's approach to and effectiveness of its sales and marketing plan.

Rating Results

During the one-day self assessment, the answers to the approximately 300 questions were entered into The Consultant Group's proprietary software. Rather than having to wait, the focus group received their results at the end of the day. The results compared the Company to a hypothetical world-class business. The results are illustrated on the SOARCard™. See the example SOARCard™ in figure 1.

S		O		A		R	
Strategy & Vision		Organization & Culture		Accounting & Finance		Responsiveness & Execution	
Current Vision & Strategic Plan		Work Environment		Accounting		Responsiveness	
Downhill Rides		Empowerment, Teamwork & Culture		Costing		Implementation of Planning & Goals	
Reasons to Thrive		Effective Hiring and Training		Financial Management		Continuous Improvement	
Sweet Spot		Performance Appraisal & Accountability		Systems & Controls		Sales & Marketing	
Section Totals	S		O		A		R
Total SOAR Score =							

Figure 1. Rating Focus Group Responses

Recommendations

The process methodology allows for a high level, end-of-the-day review of the recommendations for improvements that are explained in the following section.

RECOMMENDATIONS

Results Data Obtained

The resulting scorecard is shown below in figure 2. Notice the red highlight indicating areas where change can have the greatest impact on the organization.

SOARcard™

Green = Strength; Yellow = Needs Work; Red = Weakness

	STRATEGY & VISION		ORGANIZATION & CULTURE		ACCOUNTING & FINANCE		RESPONSIVENESS & EXECUTION	
	S		O		A		R	
1	Current Vision & Strategic Plan	33%	Work Environment	55%	Accounting	66%	Responsiveness	48%
2	Downhill Rides	56%	Empowerment, Teamwork & Culture	56%	Costing	31%	Implementation of Planning & Goals	18%
3	Reasons to Thrive	30%	Effective Hiring & Training	35%	Financial Management	57%	Continuous Improvement	15%
4	Sweet Spot	49%	Performance Appraisal & Accountability	36%	Systems & Controls	57%	Sales & Marketing	43%
	Total "S" Score	42%	Total "O" Score	45%	Total "A" Score	52%	Total "R" Score	31%
	TOTAL SOAR SCORE	42%						

Figure 2. 2007 Scorecard

The Scorecard is accompanied with detailed recommendations, which are listed in order of suggested priority, and are focused on the activities that will generate the most immediate results. For maximum effectiveness, the Company should work on many of these activities simultaneously.

1. Supply Chain Management

Implement a plan to aggressively address shortages with a strong focus on accountability. Use shortages as a KPI. Investigate root causes and develop remedial plans.

2. Aim for the Company's Sweet Spot

Determine the True Net Margins for all customers (Gross Margin minus "Cost to Serve").

Perform a Quadrant Analysis™ figure 3, for all Products, Customers. Implement an appropriate operating, pricing and sales strategy for each quadrant. .

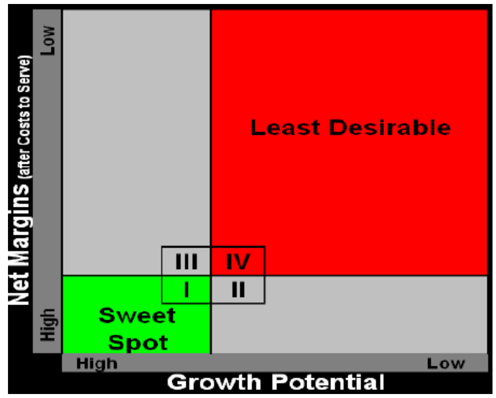

Figure 3. Quadrant Analysis™

3. Implement a Continuous Improvement Program

Ensure appropriate Key Performance Indicators are measured regularly (preferably daily or weekly)—and shared with employees who can impact the performance. Set increasing goals for improvement and consider establishing an incentive program rewarding achievement of such goals.

Measure and regularly share with employees the Total Cost of Quality. Utilize Lean Thinking, Kaizen events and Value Stream Mapping to identify and eliminate non-value added activities to reduce costs and improve efficiencies

4. Explore Ways to Differentiate Products and Service and enhance the Value Proposition

Establish a cross-functional team to review and evaluate the levels of Quality, Service and Ease of Doing Business. Identify deficiencies in these areas, and develop an action plan to significantly improve.

Consider surveying customers to determine what is important and valuable to them.

5. Develop a Strategic Plan and Vision

Develop and implement a Strategic Plan to make the Company's Vision a reality. The Strategic Plan and Vision needs to be clearly communicated to all employees and state *where* the company is heading and *why* it is likely to succeed.

The Strategic Plan and Vision should be built upon the Company's core competencies, product and non-product Reasons to Thrive and the Value Proposition.

The plan needs to clearly explain *what* it will take to achieve the Vision—and *how* it will be done in the areas of sales, operations, people and finances. The Strategic Plan has a higher likelihood of success if managers and employees are collectively involved in its development, as that creates buy-in, which is a key catalyst for success

6. Develop a Sales and Marketing Plan that is based on the Value Proposition, Sweet Spot and Downhill Rides

The Sales Plan should steer the Company towards Downhill Rides (markets that are growing and offer the Company strong market Leverage, Stability and Margins). Sales growth should be based on the Growth Pyramid™ figure 4.

Initial focus should be on protecting existing business with current customers, focusing on Quadrant I & II customers. Next focus should be on developing & implementing a concrete plan to measure & grow "Wallet Share" with existing customers. Next focus should be on creating a prospect list of Quadrant I & II target accounts that appreciate the Company's Value Proposition, and developing a sales plan to sell to them.

Review the Sales Team to determine which members are Hunters and which are Farmers, and allow them to focus their sales activity accordingly. Provide the Sales Team with training in selling skills, with a focus on selling the Value Proposition.

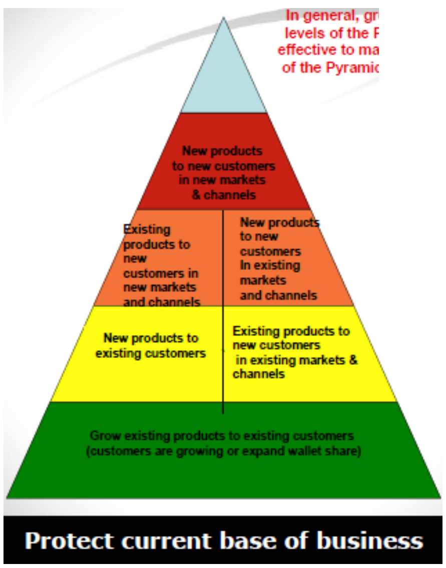

Figure 4. Growth Pyramid™

7. Enhance the Company's Organization and Culture

Implement Top-Down Vision & Bottom-Up Management concept. Management should be responsible for the initial development of the Vision. However, employees should be given significant opportunities to provide input into the Vision. Employees should take the primary role in developing & implementing the detailed plans to achieve the Vision. Management should function as Coaches and Cheerleaders and create a culture of accountability. Plans should be broken down into "bite-sized pieces" with a focus on getting wins on the board.

Responsibility and timelines should be assigned to individuals or teams. Rewards and consequences should be closely aligned with achievement of the plans.

Evaluate key employees and salespeople to ensure they are "round pegs in round holes" (well suited to their jobs in terms of skill, experience, attitude and, most important, personality traits).

Utilize cross-functional teams to plan and lead improvements and idea generation.
Review compensation systems to ensure that they reward managers & employees for achievement of the Company's Vision & Goals.

8. Upgrade and Improve Accounting Information

Develop and implement a plan to capture and include all manufacturing labor in costing. Update labor standards to reflect optimum production flow. Report and take action on labor and material variances by SKU.

RESULTS

The Company initiated many programs to support the recommendations from The Consultant Group.

A Dashboard was designed to communicate daily, weekly, and monthly goals, see figure 5. IT programs were written to easily track KPIs for reporting on the Dashboard.

An employee Gainsharing Program was implemented to increase goal visibility and reward goal achievement.

Quote procedures were rewritten to include cost to serve and improve quote accuracy. An automated software program was used to reduce quote lead time.

Changes were made in interviewing, testing and hiring policies.

A Company wide intranet was implemented for each department with shared metrics and reports.

The Company vision and value proposition was redefined.

The Dashboard emerged as the focal point of the results achieved. It has enabled each associate to see their key department goals and the collective goals for the company. It provides management with the timely information they need for key decision making.

Update Frequency	Dashboard						
Weekly	OPEN ORDERS as of 7/9/10	Past Due	July	P.D + July Bal.	August	September	Octo
Weekly	TOTAL ORDERS						
Daily	SHIPMENTS	Yesterday	Daily Goal	Daily Variance	Act. M-T-D	Goal Month	Varia
Daily	ON TIME DELIVERY	Yesterday	M-T-D	Q-T-D	Y-T-D	GOAL-%	
Daily	FILL RATE	Yesterday	M-T-D	Q-T-D	Y-T-D	GOAL-%	
Weekly	Sales Per Prod. Hour 6/30	V-T-D $'s/Hr	M-T-D $'s/Hr	Q-T-D $'s/Hr	Y-T-D $/Hr's	GOAL $/Hr's	
	7/5	Number of SKUs Short	GOAL				

Figure 5. Dashboard of Metrics

The Company—management and all employees knew they were more efficient and had the Dashboard to prove it. Management felt a follow up analysis would verify their observations, and uncover new areas for continued improvement.

Process Revisited in 2010

Three years later, the Company was evaluated again using the same process. The resulting scorecard is shown below in figure 6. Notice a high amount of green and yellow vs. the predominant red scores from 2007 in figure 2.

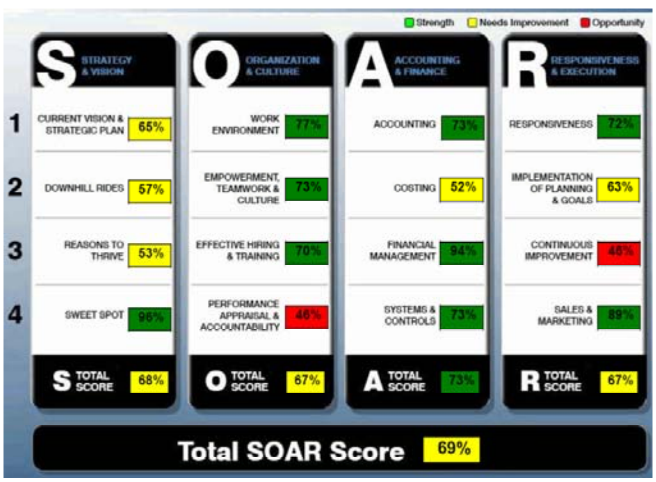

Figure 6. 2010 Scorecard

CONCLUSION

The management team initiated a process in 2007 that resulted in many company wide improvements. The results can be seen in the eyes of the associates, the data in the dashboard, and continued business growth.

The most important critical success factors in this process were: leverage external expertise that is available to provide a different perspective, a dashboard to provide new information, and a collaborative effort that engages all company associates.

The Engineering Manager, "We learned the industry experts could guide us, but we had to make the changes, and 'One-Up' improvements to suggestions got us all engaged."

The Management Team, "We now have dashboard metrics. We learned you can't watch it all, so you need to watch what's most important. This gives us a framework to easily manage on a daily basis."

The Management Team, "We asked industry experts for advice. We realized you don't know what you don't know about your business."

The Company's President, "We have been extremely pleased with the results . . . our monthly shipments have increased more than 25% per month during the past six months."

The Company's President, "I would recommend this process to any company that wishes to improve their bottom line performance."…and….“start making changes that can markedly improve its profitability."

ACKNOWLEDGEMENTS

The authors would like to acknowledge the support of The Parkland Group and Larry Goddard for the guidance and process.

REFERENCES

The Parkland Group, Soar to Strategic Excellence™, Quadrant Analysis™ and Growth Pyramid™ are trademarks of The Parkland Group, Inc; Proprietary and Confidential, © Copyright' 2006 The Parkland Group, Inc. revised - 2007/08/09/10.– Patent Pending. All Rights Reserved.