




# Strategic Thinking and Planning for Manufacturing Companies

*"We can't solve problems by using the same kind of thinking we used when we created them." - Albert Einstein*



## What “*Frustrates*” the Members of the Manufacturing Advisory Group

- ★ Probing/Understanding Market Needs
- ★ Recognizing Competitive Positioning
- ★ Addressing the Resistance to Think
  
- ★ Recognizing Production Flexibility
- ★ Introducing Manufacturing Innovation
- ★ Implementing and Working the Plan



*Lessons-Learned:*

## Why Small Manufacturing Businesses Fail

Identity crisis – *forgot what got them there; did not take competition seriously or changing business trends*

No vision – *short sightedness; under capitalized; did not adjust to the market place*

Big squeeze – *expanded too fast; no budgeting process; did not manage cash flow*

Glue stick – *passive; outdated business model; did not introduce continual improvement attitudes*

Lost touch – *did stay close to the customer; became complacent with own success at the moment*

Not listening – *internal/external personnel; advisors; became isolated within their business*



*Lessons-Learned:*

## Winning Strategies in the New Economy for Small Manufacturers

- ★ Downsizing is permanent - *outsourcing*
- ★ Finite number of customers – *take care of them*
- ★ Time is a treasured asset – *free up time*
- ★ Understand the extremes – *play what-if scenarios*
- ★ Shorter buying cycles – *customers respond faster*
- ★ Information is customer service – *develop systems*
- ★ Motivate the customer – *no need to hard sell*
- ★ Stay in touch with customers – *ongoing listening*



*Lessons-Learned*  
*What Experience Has Taught Hadley*  
*Associates About Manufacturing Strategies*

★ *Common Client*  
*Operating Attributes*

- Insightful understanding
- Have a strategic vision
- Have taken “bold” moves
- Communicate well
- Involve their people
- Decide on fact and feel
- Work the plan

★ *Formula for Their Long*  
*Term Success*

- “Leap-frog” tradition
- Focus on fundamentals
- Do their homework
- Devote the effort needed
- Facilitate work-groups
- Reward their successes
- Demanding, but fair

The continuing process of understanding, anticipating and adapting to change

**Phase V: Where you are today?** - the current state; the status quo

Self assessment  
Success factors  
Operating issues  
Competitive position  
Limitations and threats

**Phase VII: Gap Analysis** - Understanding the difference between today and tomorrow, and having the ability to see and consider the best position for the company

**Phase VI: Where you want to be tomorrow?** - the future state

Industry direction and trends  
Basic customer needs  
Technological innovation  
Management risk  
Resources available

**Phase VIII:**  
Renewed vision  
Organizational conflicts  
Psychological barriers

**Phase IV: Management's direction and positioning**  
(Performance metrics, business strategies and commitment)

**Sales and Market Planning**  
Market segments  
Customer needs  
Products and services  
Pricing and programs  
Physical distribution  
Customer service  
Sales management

Phase II

**Manufacturing Planning**  
Production capacity  
Manufacturing processes  
Day-to-day operations  
Manpower planning  
Materials Management  
Engineering and design  
Quality Assurance

Phase I

**Administration and Support**  
Senior management  
Organizational structure  
Accounting/Finance  
Information Services  
Human Resources  
Legal and Audits

Phase III - Interaction of internal disciplines based on market demands and/or management direction

**The end result: Think like a manufacturer so there is a bond of understanding, but communicate and act in terms of the customer's and market's current and future needs**



*Lessons-Learned*

## Ways to “Unleash” Internal Creativity:

- ★ “If We Bought This Company Today...”
- ★ “Lessons-Learned” From Experience
- ★ “Growth-Share” Repositioning (*Segmentation*)
- ★ Unbiased Market Assessment (*Listening*)
- ★ Alternative Channels-of-Distribution
- ★ Technology Available that is Unused

# Strategies for Manufacturers to Consider

## Market-Oriented Concepts

- ✦ Market Segmentation
- ✦ Product life Cycles
- ✦ Growth/Share Position Shifts
- ✦ Competitive Positioning
- ✦ Customer Satisfaction Ratings
- ✦ Ease-of-Doing Business
- ✦ Business Development
- ✦ Alternative Channels

## Manufacturing-Oriented Concepts

- ✦ Performance Metrics
- ✦ Lean Manufacturing
- ✦ Capacity Utilization
- ✦ Productivity Improvements
- ✦ Activity Based Cost Accounting
- ✦ Quality Assurance (Six Sigma)
- ✦ Value Stream Mapping
- ✦ Roles & Responsibilities

# Strategic Manufacturing Plan Format

- ✦ **Business Vision**
- ✦ **Strategic Goals** and Objectives
- ✦ **Self Assessment** and Competitive Review
- ✦ **Plan Assumptions** based on Business Environment
- ✦ **Business Issues** affecting Success
- ✦ **Strategies and Programs** - *Direction, actions & resources*
  - Sales and Marketing – *Customers, revenue, products*
  - Manufacturing – *Process, materials, equipment, facilities*
  - Administrative – *Accounting, engineering, IT, HR*
- ✦ **Financial Results** - *Income, Balance Sheet, Cash Flow*
- ✦ **Supporting Analysis** and Worksheets
- ✦ **Review Process**

## Worksheet #1a: *Critiquing Yourself and Plan*

### Internal Assessment - Opportunities and Threats

<u>Functional Area</u>	<u>Strengths</u>	<u>Limitations</u>	<u>Action Needed</u>
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*Suggested Areas:*

- *Sales & Marketing*
- *Customer Satisfaction*
- *Business Development*
  
- *Manufacturing Process*
- *Operations Practices*
- *Capacity & Equipment*
  
- *Cost Accounting*
- *Management Processes*
- *Planning Vision & Process*

## Worksheet #1b: *Critiquing Yourself and Plan*

### External Assessment - Opportunities and Threats

<u>Functional Area</u> <u>Needed</u>	<u>Strengths</u>	<u>Limitations</u>	<u>Action</u>
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#### Suggested Areas:

- *Market Understanding*
- *Competitive Position*
- *Customer Relationship*
  
- *Manufacturing Technology*
- *Materials Management*
- *Personnel and Training*
  
- *Channels of Distribution*
- *Financing & Interest Rates*
- *Computer Support*

## Worksheet #2a: *Establishing Strategic Objectives/Goals*

### Quantitative Objective/Goals: (How will you measure success?)

Current Period

Long Term

#### *Suggested Objectives:*

- Revenue Dollars
- Operating Margin (\$ or %)
- Pre-tax Margin (\$ or %)
  
- Market Share
- Number of Customer
- Top five Customers
- Customer Satisfaction
  
- Employee Productivity
- Cost Reduction
- Capacity Utilization

## Worksheet #2b: *Establishing Strategic Objectives/Goals*

### Qualitative Objectives/Goals: (How will you measure success?)

Current Period

Long Term

#### *Suggested Objectives:*

- Management Succession
- Employee Empowerment
- Ongoing Planning Discipline
  
- Customer Focus
- Multiple Revenue Streams
  
- Lean Manufacturing
- Employee Accountability
- Six Sigma Quality



## Worksheet #3: *Business Vision Statement*

### Key Word Attributes:

Describe your business in five years using just key words

### Vision Statement:

Use key words to describe what you will become; consider a theme statement as point of focus within your company



## Worksheet #4: *Self-Assessment Reality Check*

### Business Issues:

Roadblocks to be addressed in order to achieve your goals and objectives

Business Issues

Description and Why It Is Important



# Eliminating Manufacturing Waste and Unneeded Effort

## ★ Sources include:

- Over production or capacity
- High defect rate and work-in-process scrap
- Excessive waiting and holding time
- Unnecessary motion and labor hours
- Unneeded inventory and space
- Inefficient manufacturing processes
- Excessive material handling and storage

# Available Lean Manufacturing Techniques

- ★ Kanban – *visual control*
- ★ Cellular flow – *short spans and beat of action*
- ★ TPM – *total preventative maintenance*
- ★ POUS – *point of use storage*
- ★ Quality – *immediately correct at the source*
- ★ Changeover – *pre-plan, timing and test pre-production*
- ★ Standardize – *commonality*
- ★ Batch size – *cycle time*
- ★ Teams – *input, cross train*
- ★ 5S – *Sort, set, shine, standard, sustain*
- ★ Plant layout – *remove motion and hold time*
- ★ Visual controls – *performance metrics*



# Rationalizing Manufacturing Cost Structure

## ☀ Material costs

- Raw materials and components
- Outsourcing, including domestic or foreign
- Value analysis and reengineer value-added

## ☀ Direct labor cost

- Productivity and yield
- Automation, standardization and cross-training
- Value stream mapping

## ☀ Equipment and tooling cost

- Dedicated, flexible and automated
- Quick changeover procedures
- Machine utilization and productive hours



## Worksheet #5: *Rough Cut Analysis Required*

### Data/Analysis Needed to Understand Your Issues

Business Issues

Analysis or Data to Gather



## Worksheet #6: *Developing Your Business Strategies*

### Overall Business Strategy:

Overall approach to achieving goals

### Functional Supporting Strategies:

#### *Suggested Objectives:*

- Sales and Marketing
- Manufacturing
- Operations
- Materials Management
- Human Resources



## Worksheet #7: *Developing Your Support Programs*

### Key Programs:

Step-by-step, quarter-by-quarter, who/what/when/how will the programs be implemented to accomplish the desired results?

<u>Program Name</u>	<u>Description of Purpose/Results</u>	<u>Start Date</u>	<u>Complete Date</u>	<u>Program Leader</u>	<u>Needed Resource or Guidance</u>
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## Worksheet #8: *Resulting Needed Financial Statement*

### High-Level Pro Forma:

History	History	History	Current	Plan	Plan	Plan
Yr-3	Yr-2	Yr-1	Year	Yr+1	Yr+2	Yr+3

- *Income Statement*
  - *Balance Sheet Statement*
  - *Cash Flow Statement*
  - *Capital Spending Budget*
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- Key high-level summary items
  - Level of detail depends on strategies being implemented
  - Financial statements should just another piece of your planning document
  - Should test the validity of your action programs

## Worksheet #9: *Formal Plan Review/Progress Report*

<u>Functional Area</u>	<u>Key Program</u>	<u>Planned Activity</u>	<u>Accomplishments in this period</u>	<u>Next planned accomplishment</u>	<u>Assessment of progress</u>
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- Review should be cover every critical program
- Status report should be prepared in advance and submitted to participants
- Each review participant is responsible to be prepared
- Program manager responsible to present program status verbally
- Review should be monthly, then quarterly once process is well in place



# Roadblocks to Different Thinking –

What Is Your Manufacturing Business Model?

What Are Managers' Roles and Responsibilities?

## ☀ Functional Differences:

- *Remove the Obstacles, Whether Real or Imagined*

## ☀ Sources of “Real” Conflicts:

- *Define Magnitude and Resolve Quickly and Fairly*

## ☀ Providing “Clear and Decisive” Leadership:

- *Create Pathways and be the Advocate for Change*

## ☀ Ensuring “Implementation”:

- *Seek Understanding, Acceptance and Action*

*Lesson-Learned:*

## Seven Successful Habits of Successful People – Covey

- ★ Be proactive - *have purpose and passion*
- ★ Start with end in sight - *visualize success*
- ★ Leadership traits - *first things first*
- ★ Think win-win - *do not manipulate*
- ★ Listen then be understood - *other point of view*
- ★ Create synergies - *cooperative problem solving*
- ★ Self renewal - *invest in yourself*



## Worksheet #10: *Review Lessons-Learned Annually*

Functional Area

Lesson-Learned

Implications

Periodically, the management team needs to step back, reflect and identify positive and negative lessons-learned through the planning, analysis and implementation effort



## *Lessons-Learned* *What Experience Has Taught Hadley Associates About Manufacturing Strategies*

### *★ Applying the Lessons*

- Study, analyze and decide
- Prepare workable strategies
- Measure success with data and benchmarks
  
- Continue daily disciplines
- Get started today
- Work the plan and change as needed

### *★ Final Observations*

- Question and listen
- Be “bold and creative”
- Be receptive to new concepts from customers
  
- Manage/encourage change
- Measure the important results to be achieved
- Be a “proactive” participant