STRATEGIC PRODUCTION PLAN TO SUPPORT THE FIRM'S OVERALL BASIC COMPANY PLAN

By

R. Henry Migliore
President Managing for Success
Professor Emeritus
UCT/NSU

PRODUCTION PLAN

Purpose of Production Function:

The production function is essentially the implementation of the firm's overall strategy. The production function mobilizes varied resources to put the firm's strategies in motion.

ENVIROMENTAL FACTORS SPECIFIC TO PRODUCTION

I. The production function implements the total strategy; production greatly affects the attainment of the other functional plans. Therefore, the production function operates within an environment of subtle internal pressures from other financial areas.

II. The production function operates within an environment of standards and measures.
    1. The never ending hourglass.
    2. Measuring process parameters on a continuing basis.
    3. Input vs. output of each production factor.

III. Includes latest information of what's going on in production/operation:
    1.
    2.
    3.

PRODUCTION STRENGTHS AND WEAKNESSES

I. Having in place people, materials, machines, tools, and a complete set of standards and benchmarks for each operation and process.

II. Having in place a seasoned, well-trained workforce.

This basic evaluation tool can help an organization evaluate a wide range of things. The organization can evaluate production lines, people, facilities, buildings, etc.

PRODUCTION STRENGTHS AND WEAKNESSES

List major production strengths and weaknesses:

1.

2.

3.

PRODUCTION ASSUMPTIONS

There are several generic assumptions that we often take for granted: however, we need to list them because the consequences of their not occurring could be severe.

1. All required production factors will be available as needed at current or near current prices.
2. All completed production will be distributed to end users and liquidated to cash on a timely basis.

Assumptions for this production plan:

1.

2.

3.

Major Production Objectives

OBJECTIVES

Last Year Actual	Next Year	5 Years

MANUFACTURING/PRODUCTIVITY
Energy Productivity

1. **Output per energy consumer (BTUs)**

$$\frac{\text{Output}}{\text{BTU (constant period)}}$$

2. **Energy Productivity Index =**

$$\frac{\text{output}}{\text{BTU (base period)}} \times 100$$

-OR-

$$\frac{\text{output in current period}}{\text{output in base period}}$$

3. **Energy productivity =**

$$\frac{\text{Std BTU (or other unit of measure) for product mix}}{\text{Actual BTU (or other unit of measure) consumed}}$$

Major Production Objectives

OBJECTIVES

	Last Year Actual	Next Year	5 Years
MANUFACTURING/PRODUCTIVITY			
Capital Productivity			

1. **Quantity of output per quantity of capital input**

2. **Capital productivity = $\frac{\text{quantitiy of output}}{\text{quantity of capital of input}}$ = $\frac{\text{units produced/day}}{\text{units inventory}}$ =**

   $\frac{\text{units produced/day}}{\text{machine (process unit)}}$

3. **Capital productivity (R.O.I.) = $\frac{\text{Net assets at end of time period (1 year)}}{\text{Net assets at beginning of time period}}$**

Percent of defective output

Equipment down-time hours

Major Production Objectives

OBJECTIVES

MANUFACTURING/PRODUCTIVITY
Total Output = labor + energy + capital + miscellaneous input

Last Year Actual	Next Year	5 Years

Number projects completed
Number projects scheduled

Units produced
Hours worked

Sales
Employee

Major Production Objectives

OBJECTIVES

Last Year Actual	Next Year	5 Years

MANUFACTURING/PRODUCTIVITY

Total Output = labor + energy + capital + miscellaneous input

Labor Productivity

1. **Items produced per employee**

2. **Quantities produced per employee-hour**

3. **Labor Index =**

$$\frac{\text{equivalent employee-hours of output} \times 100}{\text{actual total employee-hours}}$$

$$\frac{\text{price-weighed output (period 2)}}{\text{total labor costs (period 2)}}$$

4. **Labor Productivity Index =** $\frac{\quad}{\text{price weighed output (period 1)}} \times 100$

$$\text{total labor costs (period 1)}$$

5. **Labor productivity =** $\frac{\text{std labor hours earned}}{\text{actual labor hours expended}}$

Major Production Objectives

OBJECTIVES

MANUFACTURING/PRODUCTIVITY
Total Output = labor + energy + capital + miscellaneous input

Last Year Actual	Next Year	5 Years

Materials Productivity

1. **Output per constant dollar of total material cost**

2. **Material productivity (yield) =** $\frac{\text{Stud mat (respective unit of measure)}}{\text{Actual material placed in process}}$

Quality

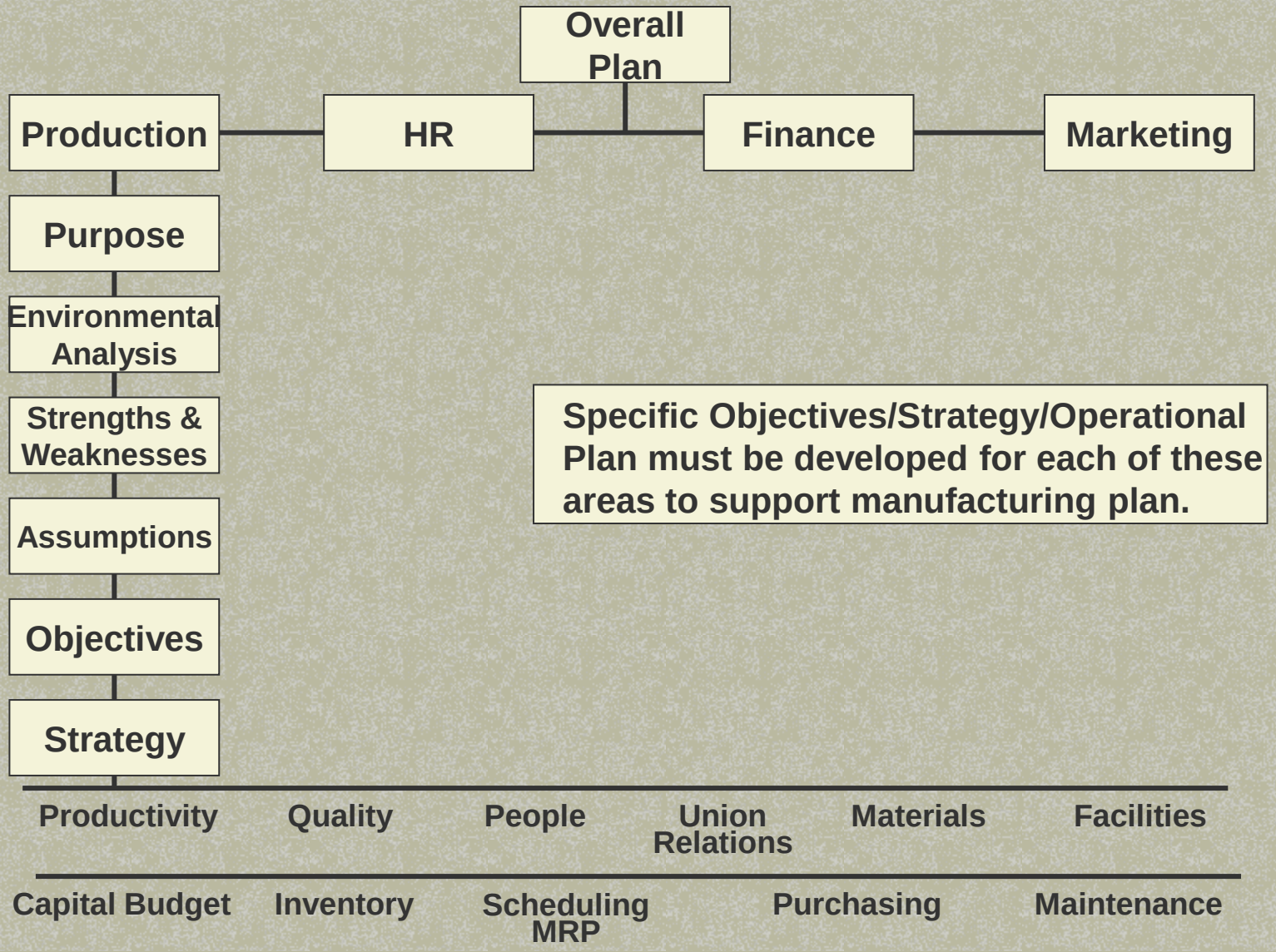
On Time Delivery

Safety

Throughput

Production Strategy:

Part of the strategy is to polish the star, solve the problems, feed the cash cows and shoot the dogs. Again, the process looks like this:



Use this sheet to develop a separate plan for production, quality, people, union relations, materials, facilities, capital budget, inventory, scheduling, energy and maintenance.

Objectives: _____

Other Responsibility: _____

1.
2.
3.

Strategies: _____

_____

_____

Start Date	Action Steps	Due Date	Responsibility	Status

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Last Year Actual	Next Year	5 Years

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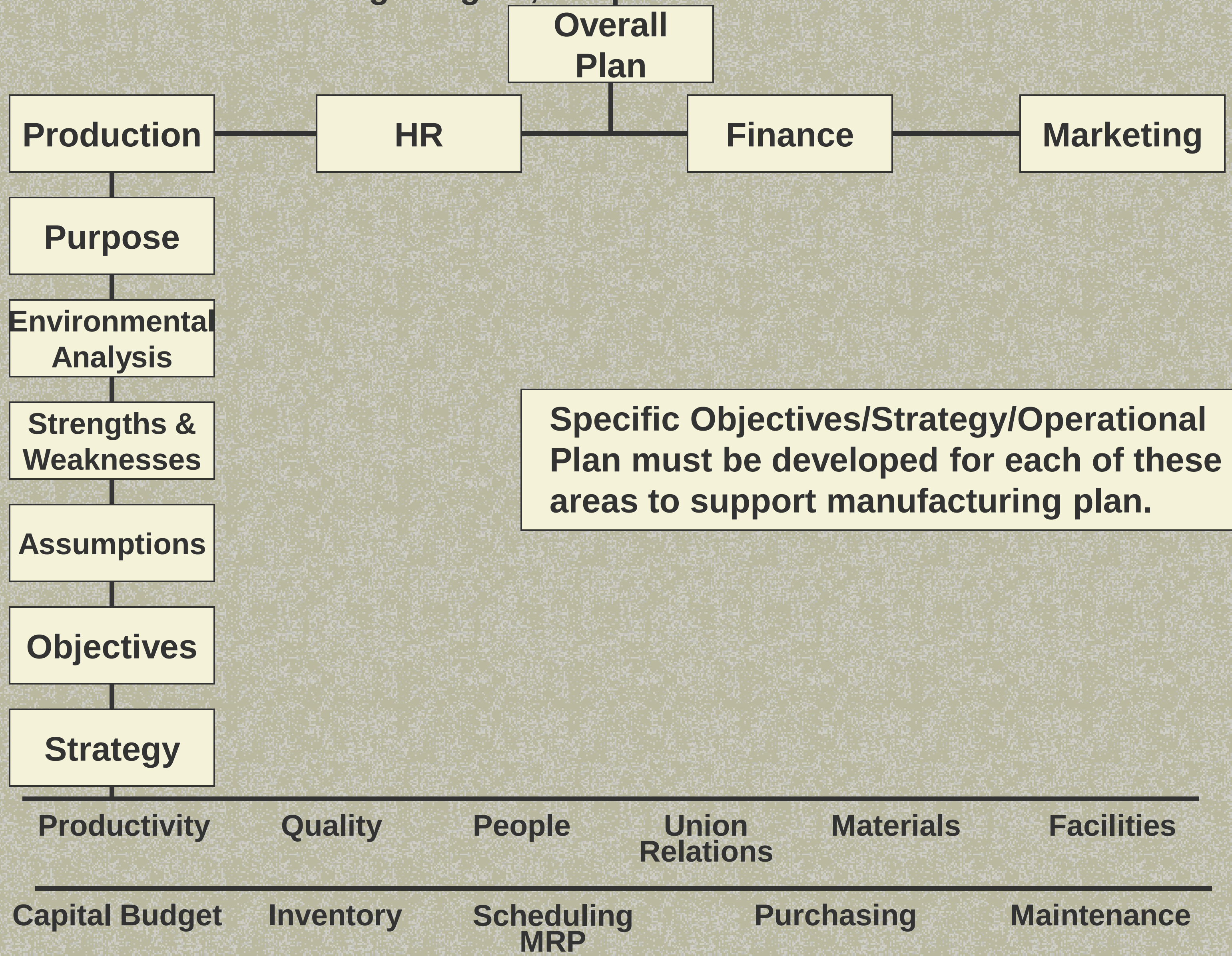

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Objectives: _____

Other Responsibility: _____

1.
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Strategies: _____

_____

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Start Date	Action Steps	Due Date	Responsibility	Status

WORKSHEET
STRATEGIC PRODUCTION PLAN TO SUPPORT
THE FIRM'S OVERALL BASIC COMPANY PLAN

by
R. Henry Migliore
Professor of Strategic Planning and Management
Northeastern State University, Broken Arrow

OUTLINE

The organization's overall strategic plan is developed according to the following format.[1] The Production Manager, as part of the organization's top management team, has played a vital and integral role in developing this overall plan.

1. Purpose
   a. What is "reason for being," your "mission ," why products are needed, customers served, needs met in marketplace, and scope of the endeavor?
   b. Nationwide and/or local, ethics, profit, or nonprofit.

2. Environmental Analysis
   a. Pulse
   b. Now or past
   c. Industry surveys
   d. Completed studies of future done now

3. Strengths and Weaknesses (S & W) (usually internal)
   a. Human
   b. Facilities/equipment
   c. Patents/resources natural
   d. Financial

4. Assumptions
   a. Have no control over
   b. Extend environmental analysis
   c. Usually external

5. Objectives and Goals
   Specific time frame, objectives, and goals including specific time frames measurable in key result areas.[2]

[1] Summary of Steps 1 through 6 in *Strategic Planning and Production Operations Management: A Productivity Approach.*

[2] Note all rules for objectives in Migliore's book *Strategic Planning and Management for the New Millennium.*

6. Strategy—Two to three strategies for each objective: Thinking stage; Where and how to commit resources; Timing; Pricing policy
    a. Sales/Marketing
    b. Manufacturing
    c. Financial
    d. Facilities: People/training/morale/public responsibility

7. Issues/Problems
    a. Major
    b. Minor

8. Analysis
    a. Industry/competitive/company situation analysis
    b. Functional; marketing, financial accounting, management, production, and people

9. Alternative Solutions
    a. List of alternatives
    b. Pros/cons of each

10. Recommended Course of Action
    a. Alternative selected
    b. Justification

Now that strategic direction has been set and the production manager has contributed and bought into the plan, then and only then can the production plan be started. Using the same philosophy and basic team principle, the production plan is developed. All staff/line managers that report to the Production Manager play an active role in the development of the production plan.

Manufacturing Plan

The Manufacturing Plan is always a subset of the corporate plan. Manufacturing executive must be involved in developing that corporate plan.

Manufacturing then develops its one Purpose, E.A., S & W, and Assumptions. As many people as possible are in on developing the plan. The plan is in writing and is continually updated.

Manufacturing Objectives are set in key result areas.
Strategies and operational plans are developed for each objective.
There is a constant interaction among marketing, finance, research and development, human resources, etc.

Strategies and operational plans develop programs for: productivity, capital budgets, union relations (if a union shop), materials, facilities, energy, scheduling, inventory, quality, etc. The Production Manager and others then concentrate on a production plan that will support the overall organization.

Production Plan

Purpose of Production Function:

The production function is essentially the implementation of the firm's overall strategy. The production function mobilizes varied resources to put the firm's strategies in motion. Write out a purpose statement for the production function in your organization.

Environmental Factors Specific to Production:

1. The production function implements the total strategy; production greatly affects the attainment of the other functional plans. Therefore, the production function operates within an environment of subtle internal pressures from other functional areas.

2. The production function operates within an environment of standards and measures.
   a. The never-ending hourglass
   b. Measuring process parameters on a continuing basis
   c. Input vs. output of each production factor

3. Includes latest information on what is going on in production/operation

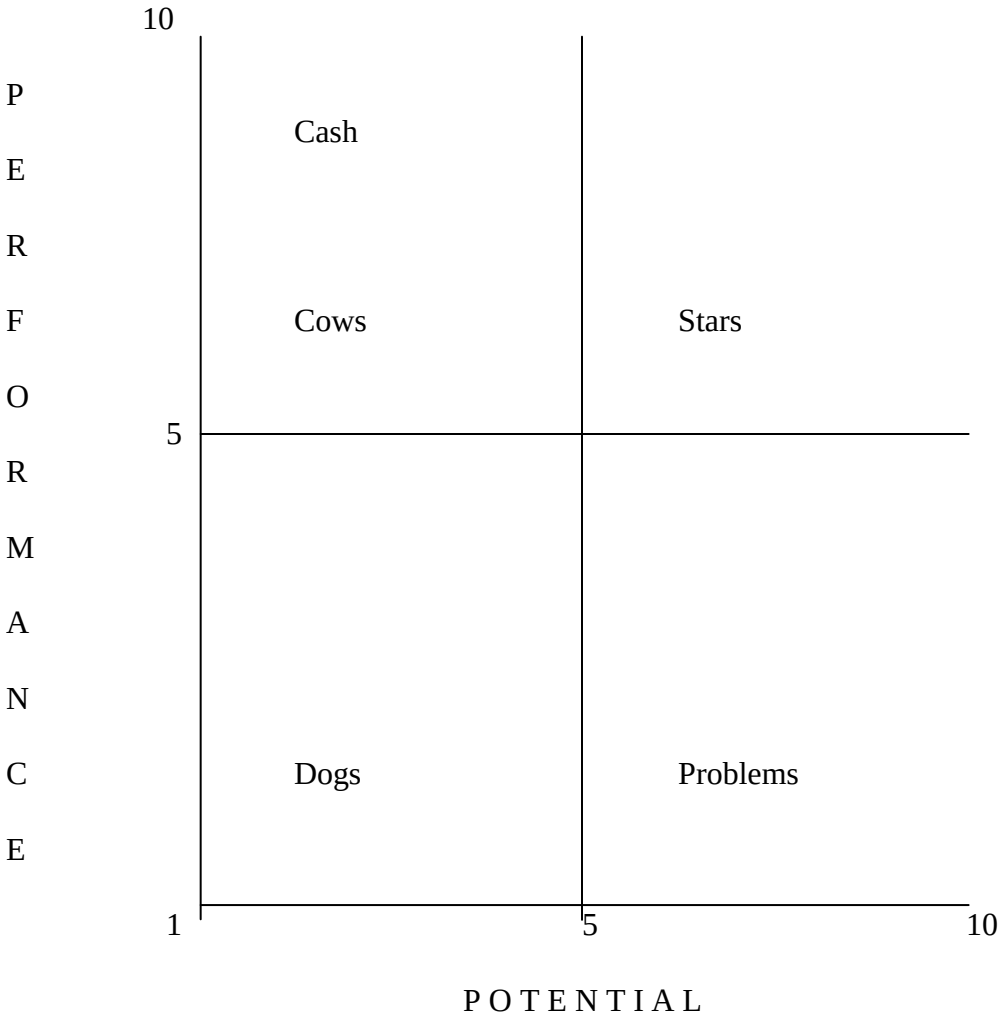
   a.

   b.

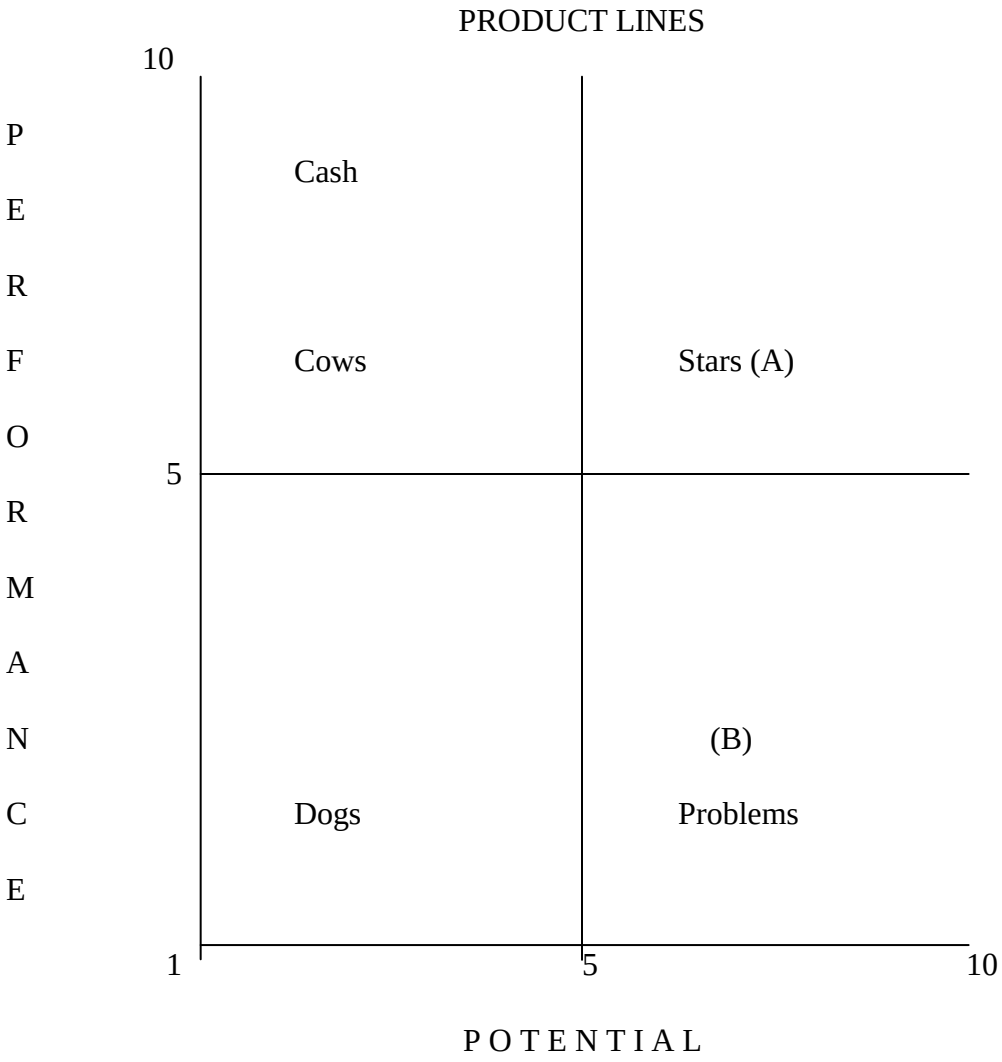
   c.

   d.

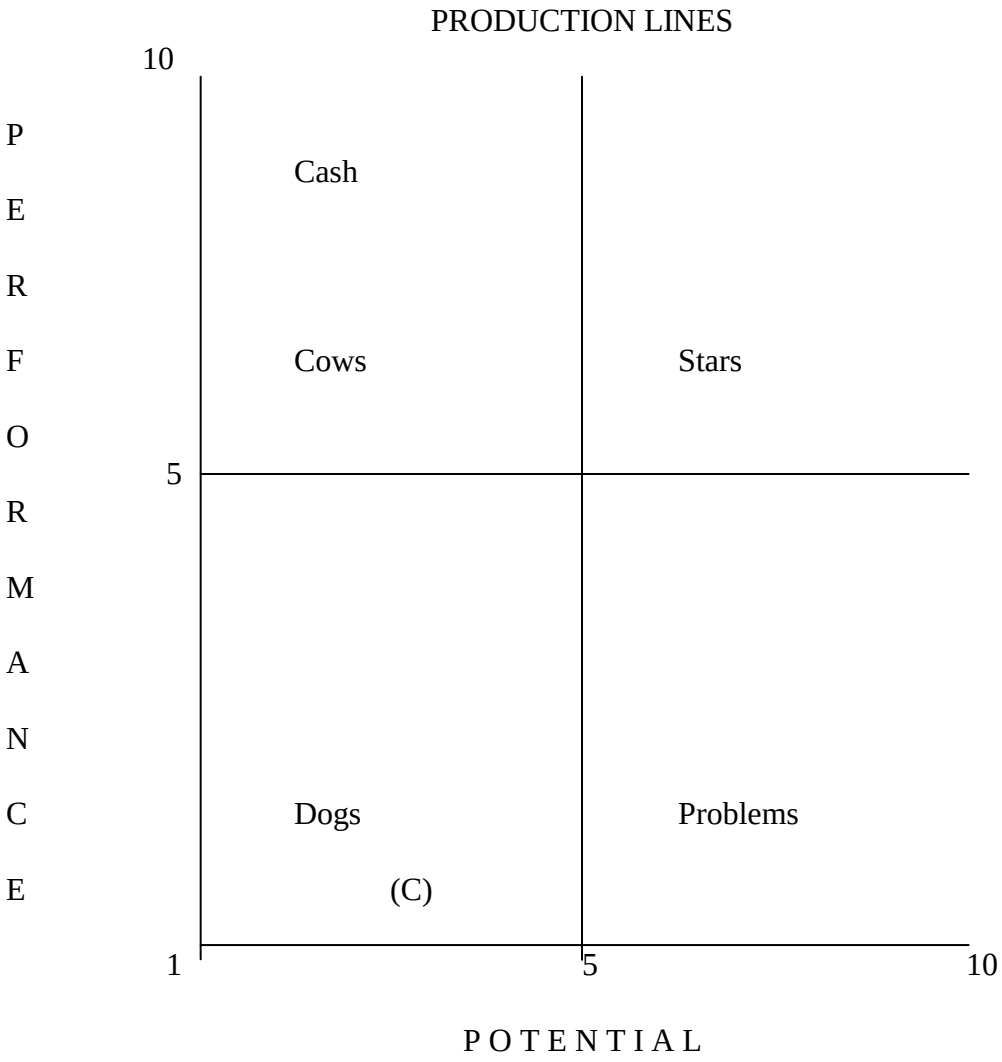
   e.



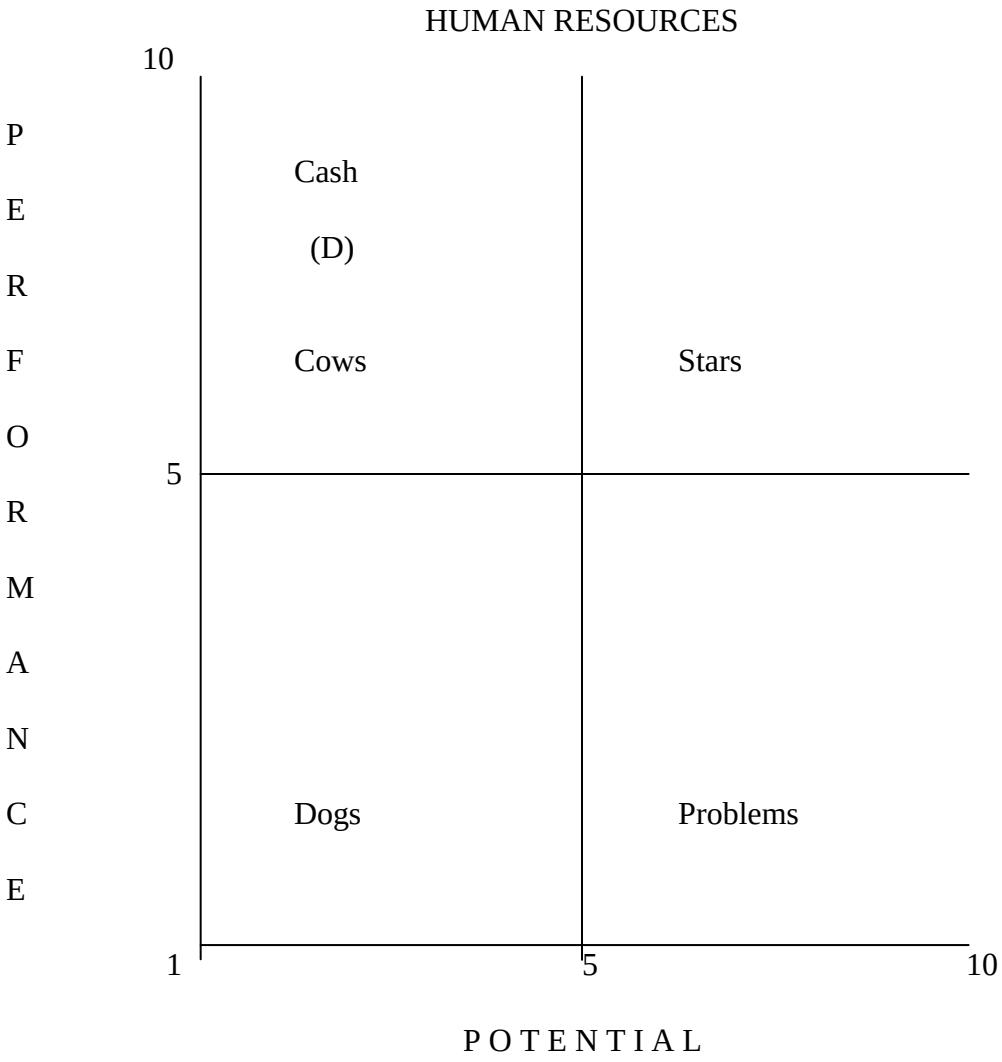
This basic evaluation tool can help an organization evaluate a wide range of things. The organization can evaluate production lines, people, facilities, buildings, etc.



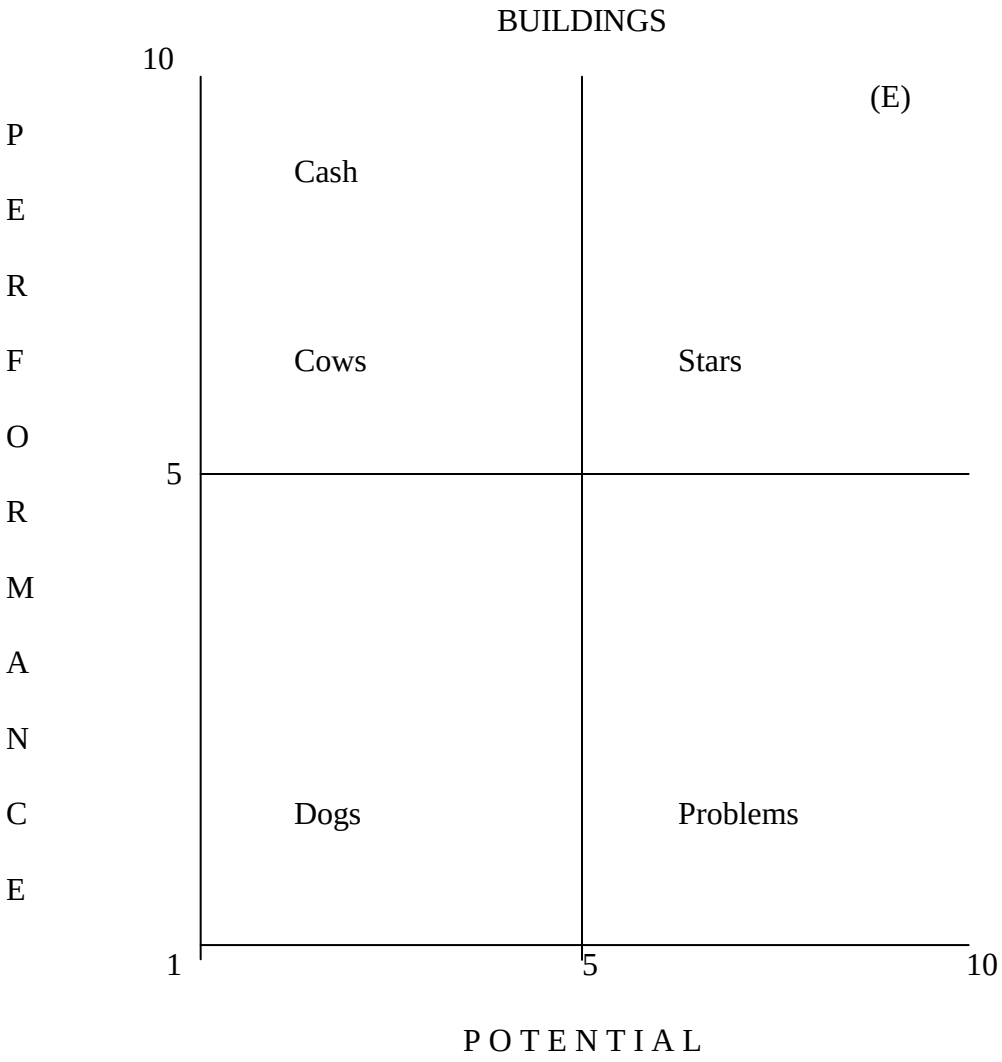
For example, Product Line A might be a "star" with (8.7) rating. B might be a "problem" with a (8.4) rating.



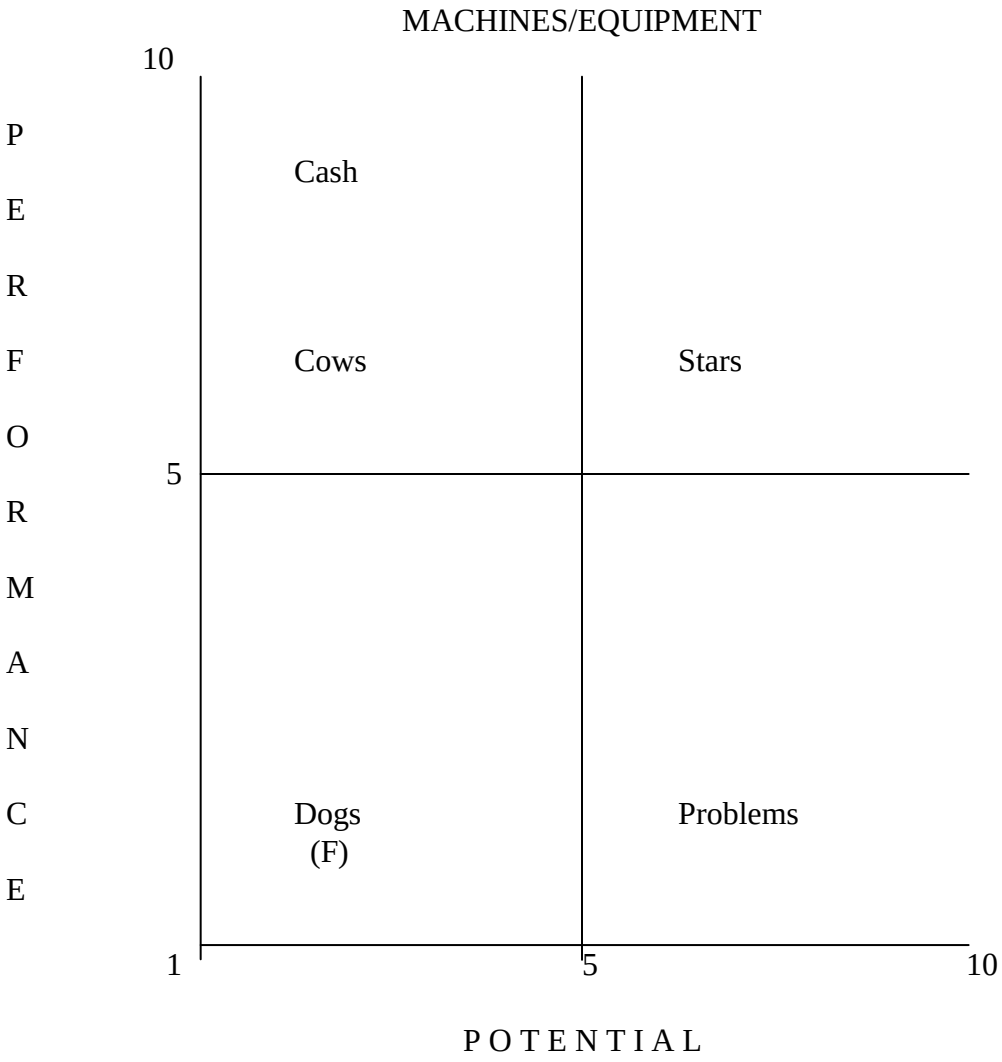
For example, Production Line C would be a "dog" if it had a (3.3) rating.



For example, Person D might be a (3.8)—a cash cow.



For example, a new plant, well laid out, might be E, a (9.9)—a star.



For example, a piece of machine (F) might have a (3.3) rating and be classified as a "dog."

Production Strengths and Weaknesses

List major production strengths and weaknesses:

1.

2.

3.

4.

Production Assumptions

There are several generic assumptions that we often take for granted; however, we need to list them because the consequences of their not occurring could be severe.

1. All required production factors will be available as needed at current, or near current, prices.
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Assumptions for this production plan:

1.

2.

3.

Major Production Objectives

OBJECTIVES		
Last Year Actual	Next Year	5 Years

MANUFACTURING/PRODUCTIVITY

Energy Productivity

1. Output per energy consumer (BTUs)

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2. Energy Productivity Index = $\dfrac{\dfrac{\text{output}}{\text{BTU (base period)}}}{\text{OR}}$ x 100

$$\frac{\text{output in current period}}{\text{output in base period}}$$

3. Energy Productivity Index = $\dfrac{\dfrac{\text{BTU in current period}}{\text{BTU in base period}}}{}$ x 100

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Capital Productivity

1. Quantity of output per quantity of capital input

2. Capital Productivity = $\dfrac{\text{quantity of output}}{\text{quantity of capital of input}} = \dfrac{\text{units produced/day}}{\text{units inventory}} =$

$$\frac{\text{units produced/day}}{\text{machine (process unit)}}$$

3. Capital productivity (R.O.I) = $\dfrac{\text{Net assets at end of time period (1 yr)}}{\text{Net assets at beginning of time period}}$

Percent of defective output

Equipment down-time hours

Major Production Objectives

OBJECTIVES		
Last Year Actual	Next Year	5 Years

MANUFACTURING/PRODUCTIVITY
Total Output = Labor + Materials + Energy + Capital + Miscellaneous Input

$$\frac{\text{Number Projects Completed}}{\text{Number Projects Scheduled}}$$

$$\frac{\text{Units Produced}}{\text{Hours Worked}}$$

$$\frac{\text{Sales}}{\text{Employee}}$$

Labor Productivity

1. Items produced per employee
2. Quantities produced per employee-hour
3. Labor Index = $\frac{\text{Equivalent employee-hours of output}}{\text{Actual total employee-hours}}$ x 100

   $\frac{\text{Price weighted output (period 2)}}{\text{Total labor costs (period 2)}}$
4. Labor Productivity Index = $\frac{\qquad\qquad}{\text{Price weighted output (period 1)}}$ x 100
   $\text{Total labor costs (period 1)}$

   Labor Productivity = $\frac{\text{Std labor hours earned}}{\text{Actual labor hours expended}}$

Materials Productivity

1. Output per constant dollar of total material cost
2. Material productivity (yield) = $\frac{\text{Stud mat (respective unit of measure)}}{\text{Actual material placed in process}}$

Quality

On-Time Delivery

Safety

Throughput

R. Henry Migliore

Dr. Migliore is President of Managing for Success, an international consulting company. He was Professor of Strategic Planning and Management at Northeastern State University/Oklahoma State University—Tulsa from 1987-2002; Dr. Migliore teaches at the graduate and undergraduate levels. He was formerly Professor of Management and former Dean of the ORU School of Business from 1975 until 1987. He was a visiting professor at the University of Calgary; ITESM Campus Guadalajara, Guadalajara, Jalisco, Mexico; Singapore; and WuYi University in China.

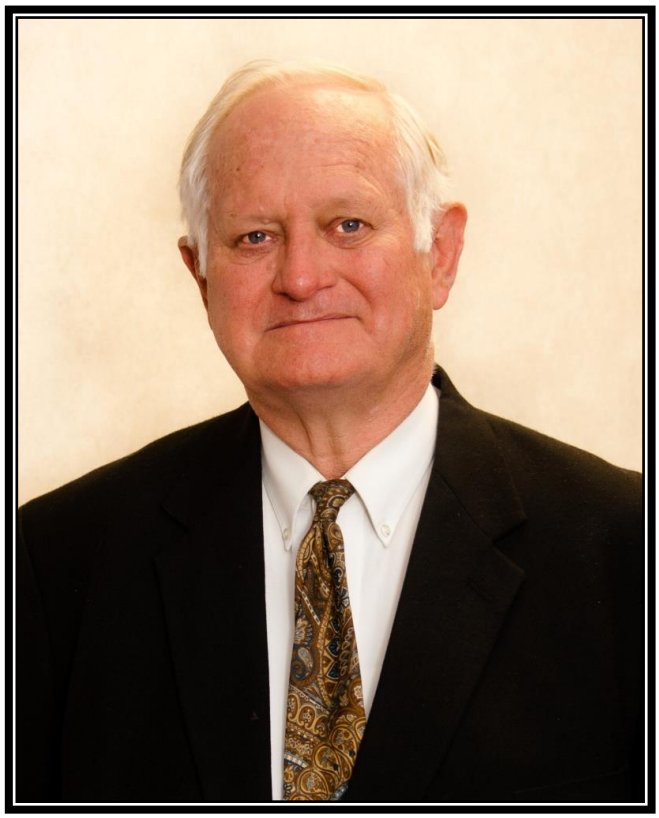
He is former manager of the press manufacturing operations of Continental Can Company's Stockyard Plant. Prior to that, he was responsible for the industrial engineering function at Continental's Indiana plant. In this capacity, Dr. Migliore was responsible for coordinating the long-range planning process. In addition, he has had various consulting experiences with Fred Rudge & Associates in New York and has served large and small businesses, associations, and nonprofit organizations in various capacities. He has made presentations to a wide variety of clubs, groups, and professional associations. Dr. Migliore has been selected to be on the faculty for the International Conferences on Management by Objectives and the Strategic Planning Institute Seminar Series. He is also a frequent contributor to the Academy of Management, including a paper at the 50th anniversary national conference. He served for 12 years on the Board of Directors of T. D. Williamson, Inc., and was previously on the Boards of the International MBO Institute, Brush Creek Ranch, and the American Red Cross/Tulsa Chapter, and is chairman of a scholarship fund for Eastern State College. In 1984 he was elected into the Eastern State College Athletic Hall of Fame. Dr. Migliore has been a guest lecturer on a number of college campuses. He has lectured for the Texas A & M, Pepperdine, ITESM–Guadalajara, Harvard and the University of Calgary Executive Development Programs. He serves on Chamber and/or Civic Committees, and he served on the Administrative Board at The First United Methodist Church, Tulsa, Oklahoma. He was selected Who's Who on a list of 31 top echelon writers and consultants in America.

To date, previous articles on management and business subjects have appeared in *AIIE Journal*, *Construction News*, *Management World*, *Management of Personnel Quarterly*, *Journal of Long-Range Planning*, *Dental Economics*, *Health Care Management Review*, *MBO Journal*, *Business and Society Review*, *Parks and Recreation Journal*, *The Journal of Business Strategy*, *Daily Blessing*, *Ozark Mountaineer*, *On Line*, *Real Estate Today*, *Communication Briefings*, *Journal of Sports Management*, *Alberta Business Review*, *The Planning Review*, *Hospital Topics*, *Journal of East-West Business*, *Journal of Ministry Management*, *IIE Solutions*, *Industrial Safety and Hygiene*, *Debt-Free Living*, *Supply Chain Management*, and two Mexican journals. His books include *MBO: Blue Collar to Top Executive*, *An MBO Approach to Long-Range Planning*, *A Strategic Plan for Your Life*, *Strategic Long-Range Planning*, *Strategic Planning for Church and Ministry Growth*, *Common Sense Management: A Biblical Perspective*, *Personal Action Planning: How to Know What You Want and Get It*, and *Tales of Uncle Henry*. They describe personal theories and experiences. He contributed to the books, *Readings in Interpersonal and Organizational Communication* and *International Handbook on MBO.* The book *The Management of Production: A Productivity Approach* is coauthored. Other books include *Strategic Planning and Management*, *Strategic Life Planning*, and *Common Sense Management*. The manuscript *People, Productivity, and Profits* has been completed. He is coauthoring a series of books with Haworth Press. Released so far are *Church and Ministry Growth* (1995), *Planning for Nonprofit Management* (1995), *Strategic Planning and Health Care* (1996), *Strategic Planning for Private Universities* (1997), and *Strategy Planning for Collegiate Athletics* (spring 2000). *Strategic Long-Range Planning for the New Millennium* was updated and published in January 2012. His books have been translated into Russian, Chinese, Korean, Spanish, German, and Japanese. A Spanish version of *Strategic Planning* was updated Spring 2013. He has also produced "Personal Financial Success," a video training kit offered on nationwide television, and video/audio tapes to go with his books. Dr. Migliore has developed three complete videotaped and computer Internet web-based correspondence courses. January 2013—A new course has been developed and instituted in 2013.

In November 1985 the daily "Managing for Success" cable television program was inaugurated and was on the air until March 1986. It was on Tulsa Cable. The series began again on Tulsa Cable in September 1986. He writes occasional columns for the *Tulsa World, Tahlequah Pictorial Press, Collinsville News, Jenks Journal, and Muskogee County Times.* A complete video series with four summary units and thirty-six support units covering planning, management, and common sense management supports other material.

In November 1998 Dr. Migliore was inducted into the Eastern Oklahoma State Hall of Fame. This followed his induction in 1988 into the Eastern Athletic Hall of Fame.

Dr. Migliore has been a small business consultant for the Oklahoma Small Business Development Center for 13 years. Dr. Migliore holds degrees from Eastern Oklahoma State, Oklahoma State University, St. Louis University, and completed his doctorate at the University of Arkansas. He belongs to the Academy of Management and the Planning Executives Institute and is a senior member of the American Institute of Industrial Engineers.



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