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

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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

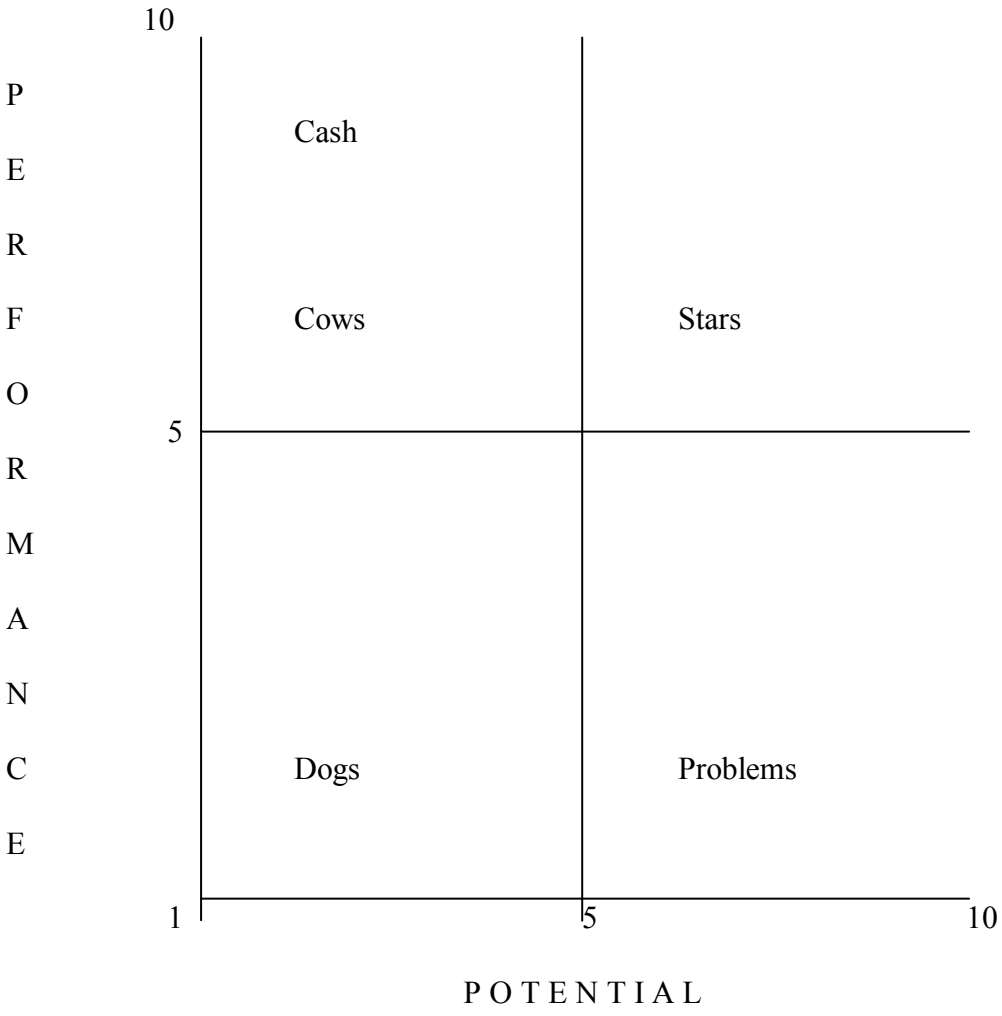
   a.

   b.

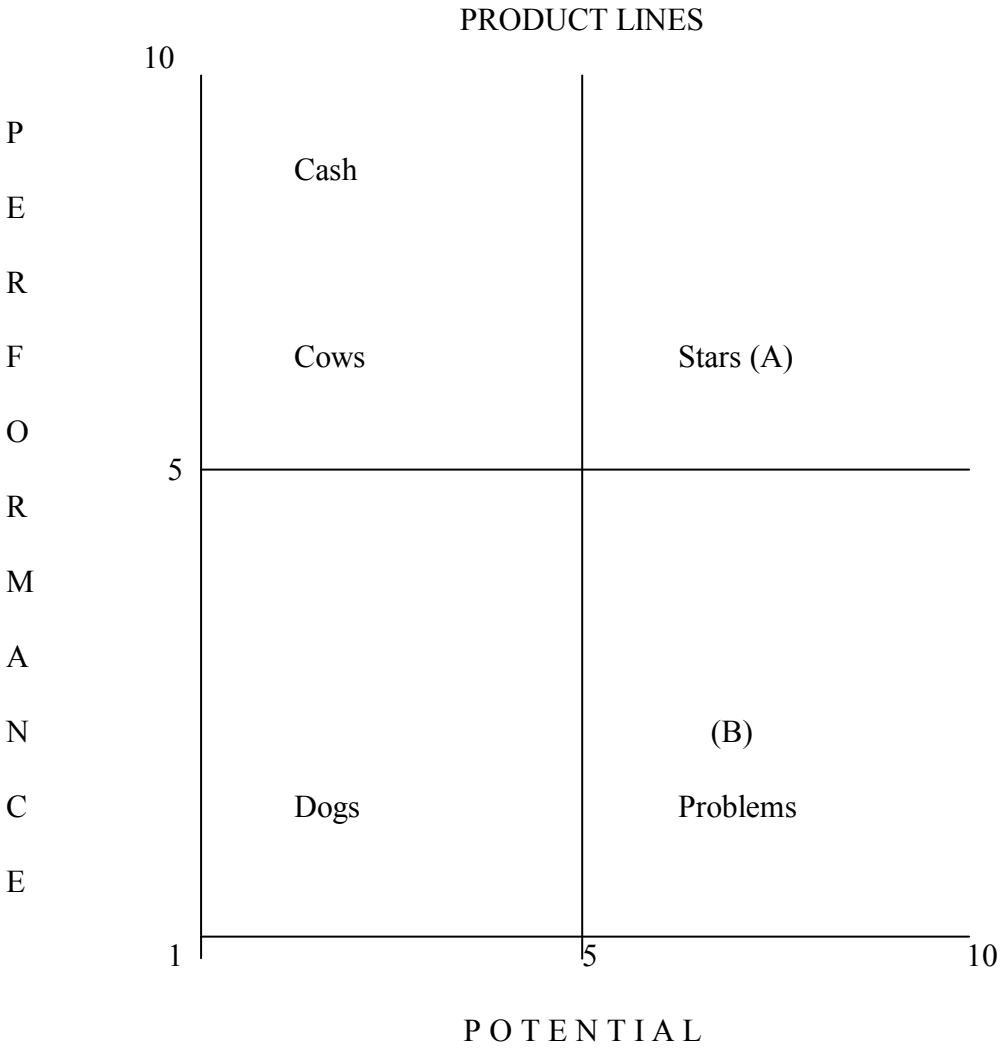
   c.

   d.

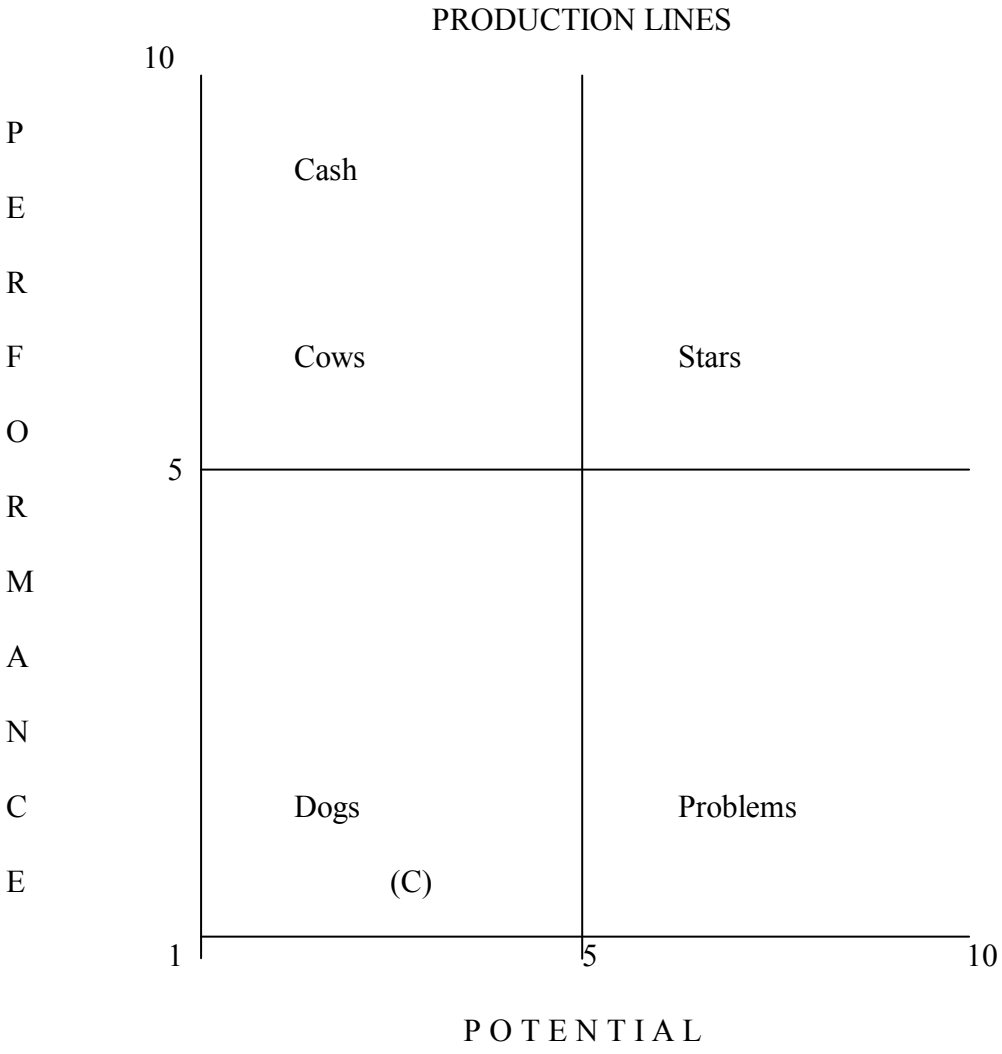
   e.



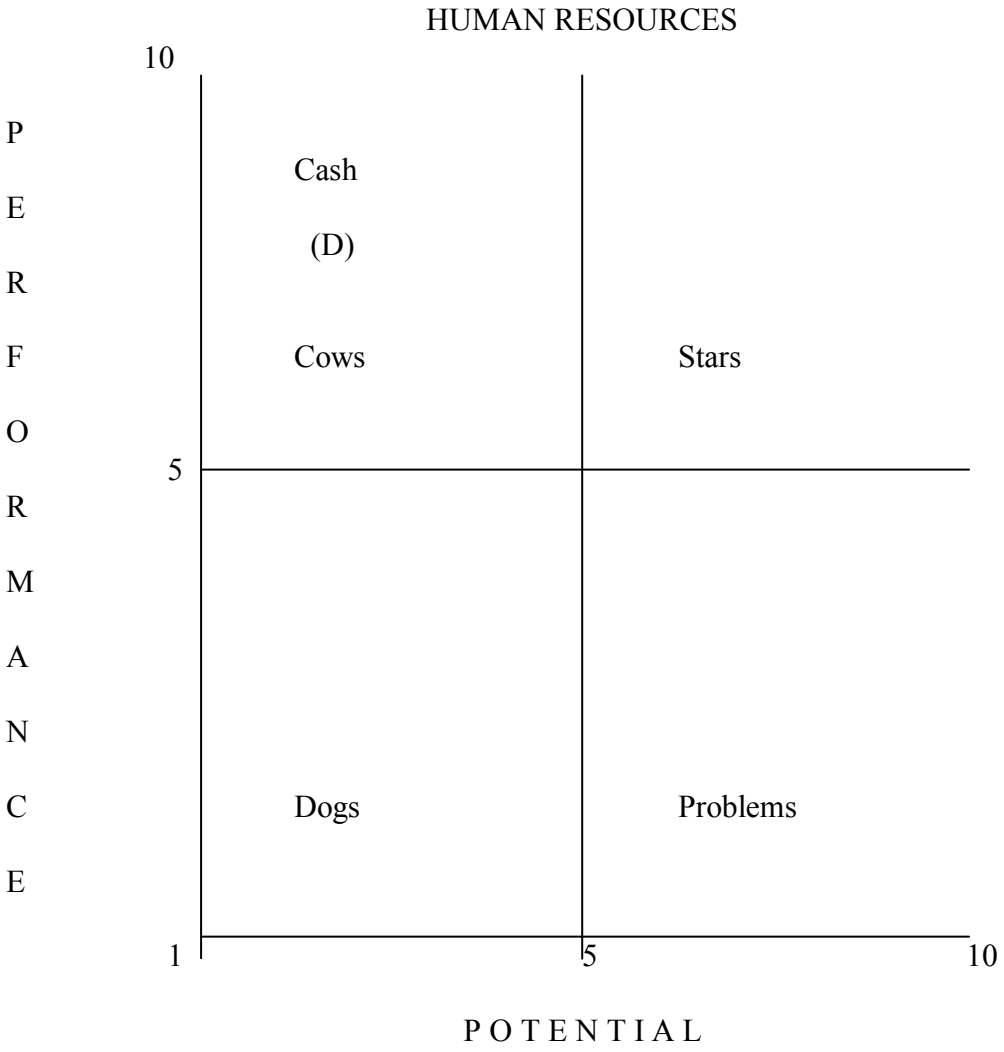
This basic evaluation tool can help an organization evaluate a wide range of things. The organization can evaluate production lines, people, facilities, buildings, etc.



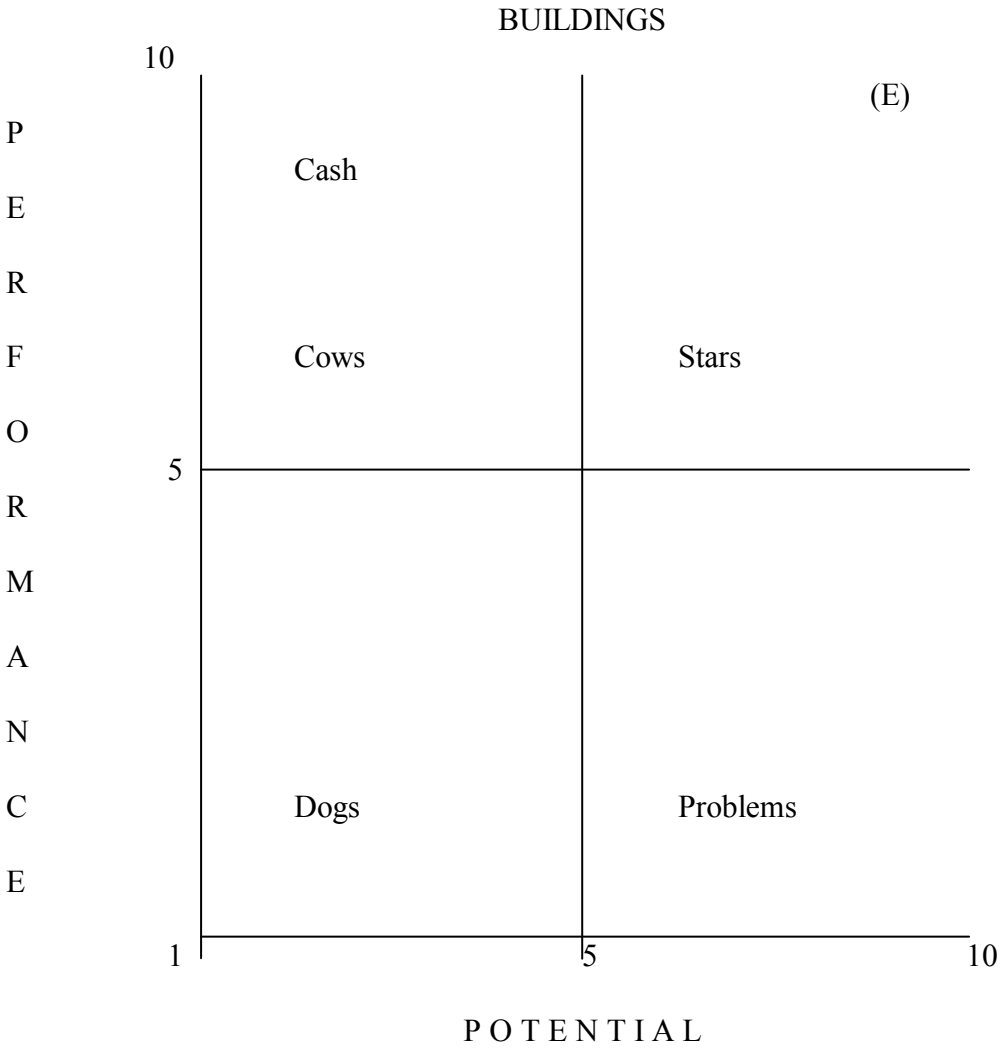
For example, Product Line A might be a "star" with (8.7) rating. B might be a "problem" with a (8.4) rating.



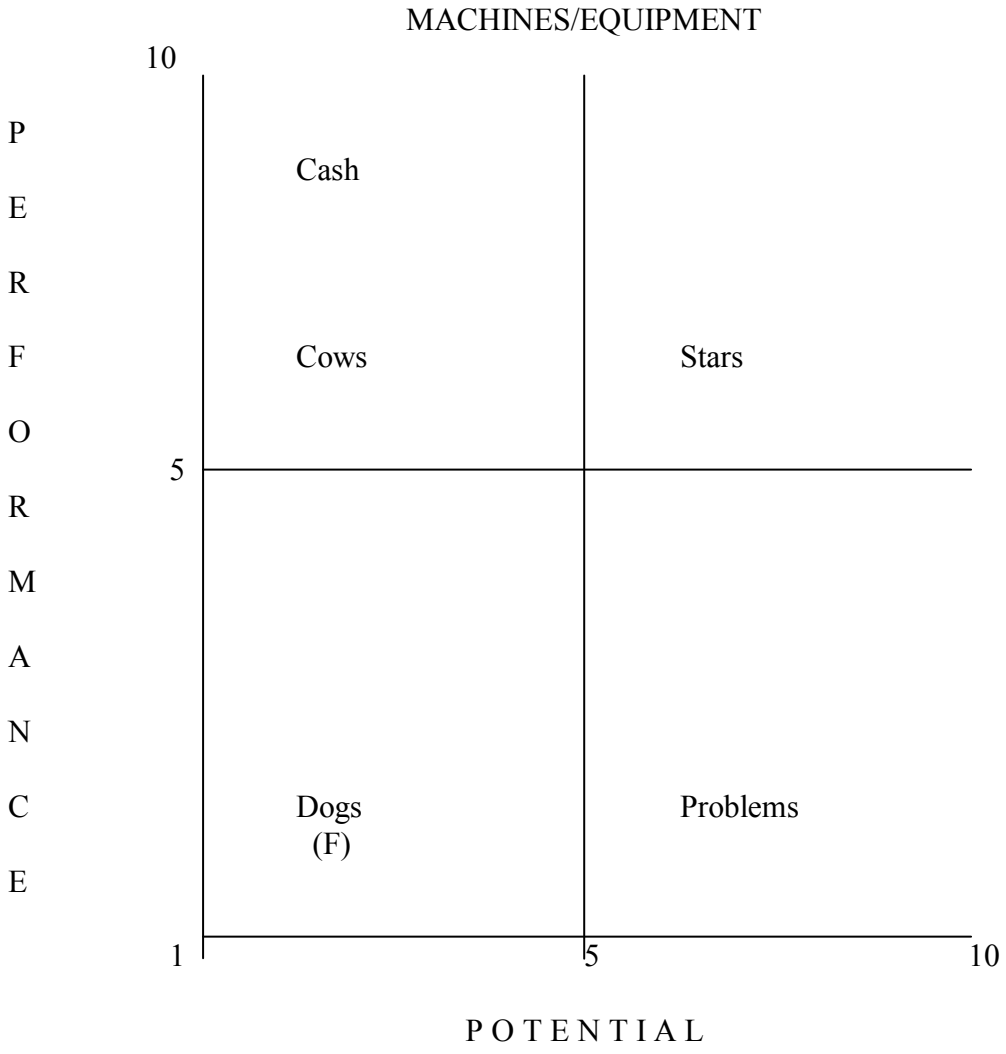
For example, Production Line C would be a "dog" if it had a (3.3) rating.



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.
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 = $\dfrac{\dfrac{\text{output}}{\text{BTU (base period)}}}{}$ x 100

OR

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

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

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

Capital Productivity

1. Quantity of output per quantity of capital input

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

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

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

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

$$\frac{\text{Price weighted output (period 1)}}{\text{Total labor costs (period 1)}}$$

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