MANAGEMENT CAPSULE

A CONCISE MANAGEMENT MANUAL

FOR STUDENTS, ENTREPRENEURS, AND BUSINESS LEADERS

By

R. Seshadri Reddy

Published by: Anika Publications, Plot# 1250, Road # 12 Extension, Banjara Hills, Hyderabad - 500096, Telangana, INDIA

Contact: R. Seshadri Reddy; Email: reddigari@hotmail.com; Cell # +91- 9347052956

Website: www.managementcapsule.com

Price: India: Rs 600; elsewhere: US$ 25

ISBN 978-93-5196-236-6

MANAGEMENT CAPSULE

A CONCISE MANAGEMENT MANUAL FOR STUDENTS, ENTREPRENEURS, AND BUSINESS LEADERS

First Published: Year 2015

Published by: Anika Publications, Plot# 1250, Road# 12 Extension, Banjara Hills, Hyderabad- 500096, Telangana, INDIA

Contact: R. Seshadri Reddy; Email: reddigari@hotmail.com; Cell# 91-9347052956
Website: www.managementcapsule.com

About the Author: R. Seshadri Reddy, a CEO in an Indian corporate company, is a graduate in Engineering from the Indian Institute of Technology, Madras with PG qualifications from the University of Mumbai. He is also a visiting professor at IIPM (International Institute of Planning and Management), Hyderabad.

Other books by the Author:

1) BLAME IT ON ME: A real life black comedy (Kafkaesque), Published by Frog Books, an imprint of Leadstart Publishing Pvt Ltd, Mumbai; (ISBN = 978-93-80154-21-3)

2) WORD BANK - Memoria Technica: Learn and recall abstruse English words through Stories, Anecdotes, News, Narrations, Etymology, and Quotes; (ISBN=978-93-5067-886-2)

3) WORD BANK Series - Know Thyself, Friends and Foes - Memoria Technica: Learn and recall selective abstruse English words; (ISBN= 978-93-5104-854-1)

4) WORD BANK Series - Confusables - Memoria Technica: Learn and recall selective abstruse English words; (ISBN = 978-93-5137-498-5)

Printed at Sri Kalanjali Graphics, Hyderabad, Telangana, India

Price - India: Rs 600; elsewhere: US$ 25

Management Capsule: Table of Contents (Main Chapters)

Management Capsule: Table of Contents (Total List)

This table comprises detailed list of contents of all the main chapters.

The applicable contents are reproduced at the beginning of each chapter for ready reference.

The index at the rear end of the book lists all the contents in alphabetical order for cross reference.

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Management Capsule:

Prologue

Get the BIG picture of BUSINESS MANAGEMENT in just 21 days!

Prologue

Formal education will make you a living; self education will make you fortune.

... Jim Rohan

The aphorism of the title of this book **"MANAGEMENT CAPSULE"** is very apt; as the contents are designed to cover most of the management subjects in an encapsulated and condensed format, keeping in view the requirement of Students, Entrepreneurs and Business Leaders.

The verb *'manage'* comes from the Italian *maneggiare* (to handle, especially tools), which derives from the Latin word *manus* (hand). The French word *mesnagement* (later *ménagement*) influenced the development of the English word *management* in the 17th and 18th centuries.

At the outset let us debate on the role of MBAs in today's business world.

Is an MBA still necessary?

Earlier, corporations used to recruit MBA graduates from Business Schools in large numbers, to be deployed as Managers. They were perceived as the *'Viz-Kids'* of product innovation, marketing, finance and the like, who implemented *"new styles of leadership".* They were a symbol of modern management culture. Today, the influence of MBA is not so effective or even reassuring! MBA programs have failed to create the type of leaders who can deal with globalization and the rapid technological advancements. Some skeptics say that the MBA programs do not produce any business leaders at all; and the MBA graduates are, at best, theoretical functionaries laying excessive stress on profits and share values at the expense of ethics and sustainability. Social responsibility is of least priority in their mindset. Share market owes are attributed to the approaches of Ivy League graduates. The eight Ivy League institutions are Brown University, Columbia University, Cornell University, Dartmouth College, Harvard University, Princeton University, the University of Pennsylvania, and Yale University. The term *Ivy League* has connotations of academic excellence, selectivity in admissions, and social elitism. When it comes to entrepreneurship, the question of whether to invest in an MBA degree becomes highly debatable. Can the necessary skills for successful entrepreneurship be taught at the Universities? The answer is 'yes', but not in the present format. All is not gloom and doom with the MBAs. The success of their performance lies in the practical application of their knowledge in the field of business. The problem is that the present crop of MBAs seems to have lost touch with the real business world; laying too much emphasis on theory and research activities. They do not appear to be '***doers'***; but they seem to be adept at planning for ***others*** / ***'doers'*** for performance and accomplishment. They tend to tell the ***doers*** what to do and how to do things; never mind

that the ***doers*** do not seek or even need their advice. MBAs are skilled at measuring the performance of the ***doers*** using various tools and techniques such a metrics and graphics.

I am a great believer in Business Management Science; but wish to inspire a serious debate as to by who, why, where, and when to learn this subject. If I were to design the system, I would recommend integration of professional courses with embedded MBA curriculum. I am certain that the course content of 'MBA' would be cake-walk for the students, in engineering and many other disciplines. I am taking the liberty of saying so from my personal experience, as I am an engineering graduate from IIT, Madras with postgraduate qualifications in management studies from the University of Mumbai. This management education indeed helped me hone my performance in the field of manufacturing and marketing; and this happened to be one of the major reasons for my reaching the apex position of a CEO in the corporate world.

Entrepreneurship is the process of starting and running a business or other organization. The entrepreneur chooses and develops a business model, acquires the human and other required resources, and is fully responsible for its success or failure. Successful entrepreneurs have the ability to lead a business in a positive direction by proper planning and innovation while adapting to changes in environments viz. technical, social, political, or economic in nature.

Now let us focus on the contents of this book. Much of MBA course content is embedded in this book, albeit in an abridged form. This knowledge would be of immense help to entrepreneurs and business leaders in pursuing their missions. It may not be worth the time and effort for the potential entrepreneurs and business leaders to go back to Business School to acquire an MBA degree, in pursuit of excellence. It is also not essential to master all the topics in management studies for the practically inclined. Having the big picture of Management Science, albeit with limited details, would suffice. It is always possible to have access to details as and when need arises, what with the information explosion backed by internet in these days.

This book is specially designed keeping in view the requirement of entrepreneurs and business leaders, who do not wish to invest much time or effort to acquire detailed knowledge of Management Science by way of formal education at a Business School. The outcome of such an effort in acquiring MBA qualification is uncertain in any case and much less reassuring.

I do hope that this book would be of immense help to any entrepreneur or business leader in more than one way, to accomplish his/her mission.

This book enables you to get the big picture of Business Management in just 21 days. Read just one chapter a day.

Chapter 02

Initiation to Management

02 Initiation to Management

The best executive is the one who has sense enough to pick good men to do what he wants done, and self-restraint enough to keep from meddling with them while they do it… Theodore Roosevelt

Table of Contents

02.01.00 Definition of Management

Management is the art and science of getting the work done by a group of persons for the attainment of an organization's goals and objectives – generally to convert certain inputs into desired outputs by means of a process, be it a physical product or a service – using requisite tools and techniques through the management processes comprising planning, organizing, staffing, directing, and controlling functions.

An important aspect of management's function is the allocation of finite resources. There are several different resource types available to management viz. human, financial, Technological, and Natural resources.

The general principles of management are enumerated in a subsequent chapter titled "Principles of Management".

02.02.00 Resources - Multiple 'M's of Management

Many inputs and management processes need to be harmonized or orchestrated together for the best possible outcome in business operations. Words pertaining to these inputs start with the alphabet **'M'**. We shall now classify these **M**'s of **M**anagement. I am not sure as to why these management elements start with the letter **'M'**. Is it a sheer coincidence? Is it an **'M'** syndrome? Pause and ponder! Perhaps, most of the terms pertaining to inputs / processes begin with the character **'M'** incidentally. Maybe, the management *gurus* have contrived to select these terms - starting with the character **'M'-** with the help of a thesaurus / synonyms. Well, it does not matter either way. Business is a "*serious Business*".

What are these multiple **'M's** of ***Management***? The word ***'Management'*** itself starts with the character **'M'**!

- **Money**
- **Mission**
- **Messengers**
- **Messages**
- **Media**
- **Men**
- **Machines**
- **Material**
- **Methods**
- **Moments(Time)**
- **Metrics (Measurements)**

02.02.01 Resources: 2 M's - Triggers of Business Development

To trigger and develop a Business, Entrepreneurs / Business Leaders must have the following 2 M's.

1. ***Money***
2. ***Mission with a vision***

02.02.02 Resources: 5 M's of Production / Manufacturing

Primarily **Man**, the first of these **5 'M's** is the most important resource. The right personnel for the right position is a sure bet for organizational effectiveness and efficiency.

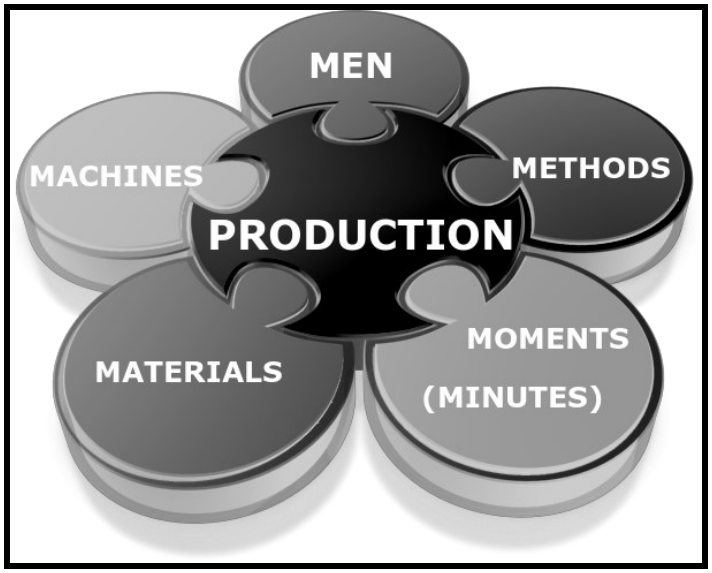
Basically, the major tasks of management are in the areas of Production of goods / services and marketing. The words production and manufacturing are some what used synonymously. The word manufacturing implies creation of physical goods whereas production covers both goods and services.

What are the **5 M's** of production?

These are:

1. **M**en
2. **M**aterials
3. **M**achines
4. **M**ethods
5. **M**oments (**M**inutes)

These **5 M's** of production / Manufacturing are displayed graphically as follow:

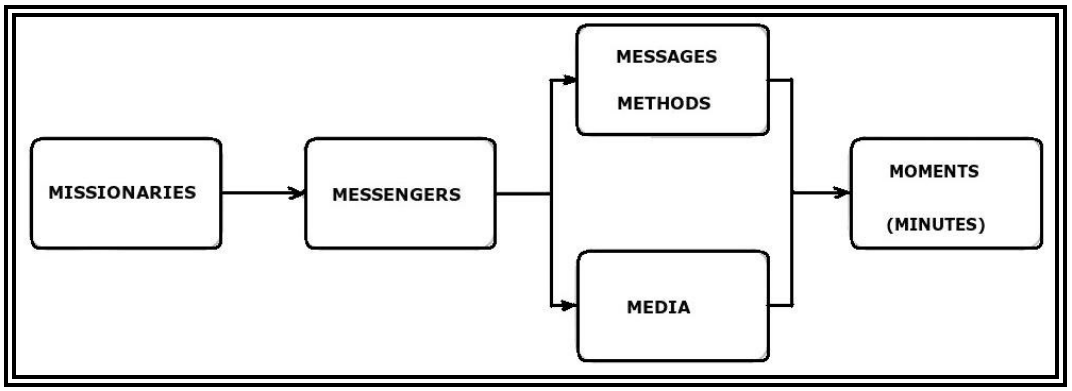


02.02.03 Resources: 5 M's of Marketing / Advertising

Likewise let us look at the **5 M's** of **M**arketing / Advertising. These are:

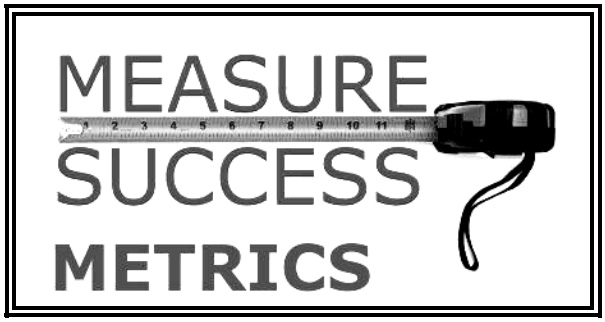
1. **M**issionaries
2. **M**essengers
3. **M**essages
4. **M**edia
5. **M**oments

These **5 M's** of **M**arketing / Advertising are graphically displayed as follows:



02.03.00 Metrics

Finally, we have to measure the performance (outputs) of management in quantifiable terms such as “production statistics”, “quality parameters of the output”, “planned figures of production / sales volumes vis-a-vis actual figures” etc. We call this “**M**etrics” (“**M**easurement”) which need to be used for performance review. This is the final test of success or failure of a management process.



Each of these **M’s** is enumerated in the following chapters dedicated for various disciplines in management. Each chapter gives an adequate view of the subject involved. The contents are designed to give the readers, the BIG Picture rather than minute details, keeping in view the requirement of entrepreneurs and business leaders. The idea is to impart total knowledge of management processes in a limited time frame. One can always obtain need-based details, as and when required for practical application. Having the BIG picture gives you the insight required and enables you to look for relevant details.

May I now exhort you to read on and get the big picture of Business Management in just 21 days!

Chapter 03

History of Management

03 History of Management

History is the version of past events that people have decided to agree upon.

... Napoleon Bonaparte

Table of Contents

03.01.00 Brief History of Management

Chronology of management development:

1) 1776: Adam Smith (Scotland) introduced the concept of specialization of labor. He recommended breaking jobs down to sub-tasks and reassigning the specialized tasks. His treatise on "Wealth of Nations" advocated division of Labor.

2) 1900: Frederick W Taylor (US) introduced **Scientific Management.**

- He developed time-study and work-study.
- He classified jobs into 2 categories: those performed by workers and those by supervisors.
- The approach was narrow and the workers were perceived to be mechanistic and motivated only by money and other rewards.

3) 1901: Concept of collective efficiency: Henry L Grant introduced scheduling techniques. Gantt charts introduced by him are used even today extensively.

4) 1914: Operations Research by P M S Blacker (World War II).

5) 1915: F W Harris: Concepts of inventory control and economic batches.

6) 1916: Henri Fayol (A French Metallurgist) suggested 14 general principles of Management. This is a Process School of Management thought / Functional approach to Management.

Some Principles are:

1. Authority and responsibility theory: Authority is the right to give orders. Authority must be commensurate with responsibility. Mangers have to delegate authority before assigning responsibility.

2. Unity of command and span of control concept.

He identified 5 functions in Management process viz. Planning, Organizing, directing, coordinating and controlling.

7) 1935: "Statistical Quality Control" techniques by Dodge and Romig.

8) 1947: Linear Programming by George B. Dantzig and William Orchard.

9) 1955: Computer Era … by IBM.

10) 1960: Organizational behavior; Study of people at work by L. Cummings and L. Porter.

03.02.00 Various Schools of Management Thought

03.02.01 Classical School of Management

This encompasses "Scientific Management" and "Process Theories".

03.02.01.01 Scientific Management Thoughts (F W Taylor)

- Suggested by Frederick W Taylor, Father of scientific Management.
- Focus is only on economic efficiency.
- Assumes a world of certainty.
- This is a closed system of engineering and economics.
- Assumes men are motivated by money alone.

03.02.01.02 Process School of Management: Functional Approach (Henri Fayol and Ralph C Davis)

This concept was developed by Henri Fayol (France) and Ralph C Davis (US).
Focus is on Functional approach to Management.
Management is viewed as a process involving Planning, organizing, direction and controlling.

03.02.02 Behavioral School of Management

Output is not always dependent upon physical environment.
Workers respond favorably to individual care and attention.
Subordinate – Supervisor relationships directly affect production.
Human relations school recognizes that a person is complex and has multiple needs.
People cannot be treated as machines.
Behavioral scientists, psychologists, sociologists and cultural anthropologists have provided the answer to human relations question.

Origin of this thought can be traced to 1930s.
Elton Mayo conducted certain experiments at Hawthorne works of Gen Electric Co. at Chicago in the Telephone relay assembly section.
These famous experiments are known as "**Hawthorne Experiments".**
The aim was to study the effects of changes in physical environment.
Some experiments concerning the effect on production due to changes in lighting triggered this study. When lighting was improved at work place, production went up; and

when the lighting was reverted in stages, to earlier level the production did not drop immediately.

Details of the "**Hawthorne Experiments**" are as under:

Location: Relay assembly at Hawthorne works of GE at Chicago, USA.

Participants: 6 girls.

Basic production level at start: 2400 relays per week.

The girls were located in a special room.

A Supervisor discussed the changes with the girls, in advance (consultation).

Chronology of the experiments…

1. Piece rate was given as incentive …. Production was up.
2. 2 breaks of 5 Minutes each were introduced ….. Production was up.
3. 2 breaks of 10 Minutes each was introduced ….. Production was up.
4. 6 breaks of 5 Minutes were introduced …. Production was down. (Assembly girls complained about loss of rhythm.)
5. Back to 2 breaks and a free meal was given….. Production was up.
6. Reduced working hours by 30 Minutes…. Production was up.
7. Reduced working hours by 1 hr …..Total production was same for the week, but hourly production was up.
8. Then all facilities were taken away and situation was reverted back to: 48 hrs work per week, no rest pauses and no free meal.
9. Production was still high at 3000 relays / week; more than before the experiments which was 2,400 relays / week.

Conclusions:

Production level was generally independent of physical changes.
Human relations mattered.
Care for employees, freedom, participation / consultation etc were considered more important to enhance performance.

Thus commenced, the behavioral school of management thought and the focus shifted to human relations.

However, Hawthorne experiments were viewed as flawed by many researchers. Nevertheless, a new chapter in Management dawned as a result of these experiments.

03.02.03 Modeling School of Management

The modeling school is concerned with decision-making, systems theory, and mathematical modeling of systems and decision-making processes.

03.02.03.01 Decision Making

- The decision-making orientation considers making decisions to be the central purpose of Management.
- Managers make use of studies dealing with human relations, information processing, assessing risk, and generating decision alternatives to help them make final choices.
- The decision theory can be expanded to include decision process through out the organization.

03.02.03.02 Systems Theory

- Stress is on the importance of "total systems" in the organization.
- All sub systems are inter related. E.g. A policy change in Marketing can affect finance or production.
- According to this school, identifying sub-system relationships, predicting the effects of a change, and implementing a system change appropriately are the part of managing an organization.

03.02.03.03 Mathematical Modeling

- Focus is on mathematical representations of management problems. A formula has certain variables and the result of a decision can be predicted. E.g. Break even analysis, inventory control / Economic batch qty, physical distribution (transportation model) and resource allocation (Operations research) etc…
- This is applicable only to certain management situations amenable to logical analysis.
- Fitting people in mathematical models has not been possible.
- This requires a thorough knowledge of mathematics and conventional mangers might resist this approach. They are more likely to adopt heuristic approach.

- This school can not assure a total approach to Management.

03.03.00 Contingency Approach - An Integrated Approach

- It is not possible to apply any single / particular school of thought in all Management situations.
- Existing ideas must be applied selectively depending upon the circumstances.
- No single idea is universal. As the famous philosopher, Confucius opined, “The Golden Rule is that there is no Golden Rule.”
- The ***contingency approach*** is integrative, focusing on fitting together the ideas of different schools of thought.
- Classical / Process approach is helpful in structuring our Management thinking, since it examines separate activities in detail viz. Planning, Organizing, Direction and Controlling.
- As we plan, organize, direct and control; we must take into account the behavioral implications. The process and behavioral approaches interact in a complex way.
- Many planning, organizing, directing and control activities can be modeled; but behavioral aspects are difficult to integrate.
- Modeling approach is best applied to routinized aspects in an organization.

We need integration of the 3 schools of thought as framework for analysis in management as there can be no universal concept applicable to all situations.

This is known as contingency approach to management.

Chapter 04
Principles of Management

04 Principles of Management

Management by objective works, if you know the objectives. Ninety percent of the time you don't. ...Peter Drucker

Table of Contents

04.01.00 Introduction to Principles of Management

There are many interesting definitions of MANAGEMENT.

"Management is the art of getting things done through others and with formally organized groups."

"Management is a distinct process consisting of planning, organizing, staffing, directing, and controlling; utilizing in each both science and art, and followed in order to accomplish pre-determined objectives."

"Management in business and organizations is the function that coordinates the efforts of people to accomplish goals and objectives using available resources efficiently and effectively. Management comprises planning, organizing, directing, and controlling an organization to accomplish the goal."

In the previous chapter we have gone through the brief history of management. Management Principles developed by Henri Fayol which are of particular interest pertaining to this chapter are enumerated below:

1. Division of Work: Work should be divided among individuals and groups to ensure that effort and attention are focused on special portions of the task. Fayol presented work specialization as the best way to use the human resources of the organization.

2. Authority: The concepts of Authority and responsibility are closely related. Authority was defined by Fayol as the right to give orders and the power to exact obedience. Responsibility involves being accountable, and is therefore naturally associated with authority. Whoever assumes authority also assumes responsibility.

3. Discipline: A successful organization requires the common effort of workers. Penalties should be applied judiciously to encourage this common effort.

4. Unity of Command: Workers should receive orders from only one manager.

5. Unity of Direction: The entire organization should be moving towards a common objective in a common direction.

6. Subordination of Individual Interests to The General Interests: The interests of one person should not take priority over the interests of the organization.

7. Remuneration: Many variables, such as cost of living, supply of qualified personnel, general business conditions, and success of the business should be considered in determining a worker's rate of pay.

8. Centralization: Fayol defined centralization as lowering the importance of the subordinate role. Decentralization is of increasing importance. The degree to which centralization or decentralization should be adopted depends on the specific organization in which the manager is working.

9. Scalar Chain: Managers in hierarchies are part of a chain like authority scale. Each manager, from the first line supervisor to the president, possesses certain amounts of authority. The President possesses the most authority; the first line supervisor the least. Lower level managers should always keep upper level managers informed of their work activities. The existence of a scalar chain and adherence to it are necessary if the organization is to be successful.

10. Order: For the sake of efficiency and coordination, all materials and people related to a specific kind of work should be treated as equally as possible.

11. Equity: All employees should be treated as equally as possible.

12. Stability of Tenure of Personnel: Retaining productive employees should always be a high priority of management. Recruitment and Selection Costs, as well as increased product-reject rates are usually associated with hiring new workers.

13. Initiative: Management should take steps to encourage worker initiative, which is defined as new or additional work activity undertaken through self direction.

14. Espirit de corps: Management should encourage harmony and general good feelings among employees.

04.02.00 Input – Output Model

Before we enumerate the management processes in a greater detail, we shall see the specific application of the process in respect of "Production and Operations Management".

Definition: *"*Production and operations management" concerns itself with the conversion of inputs into outputs, using physical resources, so as to provide the desired utilities – of ***form, place, possession or state*** or a combination there of – to the customer while meeting the other organizational objective of effectiveness, efficiency and adoptability.

Change in "***form****":* e.g. Conversion of wood into furniture or ores into metal etc…

Change in "***place***": e.g. Taxi service take us from one place to another.

Change in "***possession***": e.g. Petrol pumps; we take possession of Petrol.

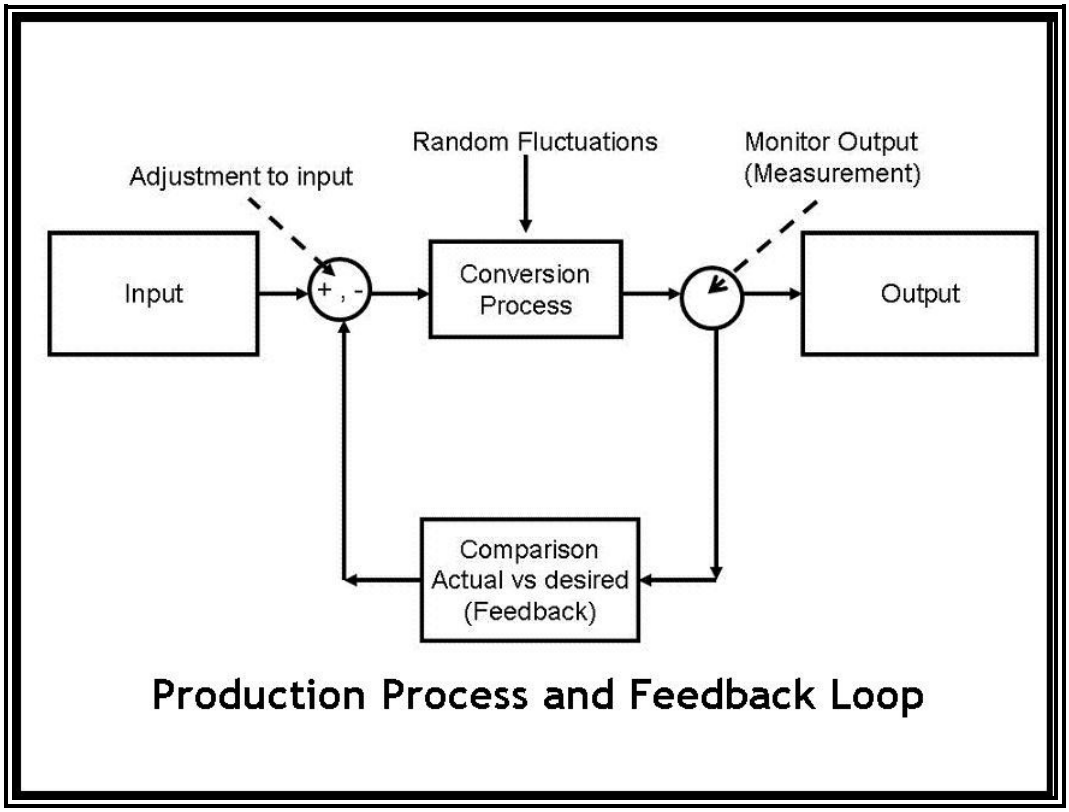
Change in "***state***": e.g. Hospitals change the state of our health.

POM (Production and Operations Management) distinguishes itself from the other functions such as personnel, marketing, finance etc by its primary concern for "Conversion by using physical resources".

All management processes are involved in the process of converting some resources (inputs) into utilities (products / services); be it in the area of production, finance, personnel, or marketing.

The following figure (INPUT – OUTPUT MODEL) pertaining to "Production and Operations Management" is self explanatory.

The inputs (resources) in general fall into the categories of ***money, men, machines, material, methods and moments (time);*** described as multiple 'M's of production management.



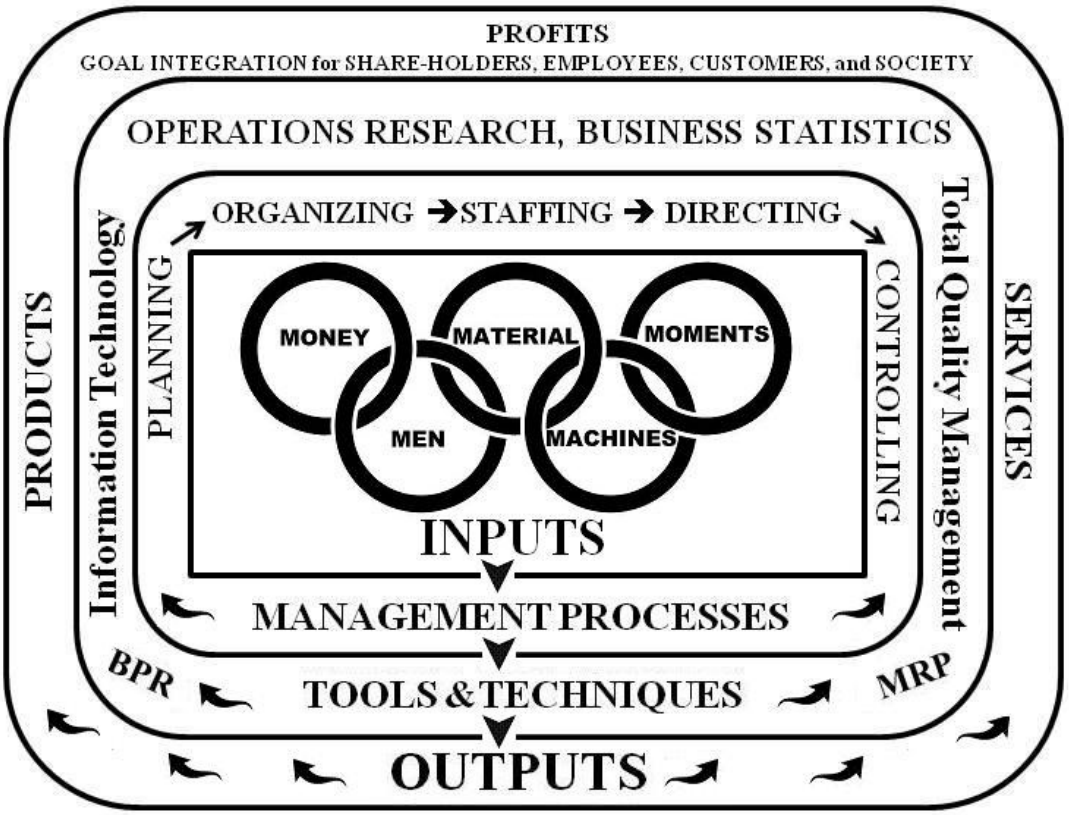
04.03.00 Framework of Managerial Transformation Process

The task of management is to transform the inputs, in an effective and efficient manner, into outputs. We are mainly concerned about the transformation process in such diverse functions as production, finance, personnel, and marketing.
The most comprehensive approach to management processes is to understand the managerial functions viz. planning, organizing, staffing, directing, and controlling.

The framework of management process involves:

1. Inputs.
2. Management functions.
3. Tools and techniques.
4. Outputs.

This approach is used as the framework of management processes, illustrated by the following figure. This is ***"The Big Picture of Management".***



THE BIG PICTURE OF MANAGEMENT

Note: Please follow the arrows to comprehend the linkages among all aspects of management. **"INPUTS"** are transformed into **"OUTPUTS"** by **"MANAGEMENT PROCESSES"** by application of **"TOOLS and TECHNIQUES"**.

04.03.01 Inputs

These basic inputs are listed in the inner core of the above figure:

1. Money
2. Men
3. Material
4. Machines
5. Moments (Time)

04.03.02 Management processes / Functions

These management processes / functions are indicated in the first outer ring adjacent to the core in the above figure – **"The Big Picture of Management**". These functions are planning, organizing, staffing, directing, and controlling.

04.03.02.01 Planning

Planning is the basic function of management. Planning involves selecting objectives as well as the requisite actions to achieve them. Planning is deciding in advance - what to do, when to do, where to do, why to do and how to do. Planning is determination of courses of action to achieve desired goals. This subject will be dealt with in detail in the later chapter titled "Production and Operations Management".

04. 03.02.02 Organizing

Organizing is that part of managing which involves establishing a structure of roles to be played by the persons in an organization and their inter-relationship. Organizing is the process of bringing together physical, financial and human resources and developing productive relationship amongst them for achievement of organizational goals. Organizing is essential to provide a business with everything useful for its functioning i.e. raw material, machines, capital and personnel etc. The purpose of organization is to help create an environment for human performance.

04.03.02.03 Staffing

Staffing involves filling, and keeping filled – by retaining the existing staff or recruitment – the positions in the organization structure. The main purpose o staffing is to put right man on right job.

Staffing function comprises:

1. Identifying work-force requirement.
2. Taking the inventory of persons.
3. Recruiting.
4. Selecting.
5. Placing.
6. Promoting.
7. Apprising performance.
8. Career planning.
9. Training.
10. Compensating etc…

04.03.02.04 Directing

Directing is that part of managerial function which actuates the organizational methods to work efficiently for achievement of organizational purposes. Direction is influencing people and guiding them to contribute to achieving organizational goals. It has to do predominantly with interpersonal aspect of managing.

Direction has following elements:

- *Supervision*: Overseeing the work of subordinates by their superiors. It is the act of watching & directing work & workers.
- *Motivation*: Inspiring, stimulating or encouraging the sub-ordinates with zeal to work.
- *Leadership*: a process by which manager guides and influences the work of subordinates in desired direction.
- *Communication*: the process of passing information, experience, opinion etc from one person to another.

04.03.02.05 Controlling

Controlling is the act of measurement of accomplishment against the standards and correction of deviation if any to ensure achievement of organizational goals. The purpose of controlling is to ensure that everything conforms to the established standards. An efficient system of control helps to predict deviations before they actually occur.

Controlling has the following steps:

1. Establishment of standard performance.
2. Measurement of actual performance.
3. Comparison of actual performance vis-à-vis standards and finding out deviation, if any.
4. Analyzing the reasons for deviations and taking corrective action.

Some examples of controlling:

1. Budget vs. actual expenses.
2. Stage inspection of components.
3. Testing final product.
4. Comparison of actual sales with respect to plan.
5. Comparison of financial results year-to-year.

04.03.03 Tools and Techniques of Management

These techniques adopted by mangers in the conversion process are indicated in the second outer ring, in the above figure i.e. “The Big Picture of Management”.

The tools and techniques used in management will be discussed in detail in the subsequent chapters, depending on the field of application.

Some of the techniques are:

1. Information Technology (IT).
2. Operations Research (OR).
3. Total Quality Management (TQM).
4. Business Process Re-Engineering (BPR).
5. Material Requirement Planning (MRP).
6. Manufacturing Resources Planning (MRP II).
7. Continuous Improvement (Kaizen).
8. Business Statistics.

04.03.04 Outputs

These outputs are indicated in the third and final outer ring in the above figure.

The outputs are:

1. Physical Products.
2. Services.
3. Profits.
4. Goal Integration for all Stake-Holders.

The nature of the first 3 outputs is obvious.

The most important output is the integration of the individual goals of all stake-holders viz. shareholders, employees, customers, society (community), and government.

Please refer to the following chart enumerating the goals of various stakeholders.

Stakeholder	**Goals / Concerns**
Shareholders	Return on investment (Dividends), Security of investment, Share values etc.
Employees	Remuneration, Job satisfaction, Job security, Self-esteem, Career progression, Recognition etc.
Customers	Product performance, Service Level, Personal safety, Esthetics, Prices, Return-policy, Warranty etc.
Suppliers	Steady demand, Continuity of relationship, Prices, Payment terms, Quality standards etc.
Society (Community)	Employment, Pollution, Ethics, Social-responsibilities of the enterprises, Public health & safety etc.
Government	Taxes, Compliance with laws, Public health & safety, Monopolistic tendency, Employment, Investments etc.

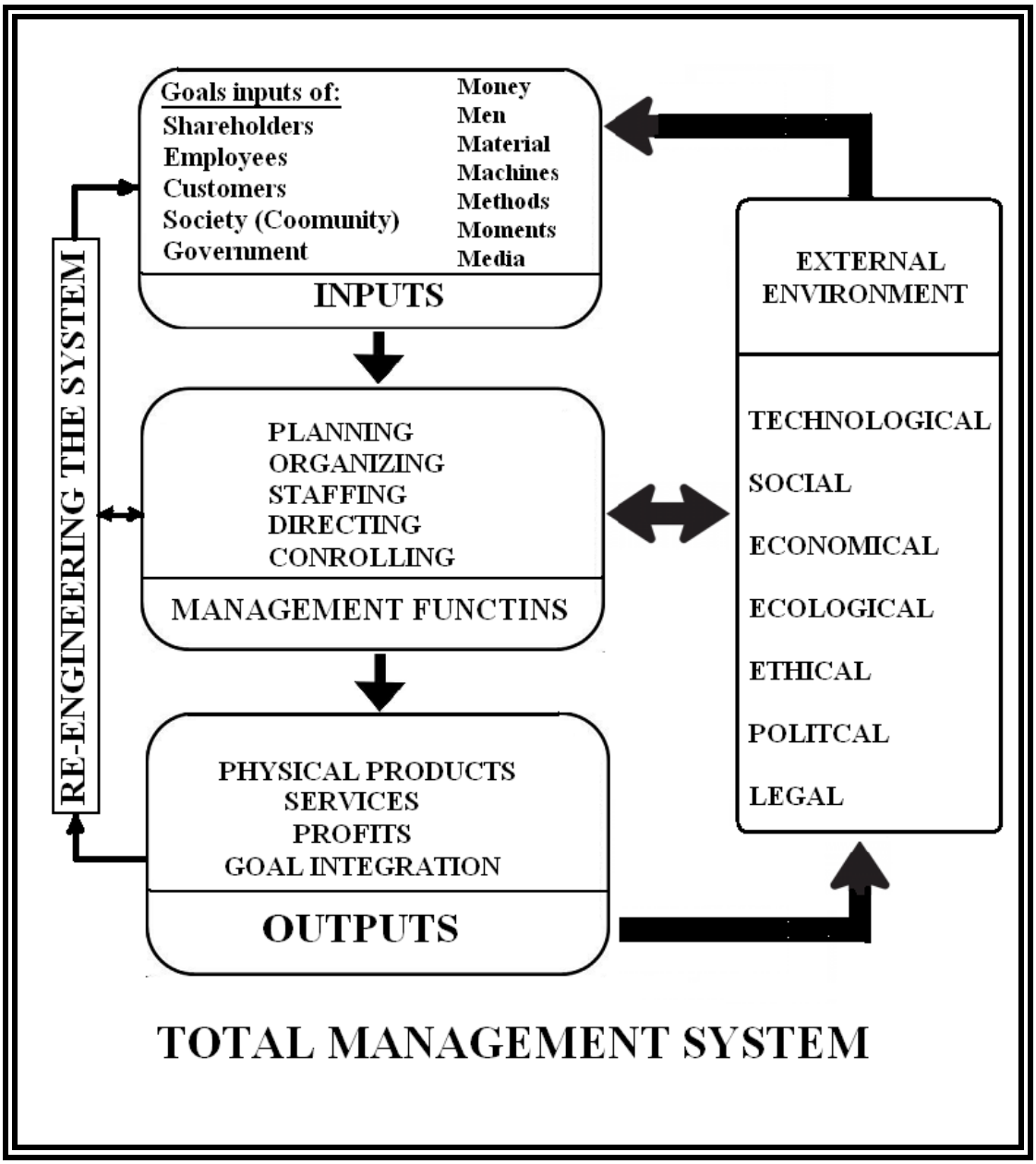
04.04.00 Total Management System and Re-Engineering

Please note that, in the systems model of the management process, some of the outputs become inputs again. The new knowledge or skills of employees become important human inputs. Likewise, the profits are reinvested in capital goods and / or business expansion.

We can take corrective action by comparing the characteristics of the outputs vis-à-vis standards and assessing the causes for the variations. Based on the feedback from the customers and observation of the changes in the environment, we can re-engineer the system for success in business.

Under exceptional situations, we may do some *"fundamental rethinking"* and effect *"radical changes*" in the business processes; which is termed 'Business Process Re-Engineering (BPR)". This is in contrast with "Continuous Improvement Process" where in we aim for only incremental improvements.

The following figure illustrates the total management system.



Chapter 05

Production and Operations Management

05 Production and Operations Management (POM)

The production of too many useful things results in too many useless people … Karl Marx

Table of Contents

05.18.00	Plant / Facilities Layout
05.19.00	Maintenance Management
05.20.00	WORK STUDY: Method Study & Time study
05.21.00	Ergonomics
05.22.00	Reliability / Redundancy

05. 01.00 Overview of Production Management

This chapter is intended to serve as a useful guide for production managers and entrepreneurs alike. All the topics are explained in a simple and concise manner to sustain the interest of the readers.

Production and Quality are inseparable twins. Why?
The answer is extremely simple, indeed! It has to be so for survival of any business, of course.

Keep an eye only on profits and ignore quality aspects in any product or service; the customer will call the bluff sooner than later. You are certain to dive into a fathomless abyss!

It is understood that business is for profit and more profit; but within the framework of law and ethics. Customer satisfaction is the key success factor.

To realize this objective, we need to follow this mantra; Deliver a product or service with built-in quality as per the customer needs at the right price, time and place.
Hear the voice of the customer!

How do we know what the customer wants? It is simple again! Just ask the customer(s)! You will be more than enlightened!

“Manufacturing Management” is a term used generally for production of physical goods.

The term “Production and operations Management” has been evolved over the years, with the advent of emphasis on provision of services and phenomenal growth of this sector.

Production is a wider term used for describing manufacturing (production of physical goods) as also production of services. The word “production” is often used for describing “production of physical goods” as also “provision of services”.

The distinction between “production management” concerning “production of physical goods” and “operations management” concerning “provision of services” is so blurred that these terms are often used synonymously and interchangeably.

The management techniques applied in “production of physical goods” and “provision of services” are similar and often identical.

Production and Operations Management (POM)

There is always an element of some “input” to create an “output” by means of a “process” in any production activity, be it a “physical product” or a “service”.

Examples of production of physical goods:

- Automobiles.
- Consumer products.
- Machine Tools etc…

Examples of production of services:

- Hospitals.
- Educational Institutions.
- Gas Stations.
- Real Estate etc…

We shall enumerate the functions of Production Management in the next section.

05.02.00 Functions of Production Management

05.02.01 Management - Definition

Let us recapitulate the definition(s) of management stated in an earlier chapter.

Here is a comprehensive definition of management:

Management is the art and science of getting the work done by a group of persons for the attainment of an organization's goals and objectives – generally to convert certain inputs into desired outputs by means of a process, be it a physical product or a service – using requisite tools and techniques through the management processes comprising planning, organizing, staffing, directing, and controlling functions.

The verb *manage* comes from the Italian *maneggiare* (to handle - especially a horse), which in turn derives from the Latin *manus* (hand). The French word *mesnagement* (later *ménagement*) influenced the development in meaning of the English word *management* in the 17th and 18th centuries. (Source: Wikipedia)

05.02.02 Production and operations management – Conversion Process

05.02.02.01 Definition of Production and Operations Management

"Production and operations management" concerns itself with the ***conversion*** of inputs into outputs, using **physical resources***, to provide the desired utilities of – *form, place, possession or state or a combination there of* – to the customer while meeting the other organizational objectives of efficiency, effectiveness, and profitability.

Physical resources *: FIVE **Ms** of Production ➔ **M**EN, **M**ATERIALS, **M**ACHINERY, **M**ETHODS, and **M**OMENTS (Time)"

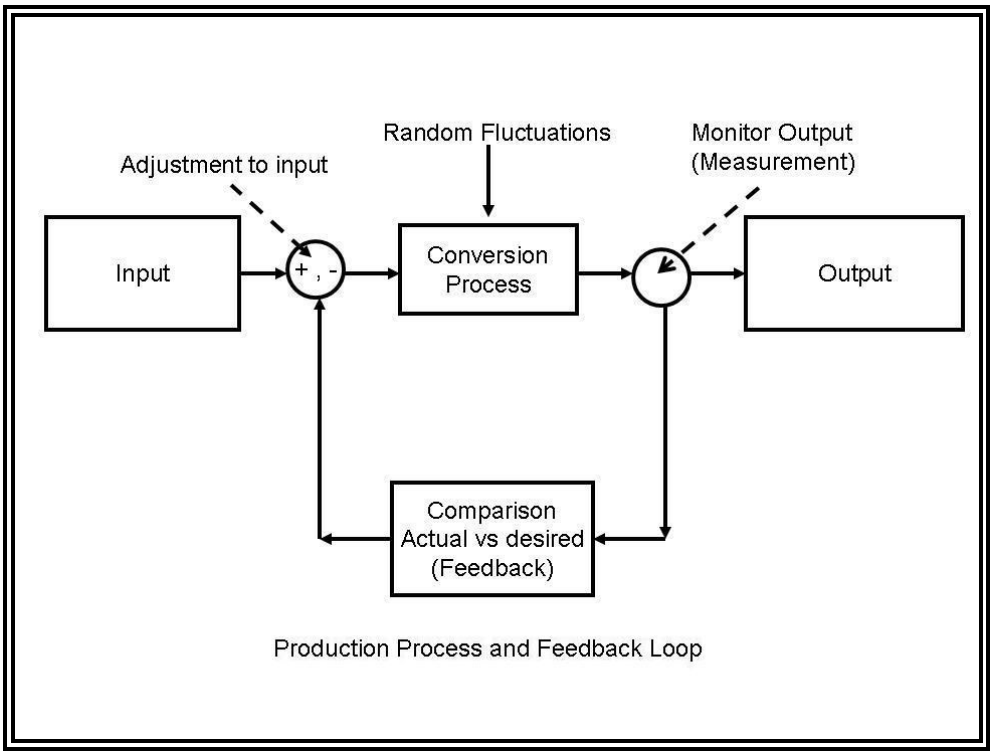
Examples of the nature of conversion processes:

1. Change in "***form"***: e.g. Conversion of wood into furniture; Conversion of ore into metals etc.
2. Change in "***place"***: e.g. Taxi service takes us from one place to another; Shipment to move goods from one place to another etc.
3. Change in "***possession"***: e.g. We take possession of petrol at a gas station (petrol pump); Registration of real estate to transfer property from one person to another etc.
4. Change in "***state"***: e.g. Hospitals change the state of our health; Universities enhance our knowledge levels etc.

05.02.02.02 Control System / Feedback Loop

The most important concept in a systems model of organizations is the control function. Control involves measurement of output, comparison with desired results, and timely adjustments in inputs to obtain the desired output quality.

The following figure illustrates the production process and feedback loop.



Production Process and Feedback Loop

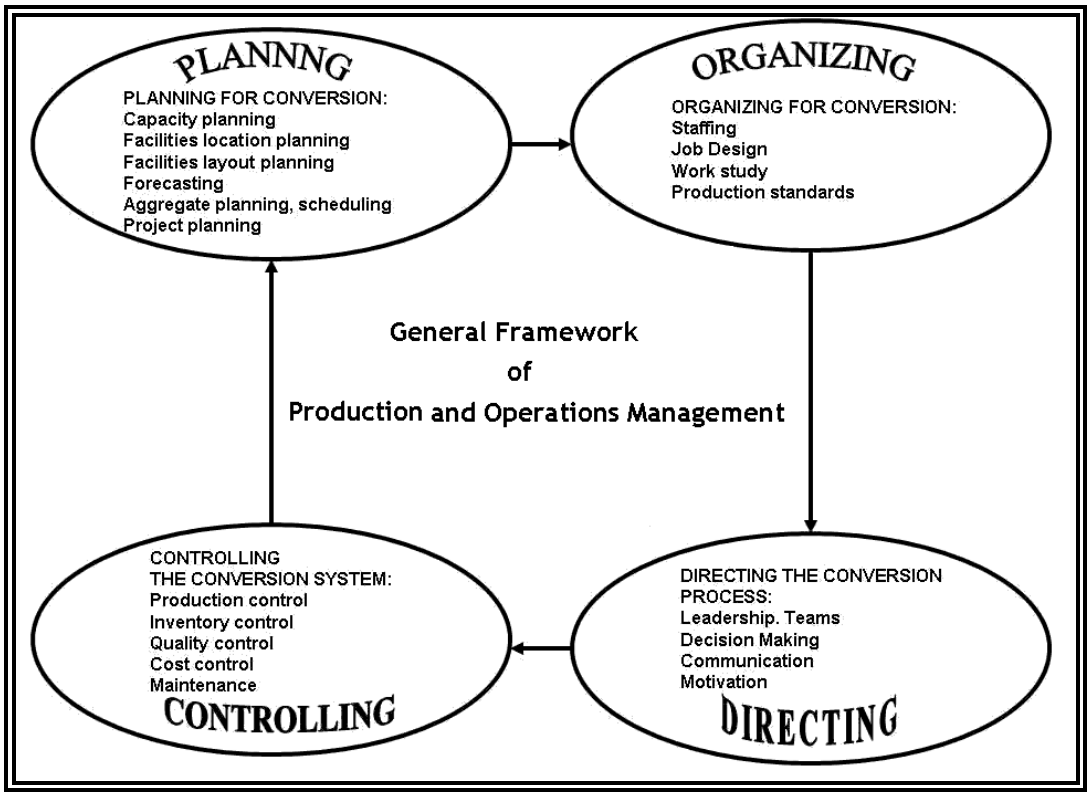
The output is measured against the established standards to determine the deviations. This information is monitored closely and continuously to give feed back in the conversion system. Then we make necessary *adjustments / corrections in the inputs to obtain desirable output.

* Examples of adjustments:

- Change of tooling in the production process.
- Change in the material specification.
- Operator training.
- Change in speed of metal cutting etc…

05.02.02.03 General Model / Framework - Production and operations management system

The general model / framework for production and operations management are demonstrated in the following diagram.



The specific management functions applicable to “Production and Operations Management” are indicated in the above diagram.

We shall deal with the above stated functions of management in detail, in the following chapters.

. a road-map used by a motorist.

05.04.04.03: Iconic Models

Iconic models are scaled physical replicas of objects and processes; e.g. a building model presented by an architect.

05.04.04.04 Mathematical Models

Mathematical models show functional relationship among variables; e.g. $x + y = 10$ where x and y are variables.

a) Optimization models

If a solution procedure ensures best possible solution, it is called an optimization Model; e.g. Determination of "economic order quantity" in materials management. This is a least cost method of ordering material considering the effect of cost of procurement per order, inventory carrying cost etc. We shall deal with this model in detail in the subsequent chapter titled supply-chain management.

b) Heuristic Models

Heuristics involve the systematic application of rules of thumb resulting in "near-best solution". This reduces the amount of search / effort / time needed for a solution. It may not yield best results; but useful when optimization algorithms are not available. Nevertheless, it is a logical procedure using a set of rules.

Examples: Plant layout, Assembly line balancing etc…

c) Break-even Analysis

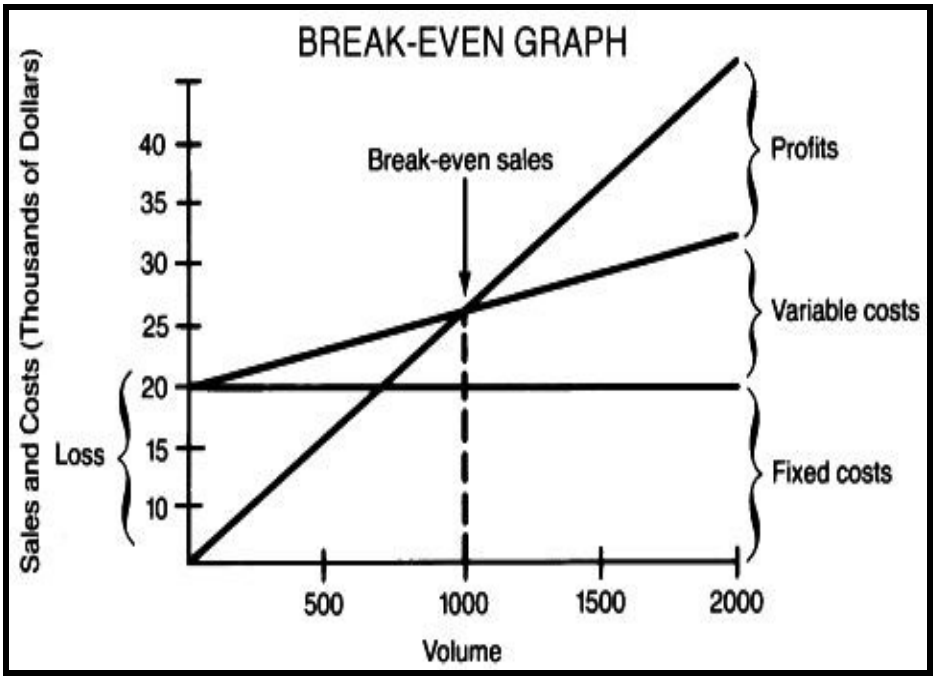
Break-even analysis is a graphical or algebraic representation of relationships among volume, cost, and revenues in an organization. We need to correlate cost and revenue (from sale of products / services) to assess loss or profit at any level of production. The point is at which level, there is no profit or loss is called "break-even point".

Fixed cost is not related to volume of production; e.g. administrative expenses, lighting, rent, office staff cost etc…

Variable cost is directly proportional to volume of production; e.g. material cost, direct labour cost etc…

Break-even level of production is the level at which the total cost of production (Fixed Cost +Variable Cost) equals the total revenue. There is a profit only at a level higher of production over the break-even level.

Following diagram illustrates this concept.



05.04.05 Decision Tree Analysis

One method of dealing with sequential problems is decision tree analysis.
The decision tree is a means of representing the sequential multi stage logic for a decision problem. The decision tree is an offshoot of probability trees. It uses 2 symbols.

□ A box to represent a decision node

○ A circle to represent a chance node

The outcomes emanating from chance nodes are the various events that may occur. These are referred to as “the states of nature”, over which the decision maker has no control. Probabilities are associated with their occurrences.

"*Decision Tree Analysis*" consists of 3 steps:

1. Identify decision alternatives / chance events and draw a tree diagram showing sequence of decisions and chance events.

2. Estimation: a) Obtain a probability estimate of the chances of each component's occurrence. b) Obtain estimates of consequences of all possible outcomes and actions.

3. Evaluation and selection: a) Calculate the expected value of all possible actions. b) Select the action offering the most attractive expected value.

Let us now apply this technique of "Decision Tree Analysis" to decide whether to set up a large or small plant to manufacture a new product.

Let us take the case of Anika Industries. The company has decided to introduce a new range of pumps. There are many uncertainties involved in respect of demand pattern. We can only assign probabilities to an occurrence.

If we setup a large manufacturing plant and end up with low demand for the product, we have a serious problem at hand. This being a long-term decision involving huge capital investment, we need to be cautious in the process of decision-making.

On the contrary, if we build a small plant and the demand goes high, we miss an opportunity to expand business or to make profits.

We need to make a scientific decision.

Following example illustrates the technique of "Decision Tree Analysis".

This is a case of setting up facilities for manufacture of pumps and a decision is to be made as to the size of the plant / level of investment in the absence of an assured market.

Example:

Anika Industries has to decide whether to set up a large plant or a small plant for its new range of pumps. A large plant would cost Rs 250 Lakhs and a small plant would cost Rs 120 Lakhs. As per market survey the following estimates are revealed for a period of 10 years.

Demand Level	**Probability**
High	0.5
Moderate	0.3
Low	0.2

Situation	**Profit / (Loss) Rs Lakhs**
Large plant with high demand	100
Large plant with moderate demand	60
Large plant with low demand	(20) Loss
Small plant with high demand	25
Small plant with moderate demand	35
Small plant with low demand	4

Solution:

Given below is a decision tree (Figure 1). We start with a decision node and draw 2 branches as follows.

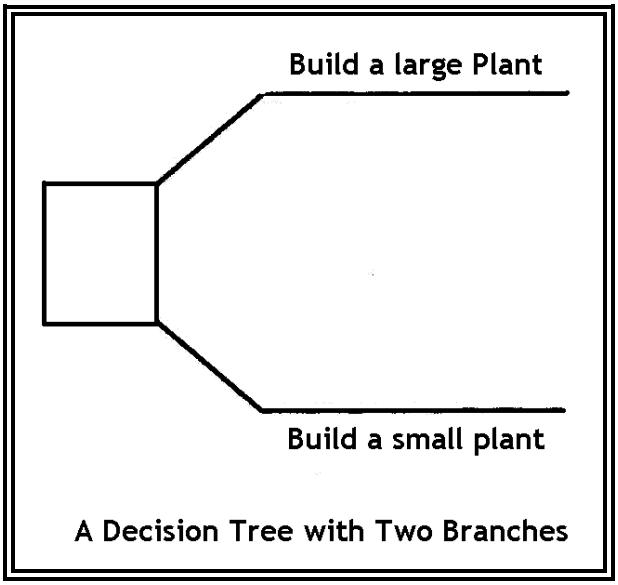


Figure 1

If we build a large plant, it can result in three outcomes viz. high demand, moderate demand, and low demand. Likewise for a small plant we have three outcomes. These outcomes are now added to the tree at the end of chance nodes as shown in figure 2.

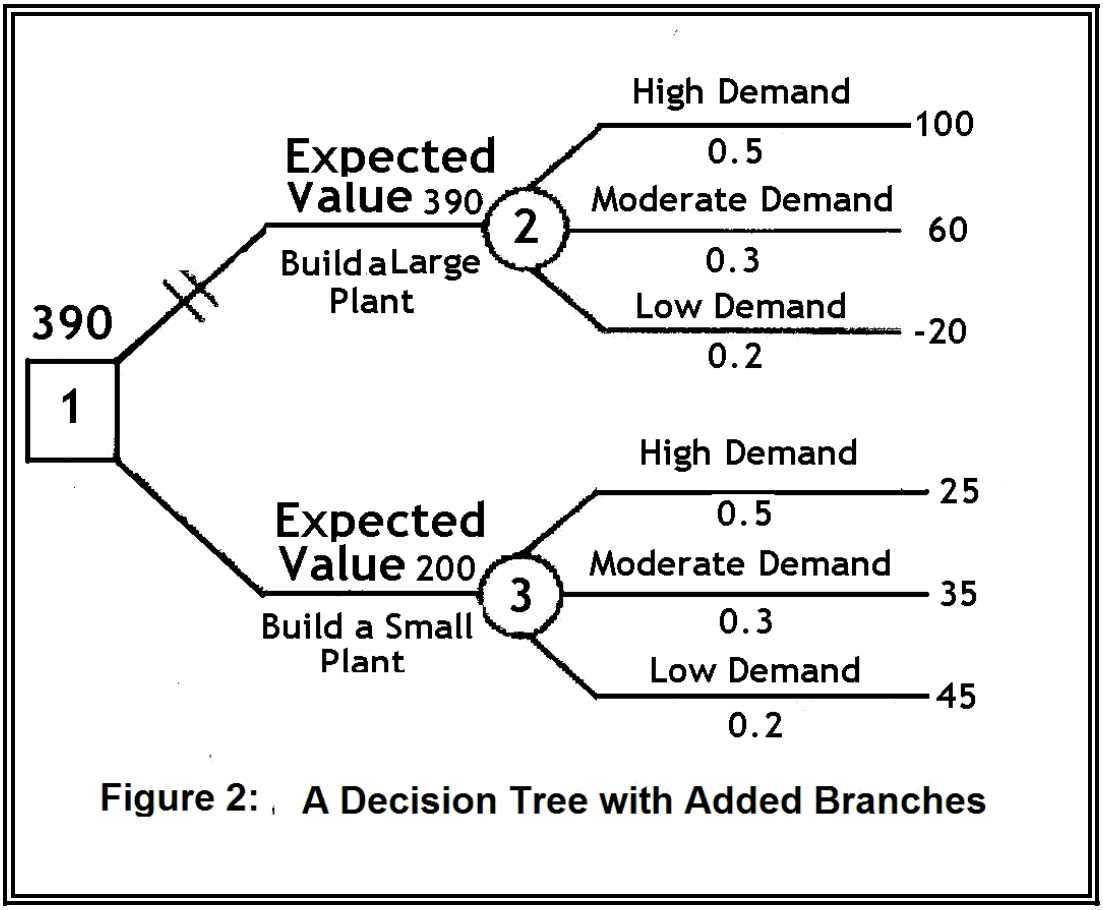


Figure 2

We have added the probabilities for each state of nature and have also added the payoff for each outcome. This step is called rolling out the tree. In order to calculate the value of the decision we now roll back tree.

The expected value at each chance node is computed as follows:

EV = 0.5 x 100 + 0.3 x 60 + 0.2 x (-20) = 64
Expected value in ten years = 64 x10 = Rs 640 Lakhs.
The cost of the large plant is Rs 250 Lakhs. Hence expected net gain at the end of 10 years is Rs 390 Lakhs (640 – 250 = 390).

Similarly we calculate the expected value at chance node 3:

EV = 0.5 x 25 + 0.3 x 35 + 0.2 x 45 = 32.
The expected value in ten years = 32 x 10 = Rs 320 Lakhs.

The cost of the small plant is Rs 120 Lakhs.
Hence the expected net gain at the end of 10 years is Rs 200 Lakhs (320-120 = 200)

The chance node with the higher value is carried backwards to the decision box and a decision is taken accordingly.

The decision in this case is to build a large plant with the expected value of Rs 390 Lakhs which is higher than the expected value of Rs 200 Lakhs worked out for a small plant.

05.04.06 Operations Research Techniques (OR)

Operations research is a discipline that deals with the application of advanced analytical methods to help make better decisions. Employing techniques from other mathematical sciences, such as mathematical modeling, statistical analysis, and mathematical optimization, operations research arrives at optimal or near-optimal solutions to complex decision-making problems. Operations research is often concerned with determining the maximum (of profit, performance, or yield) or minimum (of loss, risk, or cost) of some real-world objective.

Some of the OR techniques adopted for decision making are:

- Assignment Model.
- Decision Theory.
- Dynamic Programming.
- Inventory Models.
- Linear Programming.
- Network Analysis -PERT / CPM.
- Queuing Model.
- Regression Analysis.
- Replacement Model.
- Sequencing Model.
- Simulation Techniques.
- Transportation Model.

We shall enumerate on these techniques in a subsequent chapter titled **“Operations Research”.**

Chapter 22
Epilogue:
Realm of Business World

22 Epilogue - Realm of Business World

Nowadays the rage for possession has got to such a pitch that there is nothing in nature, sacred or profane, out of which profit can not be squeezed.

... Desiderius Erasmus

Note: Desiderius Erasmus was a Dutch Renaissance Humanist (1466-1536). Squeezing anything and everything for profit is the malady prevailing since time immemorial, as is evident from recorded History of Humans. In the present context, we have to keep in mind that profit making is in the nature of things and can not be eliminated; we can only hope to keep the affliction under control.

Corporation is an ingenious device for obtaining profit without individual responsibility.

... Ambrose Bierce

While humans could be either saints or wrong doers, businesses could not be otherwise. Of Course, business is conducted by human species; and consequently businesses are human in nature.

... Reddigari Seshadri Reddy

Chapter	**Title**
22	**Epilogue – Realm of Business World**
22.00.00	Introduction
22.01.00	Foxconn Technology Group
22.02.00	Apple Inc.
22.03.00	Wal-Mart Stores Inc.
22.04.00	Mondragon Corporation
22.05.00	Amazon Corporation
22.06.00	Maruthi-Suzuki Ltd
22.07.00	Google

Epilogue: Realm of Business World

22.00.00 Introduction

We have so far studied the principles of management, various business activities / techniques, business ethics, and styles of management.

Is *"ideal management"* an oxymoron? Well, almost…

Do businesses and ethics go hand in hand? Not necessarily!

Now let us see the real world situations in the realm of business. While humans could be saints or wrong doers, businesses could not be otherwise. Of Course, business is conducted by human species; and businesses are human in nature.

Here are a few case studies pertaining to the conduct of businesses in the real world.

1. Foxconn Technology Group.
2. Apple Inc.
3. Wal-Mart Stores Inc.
4. Mondragon Corporation.
5. Amazon Corporation.
6. Maruthi-Suzuki Ltd.
7. Google

22.01.00 Foxconn Technology Group

Source: SACOM (**S**tudents and **S**cholars **A**gainst **C**orporate **M**isbehavior Report.

Hon Hai Precision Industry Co., Ltd., trading as **Foxconn Technology Group**, is a Taiwanese multinational electronics contract manufacturing company headquartered in Tu Cheng, New Taipei, Taiwan. It is the world's largest electronics contractor manufacturer, and the third-largest information technology company by revenue.

Foxconn is primarily an original equipment manufacturer and its clients include major American, European, and Japanese electronics and information technology companies. Significant products that the company manufactures include the BlackBerry, iPad, iPhone, Kindle, Playstation 4, Xbox One, and Wii U. It is the largest private employer in China. Foxconn has factories in Asia, Europe, Mexico and South America that together

assemble around 40 percent of all consumer electronics products sold. Foxconn has 13 factories in nine Chinese cities - more than in any other country.

Foxconn has been involved in several controversies relating to how it manages employees in China. There has been a history of suicides at its factories blamed on working conditions. Civil society and media zoomed in on Foxconn recently not because of its prodigious workforce or its profits. It was because the sad plight of the workers at Foxconn factories, many of whom perished from suicides.

Workforce at Foxconn:

- 1,000,000: Number of workers Foxconn employs in China.
- 100,000: Number of production lines it runs.
- 300,000: Number of people working exclusively on the iPhone.
- 24 hours (12 Hr shift x2), 7 days a week: Foxconn's iPhone factory runtime.

Profit maximization is the ultimate corporate principle, under which workers' dignity and well-being are of no concern. Foxconn is not the only one to be blamed, but it is the most typical factory run by a management methodology that boosts productivity through the degradation of workers into dehumanized machines.

Low wages / Unpaid work assemblies:

Over a quarter of Foxconn's work force lives in company barracks and many workers earn less than $20 a day. Workers at many factories have to compulsorily attend assemblies /meetings before and after work shift, which may last for an hour. The management evaluates the production target of the previous day, reminds workers of the tasks they need to pay special attention to, and discipline workers, etc. According to some interviewees in Shenzhen, they are warned not to talk to strangers, especially journalists. Before starting to work, management would ask the workers, "how are you?" Workers must shout, "Good! Very good! Very, very good!" No matter workers like it or not, they can only follow the instructions from the management.

Long working hours / Frequent change of work shifts:

The factories work 6 days a week; extended to 7 days at times. There are day and night shift workers at Foxconn. Day shift is from 8:00 Hrs to 20.00 Hrs, and night shift from 20:00 Hrs to 8:00 Hrs, the next morning; 12 Hr shift working! Due to low wages workers are forced to work overtime to make both ends meet and consequently some workers toil 16 Hours a day. The assignment of work shift is not regular. Workers are assigned change in shift working far too often; the day and night shifts are sometimes changed 2 to 3 times a month. The change of shift is unbearable and leads to deterioration of mental and physical health of workers. Besides being illegal this is exploitation, to say the least.

Absolute obedience:

"Outside the laboratory, there is no high-technology, only execution of discipline"; A famous quote from Terry Gou. This implies absolute obedience is a rule in Foxconn. The culture of absolute obedience is imposed on workers starting from recruitment. Some applicants recall that they were badly treated in the recruitment centers. The instructors were arrogant and rude. A worker said, "We come to look for jobs, but the attitude of the instructors make us feel as if we come to beg for their mercy." All workers have to be highly focused on their work. They are not allowed to talk, doze off, giggle, stretch their bodies or move around. These would lead to rapprochement from the frontline management. Foxconn practices military style management in a civilian environment. Is it possible to do so without state sponsoring? Hard to believe!

Inhumane punishment:

Managers yell at workers for minor mistakes or for being slow in production. Many of them just try to get used to reproaches from the management. Apart from being scolded, some other forms of punishment are used. Workers, who make a mistake or violate any factory rule, would receive demerits. Moreover, the details of their cases are be posted on the notice board; humiliating indeed. Workers believe that demerits may lead to deduction of production bonus.

Harassment from security guards:

Workers are afraid of security guards; many of them having encountered harassment from the security force. Based on the 1,736-questionnaire survey result, 28% of respondents reported having been insulted by management and security guards. Some of the workers are beaten up by security guards. An instance of a security guard hitting a worker with an electrical baton was reported.

Health and Safety:

The Law on the Prevention and Treatment of Occupational Diseases of China provides that "the employing work unit must adopt effective protective facilities against occupational diseases, and provide protective articles to the laborers for personal use against occupational diseases." Notwithstanding the provisions of law, workers in Foxconn's production facilities suffer from the threat of occupational diseases. Personal protective equipment such as surgical masks, goggles, gloves, safety shoes etc are not provided to guard against hazardous working conditions. And health examination is denied.

Health and safety problems have negative impact on the bonuses and career paths of frontline workers and middle management. Some managerial staff try to cover up the

cases for their own sake. Workers are asked to take sick leave instead of medical leave despite the fact that there are work-related injuries with insurance implications.

Student Workers:

Some interviewees highlighted to the media, that the proportion of student workers was as high as one-third. For some time, Foxconn ceased to recruit new workers in Shenzhen. Instead, a high number of vacancies were filled by tens of thousands of student interns. It is believed that Foxconn alone cannot mobilize such a high number of students, without active help from provincial governments.

Trade Unions in China:

The ACFTU (All-China Federation of Trade Unions) is the largest union in the world, with over 280 million members; it's also one of the weakest in representing their members, existing primarily to serve the CCP (Chinese Communist Party) convey its messages and policies to the workers, and spread the "mass line." In fact, all other trade unions unaffiliated with the ACFTU are illegal. At the factory of workplace level, most trade unions are basically controlled directly or indirectly by management and they don't really represent workers' interests.

And, yet, China permits no independent trade unions or free collective bargaining. Complaint and mediation procedures are weak. Profits at any cost!

How does Foxconn Management style compare with the Management Science?

Is it a state-sponsored exploitation?

22.02.00 Apple Inc.

Apple Inc. is an American multinational corporation headquartered in Cupertino, California, that designs, develops, and sells consumer electronics, computer software, online services, and personal computers. Its best-known hardware products are the Mac line of computers, the iPod media player, the iPhone smartphone, and the iPad tablet computer. Its online services include iCloud, iTunes Store, and App Store. Its consumer software includes the OS X and iOS operating systems, the iTunes media browser, the Safari web browser, and the iLife and iWork creativity and productivity suites.

Apple was founded by Steve Jobs, Steve Wozniak, and Ronald Wayne on April 1, 1976, to develop and sell personal computers. It was incorporated as Apple Computer, Inc. on January 3, 1977, and was renamed as Apple Inc. on January 9, 2007.

Epilogue: Realm of Business World

Apple is the world's second largest information technology company by revenue after Samsung Electronics and the world's third-largest mobile phone maker after Samsung and Nokia. *Fortune* magazine named Apple the most admired company in the world. Apple is the technology leader in their field and is amongst “Best Global Brands”.

However, the company has received criticism for its contractors' labor practices, as well as for its own environmental and business practices.

Company Details:

- No of retail stores = 425
- Market Capitalization = US $ 446 Billion
- No of Permanent Employees = 72,800
- No of Temporary Employees = 3,300
- Annual Revenue = US $ 170 Billion

Apple and American Economy:

Apple has been phenomenally successful, making products people love and directly creating about 50,000 American jobs; but criticized for not locating its manufacturing operations in America, even as Americans complain to Apple about the working conditions of those doing the manufacture abroad mainly at Foxconn Technology Group factories in China with life in dormitories, 12-hour shifts 6 days a week, and low pay. It isn't enough for Apple to have changed the world with its innovative consumer electronics. The physical production of Apple's products accounts for over a million of manufacturing jobs globally. America, which finds itself several million jobs short of where it would like to be, and particularly short of the semi-skilled manufacturing positions that once powered growth in the middle class, seems to want some of those back. Is that an unreasonable desire? Not at all! But you can’t have the cake and eat it too. Are the Americans willing to accept lower wages? Can they live in dormitories located next to a factory? Can they mobilize thousands of workers at short notice to meet any peak demand? Can they handle the associated problems of massive pollution? Can they manufacture the products at acceptable prices? Apparently, there are no answers to these questions at the moment. Time will tell!

Success with mobile devices:

Apple achieved widespread success during the period 2007-2012 with its iPhone, iPod Touch and iPad products, which introduced innovations in mobile phones, portable music players and personal computers respectively. In addition, the implementation of a store for the purchase of software applications represented a new business model. Touch screens had been invented and seen in mobile devices before, but Apple was the first to

achieve mass market adoption of such a user interface that included particular pre-programmed touch gestures.

Technology Leadership and Brand loyalty

Apple's brand loyalty is considered unusual for any product; almost amounting to brand fanaticism. People have an incredibly personal relationship with Apple's products. This is achieved by excellent product innovation and quality.

Criticism of Apple Inc:

- Although they have been predominantly successful, their production methods, which involve huge amounts of hard labour have come under heavy criticism. Apple Inc. has received much criticism for the use of sweatshop labor, environmental destruction, and unethical business practices as a result of the method they undertake to produce electronics.
- Foxconn Technology group is one of their major suppliers, who are notorious for their unethical business practices. The facility has 300,000 employees, many working six days a week, often spending up to 12 hours a day at the plant. Over a quarter of Foxconn work force lives in company barracks and many workers earn less than $20 a day. The operations of Foxconn have been enumerated earlier in this chapter. Apple Inc. is a party to this violation. Of course, they have their own reasoning. They can not supply their products at current prices if manufactured in USA.
- There has been criticism of Apple's portable devices, whether iOS-based (i.e., iPhone, iPod Touch, iPad), or other non-iOS-based (i.e., iPod Classic, iPod Nano, iPod Shuffle), being locked into iTunes and creating an iTunes Store monopoly for these devices. Because of this, Steve Jobs was ordered to attend a court hearing regarding antitrust violations specifically with iPods and iTunes.
- Apple has been criticized for post-launch price reductions, most notably after the price of the iPhone was cut by $200 just two months after its release. This quick drop in price resulted in many complaints to Apple. Apple worked to rectify complaints by offering $100 store credit to early iPhone customers who had bought their iPhones from Apple or AT&T.

Conclusion:

Overall, Apple Inc. has been successful in developing a range of magical products, but the means of these achievements are open to much debate and criticism.

22.03.00 Wal-Mart Stores Inc.

Wal-Mart Stores, Inc. branded as **Walmart** is an American multinational retail corporation that runs chains of large discount department stores and warehouse stores. Headquartered in Bentonville, Arkansas, the company was founded by Sam Walton in 1962 and incorporated on October 31, 1969. It has over 11,000 stores in 27 countries, under a total 55 different names. The company operates under the Walmart name in the US and Puerto Rico. It operates in Mexico as Walmart de México Centroamérica, in the United Kingdom as Asda, in Japan as Seiyu, and in India as Best Price. It has wholly owned operations in Argentina, Brazil, and Canada.

The company is the world's largest public corporation, according to the Fortune Global 500 list in 2014, the biggest private employer in the world with over two million employees, and the largest retailer in the world. Walmart is a family-owned business, as the company is controlled by the Walton family, who own over 50 percent of Walmart through their holding company, Walton Enterprises.

Sam's Club, of Walmart group, is a chain of warehouse clubs which sell groceries and general merchandise, often in large quantities. Sam's Club stores are "membership" stores and most customers buy annual memberships.

To the uninitiated, Walmart is a success story! Is it? Successful only in profiteering? Let us see what this Walmart business is all about.

Walmart is the largest employer in the United States, employing almost five times as many people as IBM, the second largest employer in the U.S. With close to 2.2 million employees worldwide, Walmart has faced a torrent of lawsuits and issues with regards to its workforce. These issues involve low wages, poor working conditions, inadequate health care, as well as issues involving the company's strong anti-union policies. In November 2013 the National Labor Relations Board (NLRB) announced that it had found that Wal-Mart had pressured employees not to engage in strikes and had illegally disciplined workers who had engaged in strikes.

Criticism:

Wal-Mart has been subject to criticism from numerous groups and individuals. Among these are labor unions, community groups, religious organizations, environmental groups, and even Wal-Mart's own customers and employees. They have protested against the company's policies and business practices, including charges of racial and gender discrimination. Other areas of criticism include the corporation's foreign product sourcing, treatment of product suppliers, employee compensation and working conditions, environmental practices, the use of public subsidies etc. Yet, Wal-Mart denies doing anything wrong and maintains that low prices are the result of efficiency. It is

strange to note that the Founder Sam Walton held the belief that the company's contribution to society was the fact that it operated efficiently, thereby lowering the cost of living for its customers, and therefore in that sense was a "powerful force for good". For whose good really?

Critics point to Wal-Mart's high turnover rate as evidence of an unhappy workforce, although other factors may be involved. Approximately 50% of its employees leave within the first year.

Unfair Labour Practices:

There have been many strikes at Wal-Mart resulting in acts of reprisal by management against some striking employees. Over the past few years, in response to these reprisals, dozens of Unfair Labor Practice (ULP) charges have been filed by "OUR Walmart" (*Organization United for Respect at Walmart*) on behalf of "OUR Walmart" members who have experienced retaliation for their activities with the organization. These ULPs fall into three general categories:

1) Terminations: workers have been terminated by Wal-Mart in retaliation for their participation in "OUR Walmart"

2) Threats: workers have been threatened with loss of job or store closings in retaliation for their activities with "OUR Walmart"

3) Reduction in hours: retaliatory reduction of hours for workers who have been involved with "OUR Walmart"

Cheap Goods:

No doubt, Walmart supplies cheap goods albeit by means of exploitation of employees, suppliers, and contractors. However, there is a flipside to Wal-Mart's contribution. The secret is, Wal-Mart is exploiting China more than its own employees. The Chinese workforces involved in manufacturing goods for Walmart are the real victims. They are grossly underpaid workers with wages below subsistence level, which is why the goods get cheaper. It is anybody's guess as to the extent of pollution caused in China due to excessive manufacturing activities there for Walmart, Apple and the like. Walmart employees are getting away lightly as compared to the workers producing goods for Walmart; this said in a lighter vein. It is true that Wal-Mart's employees are grossly underpaid and are an unhappy lot. Wal-Mart is thriving on account of the Chinese policy of making cheap goods for them at cheaper prices.

Wal-Mart in India:

In India, small businesses beat Wal-Mart at their own game. They also import cheap Chinese goods - at prices barely above material cost - and sell them at every street corner in India. The transport cost is not much as China and India are neighbors. Why would anyone drive to Wal-Mart to buy cheap goods when every item is available just a stone-throw away! To make matters worse, India also manufactures a lot of cheap, cheaper, and cheapest goods - as competitive as Chinese goods - and sell them alongside Chinese stuff. Indians are busy with computer software development and other white collar activities and have no time or inclination to compete with China in the manufacturing sector. They already have a massive task of infrastructure development such as roads, buildings, irrigation projects, and the like. Wal-Mart is unlikely succeed in India. If at all, there is any slim chance, Indian political system will abort it on the tracks. China has become the world's manufacturing center; bordering on being the backyard of the world polluting the elements of nature; their rivers (water), earth, and air. The fourth element, the fire is not yet polluted!

Policy of reducing staff strength and lowering wages:

Despite Wal-Mart executives' insistence on cost cutting, the members of 'OUR Walmart' demand for improved staffing is not inconsistent with a desire for profitable business. Contrary to popular managerial belief, which holds that payroll at low-cost retailers should be kept as grossly low as possible, recent research shows that spending more on staffing, in terms of wages, hours and training, can help rather than hurt a retailer's bottom line. In a study of four low-cost retailers viz. Costco, Quiktrip, etc Professor Zeynep Ton of MIT's Sloan School of Management found that these chains, which invest substantially more in training and payroll than their peers, also have substantially higher asset and labor productivity than similar companies with leaner payrolls.

Deteriorating customer service:

As per some national surveys, consumers generally do not like shopping at Wal-Mart, and the issues cited by customers who dislike their experience in Wal-Mart stores appear to be directly related to staffing problems. The quality of goods sold at Walmart is mostly substandard. The only reason for the large customer base is *'low price of goods',* for the time being.

Health and safety risks:

Many Wal-Mart associates believe the low staffing levels contribute to safety risks at the company, and clearly Wal-Mart management has struggled with safety violations in its stores, at times resulting in an unsafe working environment for employees and an unsafe shopping environment for customers.

Wage and hour violations:

While Wal-Mart executives proudly boast of the company's relentless pursuit of labor expense reductions, the company's history of systematic wage and hour law violations in the United States has been extensively documented. In its most recent Form 10-K filed with the Securities and Exchange Commission, Wal-Mart disclosed that it remains a defendant in numerous" wage and hour class actions, and has continued to appeal.

Gender, race, disability and religion:

Wal-Mart continues to face formidable challenges in court related to gender discrimination in pay and promotions. Wal-Mart's reputation has also taken a hit for other recent discrimination and harassment lawsuits. Between June 2006 and August 2012, Wal-Mart has settled at least 9 EEOC (Equal Employment Opportunities Commission) cases for $13.4 million related to disability discrimination, gender discrimination, racial discrimination, religious discrimination and sexual harassment.

Violations in Wal-Mart's supply chain / Wal-Mart's suppliers of goods:

Public scandals and legal violations continue to occur at Wal-Mart contractors and subcontractors throughout the company's supply chain, both in supplier factories and in warehouses that store and move goods sold at Wal-Mart. According to a recent report by the National Employment Law Project, in the Inland Empire, labor violations in the warehousing industry are widespread, including lack of overtime pay, piece rate pay schemes that only lead to compensation for select portions of work performed, illegal and falsified pay records, and hazardous workplace conditions.

Recent reports by whistleblowers and outside observers reveal that many Wal-Mart suppliers of goods around the world also continue to violate local laws and Wal-Mart's Standards for Suppliers. Workers' rights organizations from around the world continue to uncover new labor violations in Wal-Mart's supply chain, suggesting systemic, widespread failures in Wal-Mart's prevention and handling of these issues.

Scott Nova, corporate social responsibility expert and Executive Director of the Worker Rights Consortium, calls Wal-Mart "the leading corporate contributor to the persistence and pervasiveness of abusive and exploitative labor conditions in global export manufacturing.

22.04.00 Mondragon Corporation

The MONDRAGON Corporation is a corporation and federation of worker cooperatives based in the Basque region of Spain. It was founded in the town of Mondragon in 1956 by graduates of a local technical college. Its first product was paraffin heaters. It is the tenth-largest Spanish company in terms of asset turnover and the leading business group in the Basque Country. At the end of 2013, it employed 74,061 people in 257 companies and organizations in four areas of activity: finance, industry, retail and knowledge. Mondragon cooperatives operate in accordance with Statement on the Co-operative Identity maintained by the International Cooperative Alliance.

Mondragon is worker owned, it's not worker managed, although the management does come from the workforce often.

Mondragon Mission:

"MONDRAGON Corporación Cooperativa" or "MONDRAGON Cooperative Corporation" is a business-based socioeconomic initiative with deep roots in the Basque Country, created for and by people and inspired by the Basic Principles of our Co-operative Experience. It is firmly committed to the environment, competitive improvement and customer satisfaction in order to generate wealth in society through business development and the creation of preferably co-operative, employment, which:

- Is based on a firm commitment to solidarity and uses democratic methods for organization and management.
- Fosters participation and the involvement of people in the management, profits and ownership of their companies, developing a shared project which unites social, business and personal progress.
- Fosters training and innovation through the development of human and technological skills.

Business culture:

Mondragon co-operatives are united by a humanist concept of business, a philosophy of participation and solidarity, and a shared business culture. The culture is rooted in a shared mission and a number of principles, corporate values and business policies.

This framework of business culture has been structured based on a common culture derived from the 10 Basic Co-operative Principles, in which Mondragon is rooted: Open Admission, Democratic Organization, the Sovereignty of Labour, Instrumental and Subordinate Nature of Capital, Participatory Management, Payment Solidarity, Inter-cooperation, Social Transformation, Universality and Education.

This philosophy is complemented by four corporate values: *Co-operation*, acting as owners and protagonists; *Participation*, which takes shape as a commitment to management; *Social Responsibility*, by means of the distribution of wealth based on solidarity; and *Innovation*, focusing on constant renewal in all areas.

Areas of Activity:

1. Finance: Banking Business of Laboral Kutxa.

2. Industries: Capital goods, Bicycles, Exercise Equipment, Construction Equipment etc…

3. Retail Business: Eroski.

4. Knowledge: University of Mondragon.

At Mondragon, there are agreed-upon wage ratios between executive work and field or factory work which earns a minimum wage. These ratios range from 3:1 to 9:1 in different cooperatives and average 5:1. That is, the general manager of an average Mondragon cooperative earns no more than 5 times as much as the theoretical minimum wage paid in his/her cooperative. In reality, this ratio is smaller because there are few Mondragon worker-owners that earn minimum wages, because most jobs are somewhat specialized and are classified at higher wage levels. The wage ratio of a cooperative is decided periodically by its worker-owners through a democratic vote.

Wage regulation:

Scholars such as Richard D. Wolff, American professor of economics, have hailed the Mondragon set of enterprises, including the good wages it provides for employees, the empowerment of ordinary workers in decision making, and the measure of equality for female workers, as a major success and have cited it as a working model of an alternative to the capitalist mode of production.

Actually, one of the successes of Mondragon is its ability to create a sense of identity among the workers within the company, encouraging an environment of solidarity and collegiality among them, a feeling that also extended to non-worker-owners.

22.05.00 Amazon Corporation

Source of information: Book titled "Mindless - Why Smarter Machines are Making Dumber Humans" by Simon Head

Amazon is now a leading global online-seller not only of books but also of music and movie DVDs, video games, gift cards, cell phones, and magazine subscriptions etc. Login at www.amazon.com, choose a product of your choice, and place order; and in a very short time the item will be at your doorstep.

Within the corporate world, Amazon now ranks with Apple as among the United States' most esteemed businesses. It is hard to resist the temptation to compare Amazon with Walmart. Like Walmart, Amazon combines state-of-the-art CBSs (Computer Business Systems) with human resource practices reminiscent of the nineteenth and early twentieth centuries.

Amazon exceeds Walmart in the use of monitoring technologies to track the minute-by-minute movements and performance of employees and in settings that go beyond the assembly line to include their movement between loading and unloading docks, between packing and unpacking stations, and to and from the shelves at gigantic warehouses where goods ordered by Amazon's online customers are sent by manufacturers and wholesalers, there to be shelved, packaged, and sent out again to the Amazon customers.

Please recall the contents of the earlier chapter in this book titled "Brief History of management" where in we had discussed about Taylorism and Scientific management. Amazon easily beats Taylor in Taylorism, hands down; albeit using CBSs (Computer Business Systems) which Taylor had no access to. You may call this "21st century Taylorism" in the garb of scientific management. Amazon's shop-floor processes are an extreme variant of Taylorism that Frederick Winslow Taylor himself would hang his head in shame, or turn in his grave. With this twenty-first-century Taylorism, management experts, *scientific managers,* take the basic workplace tasks at Amazon, such as the movement, shelving, and packaging of goods, and break down these tasks into their subtasks, usually measured in seconds; then rely on time and motion studies to find the fastest way to perform each subtask; and then work out ***"the best process"*** that employees must adapt. The entire process is dehumanized and deskilled.

Yes, Amazon is truly a global organization, and this globalism provides insights into how Amazon responds to workplaces beyond the United States that can follow different rules.

The propaganda machine claims that "Amazon cares about the customer" and "everything at Amazon is driven by and for the customer". At Amazon, there is this pseudo cult of the customer as an object of 'trust' and 'care'.

Amazon's embellishment of this customer cult with the politically correct language of "*care*" and "*trust*" comes with a strong dose of deception because Amazon's customers are principally valued by the corporation as mainstays of the bottom line, and not as the prime movers of the business. There is still more humbug in this game because Amazon treats a second significant grouping of persons with whom it has dealings - its employees - with the very opposite of *'care'* and *'trust'*. They are expected to be devotees of this *"pseudo customer cult"*, no matter what. The harsher side of Amazon is coming to light in recent years. It has been in Germany that this humbug has been exposed and the true role of the "cult of the customer" has become clear. In US and UK, Amazon management is hegemonistic as there is no independent employee voice to contest management's demands for increased output unmatched by increases in real wages. But in Germany Amazon has to deal with work councils (*Betriebsrat*); a powerful union, the United Services Union (Ver.Di), with 2.2 million members; and high officials of the federal and state governments more closely aligned with labor than their counterparts in the United States and the United Kingdom. When confronted by the unions in Germany to negotiate on wages and working conditions, especially for temporary workers who are badly exploited at Amazon management refused on the grounds that employees should be "thinking about their customers and not about their own selfish interests". This is not a very convincing argument, of course.

Amazon keeps pushing up employee productivity relentlessly while keeping hourly wages at or near poverty levels. The rationale is setting up targets based on elemental time standards established by so called scientific management. Amazon achieves this with a regime of workplace pressure, in which targets for the unpacking, movement, and repackaging of goods are relentlessly increased to levels where employees have to struggle to meet their targets and where older and less dexterous employees would begin to fail and get marginalized. These marginal employees who acquire too many demerits are then fired.

Amazon's system of employee monitoring is of the most oppressive kind with the aid of state-of-the-art surveillance technology. Amazon tags its employees with personal sat-nav (satellite navigation) computers that tell them the route they must travel to shelve consignments of goods, but also set target times for their warehouse journeys and then measure whether targets are met. As a result of this undue pressure, some Amazon employees are in constant motion across the floors of its enormous centers and others work like robots on assembly lines (belt conveyors) packing goods for shipping. Machines measured whether the packers were meeting their targets for output per hour and whether the finished packages met their targets. Apart from digital controls, the supervisors keep an eagle's eyes to ensure that the workers do not pause even catch their breath. Workers would be reprimanded even if they talk to one another, or slow down. The supervisors monitor how often a packer goes to the bathroom and whether or not he has gone to the nearest bathroom. If not, ask why not?

Other examples include providing UK employees with cheap, ill-fitting boots that gave them blisters; relying on employment agencies to hire temporary workers whom Amazon can pay less, avoid paying them benefits, and fire them at will.

In another shocking case at Allentown- Pennsylvania center at USA, during the summer of 2011, revealed the lengths Amazon was prepared to go to keep costs down and output high. How ruthless can Amazon be! Ambulances stationed on hot days at the Amazon center to take employees suffering from heat stroke to the hospital. Despite the summer weather, there was no air-conditioning in the depot, and Amazon refused to let fresh air circulate by opening loading doors at either end of the depot for fear of theft. Inside the plant there was no slackening of the pace, even as temperatures rose beyond $100^{\mathbf{o}}$ F.

Amazon's business model, the workplace practices that raise employee productivity to very high levels also keep employees off balance and thus ill placed to secure wage increases that match their increased output. The "cult of the customer" preached by Amazon is a scented smoke screen thrown up to hide this fact.

Should these apparent benefits to customers be achieved at the altar of a system that treats employees as untrustworthy human robots and relies on intimidation to push them to the limit, while denying them the rewards of their own increased efficiency? Pause and ponder!

22.06.00 Japanese Style of Management / Maruthi Suzuki Ltd

Transfer of Corporate Japan overseas: USA:

Because of the success of Japanese companies, many countries tried to adapt a Japanese system of human resource management. They hoped to increase productivity, quality, worker satisfaction etc; but it was not to be. There was an immediate increase in the number of American firms using Japanese style because of its initial appealing nature and its proven success in Japan; however, because of great cultural differences, this style did not succeed in the long run. Although a few companies in America have been successful, many companies are having difficulties transferring the Japanese style. American cultural barriers stand in the way of implementing Japanese system.

Some features of Japanese System:

- Employees are expected to meet peak demand by way of long working hours, overtime at short notice.
- Team members help each other to get out of any problem. There is a sense of *'familism'***;** They rotate jobs to make workforce flexible in order to carry out multiple tasks.
- Seniority and job security are also important aspects of the Japanese system. Workers in Japan know that their elders will have the better positions. If they perform well, their chance for seniority will come along later.
- Japanese workers have a high degree of loyalty towards their company.
- Japanese workers feel the peer pressure more than that of management.
- Participative management.
- Tradition of continuous improvement known as "***Kaizen***".

Japanese cultural traits, such as homogeneity, familism, and loyalty are conducive to successful implementation of such a system. Cultural conditions and expectations in America prevent its long-term success.

Let us see the American way in relation to the Japanese style.

- Employees do not like to work long hours or work overtime at short notice because of their prior commitments, especially concerning family members.
- There is more individualism in American psyche.
- They tend to feel resentment towards inefficient workers.
- College graduates and talented young persons do not like the idea of seniority for promotions.
- Americans look for better opportunities and tend to change jobs often.

America is a multicultural society and its cultural features are at variance with Japanese culture of homogeneity, loyalty towards company, familism at work etc. There is no one way of doing things here. This aspect is not conducive to the Japanese way of working.

However, certain features of Japanese system such as “participative management”, “Kaizen” etc have contributed to increase in productivity and employee satisfaction in America.

Transfer of Corporate Japan Overseas: Suzuki in India:

Maruti Suzuki India Limited - formerly known as Maruthi Udyog - is an automobile manufacturer in India. It is a subsidiary of Japanese automobile and motorcycle manufacturer Suzuki. Maruti Suzuki manufactures and sells a complete range of cars from the entry level Alto, to the hatchback Ritz, Celerio, A-Star, Swift, Wagon R, Zen and sedans DZire etc.

The company's headquarters are at No 1, Nelson Mandela Road, New Delhi.In February 2012, the company sold its ten millionth vehicle in India.

In 1982, a license & Joint Venture Agreement is signed between Maruti Udyog Ltd. and Suzuki of Japan. Since its founding in 1983, Maruti Udyog Ltd experienced problems with its labour force. The Indian labour it hired readily accepted Japanese work culture and the modern manufacturing process. In 1997, there was a change in ownership, and Maruti became predominantly government controlled. Relationship between the Government of India, and Suzuki Motor Corporation over the joint venture was a point of heated debate in the Indian media until Suzuki Motor Corporation gained the controlling stake.

However, the company had been plagued by labour problems and unrest. There were demands for increase in wages, which the company could not afford. Workers complained of harsh working conditions and hiring of temporary workers at low wages. There were many instances of violence in the factories. Notwithstanding these problems, the company continues to be a profitable venture and is well known for its excellent service network.

Implementation of Japanese system at Suzuki:

Initially, Suzuki brought in the following changes at the Indian subsidiary:

- An open-office policy of housing 50 employees in one office including managers, all sitting in the open. There were no separate cabins for managers. This was meant to promote close-knit working among the staff and between the staff and managers.

- A common uniform for all employees irrespective of their ranking.
- Common canteen and menu for all employees.
- Stress on cleanliness, maintenance, and quality.
- Implementation of *'Kaizen'*, a system of continuous improvement.
- Conduct shop floor meetings to discuss problems and schedule of work.
- Report for duty 10 minutes in advance of start of a shift for exercising and changing dress and a strict policy on punctuality.
- Report at the workstation within a minute after the siren goes off.
- Engage in continuous improvement process (Kaizen)

Gradually the cultural differences began to show up, hindering implementation of the Japanese work culture at Suzuki works, in India. Following cultural differences were at play:

- Maintaining punctuality was problematic. In Japan, employees have their own vehicles for commuting and public transport system is also good; whereas Indians have to depend on inefficient public transport system.
- Due to the prevailing culture at the workers' previous employment, unauthorized absenteeism was rampant. Old habits die hard!
- Stopping work for a few minutes to take rest is an old habit for the Indian workers.
- Lack of team work.
- Lack of quality consciousness.
- Managers are status conscious and do not wish to sit in the open; they want cabins.
- Managers wish to have special arrangements for food.
- Workers resented the idea of reporting for duty 10 minutes in advance; that too without proportionate remuneration.

As in America, the cultural differences challenged the concepts of Japanese system at work in India too. As a result, a hybrid system evolved, albeit with limited benefits. However, the Japanese method contributed toward significant improvement in product quality.

Suzuki management solved some of these problems as follows:

- Take fresh engineering graduates and workmen without previous experience so as to mold them to their way of working.
- Training of staff by experienced Japanese supervisors who had good hand-on experience.
- Superior Suzuki technology eliminated some human element in working.

22.07.00 Google - Matrix, the movie

If it is not in Google, it does not exist.

… Jimmy Wales

There is nothing, nothing, nothing that Google can not tell you. Google knows all that there is to know. The only problem is that of assimilating the information provided by Google, by the lesser mortals.

… Reddigari Seshadri Reddy

I can not imagine a life without Google. Why?

Have you seen the movie, Matrix (Trilogy); a dream world and an illusion at its best? It is a computer program to subdue human population. Google is presently "the MATRIX" in its nascent stage. I am sure it will soon evolve into a MATRIX and even surpass it at present rate of technological development. I was an ignorant and clueless lad earlier. Thanks to Google, I have the answers to every question. I will be soon be nostalgic about being a clueless kid.

I feel I am trapped in a matrix when I look for information at google search engine. At the same time I feel secure at the thought of having any information just a click away, thanks to Google. Other sources of information such as Wikipedia are a distant second, at best. Wikipedia is one-dimensional while Google is 3D animation of sorts. I get a video for every subject on earth in Google's youtube.com ranging "from how to make an omelet"➔ "how to repair a dishwasher" ➔ "how to build a house" ➔ "how to conduct heart surgery" and so on. Amazing, isn't it?

Google is sure to throw up whatever information one may need or not need. I grab my laptop, whenever I feel the urge to gather some information, which I may not even be in need of. Mostly, I fabricate a need for some information, just because Google beckons me.

Gone are the days when I used to call up my friends or visit a library for gathering information. Google has totally isolated me from the social circle. I do not feel the need to talk to anybody. Google tells me everything I need to know; which movie should I go to, which restaurant I should choose, what to buy and where, location of any place on this planet, exchange rate 10 years back, share price movement since inception of any company etc. This said in a lighter vein.

I am not undermining the usefulness of Google. It is truly an amazing tool.

Epilogue: Realm of Business World

Origin and Operations:

Stated Mission: Google's mission is to organize the world's information and make it universally accessible and useful.

Google is an American multinational corporation specializing in Internet-related services and products. These include online advertising technologies, search, cloud computing, and software. Most of its profits are derived from AdWords. Google AdWords is an online advertising service that places advertising copy at the top, bottom, or beside, the list of search results Google displays for a particular search query. The choice and placement of the ads is based in part on a proprietary determination of the relevance of the search query to the advertising copy. AdWords has evolved into Google's main source of revenue.

Google was founded in the year 1998 by Larry Page and Sergey Brin while they were Ph.D. students at Stanford University. Google's headquarters in Mountain View, California, is referred to as "the Googleplex", a play on words on the number googolplex and the headquarters itself being a *complex* of buildings. It may of interest to note that Google started its operations in a humble garage of a friend in Menlo Park, California. The name Google, originated from a misspelling of the word "googol", the number one followed by one hundred zeros, which was picked to signify that the search engine was intended to provide large quantities of information.

A **googol** is the large number 10^{100}; that is, the digit 1 followed by 100 zeroes:

Google is a company that started its operations in a lowly garage with a misspelled name (googol was misspelled as Google) with just one employee. Interesting!

Highlights:

The corporation has been estimated to run more than one million servers in data centers around the world.

Google process over one billion search requests each day

Number of employees = 47,756

Corporate culture:

On *Fortune* magazine's list of best companies to work for, Google ranked first in 2007, 2008 and 2012. Google was also nominated in 2010 to be the world's most attractive employer to graduating students in the ***Universum*** Communications talent attraction

index. Google's corporate philosophy includes principles such as "you can make money without doing evil".

As a motivation technique, Google uses a policy often called Innovation Time Off, where Google engineers are encouraged to spend 20% of their work time on projects that interest them. Some of Google's newer services, such as Gmail, Google News, Orkut, and AdSense originated from these independent endeavors. Many new product launches originated from the Innovation Time Off.

Philanthropy:

In 2004, Google formed the not-for-profit philanthropic Google.org, with a start-up fund of $1 billion. The mission of the organization is to create awareness about climate change, global public health, and global poverty.

In 2011, Google donated 1 million Euros to International Mathematical Olympiad to support the next five annual International Mathematical Olympiads.

Tax avoidance:

Google uses various tax avoidance strategies. Out of the five largest American technology companies it pays the lowest taxes to the countries of origin of its revenues. The company accomplishes this partly by licensing technology through subsidiaries. Following criticism in UK on this issue, Chairman Eric Schmidt said, "It's called capitalism. We are proudly capitalistic".

Criticism of Google:

Criticism of Google includes alleged misuse and manipulation of search results, its use of others' intellectual property, concerns that its compilation of data may violate people's privacy, censorship of search results and content, and the energy consumption of its servers as well as concerns over traditional business issues such as antitrust, monopoly, and restraint of trade.

Google's stated mission is *"to organize the world's information and make it universally accessible and useful"*. This mission and the means used to accomplish it have raised concerns among the company's critics. Much of the criticism pertains to issues that have not yet been addressed by cyber laws.

Likely misuse of search results by users:

With the Google interface the user gets the impression that the search results imply a kind of totality.

Page rank manipulation:

Numerous companies and individuals have voiced concerns regarding the fairness of Google's Page rank and search results after their websites disappeared from Google's first-page results. It is conjectured that Google favored its own services in search results. Complainants have been unable to provide evidence in courts.

Biased rankings for Google Shopping:

Google announced that they will no longer be maintaining a strict separation between search results and advertising. Google Shopping will be replaced with a nearly identical interface, according to the announcement, but only paid advertisers will be listed instead of the neutral aggregate listings shown previously. To counter this change in Google Shopping, Microsoft, who operates the competing search engine Bing, launched a public information campaign titled Scroogled to drive away Google users.

Copy rights issues:

Google Books previously known as Google Book Search and Google Print is a service from Google Inc. that searches the full list of books and magazines that Google has scanned. Results from Google Books show up in both Google Web Search and the dedicated Google Books site (books.google.com). Up to three results from the Google Books index may be displayed, if relevant, above other search results in Google Web Search.

A click on a result from Google Books opens an interface in which the user may view pages from the book, if out of copyright or if the copyright owner has given permission. Books in the public domain are available in "full view" and free for download. For in-print books where permission has been granted, the number of viewable pages is limited to a "preview"

Google's ambitious plans to scan millions of books and make them readable through its search engine have been criticized for copyright infringement. The Association for Learned and Professional Society Publishers and the Association of American University Presses both issued statements strongly opposing Google Books, stating that "Google claims a sweeping right to appropriate the property of others for its own commercial use".

Google Map Maker:

is a service launched by Google in 2008 designed to expand their Google Maps service. Google Map Maker allows user contributed data to be put into the Google Maps service, similar to OpenStreetMap. It includes concepts such as organizing mapping parties and

mapping for humanitarian efforts. It has been criticized for taking work done for free by the general public and claiming commercial ownership of it.

Environmental issue:

By Google's own admission, the company continuously uses enough electricity to power 200,000 homes; which is about 300 million watts or about a quarter of the output of a nuclear power plant. Total carbon emissions may far exceed a million metric tons, mostly due to fossil fuels that provide electricity for the data centers and over a million servers. Google is making an attempt to reduce pollution by funding some clean energy initiatives. Google is also working with other members of the IT community to improve efficiency on a broader scale. In 2007 Google co-founded the "Climate Savers Computing Initiative", a group which champions more efficient computing and dedicated to cutting computer energy costs. But like any other business, Google is doing what it must to conduct their operations and can not be singled out for criticism on this issue. Microsoft is also reported to rival Google in causing pollution. There seems to be no easy answer.

In this milieu of debate over climate control issue, some *'vested interests'* claim that CO2-based climate alarm is *humbug*. I would like to believe this, even as evidence is overwhelmingly building up to the contrary. I wish the evidence is a conjecture. Let us give this a benefit of doubt. Am I just fantasizing!

Project Oxygen:

Management at the Googleplex (Google Headquarters) embarked on a plan code-named ***"Project Oxygen"***, in early 2009. Their mission was to devise something far more important to the future of Google Inc. than its next search algorithm. They wanted to build better bosses. Were they trying to reinvent the wheel or trying to challenge the conventional wisdom? In Project Oxygen, the statisticians gathered more than 10,000 observations about managers across more than 100 variables. The research team analyzed performance review reports, conducted interviews / surveys, collected voluminous data, correlated the words and phrases in the feedback, and by the year-end came out with a report listing what can be termed " Eight Habits of Highly Effective Google Managers". Hold your breath; in anticipation of what might be revelations by the mighty data-mining Google.

The list read like this:

- "Have a clear vision and strategy for the team."
- "Help your employees with career development."
- "Don't be a sissy: Be productive and results-oriented."
- "Possess technical expertise."

The list goes on… At first glance, the findings sound too obvious. Why did it take so long for the Giant Google to realize the obvious? Why did Google reinvent the wheel. Maybe, they wanted some unique kind of wheel; Google Wheel? However, it turned out to be more interesting, when the list was to be prioritized. Google found that technical expertise ranked dead last among Google's big eight traits.. What employees valued most were even-keeled bosses who made time for one-on-one meetings, who helped people puzzle through problems by asking questions, not dictating answers, and who took an interest in employees' lives and careers.

Knowing the capabilities of "*Google Search Engine*", we'd always believed that to be a manager, particularly on the engineering side, you need to be as deep or deeper a technical expert than the people who work for you. It turns out that it is important but absolutely the least important thing. Much more important thing is just making that connection and being accessible. Most companies are better at exhorting you to be a great manager, rather than telling you how to be a great manager. These findings are convincing to Google employees as they are based on their own company's data.

These results were extensively discussed in various training programs and performance reviews. It was found that there was a significant improvement in the performance of the Managers, subsequently. The whole exercise was to make the Google managers aware of what works, and what does not.

Google Code of Conduct:

"Don't be evil." Googlers generally apply those words to show how we serve our users. But "Don't be evil" is much more than that. Yes, it's about providing our users unbiased access to information, focusing on their needs and giving them the best products and services that we can. But it's also about doing the right thing more generally – following the law, acting honorably and treating each other with respect.

The Google Code of Conduct is one of the ways we put "Don't be evil" into practice. It's built around the recognition that everything we do in connection with our work at Google will be, and should be, measured against the highest possible standards of ethical business conduct. We set the bar that high for practical as well as aspirational reasons. Commitment to the highest standards helps us hire great people, build great products, and attract loyal users. Trust and mutual respect among employees and users are the foundation of our success, and they are something we need to earn every day.

Bibliography

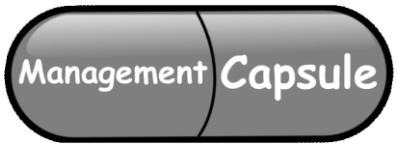
1. B.Mahdevan, Operations Management; Pearson education.
2. Dale H.Besterfield / Carol Besterfield-Michna / Glen H.Besterfield / Mary Besterfield-Sacre, Total Quality Management: Prentice Hall – an imprint of Pearson Education.
3. Dale H.Besterfield, Carole Besterfield-Michna, Glen H.Besterfield, and Mary Besterfield-Sacre., Total Quality Management: Pearson Prentice Hall Dipak Kumar Bhattacharyya., Production and Operations Management: Excel Books.
4. Hamdy A.Taha, Operations Research: Prentice Hall – an imprint of PEARSON.
5. Harold Koontz/Heinz Weihrich; Essentials of Management: Tata McGraw Hill Education Pvt Ltd.
6. Investopedia - Investment Education.
7. J.K.Sharma, Business Statistics: Pearson Education.
8. James R.Evans and James W.Dean, JR.,Total Quality: Management, Organization and Strategy: South-Western College Publishing, a division of Thomson Learning Inc.
9. John M.Kelly., Total Quality Management: Alexander Hamilton Institute Inc / Infotech Standards India Pvt Ltd.
10. Oxford English Dictionary.
11. Philip Kotler / Kevin Lane Keller, A Framework for Marketing Management: Pearson Education.
12. Poornima M.Charantimath., Total Quality Management: Pearson Education (Singapore) Pte ltd.
13. Prem Kumar Gupta / D.S.Hira, Operations Research, S.Chand & Company Ltd.
14. R.B.Khanna., Production and Operations Management: Prentice-Hall of India Pvt Ltd.
15. Rajesh ray, Supply Chain Management for Retailing.
16. Richards Bronson / G.Naadimuthu, SCHAUM'S Outlines: Tata McGraw-Hill Publishing Company Ltd.
17. Roget's Thesaurus.
18. S.N.Chary., Production and Operations Management: Tata McGraw-Hill Publishing Company Ltd.
19. Seshadri Reddy and Harish Reddy, Blame it on me: Frog Books, an imprint of Leadstart Publishing Pvt Ltd.
20. Seshadri Reddy and Harish Reddy, Word Bank: Anika Publications.
21. Sunil Chopra / Peter Meindl / D.V.Kalra, Supply Chain Management: Pearson Education (Singapore) Pte Ltd.
22. Wikipedia - The free encyclopedia.
23. Word Power - from Reader's Digest.
24. Word Smart: Princeton Review.


Notes


Notes


Notes

INDEX: Management Capsule



Other Books by the Author, R. Seshadri Reddy

1. BLAME IT ON ME: A Real-Life Kafkaesque Black Comedy

ISBN = 978-93-80154-21-3

Published by FROG BOOKS, An imprint of LEADSTART PUBLISHING Pvt Ltd, Mumbai

Website: www.blameitonme.in

2. ***WORD BANK: Learn and Recall Abstruse English Words through Stories, Anecdotes, News, Narrations, Etymology, and Quotes***

ISBN = 978-93-5067-886-2

Published by Anika Publications, Hyderabad

Website: www.englishwordbank.com / www.englishwordbank.in

3. ***WORD BANK SERIES: Know Thyself, Friends, and Foes - Memoria Technica***

Learn and recall selective abstruse English words

ISBN = 978-93-5104-854-1

Published by Anika Publications, Hyderabad

Website: www.englishwordbank.com / www.englishwordbank.in

4. ***WORD BANK SERIES: Confusables - Memoria Technica***

Learn and recall selective abstruse English words

ISBN = 978-93-5137-498-5

Published by: Anika Publications, Rd#12 Extension, Hyderabad-500096, INDIA

Website: www.englishwordbank.com / www.englishwordbank.in

Contact: R. Seshadri Reddy, Plot # 1250, Road # 12 Extension, Banjara Hills, Hyderabad - 500096, Telangana, India; Cell # + 91-9347052956 ; Email ID : reddigari@hotmail.com

Website: www.managementcapsule.com