Chapter Summary

SCM

Traditional Cost Management Disadvantage

- SHORT TERM OUTLOOK
- LIMITED FOCUS ON REVISION & IMPROVISATION
- IGNORE DYNAMICS OF MARKETING AND ECONOMICS
- EXCESSIVE FOCUS ON COST REDUCTION
- IGNORE COMPETITION, MARKET GROWTH AND CUSTOMER REQUIREMENT
- REACTIVE APPROACH

LEADS TO DEVELOPMENT OF

SCM

- SUSTAINABLE COMPETITIVE ADVANTAGE
- PRODUCT DIFFERENTIATION
- COST LEADERSHIP

4 STAGES

- FORMULATION
- COMMUNICATION
- IMPLEMENTATION
- CONTROL

NECESSITY

- COST ANALYSIS IN A BROADER CONTEXT
- COST DATA IS ANALYSED AND USED STRAGICALLY
- CLEAR UNDERSTANDING OF COMPANY'S COST STRUCTURE
- MANAGERIAL USE OF COST INFORMATION
- OVERALL RECOGNITION OF COST RELATIONSHIP

COMPONENTS OF SCM

A — Strategic Positioning Analysis

- ORGANIZATION CULTURE, VALUES & SYSTEM
- INTERNAL ENVIRONMENT
- EXTERNAL ENVIRONMENT

B — Cost Driver Analysis

- STRUCTURAL COST DRIVER
- EXECUTIONAL COST DRIVER

C — Value Chain Analysis

Primary

- INBOUND LOGISTIC
- OPERATIONS
- OUTBOUND LOGISTIC
- MARKETING
- AFTER SALES

Primary

- PROCUREMENT
- TECHNOLOGY
- HUMAN RESOURCES
- MANAGEMENT & FINANCE

CASE STUDY: S-MART

STRATEGIC FRAMEWORK FOR VCA

Industry Structure Analysis

≫ PORTER'S 5 FORCES ≪

- THREAT OF NEW ENTRANTS
- BARGAINING POWER OF CUSTOMERS
- BARGAINING POWER OF SUPPLIERS
- RIVALRY AMONG CURRENT PLAYERS
- THREATS FROM SUBSTITUTES

CASE STUDY: WDG, COCA-COLA

Core Competencies Analysis

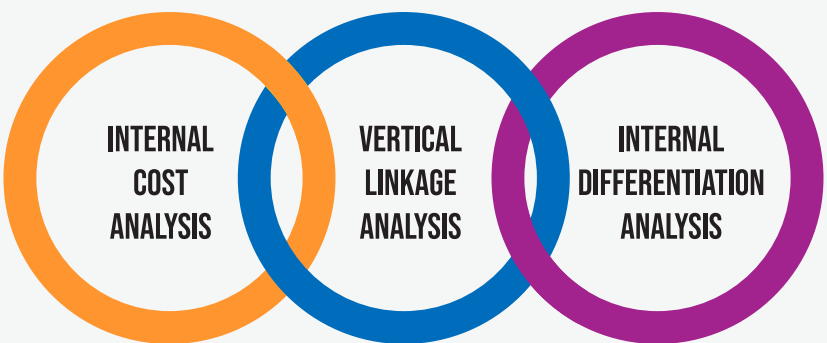
- **Resources** (CREATE VALUE FOR CUSTOMER)
- **Capabilities** (USE RESOURCES PRODUCTIVELY)

Segmentation Analysis

- SUPERIOR PERFORMANCE
- COMPETITIVE ADVANTAGE
- PRODUCT DIFFERENTIATION
- COST LEADERSHIP

CASE STUDY: WIRELESS MANUFACTURER

VCA FOR COMPETITIVE ADVANTAGE



- FIRMS VALUE CREATING PROCESS.
- COST DRIVERS & LINKING.

- ANALYSIS OF UPSTREAM & DOWNSTREAM ACTIVITIES.
- SUPPLIER ANALYSIS.

- CREATE CUSTOMER VALUE.
- USE DIFFERENTIATION STRATEGY.

Chapter Summary

QUALITY MANAGEMENT

COST OF QUALITY

- **COST OF GOOD QUALITY**
  - **PREVENTION COST** (BEFORE PRODUCTION)
    - QUALITY
      - ENGINEERING
      - TRAINING
      - REVIEW
  - **APPRAISAL COST** (DURING PRODUCTION)
    - INSPECTION
    - PACKAGING
    - SUPPLIER VERIFICATION
- **COST OF POOR QUALITY**
  - **INTERNAL FAILURE** (AFTER PRODUCTION BEFORE SALE)
    - REWORK
    - SCRAP
    - REPAIR
  - **EXTERNAL FAILURE** (AFTER SALE)
    - WARRANTY
    - DISCOUNT DUE TO DEFECTS

TQM

TOTAL — INCLUDES ALL EMPLOYEES FROM TOP LEVEL TO LOWER LEVEL

QUALITY — CUSTOMER SATISFACTION & CONTINUOUS IMPROVEMENT

MANAGEMENT — PLANNING & CONTROL

- **6C's**
  - COMMITMENT
  - CULTURE
  - CONTINUOUS IMPROVEMENT
  - CO-OPERATION
  - CUSTOMER FOCUS
  - CONTROL
- **PDCA CYCLE**
  - PLAN
  - DO
  - CHECK
  - ACT
- **DEMING POINT**
  - EDUCATION FOR SELF - IMPROVEMENT
  - INVOLVE EVERYONE
  - LONG TERM PLANNING
  - SINGLE SUPPLIER
  - ON THE JOB TRAINING

CASE STUDY:
TATA STEEL
GENERAL ELECTRIC
MOTOROLA

BUSINESS EXCELLENCE MODELS

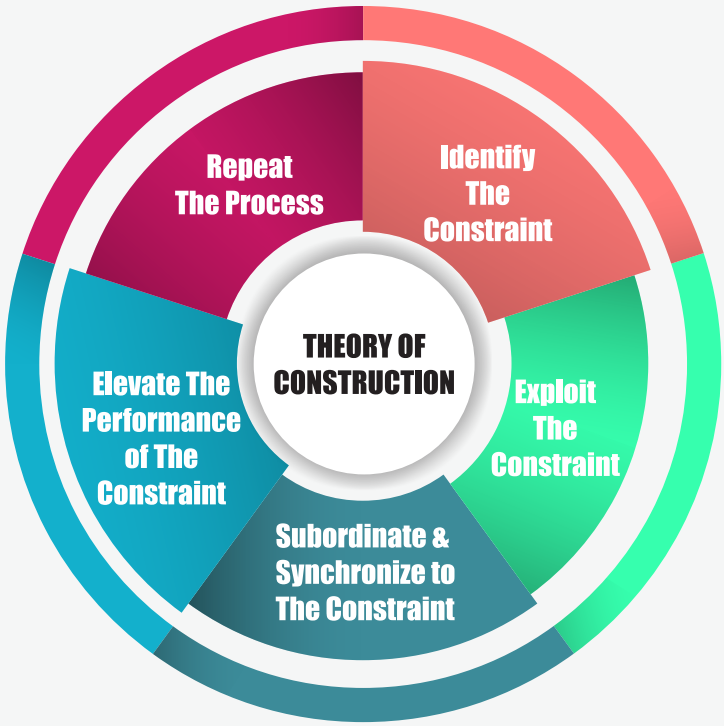
BEM = QUALITY MANAGEMENT PRINCIPLES TO
(INCREASE EFFICIENCY -->
MINIMIZE WASTE -->
EMPLOYEE LOYALTY & EXCELLENCE)

- **MODELS**
  - **EFQM**
    - **FUNDAMENTAL**
      - SUSTAINING OUTSTANDING RESULTS
      - ADDING VALUE FOR CUSTOMERS
      - CREATING A SUSTAINABLE FUTURE
      - DEVELOPING ORGANIZATIONAL CAPABILITY
      - HARNESSING CREATIVITY & INNOVATION
      - LEADING WITH VISION, INSPIRATION & INTEGRITY
      - MANAGING WITH AGILITY
      - SUCCEEDING THROUGH THE TALENT OF PEOPLE
    - **APPLICATION**
      - **ENABLERS**
        - LEADERSHIP
        - POEPLE
        - STRATEGY
        - PARNTERSHIP RESOURCES
        - PROCESSS PRODUCT SERVICES
      - **RESULTS**
        - PEOPLE
        - CUSTOMER
        - SOCIETY
        - BUSINESS
    - **RADAR**
      - RESULT
      - APPROACH
      - DEPLOY
      - ASSESS
      - REFINE
  - **BALDRIGE**

CASE STUDY:
APPARREL COMPANY
TATA BUSINESS EXCELLENCE MODEL

THEORY OF CONSTRAINTS (TOC)

5 Step Diagram



SUPPLY CHAIN MANAGEMENT

INTEGRATION OF KEY BUSINESS PROCESS FROM SUPPLIER TO END USER

PRODUCTION → PURCHASE → MATERIAL MANAGEMENT → DISTRIBUTION → CUSTOMER → AFTER SALES

CASE STUDY : SUN ELECTRONICS

TYPE OF SUPPLY CHAIN

PULL STRATEGY

PRODUCTION BASED ON ANTICIPATED DEMAND

PUSH STRATEGY

PRODUCTION BASED ON ACTUAL DEMAND

UPSTREAM SUPPLY CHAIN MANAGEMENT

RELATIONSHIP WITH SUPPLIERS

- SUPPLIER STRATEGY
- SOURCES (ALL OVER THE WORLD)
- NUMBER OF SUPPLIERS (BULK PURCHASE, DISCOUNT)
- COST, QUALITY, AND SPEED OF DELIVERY
- MAKE OR BUY AND OUTSOURCING

USE OF TECHNOLOGY

E-PROCUREMENT

- E - SOURCIING
- E - PURCHASING
- E - PAYMENT

DOWNSTREAM SUPPLY CHAIN MANAGEMENT

Relationship Marketing

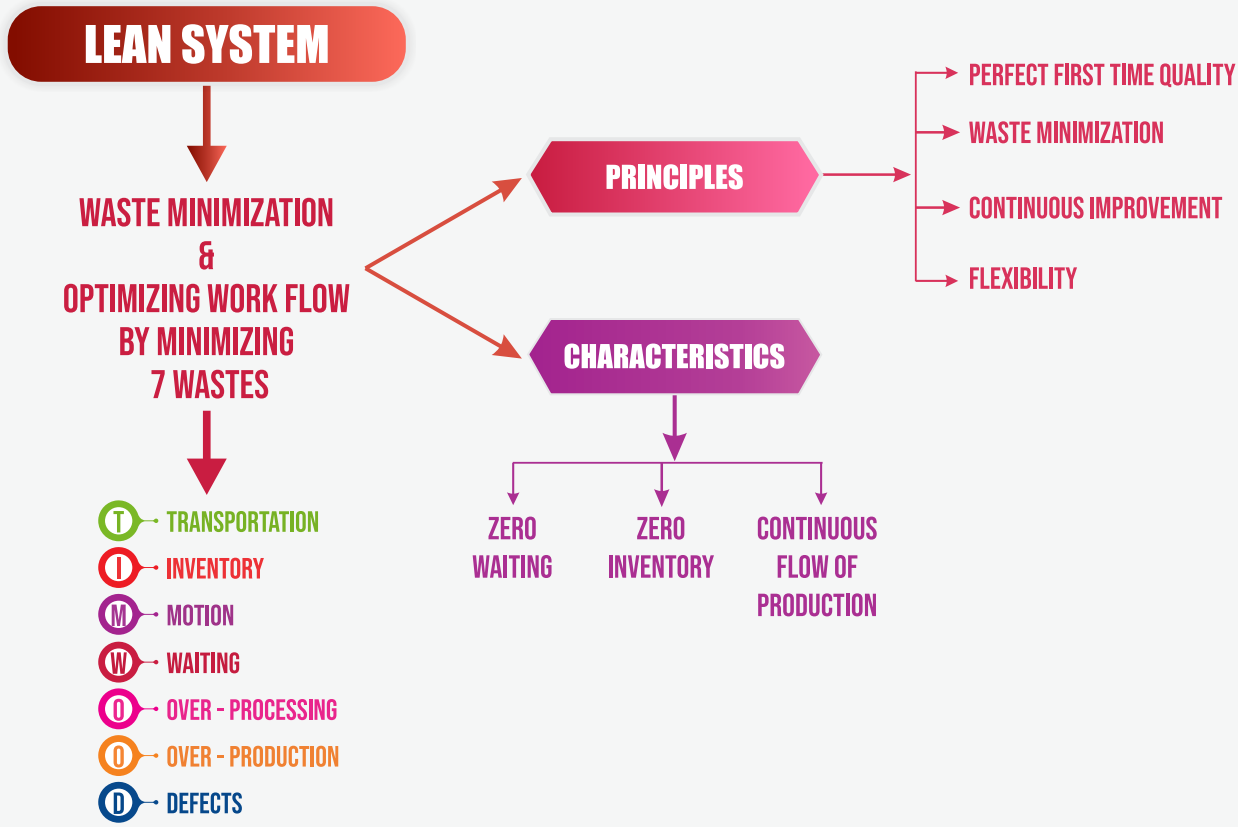
- INTERNAL MARKETS
- REFERRAL MARKETS
- INFLUENCE MARKETS
- RECRUITMENT MARKETS
- SUPPLIER MARKETS
- CONSUMER MARKETS

Customer's Relationship Management

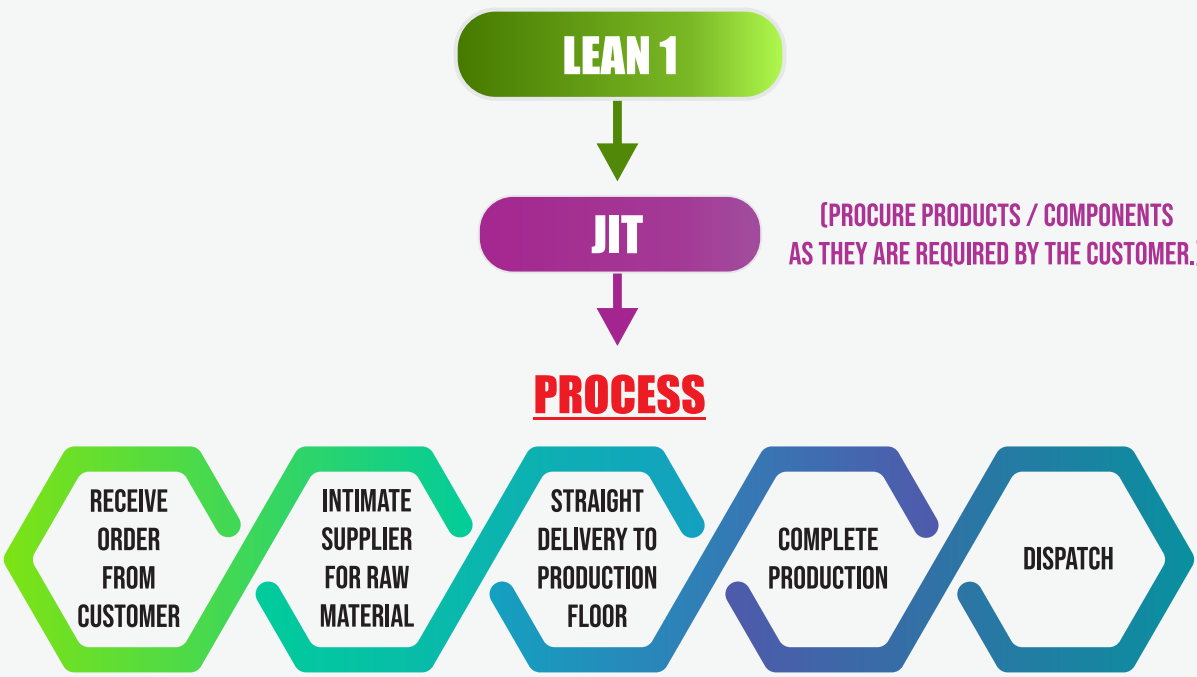
- ANALYSIS OF CUSTOMERS AND THEIR BEHAVIOR
- CUSTOMER ACCOUNT PROFITABILITY
- CUSTOMER'S LIFETIME VALUE
- CUSTOMER'S SELECTION, ACQUISITION, RETENTION & EXTENSION

CASE STUDY: CINEWORLD PRACTICAL QUESTION APPLE INC

Chapter Summary



TECHNIQUES OF LEAN SYSTEM



JIT

ADVANTAGE

- REDUCTION IN INVENTORY
- REDUCE SPACE REQUIREMENT
- LOWER PRODUCTION COST

DISADVANTAGE

- DANGER OF DISRUPTED PRODUCTION DUE TO NON-ARRIVAL OF SUPPLIES
- HIGH DEPENDENCE ON SUPPLIERS
- INCREASED ORDERING AND ADMIN COSTS

Accounting in JIT

BACKFLUSHING:

FIND TOTAL PRODUCTION COMPLETED IN A MONTH

CALCULATE RAW MATERIAL REQUIRED PER PRODUCTION UNIT

=

TOTAL RAW MATERIAL SUPPLIED FOR PRODUCTION

Ways To Resolve JIT Problems

- **KANBAN CARD** — (SYSTEM USED TO PULL WORK AUTHORIZATION THROUGH PRODUCTION SYSTEM)
- **WORKING CELLS** — (SMALL CLUSTER OF MACHINE WHICH CAN BE RUN BY SINGLE MACHINE OPERATOR)

PERFORMANCE MEASUREMENT IN JIT

- Machine Utilization
- Direct Labour Efficiency Tracking
- Price Rate Tracking

LEAN 2

KAIZEN COSTING (CHANGE FOR BETTER)

- CONTINUOUS IMPROVEMENT
- ELIMINATION OF WASTE IN PRODUCTION
- BENEFIT IN SMALL VALUES

CASE STUDY
ZEN LIMITED

LEAN 3

5S

SORT (SEIRI)
- REMOVAL OF UNNECESSARY THINGS FROM WORK AREA.

SET IN ORDER (SEITON)
- SYSTEMATIC ARRANGEMENT OF NECESSARY THINGS.

SHINE (SEISO)
- KEEP WORK AREA CLEAN & SAFE

STANDARDIZE (SEIKETSU)
- PROCESS MEASURES ESTABLISHED AND BEST PRACTICES IN WORK AREA.

SUSTAIN (SHITSUKE)
- CONTINUE THE ABOVE THINGS IN DISCIPLINED WAY

CASE STUDY:
Y & E CHARTERED ACCOUNTANTS

LEAN 4

TPM

EQUIPMENTS MAINTENANCE TO ACHIEVE
- ✔ NO BREAKDOWN
- ✔ NO DEFECT
- ✔ NO SMALL STOP

8 PILLARS OF TPM
1. AUTONOMOUS MAINTENANCE
2. FOCUSED IMPROVEMENT
3. PLANNED MAINTENANCE
4. EARLY EQUIPMENT MANAGEMENT
5. QUALITY MAINTENANCE
6. TRAINING AND EDUCATION
7. SAFETY, HEALTHY, ENVIRONMENT
8. OFFICE TPM

CASE STUDY:
SUPER REFINERIES LIMITED

PERFORMANCE MEASUREMENT IN TPM (OEE)
3 MAIN THINGS

AVAILABILITY
NO STOPS (EQUIPMENT FAILURE/ BREAKDOWN SETUP/ ADJUSTMENT)
> 90%

PERFORMANCE
NO SMALL STOPS OR SLOW RUNNING (IDLING & MINOR STOPPAGE REDUCED SPEED)
> 95%

QUALITY
NO DEFECTS (REDUCED YIELD, QUALITY DEFECTS & REWORK)
> 99%

LEAN 5
CELLULAR MANUFACTURING

A MANUFACTURING PROCESS THAT PRODUCE FACILITIES OF PARTS WITHIN A SINGLE LINE OR CELL OF MACHINE OPERATED BY MACHINISTS WHO WORK ONLY WITHIN THE LINE OR CELL. A CELL IS A SMALL SCALE, CLEARLY DEFINED PRODUCTION UNIT WITHIN A LARGER FACTORY.)

❑ A SUB SECTION OF JIT AND LEAN SYSTEM IS CELLULAR MANUFACTURING. IT ENCOMPASSES GROUP TECHNOLOGY. THE GOALS OF CELLULAR MANUFACTURING ARE:

- TO MOVE AS QUICKLY AS POSSIBLE,
- MAKE A WIDE VARIETY OF SIMILAR PRODUCTS,
- MAKING AS LITTLE WASTE AS POSSIBLE.

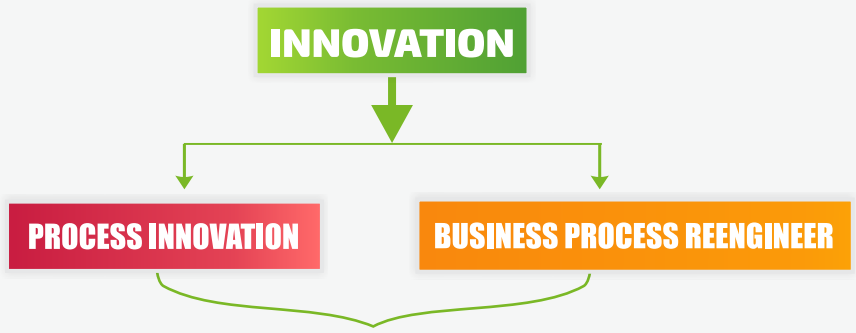
LEAN 6
SIX SIGMA

SIX SIGMA IS THE STATISTICAL MEASURE USED TO ENSURE QUALITY OF PRODUCTS AND SERVICES.

- 99.999998% OR 0.002 DEFECTS PER MILLION.
- MEASURE USE TO ENSURE QUALITY OF PRODUCTS AND SERVICES.
- CUSTOMER SATISFACTION.
- GOAL OF PERFECTION.

DMAIC FOR EXISTING PROCESS	DMADV FOR NEW PROCESS
D DEFINE	D DEFINE
M MEASURE	M MEASURE
A ANALYSIS	A ANALYSIS
I IMPROVE	D DESIGN
C CONTROL	V VERIFY

CASE STUDY
(ASPL)
(DERBY GRAY)



PROCESS INNOVATION

PROCESS INNOVATION MEANS THE IMPLEMENTATION OF A NEW OR SIGNIFICANTLY IMPROVED PRODUCTION OR DELIVERY METHOD (INCLUDING SIGNIFICANT CHANGES IN TECHNIQUES, EQUIPMENT AND/ OR SOFTWARE).

BUSINESS PROCESS REENGINEERING

PRINCIPLES OF BUSINESS PROCESS RE-ENGINEERING

- ORGANIZE AROUND OUTCOMES
- HAVE THOSE WHO NEED THE RESULTS OF A PROCESS PERFORM THE PROCESS
- TREAT GEOGRAPHICALLY DISPERSED RESOURCES AS THOUGH THEY WERE CENTRALIZED
- LINE PARALLEL ACTIVITIES INSTEAD OF INTEGRATING THEIR RESULTS
- PUT THE DECISION POINT WHERE THE WORK IS PERFORMED, AND BUILD CONTROLS INTO THE PROCESS

MAIN STAGE OF BPR

PROCESS IDENTIFICATION
EACH TASK PERFORMED BEING RE- ENGINEERED IS BROKEN DOWN INTO A SERIES OF PROCESSES.

PROCESS REASSEMBLY
RE-ENGINEERED PROCESSES ARE IMPLEMENTED IN THE MOST EFFICIENT MANNER.

PROCESS RATIONALISATION
PROCESSES WHICH ARE NON VALUE ADDING, TO BE DISCARDED.

PROCESS REDESIGN
REMAINING PROCESSES ARE REDESIGNED.

CASE STUDY
FORD MOTOR
ANI