

IPE (Theory):

* **Organization**: A deliberate arrangement of **people** to accomplish some specific **purpose** that individuals could not accomplish alone.

Common Characteristics:

- Distinct **Purpose [goal]**
- Deliberate **Structure**
- **People**.

* **Management**: Coordinating work to finish it efficiently + effectively.

Efficiency	Effectiveness
1. Doing thing right	1. Doing the right things
2. Most outputs least inputs.	2. Attaining goal
3. Present state matters	3. Long term strategy matters
4. Quantity based	4. Quality based.

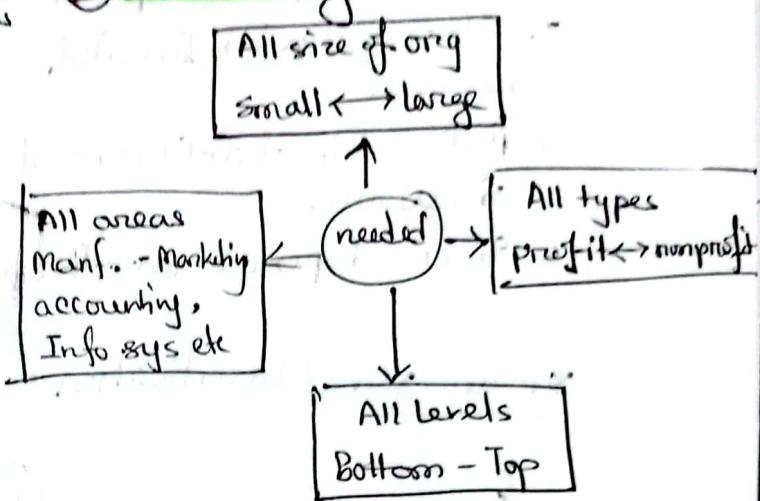
↓
low resource (high efficiency)
high goal attainment (" effectiveness)

Importance of Management:

1. achieves **given goals**.
2. arranges **factors of production**
3. organizes **resource**.
4. improves **efficiency + productivity**.
5. " **customer experience + increase profitability**.

Why study management?

① Universality:-



② Reality of work:-

- Employees manage
- or are managed

③ Rewards of Managers:-

1. Good work **environment**
2. Think **creatively** (changes)
3. Help others find **fulfillment** - meaning
4. Support, coach, nurture
5. Work with **various people**
6. Recognition + status.

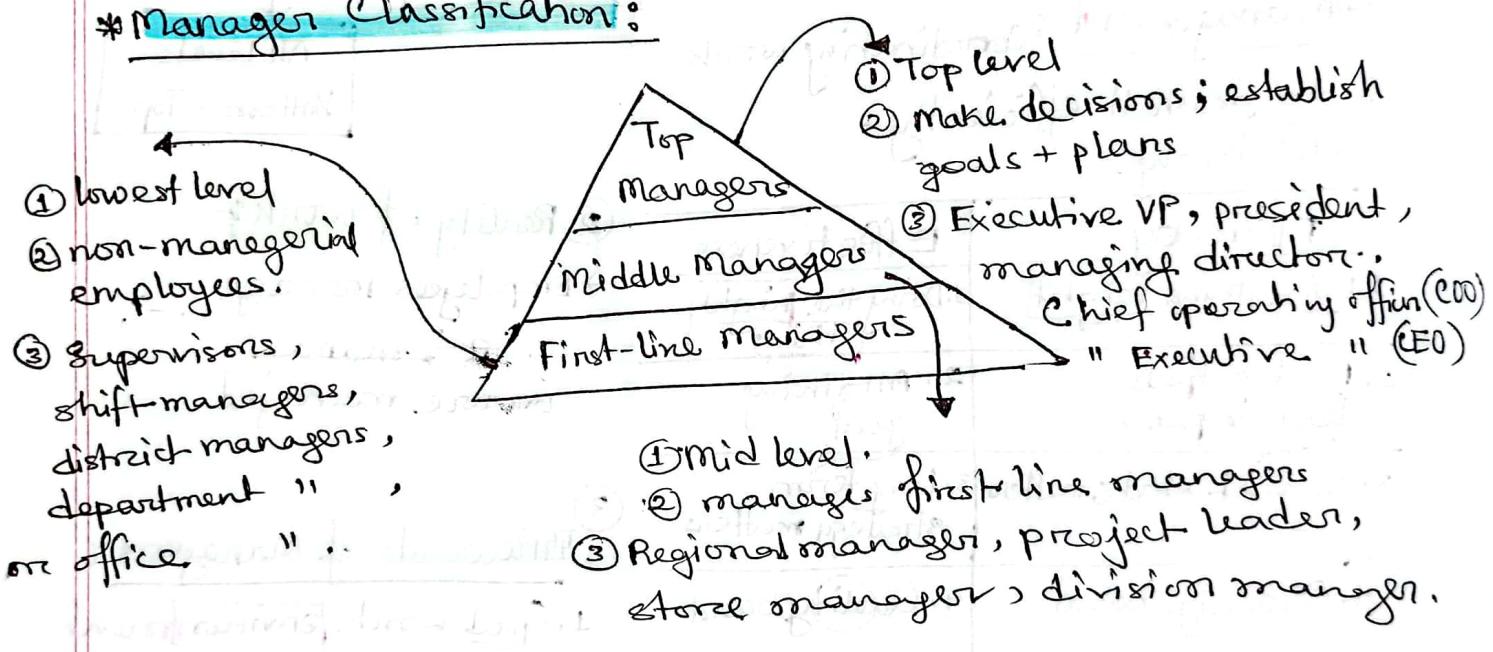
Challenges

1. Hard work
2. Deals with various personality.
3. Often deal with limited resources
4. Motivate in chaotic + uncertain situations.
5. Success depends on others.

* Who are Managers?

- someone who works WITH & THROUGH other people by COORDINATING their work accomplishing goals.

* Manager Classification:



* Management Functions:

Planning:

1. Defining goals.
2. Establishing strategies
3. plans to integrate + coordinate activities

Organizing:

1. determine tasks
2. 誰が何をする
3. how to group the tasks.
4. Who reports whom.
5. Where decisions are to be made.

Leading :-

- ① motivating ..
- ② influencing ..
- ③ selecting communication channels.
- ④ deals with employee behaviour.

Controlling :-

- ① Monitoring actual performance.
- ② Comparing " standard .
- ③ Taking action ..

Mintzberg's Managerial Role:

① Interpersonal roles : (ceremonial + symbolic duties)

* Figure head .

- ① Symbolic head .
- ② does work of legal/social nature
- ③ — greets visitors .
- ④ — signs legal docs .

* leader

- ① motivates .
- ② staffing, training etc .
- ③ performs virtually .

* liaison

- ① Network experts (HQ)
- ② favors + info .
- ③ — ack mails .
- ④ — deals with outsiders .

② Informational roles : (collecting , receiving , disseminating)

* Monitor

- ① seeks-receives both internal + external info
- ② — reads reports .
- ③ — maintains personal contacts

* Disseminator

- ① Transmits info from outsiders .
- ② — holds info meetings .
- ③ — making phone calls .

* Spokesperson

- ① Transmits info to outsiders , (plans , policies etc) .
- ② — holds board meetings
- ③ — gives info to media .

③ Decisional roles: (making choices)

* Entrepreneur

- ① Searches org + environment.
- ② Organizes strategies.
- ③ " reviews to develop new programs

* Resource allocator

- ① Allocates resources
- ② - scheduling.
- ③ - requests authorization.
- ④ budget handles

* Disturbance handler

- ① corrects unexpected disturbances
- ② organize strategy involved with
- ③ " reviews disturbance

* Negotiator

- ① negotiates.
- ② - union contract.

④ Management Skills

① Technical skills

- techniques
- lower level manager.

② Conceptual skills

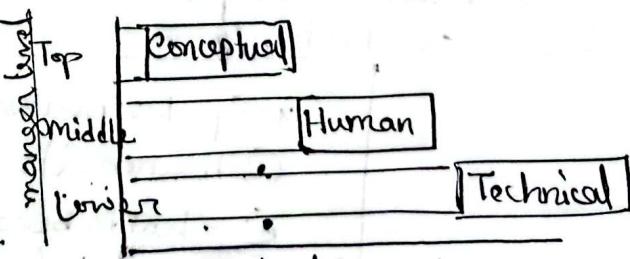
- thinking, abstract
- complex situation
- top level.

③ Human skills

- attitude, motives, emotion
- needed in all level.

Manager's job change:

- imp of customers
- imp of innovation
- imp of sustainability.



Purpose of Organizing

- ① divides work - into jobs + dept.
- ② assigns task - with individual jobs.
- ③ Coordinates diverse org. tasks.
- ④ Establishes relations - individuals, groups, dept.
- ⑤ Establishes formal lines of authority
- ⑥ Allocates + deploys org. resources.

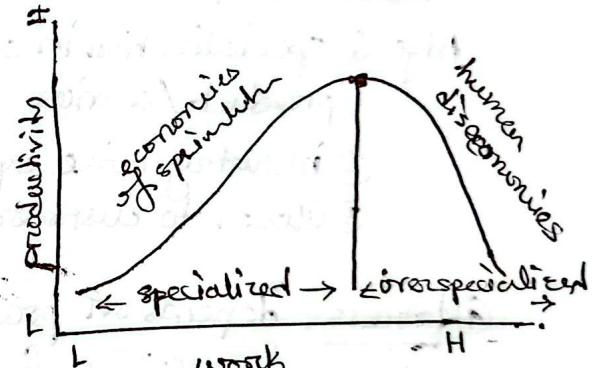
Organizational Design

- ① Work specialization
- ② Departmentalization
- ③ Chain of Command
- ④ Span of control
- ⑤ Centralization + Decentralization
- ⑥ Formalization

WORK SPECIALIZATION (job task-कार्य)

→ divide work and assign. employees specialize in that part rather than the entire activity.

dis - overspecialization can lead to boredom, fatigue, stress, poor quality, high absenteeism, and turnover

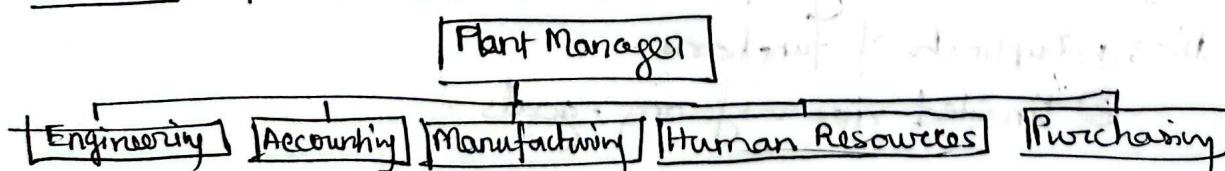


DEPARTMENTALIZATION (grouping)

Grouping common work — for coordination and integration.

5 Forms :-

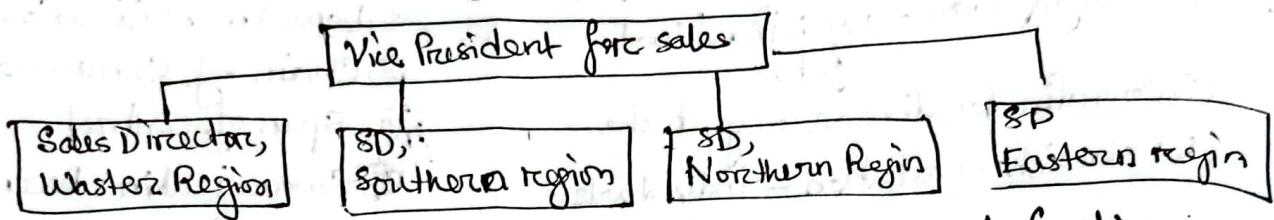
① Functional : function wise अस ; common skilled - तो एकाग्र व्यवस्था



Adv : ① Coordination is current
② Efficiencies - putting common people
③ Depth specialization

Dis : ① poor communication across func. areas.
② Limited views of org. goals.

② Geographical: territory or geography wise grouping
Demand for credit & plant units



- Adj: ① Efficient handling regional issues.
 ② serves needs of unique geographic market

- Dis: ① duplication of functions
 ② isolated from other org. areas.

③ Product: product-line wise

- Adj: ① specialization in specific product/services
 ② industry wise expertise
 ③ closer to customers

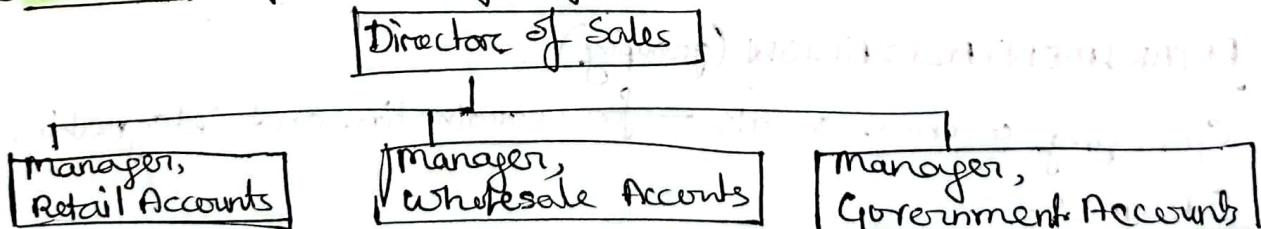
- Dis: ① duplication of functions
 ② limited view of organizational goals

④ Process: depends on product/customer flow.

Adj: more efficient flow of work

Dis: can be used for certain type of products.

⑤ Customer: depends on type of customer & needs



Adj: ① needs met by specialists

Dis: ① Duplication of functions

② limited view of org. goals.

CHAIN OF COMMAND

Continuous line of authority — from upper to lower — classifies who reports to whom.

Acceptance theory of Authority: (Bachord)

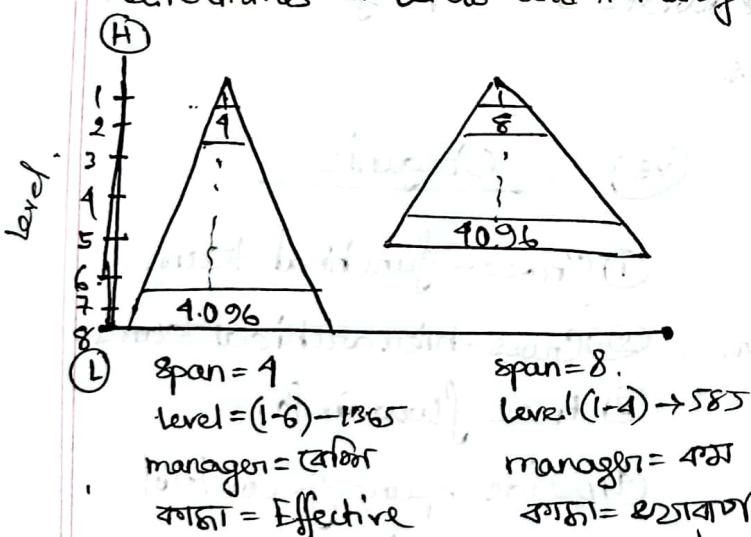
Subordinates ex-accept order if:

- ① understand it
- ② feels order is consistent with the orgnizt's purpose
- ③ does not conflict with their personal belief
- ④ able to perform the task

SPAN OF CONTROL

* number of people supervised by a manager

* determines # levels and # managers.



Line Authority: One who directs
Staff Authority: supports, assists
advises line authority.

Responsibility: unit of command

obligation/expectation

to perform.

→ concept of having one boss
and should report to their person.

Width of span is affected:

- ① Skills + abilities of manager/employees
- ② Characteristics of work
- ③ Similarity of tasks
- ④ Complexity " "
- ⑤ Standardization " "
- ⑥ Strength of org. culture.

CENTRALIZATION

- ① Decision making → at a single point
- ② Top manager → order that employees → carry out the orders
- ③ Stable environment
- ④ Lower level manager do not want a say in decision making
- ⑤ Decisions are relatively minor
- ⑥ Organization - face crisis, risk, of company failure
- ⑦ Large Company.
- ⑧ Strategies depends on managers.

DE CENTRALIZATION

- ① Employees / lower level decision making
- ② Employee empowerment
- ③ Complex, uncertain environment
- ④ Lower Level manager want a voice in decision
- ⑤ Significant
- ⑥ Allow managers a say in what happens
- ⑦ Geographically dispersed
- ⑧ depends on manager involved, also has flexibility to decide

FORMALIZATION

Degree to which jobs — standardized + employee behaviour is guided by rules + procedures.

Mechanistic

- ① High specialization
- ② Rigid departmentalization
- ③ Clear Chain of Cmd
- ④ Narrow spans of control
- ⑤ Centralization
- ⑥ High formalization



Organic

- ① Cross-functional team
- ② Cross-hierarchical teams
- ③ Free flow info.
- ④ Wide spans of control
- ⑤ Decentralization
- ⑥ Low formalization



Motivation:-

Process — person's efforts are energized, directed, sustained toward attaining a goal.

#Elements of Motivation:

① Energy

"How hard a person tries —"
measure of intensity,
drive & vigor

② Direction

"Where a person channels his effort"
goals

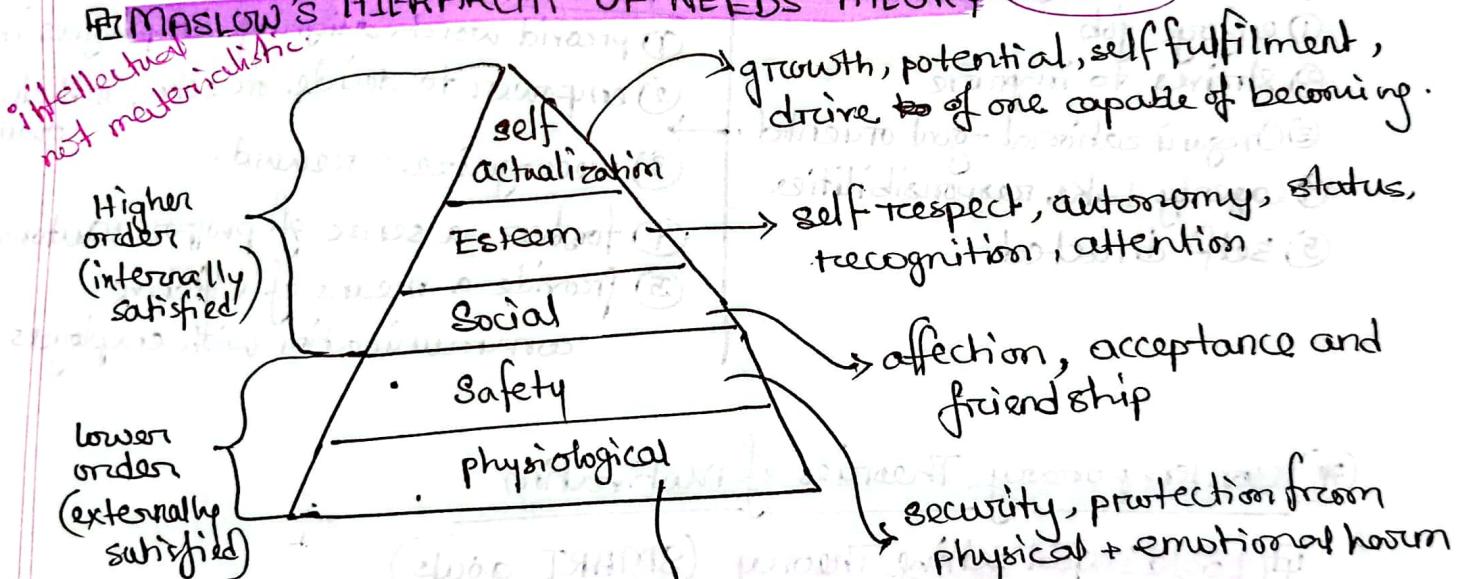
③ Persistence

"How long a person maintains effort —"

#Early theories of Motivation

MASLOW'S HIERARCHY OF NEEDS THEORY

SES 8P



(below Pyramid)

higher order (internally satisfied)

lower order (externally satisfied)

self actualization

Esteem

Social

Safety

physiological

need for food, drink, shelter, reproduction

McGREGOR'S THEORY X and THEORY Y

Theory X:

For Negative POF of employees

- ① Don't enjoy their job
- ② Little ambition
- ③ Individual-goal oriented
- ④ Avoid responsibility
- ⑤ Require formal direction

Theory Y:

For Positive POF of employees

- ① enjoys job
- ② strives to improve
- ③ Organizational-goal oriented
- ④ eagerly take responsibilities
- ⑤ self directed

Motivation

- ① use threats/punishments
- ② focus on tangible incentives (bonus, promotion, pay rise)
- ③ close supervision + monitoring
- ④ strict rules/regulation
- ⑤ .

Motivation

- ① provide work aligning employees interest
- ② empower to decide or solve on their own
- ③ recognize + reward
- ④ foster a sense of purpose + autonomy
- ⑤ provide a means of effective communication with employees.

* Contemporary Theories of Motivation

Locke's Goal setting Theory (SMART goals)

- (S) Specific: precise - single focus per goal
- (M) Measurable: - so that you know when you've hit them
- (A) Achievable: not unachievable but might stretch you.
- (R) Relevant: goal must matter to you + organization
- (T) Time-bound: must have a deadline (long term works with no ending demotivates you)

由 Equity Theory (input = output jobs) .

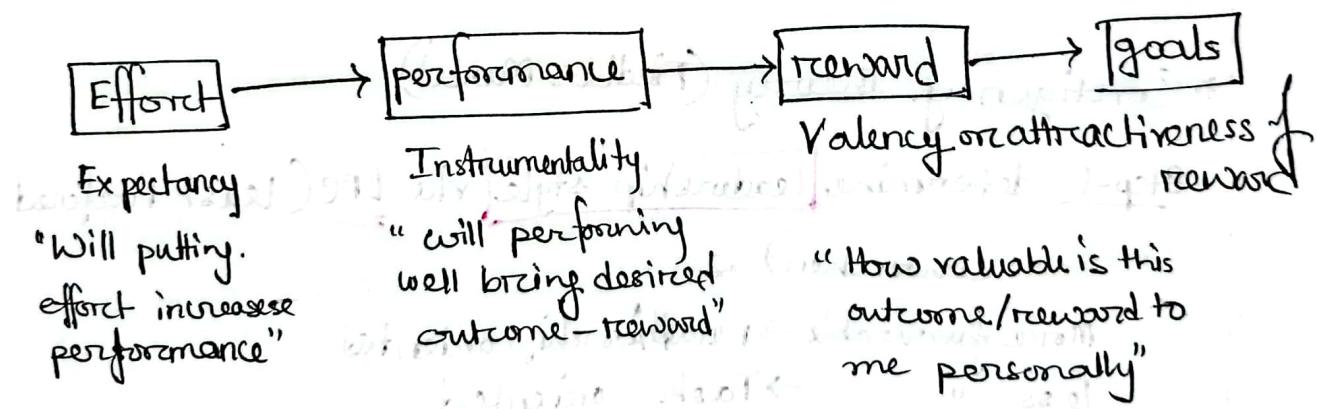
* employees compare their input-output ratio with others.

2 Factor Theory: ① Satisfaction: input wise output ORCA

Common input and their outcomes

- ① no. of hours worked → Salary.
 - ② commitment & enthusiasm → Holiday allowance.
 - ③ responsibilities + duties in the role → transport/accommodation facilities.
 - ④ Experienced → recognition.
 - ⑤ Personal sacrifice made → Bonus. or promotion
 - ⑥ Loyalty shown to superior/organization → Flexibility at work.
 - ⑦ Flexibility shown(assignments within tight-deadlines - short time) → training/learning facilities.

Expectancy Theory

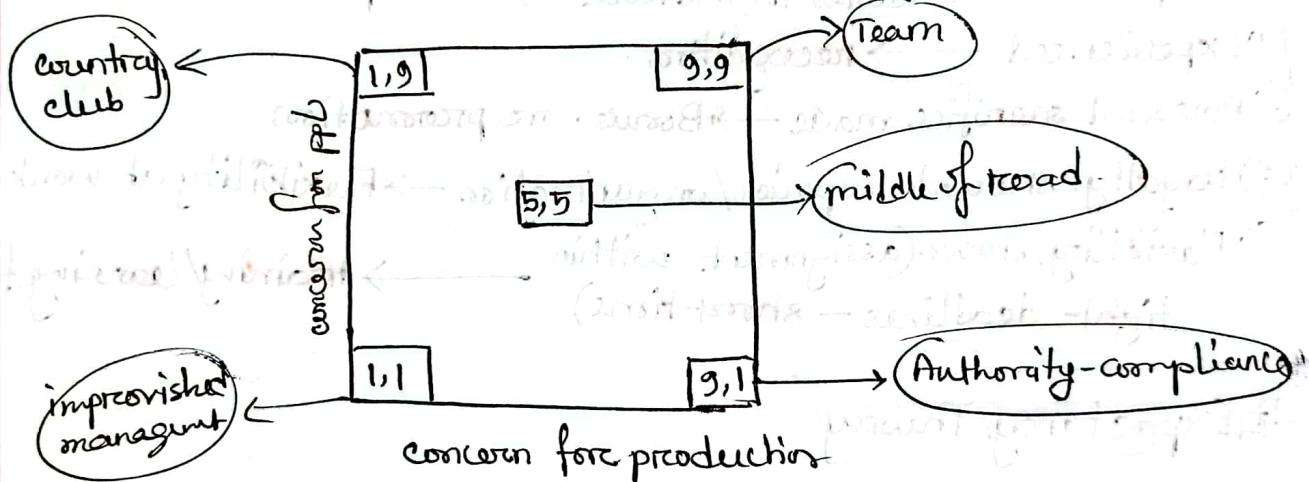


- Q1** **leader**: someone — influence others + has managerial authority
Q2 **Leadership**: process — leading / influencing a group — to achieve goal.

Leadership traits:

- (1) Desire to lead
- (2) Honesty + integrity
- (3) Self confidence
- (4) Intelligence
- (5) Job relevant knowledge
- (6) Extraversion
- (7) Drive

* **Behavioral Theories**. (Blake and Mouton's Managerial Grid)



* **Contingency Theory (Fiedler Model)**

Step-1 determine **leadership style** via **LPC** (least Preferred Co-worker)

More favorable → relationship oriented
 less " " → Task oriented

> 69 → relationship oriented

63-58 → mixed (rare)

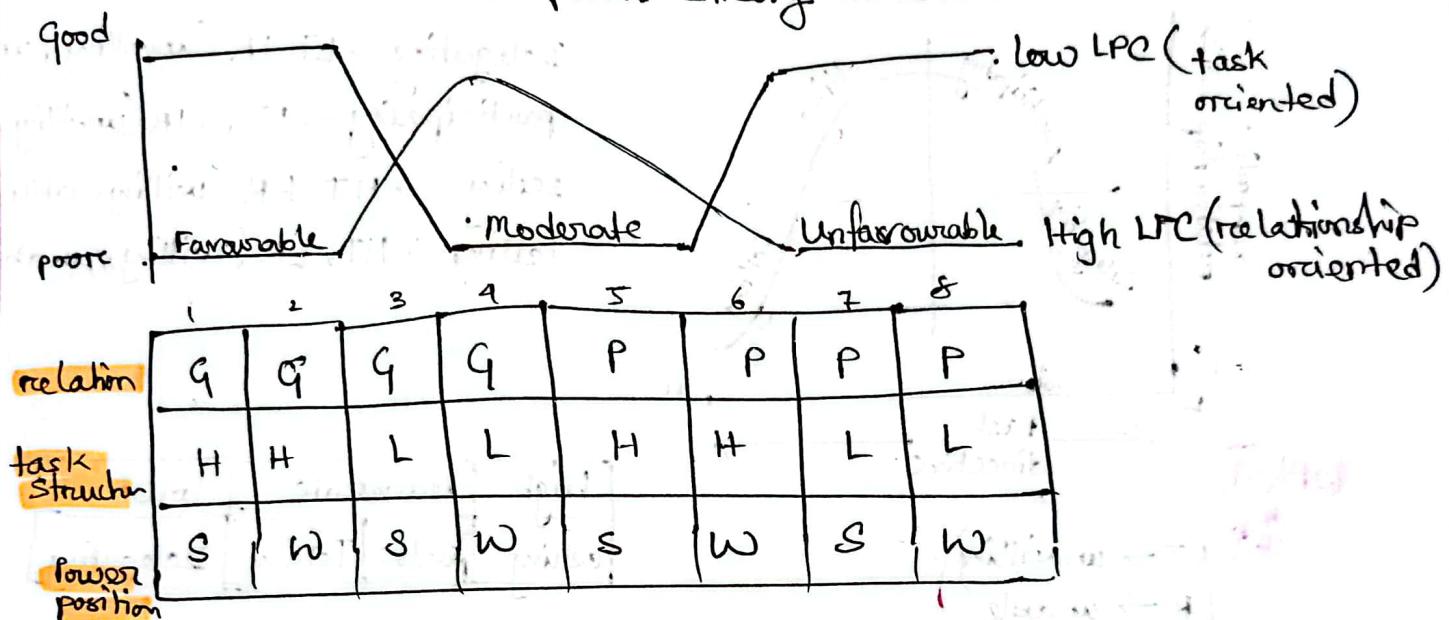
57 > → task oriented

Step-2 Get the favorableness of the situation.

3 Questions : (1) leader-member relation: good or poor

(2) Task structure: vague or clear

(3) Position power: strong or weak.



Relation Good: knows each other for years - trusted

" Poor: new team - trust issue"

Task high: standardized + detailed division of labour

" low: not "

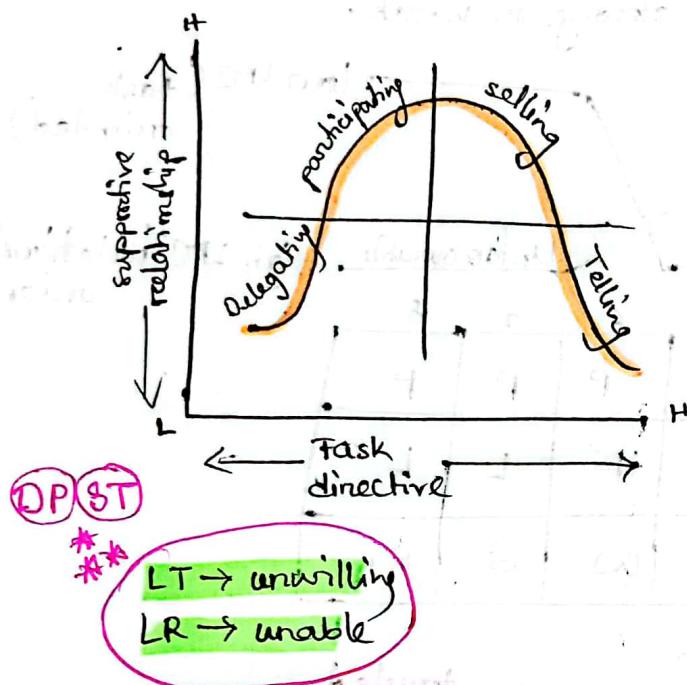
Power strong: hires, fires, rewards, punished

" weak: manage day-to-day work but not responsible for line management.

ability to make up for shortcomings in technique & method, to

keep morale high for long periods of time.

* **Situational Leadership Theory** (Leader-follower parent-child)
 leaders need to adjust style according to Task and psychological readiness of the followers.



Delegating → LT, LR (unwilling, unable)
 participating → LT, HR (unwilling, able)
 selling → HT, HR (willing, able)
 Telling → HT, LR (willing, unable)

High	Moderate	Low
selling	participating	Telling
		Delegating

* **Leader Member Exchange Theory (LMX)** [Contemporary Views]

→ leaders actions ain't same toward everybody.

→ Has two groups: ingroup & outgroup.

Strength: ① Valid + practical.

② Focuses on significance of communication + develop + grow + maintain beneficial exchange.
 Mutual trust, respect, devotion.

Criticism: objected on grounds of fairness + justice

as some receive special attention others don't

* Transformational leadership. (Zuckerberg, Howard Schultz)

- ① Charismatic
- ② Motivates, inspires.
- ③ Encourages Creativity
- ④ Individual consideration, personal care + concerns.

* Visionary leadership: (Michael Dell, Elon Musk)

- ⑤ ability to create, articulate realistic, credible and attractive vision of future. — that improves present.

Human Resource Management (HRM)

Function concerned with hiring, motivating and maintaining — a workforce — in an organization — to achieve org. goals.

* External Factors Affecting HRM process:- ④

① The Economy: Global economic downturn impacts HRM practices → economic recession, great Depression, COVID19 etc.

② Employee Labour Unions: organization — represents workers seeks — interests through collective bargaining. whether:

- * recruitment sources
- * hiring, promotion, layoff criteria
- * training eligibility + disciplinary practices

③ Legal Environment: practices are governed by a country's laws. Unfairness, illegal things must be avoided.

④ Demographic trends: Older generation must be replaced by the new. ones at a certain point, they may retire so the next generation can do the job — each generation in workplace have certain percentage of population.

HRM Process:

- ① Workforce planning
- ② Recruiting
- ③ Organization Socialization
- ④ Performance management
- ⑤ Training
- ⑥ Succession planning.
- ⑦ Compensation + benefits
- ⑧ Critical Skill gap analysis

* Assessing Current HR

- ① Inventorying current employee
- ② Job analysis
- ③ Job description
- ④ " Specification

* Meeting future HR Needs

- ① Missions, goals, strategies
- ② Demand of Org.
- ③ Estimating understaffed/overstuffed areas.

* Recruiting Sources

① Internet : Adv - reach high, immediate response.

Dis - unqualified candidates.

② Employee referrals: Adv - knowledge abt. org, strong candidates as good referred reflects on recommended

Dis - not diverse

③ Company Website : Adv - wide distribution, targets specific groups

Dis - generate unqualified candidates

④ College recruiting: Adv - centralized large body of candidates.

Dis - limited to entry level position.

⑤ Prof recruiting org: Adv - good knowledge of industry challenges & requirements

Dis - little commitment to specific org.

After completing all the above mentioned activities, the company will be in a position to identify its strengths and weaknesses of current

* Decruitment Options

- ① **Firing**: permanent - involuntary - termination
- ② **Layoff**: temporary - involuntary - termination (few days / years)
- ③ **Attrition**: voluntary resignation, retirements
- ④ **Transfer**: moving employees (Lateral / downward)
reduces intraorg. supply-demand balance.
- ⑤ **Reduced workweeks**: work hours reduction,
part-time job.
- ⑥ **Early retirements**: providing incentives to retire early
- ⑦ **Job sharing**: having employees share full-time positions.

* Selection Tools

① Application Forms :

1. universally used
2. gather info.
3. predicts performance but
not easy to create one that
does.

② Written Test:

1. Job related.
2. includes intelligence,
ability, interest etc.
3. popular
4. good predictor for supervisory
positions.

③ Performance Simulation Test:

1. actual job behaviors.
2. work sampling.
3. assessment center
4. good for managerial posts.

④ Interviews :

1. universally used
2. interviewee must know
what can or can't be asked.
3. good for managerial posts.

⑤ Physical Examinations:

1. For insurance purposes
2. In jobs with certain physical requirements

⑥ Background investigation:

1. verifying app. data
2. " ref. checks

* Orientation: Work + Org. related DATA

* Employee Training Methods

Traditional:

- ① On job
- ② Job rotation.
- ③ Mentoring/coaching
- ④ Experiential exercise
- ⑤ Workbooks/manual
- ⑥ Classroom lectures.

Technology based:

- ① CD ROM / DVD
- ② Video conference / TV
- ③ Elearning

* Employee Performance Management

① Written Essay

Evaluator will note down → strength - weakness, potential - performances, will suggest improvements.

Adv: simple.

Dis: Evaluator's writing skill - 20% & 80% depend on it.

② Critical Incident

Evaluator focuses on critical behaviors.

Adv: rich examples, behaviorally based

Dis: Time consuming, lacks quantification.

③ Graphic Rating Scale:

popular method

→ list of performance and a scale.

Evaluator rates:

Adv: quantitative data, not time consuming.

Dis: doesn't provide indepth info.

④ BARS (Behaviorally Anchored Rating Scale):

Combines critical incidents and GRS.

Adv: specific + measurable job behaviors

Dis: time consuming

Difficult behavior

⑤ Multi person Comparison:

Compares across work groups

Adv: compares

Dis: difficult for large # employees

⑥ 360-Degree Appraisal:

Feedback from supervisors, employees, coworkers.

Adv: Thorough.

Dis: Time consuming.

*Current Issues in HRM

① Managing Diversification.

② Managing work force diversity

③ Sexual harassment

④ Managing worklife balance.

⑤ Controlling HR costs.

■ Inventory Management:

* stock/storage of goods → Raw material
Work in Process.
Finished goods.

* Function:

- ① meet anticipated demands
- ② seasonal requirements
- ③ protect against stockouts
- ④ Quantity Discounts

* Inventory Cost:

- Holding / Carrying Cost : (warehouse खाता)
- Ordering / Setup cost : (order delivery + product आगामी वर्ष)
- Shortage cost : (customer ordered + but no product बिज़नेस - लोस बन्द प्रौद्योगिकी)

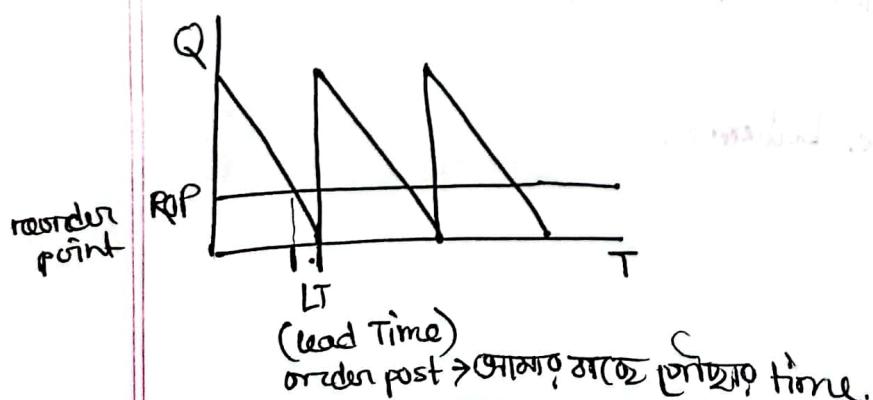
* ABC - Always Better Control:

	A	B	C
volume	10-15%	20-30% vol	60-70% vol
value	60-70%	20-30%	5-10%

Quantity

टेटा के लिए अचूक - high, स्टोर - नि यांत्रिकीय कठोर विकल्प।

* Ordering & Usage cycle



Maths :-

* Material Cost - गणित :

D = Demand

H = Holding cost / Carrying cost

S = Ordering cost / setup

$$\text{Annual Holding} \rightarrow \frac{Q}{2} H$$

$$\text{" ordering} \rightarrow \frac{D}{Q} S$$

$$Q = \text{Quantity वा उत्पाद आवाले} \rightarrow \sqrt{\frac{2DS}{H}}$$

$$TC = \frac{Q}{2} H + \frac{D}{Q} S$$

$$TC (\text{with material price}) = \frac{Q}{2} H + \frac{D}{Q} S + DP$$

* EOQ - गणित :

TC के रूप में

If Quantity Discount Given, $\rightarrow Q$ - गणित range is the गणित discount
एवं TC के रूप में with range - गणित minimum unit as Q for
other, प्राप्त करा TC के EOQ.

* EPQ - गणित

$$I_{max} = Q_0 \left(1 - \frac{u}{P}\right)$$

↑ rate of use .
↑ production rate

$$TC = \frac{I_{max}}{2} H + \frac{D}{Q_0} S$$

* Line Balancing :

output rate = r_0 unit .

days, hours \rightarrow time $\rightarrow (d \times hrs) = \text{time}$

$$\text{cycle, } c = \frac{\text{time}}{r_0}$$

$\left[\begin{array}{l} r_0 \text{ unit} \rightarrow \text{time} \\ 1 \text{ " } \rightarrow \frac{\text{time}}{r_0} \end{array} \right]$

$$= \frac{\text{time} \times 3600}{r_0} \text{ sec}$$

Theoretical minimum (workstation) $= \frac{\sum t}{c} = n$

$$\text{Efficiency} = \frac{\sum t}{nc} \times 100$$

$$\text{Idle time, } I = nc - \sum t$$

* Control chart (\bar{x} -R)

always R chart first starts \bar{x} !

$n = \# \text{ samples}$

$$\bar{x} = \frac{x_1 + \dots + x_n}{n}$$

$$R = x_{\max} - x_{\min}$$

For R,

$$\bar{R} = \frac{R_1 + \dots + R_i}{(\text{total days})}$$

$n - 2 \bar{R}, D_4 = ?, D_3 = ?$ (from chart)

$$UCL = \bar{R} D_4$$

$$CL = \bar{R}$$

$$LCL = \bar{R} D_3$$

For \bar{x} ,

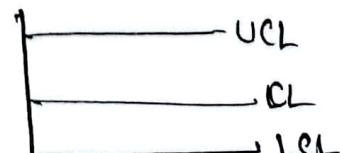
$$\bar{x} = \frac{\sum x}{\text{Time}}$$

$n - 2 \bar{x}, A_2 = ?$ (from chart)

$$UCL = \bar{x} + A_2 \bar{R}$$

$$CL = \bar{x}$$

$$LCL = \bar{x} - A_2 \bar{R}$$



*under estimated budget :

Total parts of work = $\boxed{1}$ units.

T_n = expert - go time

n = parts to be done to be expert.

LR = learning rate

unit time table $\frac{T_n}{n}$ if n-LR wise

$$\text{rc factor} = \frac{\ln(LR)}{\ln 2}$$

$$T_1 = \frac{T_n}{n^{\text{rc}}}$$

1 unit क्षमता \rightarrow unit time.
 n " " \rightarrow (unit time $\times T_1$) hours.

For rest (total parts - n parts) $\rightarrow ((\text{unit time} \times T_1) + (T_n \times \text{rest part}))$

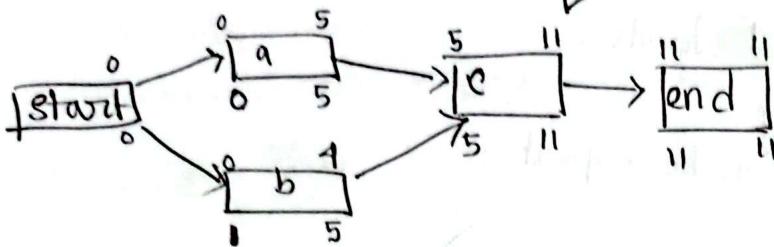
Expert need total time for total work = (total parts $\times T_n$)

If rest part क्षमता नहीं होती तो Expert - का पूरा काम गठाये time

then then under funded \rightarrow (difference वे काम का time loss होगा)

\therefore loss time $\times T_n \rightarrow$ under estimated budget

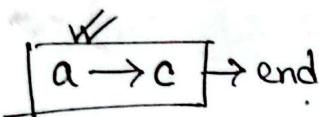
* Critical path + duration



upper (forward part) \rightarrow अधिक समय (5+4?) $\rightarrow 5\sqrt{11}$
 lower (backward ") \rightarrow कम समय (0?+1?) $\rightarrow 0\sqrt{11}$

Duration = 11 (end - start)

Critical path (lowest time \rightarrow start \rightarrow end तक अवधि या)



* Forecasting.

annual demand \rightarrow

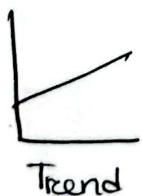
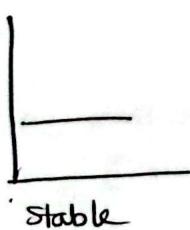
$$F_{\text{new}} = F_{\text{old}} + \alpha (A_{\text{old}} - F_{\text{old}}) \quad [\alpha \rightarrow 0.1 \sim 0.2]$$

or $0.3 \sim 0.5$

Double exponential smoothing (with trend).

$$F_{\text{new}} = \alpha(A_{\text{old}}) + (1-\alpha)(F_{\text{old}} + T_{\text{old}})$$

$$T_{\text{new}} = \beta(F_{\text{new}} - F_{\text{old}}) + (1-\beta)T_{\text{old}}$$



* Break even point

Fixed cost, FC quantity

variable " , $VC = Q \times V$

Total revenue = $Q \times R$

$$TC = FC + VC$$

$$\text{Profit} = TR - TC$$

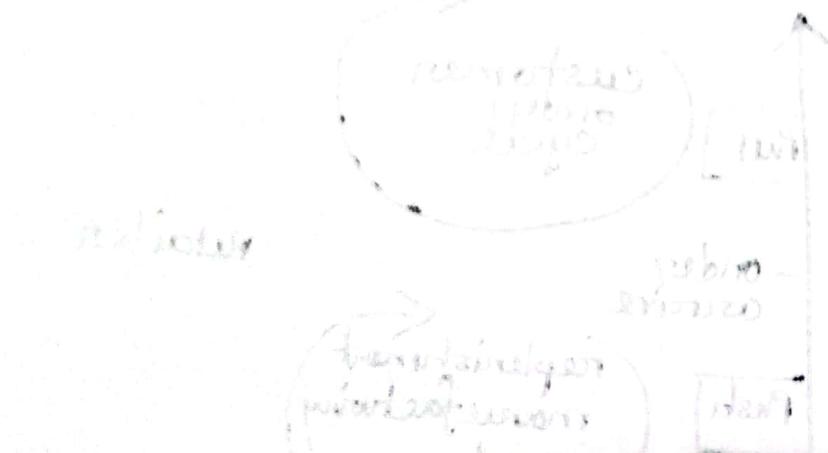
$$\text{or, } P = QR - (FC + QV)$$

bep- \Rightarrow কোথা $P=0$.

$$\text{so, } Q = \frac{P+FC}{R-V} = \frac{FC}{R-V}$$

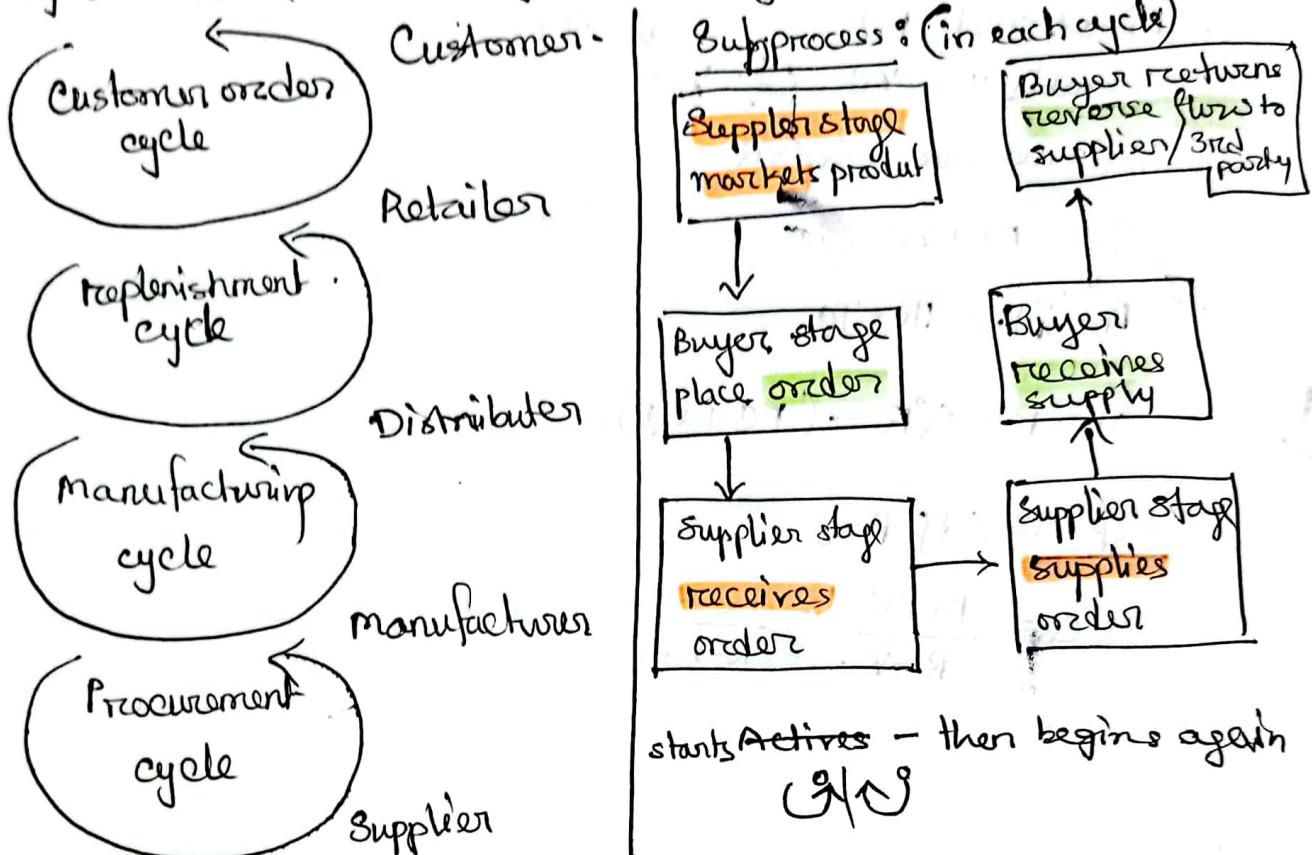
বিলি একজন স্টোরেজ সেলার
(কফি)

গুরুত্ব



⇒ Supply Chain (process + flows → fulfill customer need)

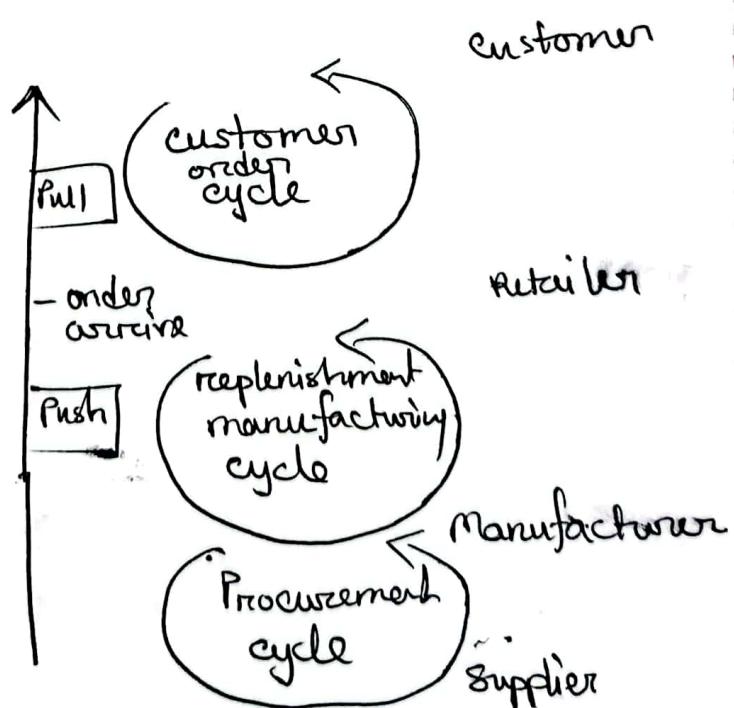
① Cycle View (4 process cycles + 5 stages + 6 subprocesses)



② Push/pull view:

make to stock

order আন্তর্ভুক্ত customer
order cycle-এ বাস্তি
process (~~pull~~) execute
করা হবে কাটে



Build to order.

order driven production

কাস্টমার ইয়ার্ড

2 cycles just

