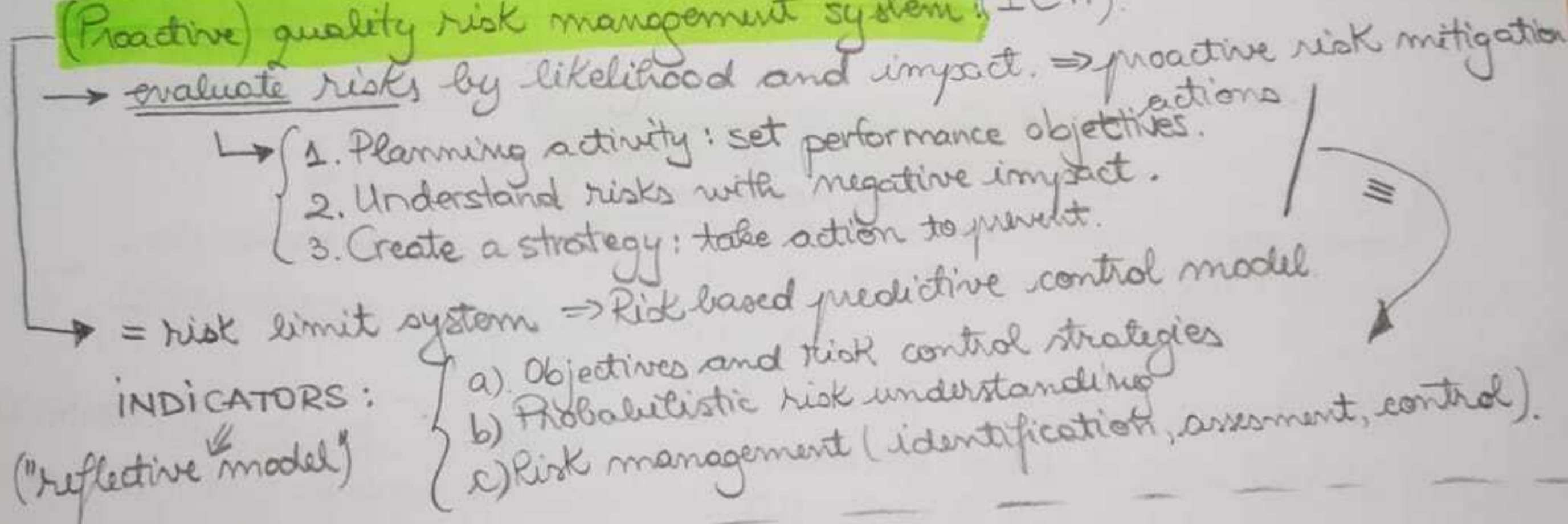


RISK	MNGT	
Preventable (I)	Operational MGT Domain	"pure risks" e.g. <sup>people's fault or system breakdown</sup> (Mostly preventable)
Strategy / Execution (II)	Financial Performance MGT	"speculative risks" = risk events + chance events. (exchange rates, competition...)
External (III)	Strategic MNGT Level	

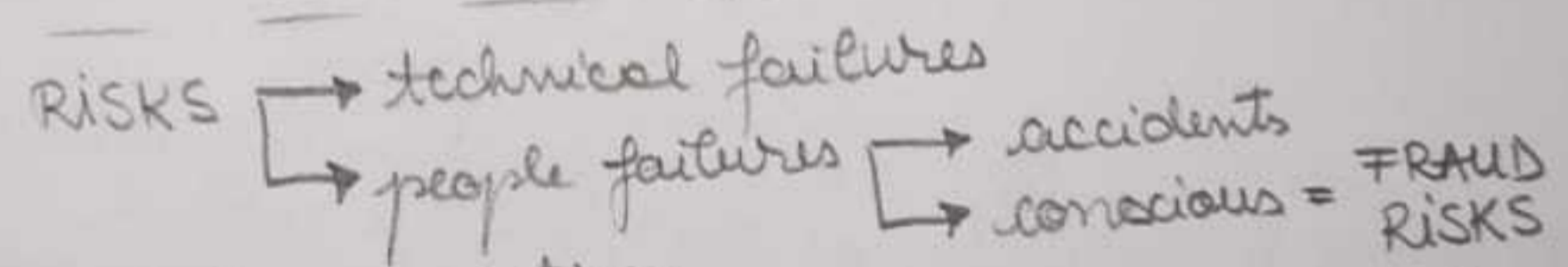
### Statistic quality control model:

- monitoring & maintaining the quality of products / services.
- ⊖ focused on incurred risk events ⇒ reactive management system

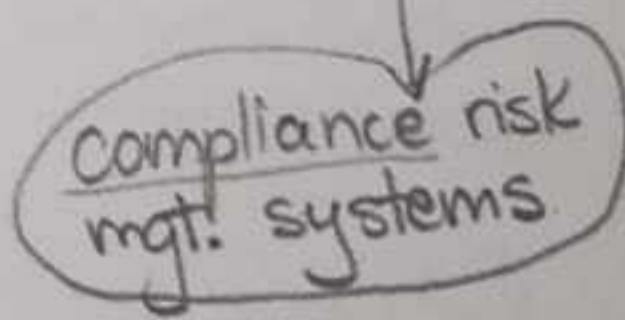
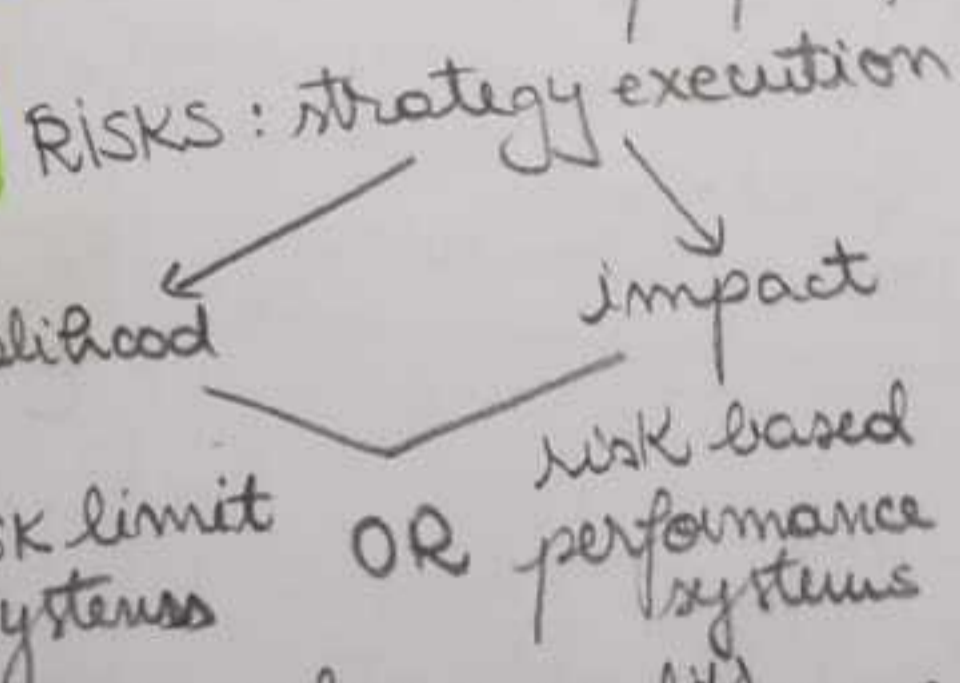
### (Proactive) quality risk management system (ICH)



### Operational level



### Financial level



Probabilistic CVP (cost-volume profit) analysis

- + multiple products (portfolio)
- + longer period of time

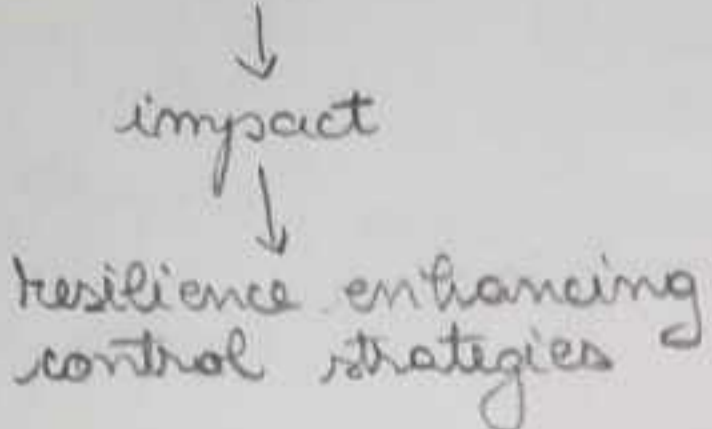
⇒ dynamic risk limit system OR risk based performance mgt. system.

! "LUCK EFFECT"

⇒ explaining over/underperformance.

**Strategic level**

speculative (external) risks : long-term view :  
→ market competition  
→ environmental uncertainties.  
(e.g. disruptive technologies).



(1965) **SWOT** (strength, weakness, opportunity, threat).  
analysis

**5 FORCES MODEL**

(1979) Porter : Long-run profitability depends on:  
1. Industry rivalry.  
2. Threat of substitutes.  
3. Bargaining power of buyers.  
4. Bargaining power of suppliers.  
5. Threat of new entrants.  
} → strategic agenda for action

(1993) Schoemaker : **Scenario planning model** ← complex business

**Generation of Valid Risk information**

RISK → likelihood of occurrence & negative impact ← elimination  
Speculative RISK → risk (-) OR chance event (+) ← control.  
! Established standards for risk mgt.

→ ISO 31000 : 2009 Risk Mgt. Standard  
↳ framework & Process

**5 components FRAMEWORK**

- Mandate & commitment
- Design framework
- Implementing Risk Mgt.
- Monitor & Review framework
- Continual improvement of framework.

**COSO ERM FRAMEWORK**

- 5 components**
- \* Communication & Consultation
  - \* Establishing the context
  - \* Risk assessment (identify, analyze, evaluate)
  - \* Risk treatment
  - \* Monitoring & Reviewing

Forecasting accuracy  
↓  
statistical law of large number  
INFORMATION

**RISK INFO**

- strategic
- operational
- reporting
- compliance.

- ERM**
- Process
  - Effected by people
  - Applied in strategy setting.
  - — across the enterprise (all levels/unit)
  - Designed to identify potential risks and manage them
  - Provide assurance
  - Achievement of objectives in 1/more categories

**3-LoD model (organizational structure)**

- \* Functions that manage risks
- \* — oversees risks
- \* — provide independent assurance