

R&D Innovation Practice in SAIT

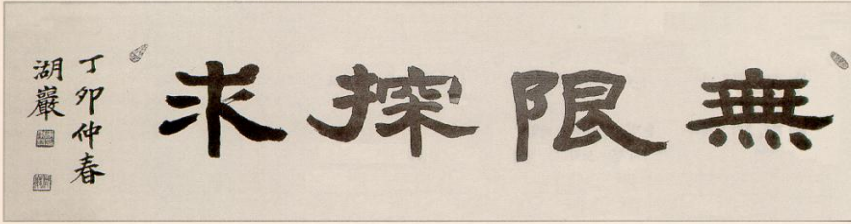
Competiveness Enhancement through Creative Management

2011. 02

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현대 회장의 '무한탐구' 원호

Boundless Research for Breakthrough

**Samsung Advanced
Institute of Technology
1987.10. 22**

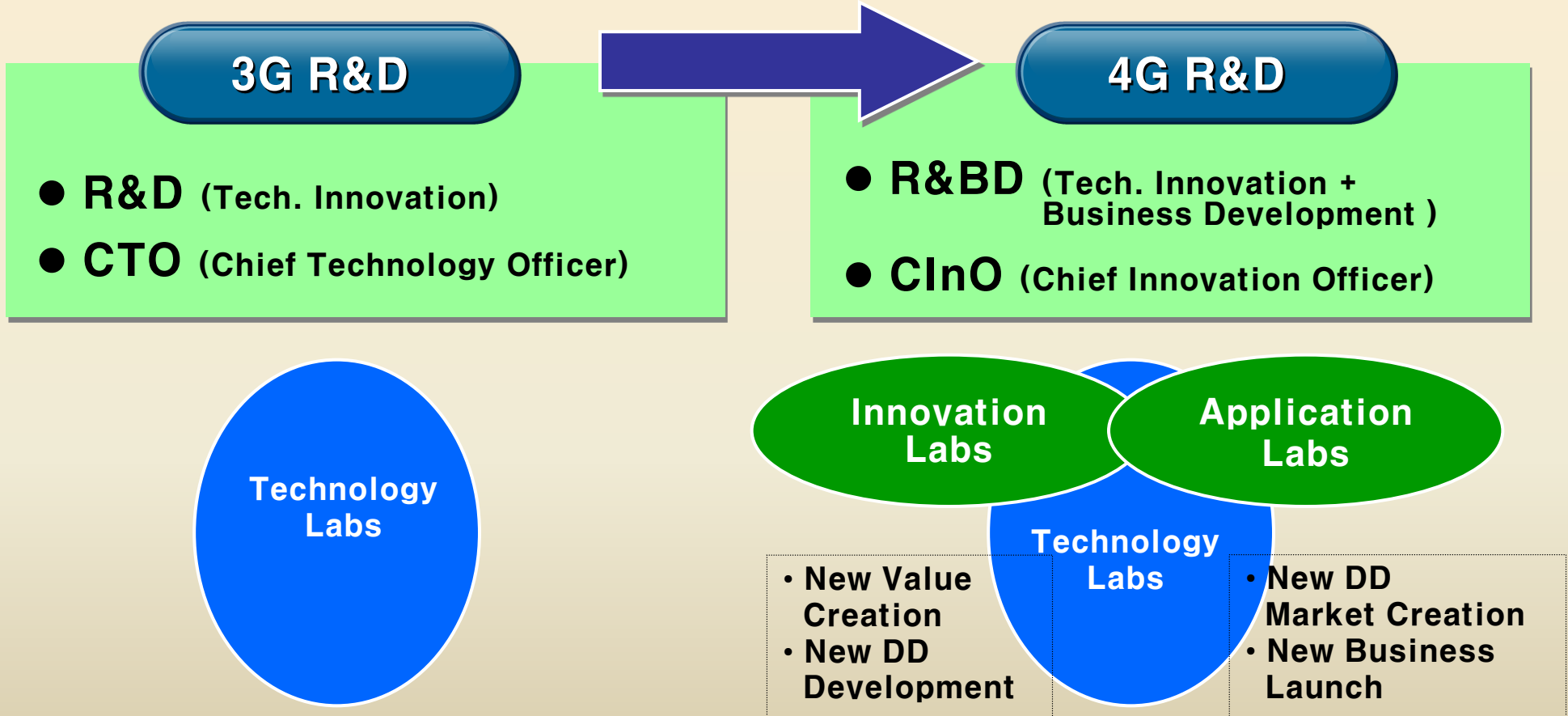


Challenge in developing new cutting-edge technologies

Transform existing strategic business lines into global market leader

Conversion into 4G R&D Paradigm(2000 ~)

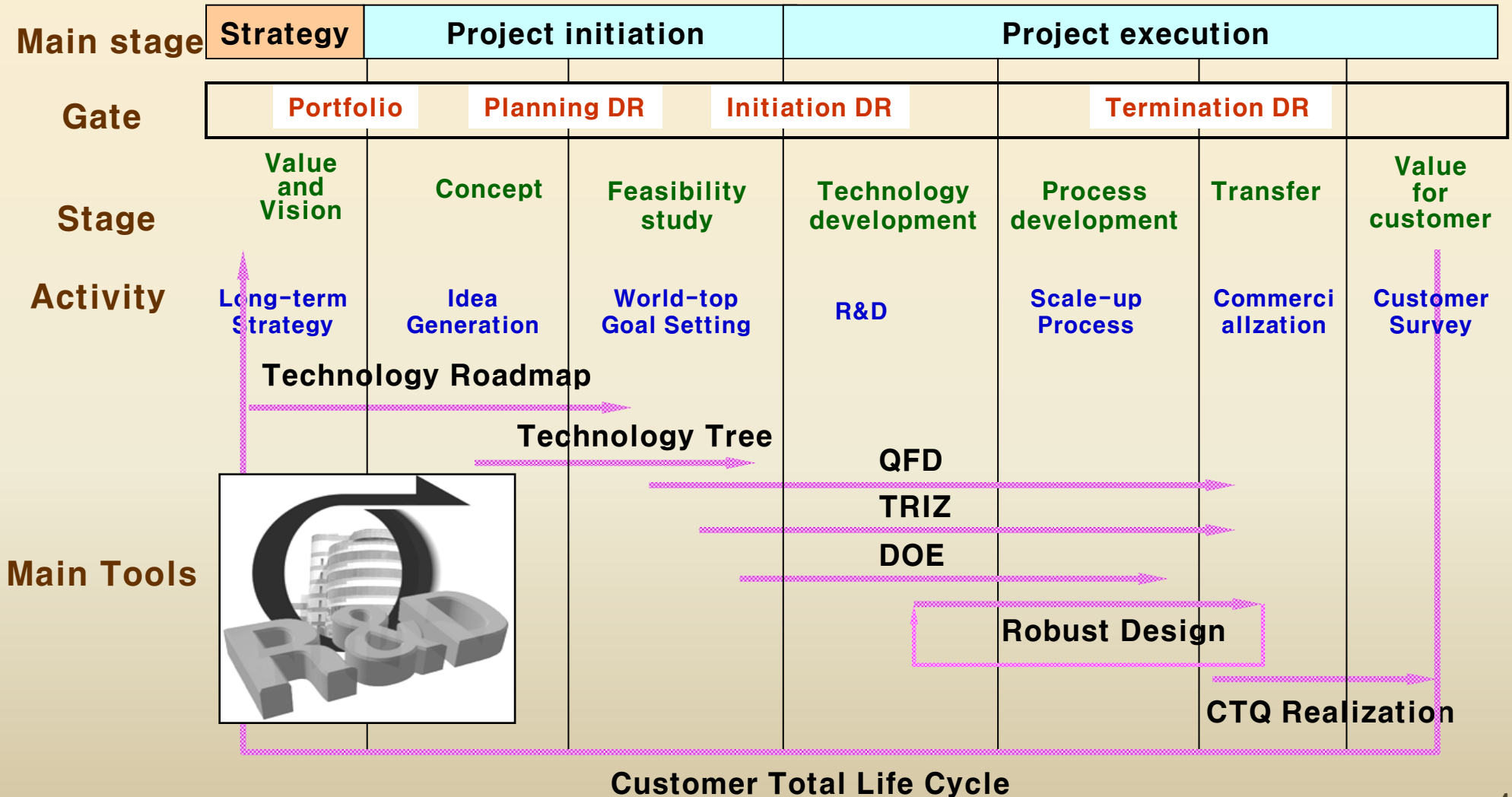
Technology Innovation × Customer's Value Innovation



* DD (Dominant Design)

R&D Process Setup coupled by Methodology

Scientific & Rational R&D Framework



Essential Concept of SAIT-DFSS

- SAIT-DFSS : from long-term strategy to technology transfer

$$\text{SAIT-DFSS} = 3T + \text{DFSS}$$

<input type="checkbox"/> Quality of Strategy	Technology Roadmap	Strategic Project Selection
<input type="checkbox"/> Quality of Project Plan	Technology Tree	Right Project Planning
<input type="checkbox"/> Quality of Idea	TRIZ	Creative Problem Solving
<input type="checkbox"/> Quality of Execution	DFSS(QFD, DOE 등)	Systematic experiment
<input type="checkbox"/> Quality of Communication	KI, Scorecard	Fusion & Synergy

Innovation Acceleration through Knowledge Management

Capability level-up(**G-Pro**), Consideration of others (**Oh~Yes actives**)
Spontaneous participation(**Flying Fishes**), Visual Planning (**KI meeting**),
My Share 1/10, your share 10 (**Praise relay**)

→ 5S activities of Knowledge Management in R&D organization



KSF of R&D Innovation

- Visualization of Hidden Problem
- Open Communication
 - Through WOW Meeting,
Sharing the Goal and Scheduling of the project

[Voice of R&D Field]



- Big Investment,
No Performance

Executive



- Huge Trouble
- Success or Failure

Manager



- Busy, Busy !



- Night work
- Miscellaneous

Creative Management : Organization

Knowledge Sharing & Brain Storming - Man & Man, Team & Team -

USA (GE)

- **Workout**
 - Speed, Simplicity, Self-Confidence
- **Change Acceleration Program**
 - Shape a Vision
 - Make Change Last
 - Monitor Progress etc

Japan (Cannon)

- **KI Meeting**

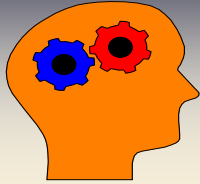


Korea (Samsung)

- **Process Meeting (Every Wednesday)**

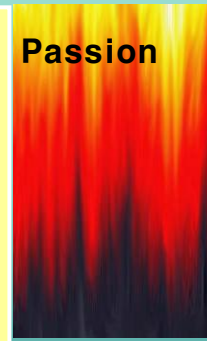
“눈치 안 보고
토론하는 문화”

Creative Management : Individual



Fusion of Left & Right Brain

- Left : managing common affairs
- Right : responding the stimulus (Goal, Crisis, Passion etc.)



- 생각의 뒷다리는
사상(捨象)
- 부정적 사고
 - 패배주의
 - 무책임
 - 소극적 생각 등

- 매일 논문 1건 읽기 (Paper)
- 매주 특허조사, 매년 1건 해외특허(Patent)
- 분기 CDP 점검 (Career)
- 6 Sigma GB 필수 (R&D Method)
- 하루 10분의 사색 (Purpose of life)

- 매월 고객과의 만남 (CTQ)
- 세계고수 10명과 네트워킹(Networking)
- 동료 功 10배, 나의 功 1/10(Big Heart)
- 점에서 선 · 면 · 입체로 (X-Eng.)
- 최고, 최초로 도전 (Great Goal)

Major Achievements(2006)

Creative Management is essential to Blue Ocean

4G Mobil Communication



CTF (Charge Trap Flash)



LCD TV 「 Bordo 」



Happiness Sharing 125

Good Things

- Doing **1** good things
a week

- Practice acts of kindness
Learn to forgive

Good Books

- Reading **2** books
a month

- Book club, Reading circle

Thanks Giving

- Practicing **5** thanks
a day

- Count your blessings
Thank a mentor

Best Practice Sharing & Propagation

Three-way Communication, WOW