

Mission-Oriented STI Policies in Korea

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A Typical Vision Map (The 3rd S&T Basic Plan (2013-17))

Vision

Creative Science & Technology

40% Contribution to **Economic Growth**

Goals

640K Job Creation

7th Rank in World **STI Competitiveness**

- 1. Expand Public R&D Invest & **Improve** its **Efficiency**
- 2. Identify **National** Strategic Tech

Strategies

3. Strengthen Creativity in STI

Actions (Programs)

4. Assist Creating New Growth **Engines**

5. Create New Highquality Jobs





MOP Governance in Korea

Vision

MOP at National Level

Goals

MOP at Sectoral or Ministerial Level

Strategies

MOP at Agency or Institutional Level

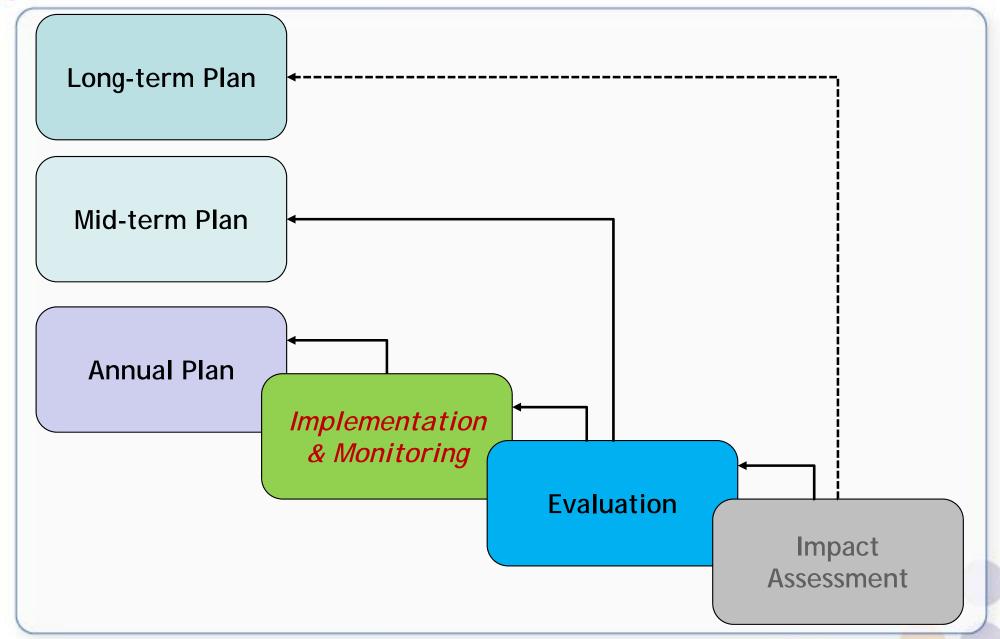
Actions (Programs)

Annual Action Plan w/ Budget Appropriation





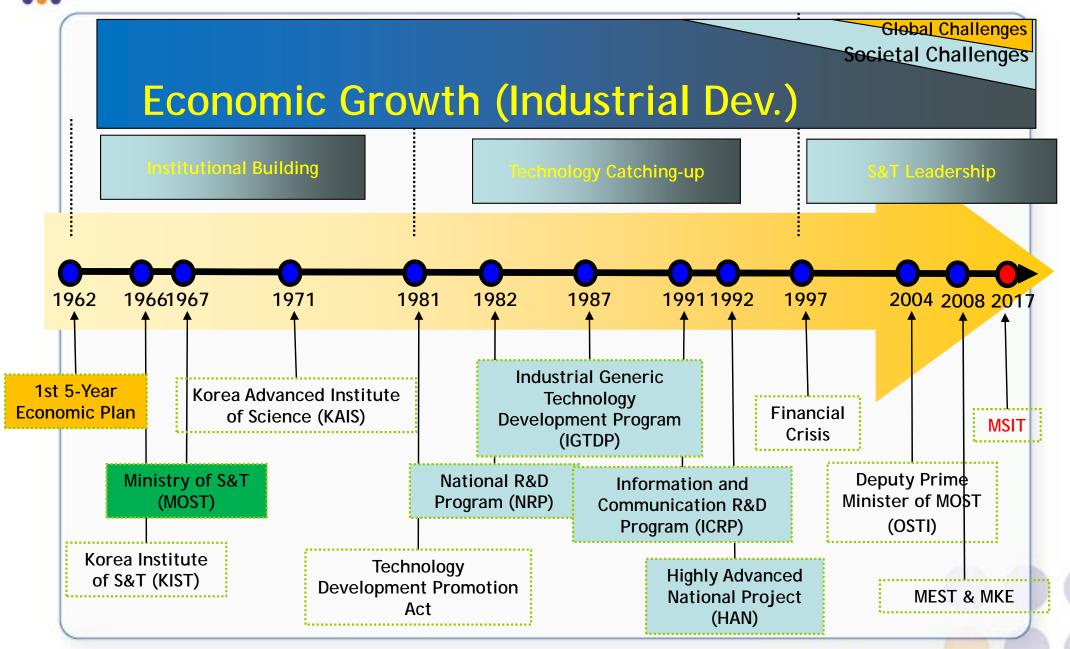
MOP Processes in Korea







Evolution of Korean STI Policies and Orientations







Korean Industrial Shifts

capability

oriented light industry

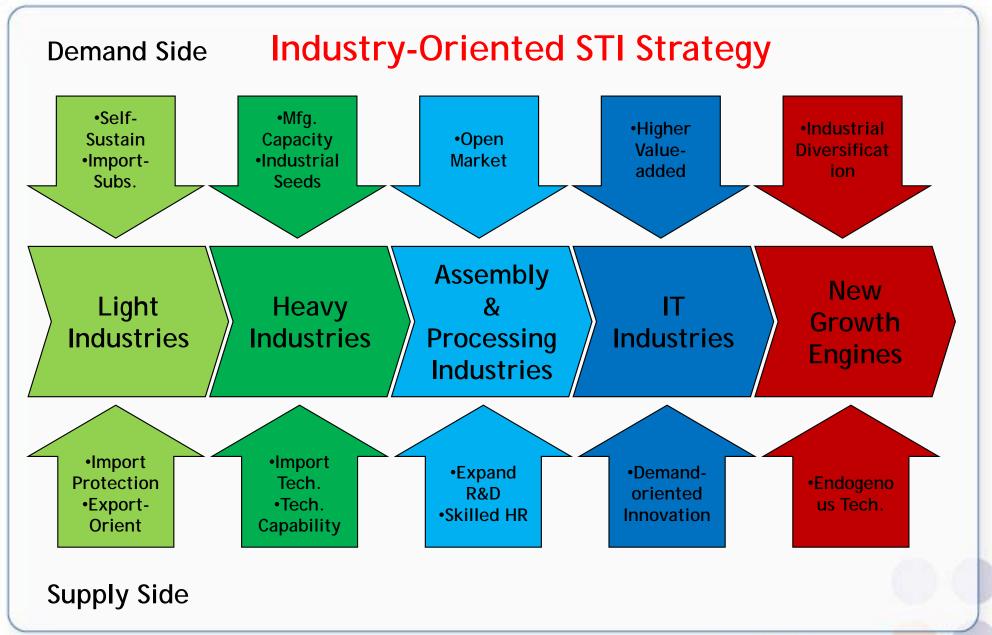
"Select and Focus" Strategy 1990s 1980s 1970s Industry 1960s Assembly & Processing **Industries** Heavy **Industries** Strengthen Light demand-driven **Industries** technological Promote import innovation liberalization Establishment of Introduce new Expand investment nationwide IT in technological technology, infrastructure Import Protection development, expand Foster exporttechnological training of skilled

manpower





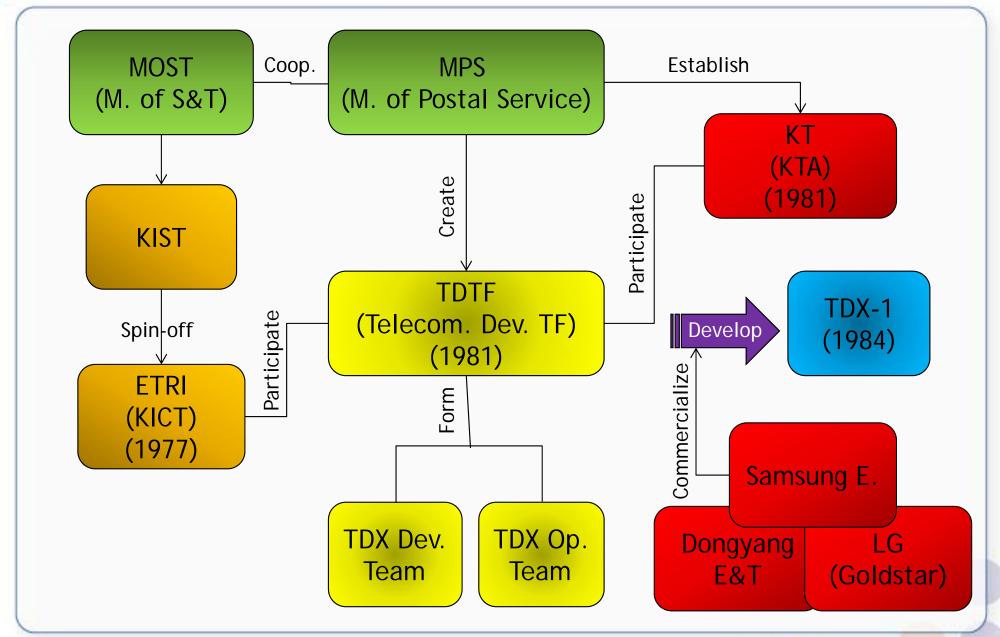
STI Meets Industrial Demands







A PPP Case: TDX Development Project (1977-1984)







- 'Select and Focus' Strategy (Strategic Selectivity)
 - Not an Option but a Must Strategy
 - Under the condition of scarce natural resources and limited financial resource
 - Selected and Focused on Decadal Strategic Industries
 - STI Policies focused on providing necessary industrial tech.
- Policy Coordination towards National Development
 - Economic Policy + Industrial Policy + STI Policy
 - STI Policies supported Economic & Industrial Dev. Strategies
 - Meeting Industrial Technological Demands
 - Facilitated and Encouraged Private R&D Investment & Innovation
- Strong Implementation and Close Inspection (Evaluation)
 - Strong Drive for Implementation
 - Close Inspection & Evaluation
 - Feedback to Planning





Issues and Challenges

- Picking Winners?
 - MOP necessarily picked winners (e.g., Chaebols, GRIs, etc.)
 - Can we still pick the winners?
- Political Leadership < Ministerial Silos < Interest Groups
 - Political leadership getting weaker
 - Ministerial silos getting bigger
 - Interest groups getting powerful
- Appropriate for Strengthening Basic Research?
 - Korea is trying to strengthening its basic research capacity
 - Then, is MOP appropriate for strengthening basic research?
 - At least, some argues that Korea should abandon MOP
- Renew MOP in Korean Context?
 - Korea has been strong at MOP
 - Not necessarily contradict with Basic Research?
 - How to reinterpret, modify and renew Korean MOP practices?





Thank You!

For Further Comments & Questions;

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