

Innovation and Korea

by

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Korea has achieved miraculous industrial and economic growth in the past forty years

- Exports have grown 1,302 times (U\$250mil. in 1966, U\$325.5bil. in 2006)
- GDP has grown 240 times (U\$3.6bil. in 1966, U\$887.4bil in 2006)

- The balanced development between traditional industries and new ones
- Number 1 position industries ; shipbuilding, memory chip, display
- Number 5~6 position industries ; steel, petrochemical, automobile, textile
- Trade deficit with Japan in the parts sector declined for the first time in 2006

- Manufacturing's considerably high contribution to the overall economy
- Manufacturing and Trade in commodities accounts for 28% and 72% of the GDP

Korean economy is expected to face new challenges ahead

- Intensified global competition
Creativity will be the only viable route to survival in the coming days
- Rapidly changing economic environment in the Northeast Asian region
- Changing economic growth engine paradigm
Economic growth through greater input of labor force and physical capital resources has reached its limits

To respond to these challenges,
the Korean economy must upgrade itself
from an “input-driven economy” to an “innovation-driven economy”

Korea still has many factors hindering innovation

- Korea's public education system is plagued with poor quality
- The number of patent applications filed by state-run research institutions is quite low
- Independent R&D initiatives by individual companies lack adequate resources
- A shortage of professionals with expert knowledge in "technology management"
- Almost no innovation is carried out in regions outside the capital

In response to these factors, it is important for the drivers of innovation – companies, universities, research institutions and the government - to build up their innovative capabilities and engage in greater cooperation with one another

Most importantly, it is imperative for companies to take up expanding leading role in driving innovation

- Secure and nurture high-quality human resources that are capable of developing and applying technology
- Build mutually rewarding strategic partnership with other corporate counterparts and research institutions both at home and abroad
- To be proactive about fostering their “technology management” experts
- Work hard to anchor the concept of knowledge-management within their organizations

Innovation has been a key factor in making our memory chip industry number one in the world

- Companies have made bold investment into R&D and intensive efforts to secure and foster the manpower critical to the development of technologies
- Thanks to continuous innovation in products, services, processes, and infrastructure leading semiconductor businesses now boast world-class process technologies and cost competitiveness
- Our challenge is to build strategic partnership with internal and external counterparts; step up development of leading products to maintain our front edge position in products and technologies;
localizing production of equipment and materials;
introducing the concept of end-to-end service for our corporate customers;

The future direction of innovation will evolve around efforts to build Intellectual capital and engage in broader exchanges with key players driving innovation

- Innovation is still primarily limited to a handful of large conglomerates and innovative SMEs in cutting edge industries
- Innovation by individual companies should be geared toward solving strategic and operational issues using knowledge management as an enabling tool
- Programs to nurture suppliers should be selectively concentrated on the equipment and materials space
- We should ease regulations so that creativity can manifest itself more freely

My best thanks