

COMPETITIVE ANALYSIS ...

THE PRIVATE SECTOR

In Singapore, foreign private sector participation in high technology industries is actively used to improve manufacturing efficiency and productivity, to develop in-house R&D expertise, to fashion unique solutions for the local environment, to target Pacific Basin markets, and boost the corporate image of the firm. Private sector business in advanced technologies occurs on a wide scale. The Science Council of Singapore categorizes them into six major groups.

INDUSTRIAL PRIVATE SECTOR R&D CATEGORIES

<p><i>Type I</i> MNC Product & Process Development</p>	<p><i>Type II</i> MNC Sales Support</p>	<p><i>Type III</i> MNC R&D Cost Center</p>
<ul style="list-style-type: none"> • Hewlett Packard • Seagate • Philips • ESE • SGS • Texas Instruments • Polysar 	<ul style="list-style-type: none"> • Mentor Graphics • Alfa-Laval • Data General 	<ul style="list-style-type: none"> • Det Norske Veritas • Eastraco • Goodyear
<p><i>Type IV</i> Established Local Firms</p>	<p><i>Type V</i> New Tech Venture (with Foreign Partner)</p>	<p><i>Type VI</i> New Tech Venture (Local Start-up)</p>
<ul style="list-style-type: none"> • Chartered Industries • Singatronics • Lam Soon 	<ul style="list-style-type: none"> • Plantek International • Pacific Biomedical • Diagnostic Biotechnology • Tata-Elxsi 	<ul style="list-style-type: none"> • DART • Creative Technology • IC Equipment • Everbloom

Source : Science Council of Singapore

MNC Product/Process Development (Type I) companies have set up full scale subsidiaries involved with R&D, manufacturing, marketing and sales. Typical research concerns :

- optimization of the current manufacturing process with labor input and processing time reduction
- product quality improvement through quality assurance/control
- highly complex manufacturing task automation

The MNC Sales Support (Type II) group specializes in customizing company products for the region. These are typically referred to as "value-added" R&D centers, since the products were developed elsewhere. A common trait is that they are Western companies looking to tailor their products to the Asian consumer market.