Establishing a science and technology park is no walk in the park

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## What are incubators and technology parks?

<table>
<thead>
<tr>
<th>Features</th>
<th>Incubators</th>
<th>Technology parks</th>
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<tbody>
<tr>
<td><strong>Target enterprises</strong></td>
<td>Seed or early stage entrepreneurs with high growth potential</td>
<td>Emerging and established businesses with some technology focus</td>
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</tbody>
</table>
| **Central elements** | Cluster effect among entrepreneurs  
Ongoing supply and demand driven assistance  
Clear performance metrics  
Clear process for accessing finance at different stages | Cluster effect  
Emphasis on state of the art infrastructure and networking opportunities  
More hands-off |
| **Revenue sources** | Government subsidies  
Gradually increasing fees for services based on outcomes | Fee for service  
Equity returns |
Science and technology parks launched in each decade

Source: Derived from a survey conducted by the International Association of Science Parks and Areas of Innovation, 2012.
Note: The survey covers 119 parks from 38 countries.
Economic zones and stage of economic development

Source: UNIDO country office in Viet Nam, 2015
Not all science and tech parks are successful

One study found that a large percentage of science parks in the United States either ended as outright failures or contributed little to economic objectives, reporting that

– only 25% of science parks achieved their goals (such as attracting and fostering research and development activity, contributing to job creation and economic growth);
– another 25% became purely real estate operations that contributed little to economic objectives; and
– 50% failed.
# The value-added of business incubators

<table>
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<th>Services</th>
<th>Value to the entrepreneur</th>
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<tr>
<td><strong>Infrastructure</strong></td>
<td>Economies of scale decrease the cost, especially during the pre-seed and seed face before starting a business.</td>
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<tr>
<td>Office space, meeting rooms, lab facilities</td>
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<td><strong>Business services</strong></td>
<td>This helps entrepreneurs with non-core business and related overhead in the initial stages.</td>
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<tr>
<td>Registration, licenses, accounting, strategic consulting, market research</td>
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<tr>
<td><strong>Financing</strong></td>
<td>Increases the chances of creating a bankable investment opportunity through leveraging incubator credibility and initial subsidies.</td>
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<td>Brokering, equity investment, grants, guarantees.</td>
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<td><strong>Connectivity</strong></td>
<td>Exchange of ideas, systematic exploration of partnerships and business opportunities.</td>
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<td>Coaching, interaction with entrepreneurs, researchers, investors, customers, suppliers.</td>
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</table>
Some (not all) recommendations from the Guidebook: The pre-conditions for success of a S&T park

- The key tenants or the anchor tenants – such as national research institutes – are committed to staying in the science and technology park.
- A management team with all the skills necessary for managing the science and technology park can be identified and assembled.
- A strong science base in the surrounding areas of the science and technology park is already available.
- The city or area where a science and technology park will be built is attractive to talented researchers and entrepreneurs.
- An entrepreneurial culture is available in the city or country where a science and technology park will be built.
- Finance, especially seed and venture capital, is available in the city or country where a science and technology park will be built.
In a nutshell

- The success of Silicon Valley has been inspirational. However, if the precursory conditions are not in place, a science and technology park could turn into a white elephant project.
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