

Business Incubators - the International Experience

***Support for new and potential start-up incubators in
the field of Information and Communication
Technology (ICT)***

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National Computer Board

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Regional Development



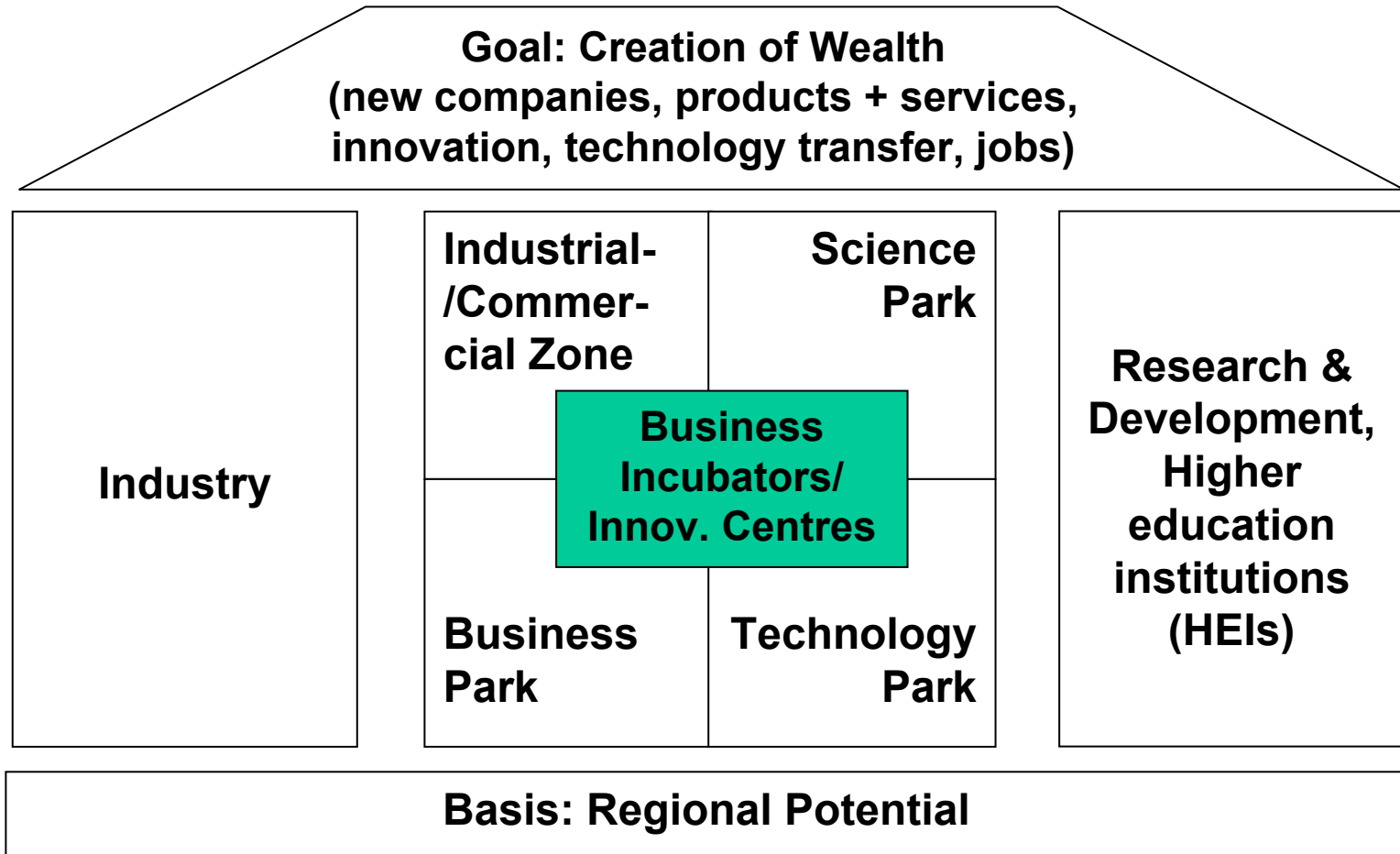
Definition

Business incubators + their relation with the environment

- Business Incubator:
 - economic development tool
 - to accelerate the growth and success of entrepreneurial companies
 - business support resources and services
- Goal: successful firma
 - financial viable
 - freestanding

Definition

Business incubators + their relation with the environment



Source: Dietrich 1996

Facilities + services, the model

- **A full-service incubator will offer:**
 - **Incubator space:** offices or workshops, sometimes labs, available on a flexible, affordable + temporary basis (**easy-in + easy-out**), more & more: pre-incubation rooms
 - **Common services:** incl. secretarial support, telephone answering, common reception, mailing facilities, LAN and other office equipment, meeting rooms and (in some cases) **cafeteria/canteen** facilities
 - **Business counselling,** namely ‘hands-on’ assistance with regard to business planning, training in management skills, access to accounting, legal-, marketing- + financial expertise, + ad hoc advice
 - **Access to finance + specialist advice:** some operate own seed + venture capital funds; access to specialist advice will be provided if an incubator does not have the skills + know-how itself

Factors influencing the role a business incubator can play

- Local support
- Promoters from different sources
- Referring to local strengths + weaknesses
- Type of services already available to businesses locally
- Type of R&D being undertaken

Role of business incubators in enterprise creation + regional development: Limits

- The business incubator is an instrument showing effects in the long run:
 - it is a **medium-term venture** (with possibly **3-5 years** before it shows sustainable success)
 - its **impact** will be felt **locally + 15-20 km surrounding**, not nationally + macro-economically
- Initiatives such as business incubators **make sense only** if
 - the relationship between entrepreneurship + economic development has been acknowledged and supported
 - there is **consistency** with the overall economic development strategy

History

First business incubator + origin of the term

- First incubation activities in the USA + Western Europe → partitioning space, share services by J. Mancuso
- **Batavia Industrial Center (BIC):** first business incubator, founded 1959 (Batavia/ State of N.Y.)
- Still operating (110 tenants, 1000 working places)
- Had much in common with present initiatives in Eastern + Central Europe



Batavia Industrial Centre (N.Y.)

http://www.mancusogroup.com/properties_bic.html

History

Dissemination of the business incubator concept

- **European pioneers in business incubators**

Herriot-Watt University, Edinburgh (1969), Cambridge University

- **Followed by projects in**

- Australia (1972)
- Asia (1974)
- Scandinavia (1982)
- Germany (1983) →BIG Berlin
- Latin America (1986)
- Eastern + Central Europe (1990) at the same time in Africa

- **Different continents developed quite heterogeneous models**

Dissemination of the business incubator concept

■ Today:

- approx. 60 associations (international + national) of business + innovation centres or science/ technology parks actively promote the development of new companies + regional economic development
- more than 4,000 incubators worldwide

in Europe:

- around **1,200 incubators generating 30.000 gross new jobs/ year**; results being achieved at an average cost per job to public authorities of around 4.000 € net

(Source: European Commission 2002; newer sources, where available)

Dissemination of the business incubator concept

in the US:

- around **1,000 incubators** which assisted more than 35,000 start-up companies that provided full-time employment for nearly 82,000 workers and generated annual earnings of more than \$7 billion
- Publicly supported incubators create jobs at a cost of about \$1,100 each, whereas other publicly supported job creation mechanisms commonly cost more than \$10,000 per job created.

(NBIA, <http://www.techno-preneur.net/new-timeis/faqs/faqs.htm>)

Dissemination of the business incubator concept

in Asian countries:

- total of over **1,100 incubators with over 6,000 incubator graduates**

	China	Japan	Korea	Taiwan	Singapore	Hong Kong	India	Total
Non-profit	460	159	322	59	42	4	25	1,071
For-profit	-	44	11	5	13	2	6	81
Total	460	203	333	64	55	6	31	1,152
Incub. graduates	3,887	800	1,234	190	-	66	-	6,177

Hong KIM, President, KOBIA (2003):The Improvement of Asian Business Incubation.

Business activities in which European business incubators specialise in

Business Activities	Number	Percentage
(1) Sales, marketing and distribution	5	0.4
(2) Business and financial services	8	0.6
(3) Advanced/ high-tech manufacturing	263	18.6
(4) Information & communication technologies	258	18.2
(5) Research & development	173	12.2
(6) Biotechnology/ pharmaceuticals	201	14.2
(7) Knowledge-based industries/ new economy companies	162	11.5
(8) Other manufacturing activities	86	6.1
(9) Other service activities	124	8.8
(10) A combination of some/ all of these activities	134	9.5
Total (<i>multiple responses possible</i>)	1,414	100.0

(Source: CSES analysis of DG Enterprise, Incubator database)

Examples of business incubators

Technology business incubator: TZDO – Dortmund Technology Centre

- Opened in 1985 + belongs to the largest technology centres Europe-wide
 - approx. 90 companies, 1.300 work places
 - size: 70.000 sqm, consists of 8 complexes of buildings
 - with complete service-package + established network-links to main agents in the region
 - PPP by local administration, chambers and 7 banks
- **Focus** on existing **technology potentials** in science + economy: Micro-systems-technologies, IT, technology-oriented services, electronics, mechanical engineering, logistics, environmental technologies, biomedicine



TZDO

<http://www.tzdo.de/>



Technology park Dortmund

<http://www.technologiepark.de>



Examples of business incubators (cont.)

Virtual incubator: nhvbi

- Resource portal:
 - supporting entrepreneurs, self-employed and small business professionals by connecting
- Access and Use:
 - Sources of free business counselling
 - Sources of business funding
 - Virtual tools for business planning, financial analysis, and strategy development
 - Expert advice

new hampshire
VIRTUAL BUSINESS INCUBATOR nhvbi
<http://www.nhvbi.buzgate.org>



Examples of business incubators (cont.)

Software centre Hagenberg, Upper Austria

- Founded 1988, located in the Software park Hagenberg, PPP
- Favourable environment due to location near to on-site research institutes, competence centres + polytechnic university
- Austrian-wide network provides start-up assistance to entrepreneurs
- Upper Austria is among the top-networking regions in Europe concerning its **cluster strategies**
- Grant for max. 75 sq. m
- 1–50% (of rent price), 2–40%, 3–30%
- Coaching & on-site consultation
- Access to financing programmes
- Founder services



<http://www.softwarepark.co.at>

Examples of business incubators (*cont.*)

Dublin Business Innovation Centre (Dublin BIC) today also: Guinness Enterprise Centre (GEC)

- Opened in 2001 in the **disused premises of a former warehouse** from the Guinness Group
- Joint initiative of public + private sector (PPP of six partners)
- Focus primarily on: software services oriented businesses, hi-tech prototype engineering, e-commerce, internet + mobile technology development
- Own seed capital funds
- Size: 5.000 sqm
- 83 companies (2003)
- Max. tenancy: 33 months



<http://www.guinness-enterprisctr.com>; <http://www.thedigitalhub.com>



Examples of business incubators (*cont.*)

Innopoli incubators at Otaniemi Science Park, Espoo, Finland

- **Innopoli** – Opened in 1991; size: 20.000 sqm; focused on hi-tech start-ups
- **Innopoli II** – Completed 2002; specialised in software; size: 19.500 sqm
- **Innolinko** – Pre-incubator at Innopoli II: early stage companies; support professors + students to transform their business ideas (no rental costs)
- Tenants at Innopoli: 140 companies employing > 800 people
- Located in Otaniemi Science Park, one of Europe's largest commercial science parks, outskirts of Helsinki
- **Main objective** for setting up the incubators: **revitalise the regional economy** severely effected by the decline of traditional industry

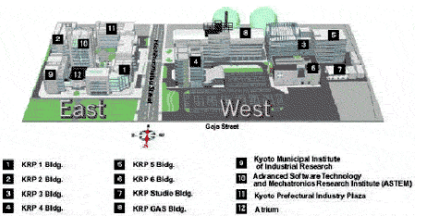
<http://www.innopoli.fi/english/v>



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Examples from Asian countries: Japan, Kyoto Research Park - Technology Business Incubator

- Regarded as a **leading business incubator** and international centre for high-tech R&D
- Privately-owned research park, established in 1987 as a 100% subsidiary of Osaka Gas. Co., Ltd.,
- Now over **200 tenant companies** and research facilities specializing in fields ranging from life sciences, to business services
- Park complex has developed into a **cluster** of new media and IT companies with over 45% of tenant companies falling into these categories
- Total floor space: 1,076,000ft² [100,000 m²]
- Average monthly rent: US\$ 3.50/ft² [US\$ 34/m²]
- No. of staff: 95



<http://www.krp.co.jp/english/>

Examples from Asian countries: Japan, KRP - Technology Business Incubator (cont.)

- **Business Services:**

Market research, Business matching, Technology matching, Financial advice, Venture Capital Coordination, Introduction to public subsidies, Bookkeeping, Legal services, Incorporation support, General office equipment, Computer services and/or equipment, Secretarial services

- **Other Services:**

Infrastructure includes a Data Centre, 1 Gigabit LAN, Labs, Meeting rooms, Rental apartments, Catering facilities, Gymnasium, and Conference facilities that host **over 1000 conferences** per year.

<http://www.krp.co.jp/english/>



Key European incubator performance statistics + suggested benchmarks

Setting up + operating	Average	Range	Benchmark
Average capital investment cost	€ 3.7 m.	€ 1.5 – 22 m.	na
Average operating costs	€ 480,000 p.a.	€ 50,000-1.8 mio.	na
% of revenue from public subsidies	37%	0-100%	25%
Incubator space	3,200 sqm	90-41,000 sqm	2,000-4,000 sqm
Number of incubator tenants	27 firms	1-120 firms	20-30
Incubator functions	Average	Range	Benchmark
Incubator occupancy rates	85%	9-100%	85%
Length of tenancy	35 months	6 months – no max.	3 years
Number of management staff	2.3 managers	1-9 managers	2 managers min.
Ratio of incubator staff: tenants	1:14	1:2 – 1:64	1:10–1:20
% of managers' time advising clients	39%	5% - 80%	50%

Source: European Commission

Organisation, operation + financing (cont.)

Legal structure

- **Typical partners:** local authorities, RDA, business associations, chamber of commerce, chamber of handicraft, banks, HEIs, R&D institutions, private firms
- Probable nature of relation between **promoters + objectives:**
 - Public ⇔ job + enterprise creation
 - University ⇔ transfer of technologies; commercialisation of academic research
 - Private ⇔ real estate investment, financing, social responsibility

Organisation, operation + financing (cont.)

Enterprise-like operation + PPP

- Business incubators: generally legally incorporated as
 - Companies with limited liability
 - Association
 - Foundation
- Public Private Partnership (**PPP**) is most recommendable
- Relatively few business incubators operate as ‘**for profit**’ organisations; it is generally impossible in the short + medium-term
- Few incubators also are just part (department) of a University or Science Park holding or governmental organisation

Key success factors for technology incubators

- Significant regional demand for an TBI
- Broad support from different stakeholders
- Adequate incubator building (free)
- Secured long-term financing
- Clear entry- and exit criteria
- Actively embedded into a national and international network
- High professional, dedicated and qualified long term staff from different educational background

Thank you for your attention.

Links

- European Commission/ Promotion of entrepreneurship:
http://europa.eu.int/comm/enterprise/entrepreneurship/support_measures/incubators/index.htm (***)
- EU Business incubators case studies:
http://europa.eu.int/comm/enterprise/entrepreneurship/support_measures/incubators/map_case_studies.htm (***)
- OECD-Leed Programme (Local economic and employment development):
<http://www.oecd.org/EN/home/0,,EN-home-545-5-no-no--no,00.html> (***)
- WorldBank/ Infodev incubator initiative: <http://www.infodev.org/incubator/>
- UNIDO/ Business Incubators: <http://www.unido.org/en/doc/3736>
- APCTT Asian + Pacific centre for transfer of technology
<http://www.apctt.org>
- SPICE Science Park and Innovation Centre Experts:
<http://www.spicegroup.de/>

(***)=
very comprehensive up-
to date information;
recommended



Links (cont.)

- EU Business Incubator Database: <http://www.cordis.lu/incubators/>
- EBN European Network of Business and Innovation Centres: <http://www.ebn.be/>
- AdT German Association of Technology + Incubation Centres: <http://www.adt-online.de/>
- Database on German Centres: <http://www.adt-online.de/zentren/standorte.htm>
- Links to international incubation associations + organisations: <http://www.infodev.org/incubator/annex1.htm>
- Business Incubators Worldwide Database: <http://www.smallbusinessnotes.com/incubation.html>
- NBIA: <http://www.nbia.org/>

Links (cont.)

- Asian Association of Business Incubation AABI: <http://www.aabi.info>
- Japan Association for New Business Incubation JANBO: http://www.janbo.gr.jp/eng/e_index.html
- Korean Business Incubation Association KOBIA: <http://www.kobia.or.kr/english/index.php>
- China Business Incubator Association
- Business incubator development programme: <http://www.wtec.org/loyola/bid/bid-eng.html>
- Business e-Coach for Asia-Pacific SMEs: <http://www.technology4sme.com/ecoach/index.htm>
- Best practice in business incubator management: <http://www.uark.edu/~genesis/about/bestpracrpt.pdf>

Sources

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- European Commission/ Enterprise DG (2002): Benchmarking of business incubators. UK/Brussels.
- OECD (2003): Entrepreneurship and local economic development – Programme and policy recommendations. Paris.
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- Dietrich, F./ Fiedler, H./ Nagy, P. (1996): The concept of business incubators and innovation centres. ICECE-Focus, Vol. 1. Berlin.

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