

# **Business Incubators - the International Experience**

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

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***National Computer Board***

**EXPERPLAN**  
GmbH

Regional Development



# Definition

## Business incubators + their relation with the environment

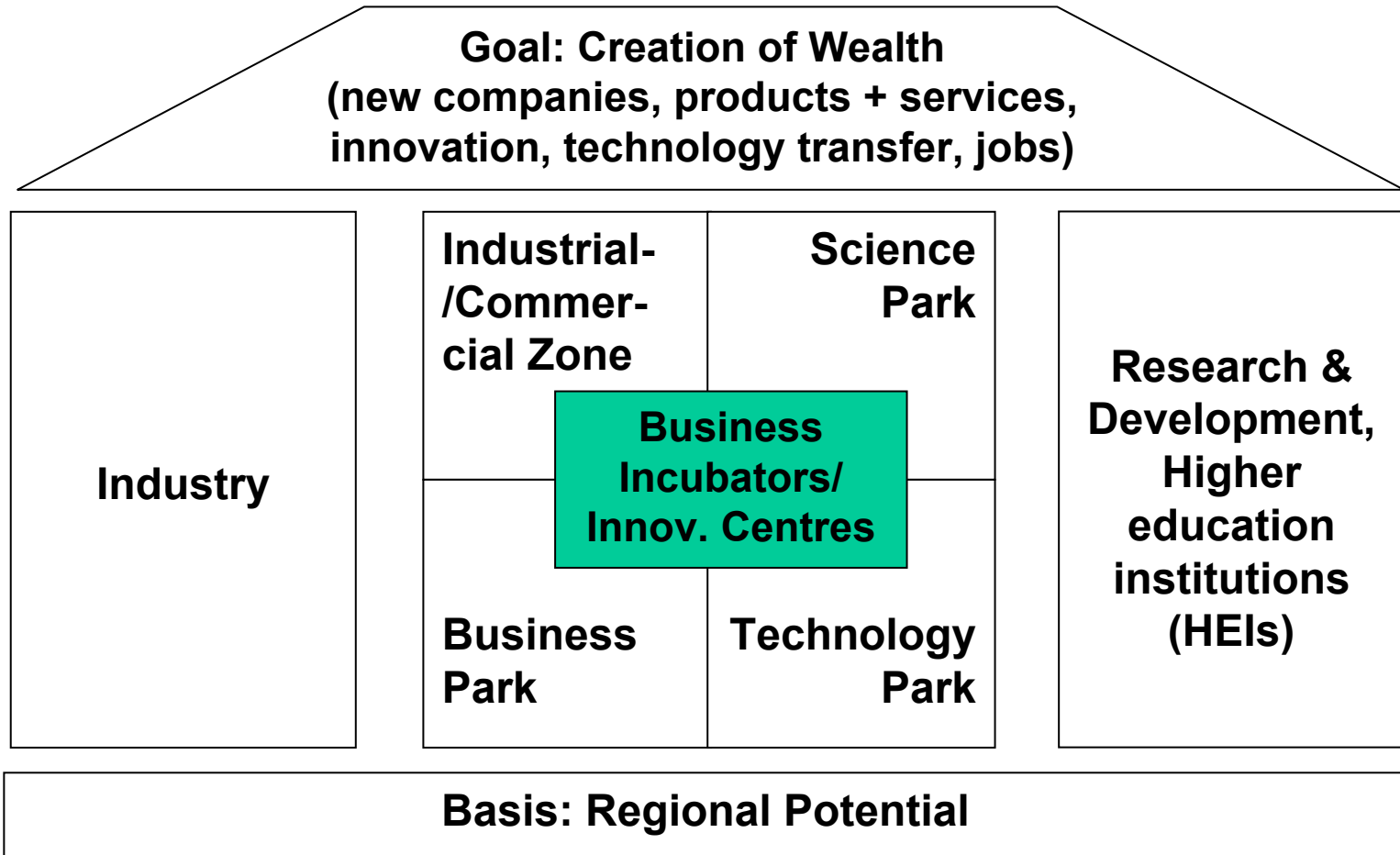
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- Business Incubator:
  - economic development tool
  - to accelerate the growth and success of entrepreneurial companies
  - business support resources and services
- Goal: successful firma
  - financial viable
  - freestanding

# Definition

## Business incubators + their relation with the environment



Source: Dietrich 1996

## Facilities + services, the model

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- 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

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- 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

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- 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

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- 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](http://www.mancusogroup.com/properties_bic.html)

# History

## Dissemination of the business incubator concept

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- **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

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## ■ 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

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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
<b>Total</b>	<b>460</b>	<b>203</b>	<b>333</b>	<b>64</b>	<b>55</b>	<b>6</b>	<b>31</b>	<b>1,152</b>
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
<b>Total</b> ( <i>multiple responses possible</i> )	<b>1,414</b>	<b>100.0</b>

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

# Examples of business incubators

## Technology business incubator: TZDO – Dortmund Technology Centre

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- 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

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- 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

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- 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)

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- 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

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- **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

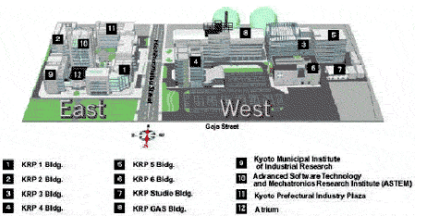
<http://www.innopoli.fi/english/v>



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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: 1,076,000ft<sup>2</sup> [100,000 m<sup>2</sup>]
- Average monthly rent: US\$ 3.50/ft<sup>2</sup> [US\$ 34/m<sup>2</sup>]
- No. of staff: 95



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

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

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- **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

<b>Setting up + operating</b>	<b>Average</b>	<b>Range</b>	<b>Benchmark</b>
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
<b>Incubator functions</b>	<b>Average</b>	<b>Range</b>	<b>Benchmark</b>
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

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- **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

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- 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

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- 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

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**Thank you for your attention.**

# Links

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- European Commission/ Promotion of entrepreneurship:  
[http://europa.eu.int/comm/enterprise/entrepreneurship/support\\_measures/incubators/index.htm](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](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.)

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- 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.)

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- 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](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>

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- UNIDO: Practical guidelines for business incubation systems. New York.
- 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.

## Sources (cont.)

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- AdT (2000): Abschlussbericht zum Projekt MINERVA. Maßstäbe für Innovationszentren – Erfolgsstrategien durch vergleichende Analysen. Berlin.
- AdT (2000): Handbuch für das Management von Innovationszentren. Berlin.
- IHK-UTB Karlsruhe et. al. (1998): BEST – Benchmarking of Science Parks and Technology Centres. Karlsruhe.