

Swissparks.ch Pilot Benchmarking

] BIO-TECHNOPARK®

The systematic impact analysis – initiated by Swissparks.ch - is unique for Switzerland. It provides detailed insights into the role of business incubators and technology parks and reveals a robust yet dynamic innovation ecosystem.

The successful development of start-ups plays an important role in the innovative capacity of national economies. The benchmarking developed by BAK Economics and EvalueScience enables a detailed, comparative analysis of the function and impact of business and technology parks in the Swiss innovation and start-up ecosystem.

The pilot study was conducted together with Swissparks.ch and the four participating centers Bio-Technopark Schlieren, Business Parc Reinach, EPFL Innovation Park and Startfeld and included an analysis of the centers as well as a study of the companies located at the centers.

Mission of the centers

Support system for start-ups: The centers are much more than a real estate business: Central functions are networking, facilitating cooperation and new forms of work, lobbying, consulting and mentoring.

Bridge to commercialization: The centers provide the business infrastructure for the commercialization of new technologies in close connection with the universities and research institutions, and they promote regional entrepreneurship. High proportion of private funding (see Figure 2); high proportion of companies developing future technologies (see Figure 4).

Regional impact: Business and technology parks act as instruments to attract and settle companies in order to bring new jobs and innovative technology to the region.

Diverse and specialized: High diversity of the centers studied - different technology profiles, different specializations of technology and business parks

Fig. 1: Overview mission of the centers

Mission regarding Start-ups	Mission regarding Ecosystem	Mission regarding Economy & Society
Consulting, coaching, training regarding innovation, management, financing	Facilitate contacts between start- ups, academic research groups, industry, and investors	Promote and accelerate innovation and technological progress
Provide intrastructure (offices, equipment, labs, production facilities)	Transfer of (disruptive) innovation and technology from academia to business	Promote entrepreneurship
(Seed) funding	Lobbying to optimise framework conditions for start-up ecosystem	Create (directly and indirectly) gross value added and jobs
Support services (accounting, legal, HR etc.)	Education (e.g., entrepreneurship courses for students)	
Offering networking events and collaboration opportunities		

Contact

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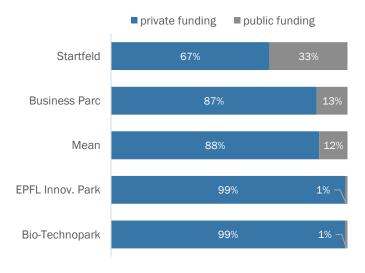




High proportion of private financing

The operating costs of the centers are financed to a large extent from private funds; that is, through membership fees, rents, service fees and sponsorships. The high percentage indicates a sustainable business model for the centers and shows the important role of the private sector, with the centers in an interface role with academia.

Fig. 2: Funding sources of the centers



Source: BAK, eS: Manager Survey

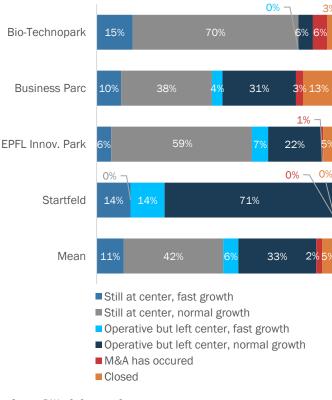
Resilient and dynamic companies at the centers

The pilot study examined the business success of the companies located at the centers: How did they perform in the span of 2015 – Now? A resilient and dynamic corporate landscape is revealed:

- High survival rate of companies: Only 5% of the companies located in 2015 were no longer in existence in 2020.
- High proportion of fast-growing companies: 17% of companies exhibited rapid growth (measured by the number of full-time equivalents).
- Comparably good performance of companies that were still located at the centers in 2020 compared to companies who have moved out of the centers.

Repeating the benchmarking process in the future will allow for an ongoing monitoring of company and center performance.

Fig. 3: Fate of companies since 2015



Source: BAK, eS: Company Survey



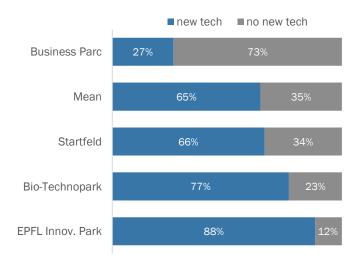


New technologies at the centers

65% of the companies develop new technological applications. At the studied business incubator, this fraction is lower, owing to the different business model and role of the center. More than half of all companies are spin-offs from universities or research institutions.

The picture of technology specialization is consistent with the overall Swiss technology structure, with a strong focus on life sciences, IT/digital, MEM industry. The parks form an important bridge in the innovation process - between academic research and the commercial implementation of innovations in companies.

Fig. 4: Share of companies developing new tech applications



Source: BAK, eS: Company Survey

Fig. 5: Distribution of companies across major technology fields, and top 5 most prominent technology subfields

Total	100%	100%	100%	100%	100%
Other	2%	9%	15%	8%	9%
Materials	2%	0%	3%	10%	4%
Green Tech	0%	9%	7%	6%	5%
Digital/IT	2%	57%	32%	31%	30%
Life Science	90%	17%	25%	11%	36%
Mach./Electr./Mobil.	2%	9%	17%	34%	15%
	Bio-Technopark	Business Parc	EPFL Innov. Park	Startfeld	Mean

Mean

- 1. Red Biotech
- Machine Learning / Al
- 3. Medical Wearables
- Bioprint./Biosensor/Lab-on-a-Chip
- Digital Medtech

Bio-Technopark

- 1. Red Biotech
- 2. Bioprint./Biosensor/Lab-on-a-Chip
- 3. Digital Medtech
- White Biotech
- 5. Machine Learning / Al

Business Parc

- Machine Learning / Al
- IoT: M2M (Factory Newtwork)
- Prevent & Predictive Maintenance
- Process Automation
- Blockchain

EPFL Innov. Park

- 1. Machine Learning / Al
- 2. Medical Wearables
- 3. Bioprint./Biosensor/Lab-on-a-Chip
- Image Analysis
- 5. Red Biotech

Startfeld

- 1. Electro/Hybrid Vehicles
- Machine Learning / Al
- Sensors
- Medical Wearables
- **Nanomaterials**

Source: BAK, eS: Company Survey

Fig. 5 is based only on companies that develop new technological applications (see Fig. 4).





"This is the very first time that such a systematic impact analysis has been conducted in Switzerland. The results demonstrate the unique role that technology parks and business incubators play in the innovation ecosystem. A key value is the unparalleled networking that the hosted companies experience, both in-house and with external players in the sector, such as investors, economic promotion, universities and other technology transfer partners, coaching and support organizations."

- René Hausammann



Swissparksoch



"I see it almost as a duty to regularly check whether companies have a strategic advantage when they are located in a technology park (e.g. survival, growth). I was positively surprised by the results of the pilot study, and I recommend my colleagues from the other parks and business incubators to participate in a next round. This will make the results statistically more relevant and, in sum, comparable with other regions and countries."

- Mario Jenni



"Since its founding in 1999, the members of Business Parc Reinach have generated revenues of around CHF 470 million. Currently, they generate around CHF 35 million annually. With their earnings, they can fully finance themselves. These are impressive figures for a center serving young entrepreneurs. We are glad we now have such figures at our disposal and are able to use them in discussions about the economic benefits of the Business Parc."

- Melchior Buchs



business parc



"The Swissparks.ch pilot benchmarking project brought us valuable insights. Where before there were only self-made assumptions, now facts and figures are available. They show where we can improve and where we are already good compared to the others. I found the cooperation with BAK Economics and EvalueScience to be professional, competent and goal-oriented."

- Peter Frischknecht



"We were looking for a clear methodology to measure our added-value and better highlight it to external stakeholders. This pilot study maps the breadth and impact of EPFL technologies that our Innovation Park brings to the economy. Such benchmarkings allow us to compare ourselves with our peer institutions and are important quality control tools for us."

Jean-Philippe Lallement



EPFL Innovation Park