A brief overview of the development of the Swedish incubation system and some good practices

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Brief history of the Swedish incubation system

| 1981 | Informal incubator for university spin-offs | | |
|-------|--|--|--|
| 1983 | First Swedish Science Parks | | |
| 1995 | Pre-incubator | | |
| 1996 | First formal incubator(s) | | |
| 1989 | SwedPark | | |
| 1999 | Cluster of new incubators (SwedSpin) | | |
| 2003 | Swedish National Incubator Programme (a pilot) | | |
| 2005 | Formal Swedish National Incubator Programme SwedPark (1989) and SwedSpin (1999) merge into SISP | | |
| 2010 | Innovation offices at Swedish universities | | |
| 2015- | The government assigns the incubator programme to VINNOVA | | |
| | Continuous development of the programme | | |





VINNOVA

A governmental organisation aimed to build Sweden's innovation capacity, contributing to sustainable growth. VINNOVA develops and finances the national incubator programme.

□ Start: 2003

□ Budget (total): 200+ million USD

□ Ventures: 6 000+

□ Dominating areas: Life science & ICT





SISP has 62 members all over Sweden, which together have more than 5,000 companies with just over 70,000 employees.



The Swedish national incubator programme (21-22)

| Region | Incubators | | |
|------------------|---|--|--|
| Dalarna | Stiftelsen Dalarna Science Park | | |
| Blekinge | Blekinge Business Incubator AB | | |
| Gotland | Science Park Gotland | | |
| Gävleborg | Movexum AB | | |
| Jönköping | Science Park Jönköping AB | | |
| Kalmar | Kalmar Science Park AB | | |
| Kronoberg: | Företagsfabriken i Kronoberg AB | | |
| Norrbotten | Arctic Business Incubator AB | | |
| Skåne | Lund Business Incubator AB, Smile AB, Minc i Sverige AB | | |
| Stockholm | Stockholm Innovation & Growth AB, SSE Business Lab AB Karolinska Institute Innovations AB | | |
| Uppsala | Uppsala Innovation Centre AB | | |
| Västerbotten | Uminova Innovation AB, Umeå Biotech Incubator AB | | |
| Västernorrland | Åkroken science park ab | | |
| Västmanland | Create Business Incubator Mälardalen AB | | |
| Västra Götaland: | GU Ventures AB, Chalmers Ventures AB, Founders Loft, Sahlgrenska Science Park AB, Brew House Göteborg, Inkubatorn i Borås AB, Innovatum AB, Science Park Skövde AB | | |
| Örebro | Inkubera i Örebro AB | | |
| Östergötaland | Lead i Östergötland AB | | |



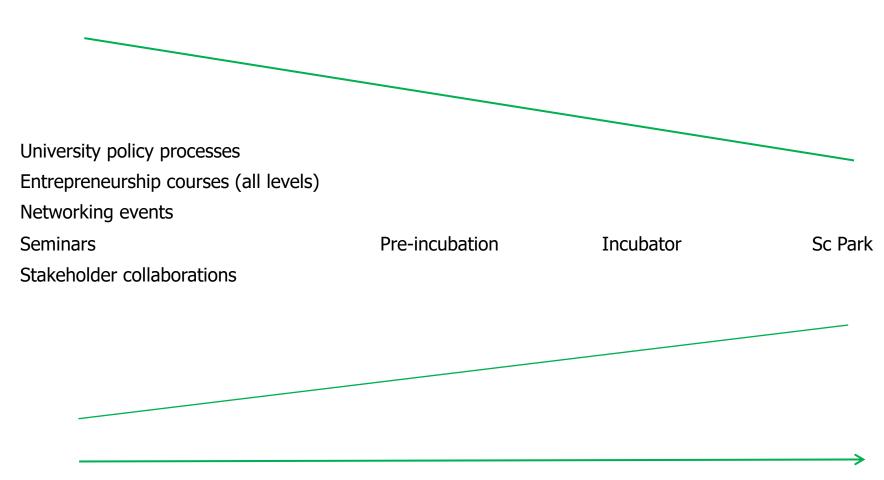


Key characteristics of the Swedish incubation system

- Attraction
- □ Team development
- Business development
- Sustainability & gender equality



Business incubation support vs degree of business maturity



Degree of maturity (entrepreneur/idea)

Some good practices – setting of the study

- □ The differences between **incubatees** and **non-incubator firms** in business performance and four firm dimensions: growth orientation, external financing, partnerships, and business networks.
- □ Important factors for firms' future business performance
- □ 2016 survey covering 401 small Swedish NTBFs (employment mean: 1.8; average firm age: 28.3 months); of these, 38 firms are in incubators (incubatees) and 363 firms are not (non-incubator firms).
- □ High-tech knowledge intensive industry (90.0%), followed by the medium high-technology manufacturing industry (7.2%) and high-technology manufacturing industry (2.8%).

Some good practices – type of firms

□NTBFs located on and off incubators

| | <u>Incubatees</u> | Non-incubator firms |
|--|-------------------|---------------------|
| | Percent | Percent |
| High-tech manufacturing | 5.3 | 4.4 |
| Medium high-tech manufacturing | 15.8 | 7.7 |
| High-tech knowledge intensive | 78.9 | 87.8 |

Some good practices - hypotheses

- □H1: There is a significant difference between incubatees and non-incubator NTBFs with regard to growth orientation.
- □H2: There is a significant difference between incubatees and non-incubator NTBFs with regard to external financing.
- □H3: There is a significant difference between incubatees and non-incubator NTBFs with regard to partnerships.
- □ H4: There is a significant difference between incubatees and non-incubator NTBFs with regard to business networks.

Some good practices – results

- □The sampled incubatees are more oriented towards all the four dimensions (H1 H4). Statistical differences were observed between incubatees and non-incubator NTBFs for 16 of the 21 variables.
- □ For example, a significantly higher level of cooperation from distributors, local authorities, universities, lawyers, and regional business partners, compared to non-incubator NTBFs.
- □Significant differences between incubatees and non-incubator NTBFs in terms of business performance in 2015 (EBIT and ROA), but no significant difference in terms of size (employment, sales, and assets [total capital]) and age.
- □ Another finding was that incubatees have higher technology levels than non-incubator NTBFs in terms of number of patents, but the latter show better profit and profitability (i.e., EBIT and ROA).

Some good practices – implications

- □This confirms the important role of incubator managers.
- This study also showed that incubatees are significantly more oriented towards high growth (sales) and rapid geographic expansion than non-incubator firms.
- □ From a firm's perspective, an incubator is well placed to help them gain access to sources of information and create network links that are important for their business activities.
- □ However, nascent incubatees face a number of constraints that may hinder their business and innovation performance in the long run.

Concluding remarks: Why a well-functioning and world class national incubator programme?

- Engaged collaboration and peer-review activities
- From resource based incubation to business development processes
- □ Pitching & business plans -> products & sales-> business models
- Focus on sustainability and horizontal aspects
- Increased interest in measuring and assess impact of business incubation in a holistic manner (the ecosystem)
- Local as well as global connectiveness is become crucial



Thank you for your attention!

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