

SCIENCE TO BUSINESS SPIN-OFF INITIATIVE LOWER AUSTRIA

FOREWORD



'Scientific start-ups are crucial for entrepreneurial innovation, regional prosperity and job creation. The state of Lower Austria recognized this early on and put together a package of measures in 2016. This was successfully implemented with the Spin-off Initiative of Lower Austria, which is unique in Austria. With the new *SCIENCE TO BUSINESS* initiative, we want to leverage the potential that lies within our universities and universities of applied sciences in order to establish the innovative flagship companies of tomorrow.'

Johanna Mikl-Leitner

Governor



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01 MOTIVATION FOR SPIN- OFF INITIATIVE

Lower Austria's economic success is based on its innovative leading companies. These companies are highly specialized and world leaders in their respective market niches.

Spin-offs from universities, universities of applied sciences and research institutions transform scientific results into marketable products and services. These new, innovative companies make a significant contribution to the competitiveness of the national economy, create jobs and strengthen Lower Austria's role as a business location.

'Today's spin-offs are the innovative flagship companies of tomorrow.'

For this reason, the state of Lower Austria relies on its future-oriented spin-off initiative as part of its economic strategy.



02 WHAT DO WE MEAN BY SPIN-OFFS?

In this context, we define a spin-off as a start-up with a close connection to a university, a university of applied sciences or a non-academic research institution.

03 BASIS OF THE SPIN-OFF INITIATIVE

Students and scientists at research institutions constantly develop innovative product ideas. In order to strengthen Lower Austria as a business location, special funding programs have been set up for spin-offs. Spin-offs are an important contribution of universities, universities of applied sciences and research institutions to **economic growth**. They create **highly qualified jobs**, entrepreneurial **innovations** and, thus, generate **regional prosperity**.¹

Due to their technical knowledge and flexibility, spin-offs in particular are well suited in responding to new needs of people and markets. The nationwide initiative to promote the 'third mission' of universities should also be understood in this way: The transfer of academic knowledge into concrete applications will contribute to solutions for the diverse challenges facing our society. Technology spin-offs of academic institutions are important drivers for the **business hub**. They have close ties to regional academic institutions and strengthen the region's innovative power. They serve as a role model for other innovators interested in setting up a start-up and, thus, entail economic effects that go far beyond individual founding. Through cooperation with academic partner institutions, they generate additional know-how both in and for the region. In addition, they create added value as specialized suppliers

'Spin-off initiatives are an essential part of regional development and promote start-up activities.'

¹Spinning out Success - Entrepreneurial Impact Ranking 2020, Octopus ventures.





Figure 1: Overview of the 5 barriers of founders

Needs of founders

In an international context, comparatively few spin-offs are founded. Scientists in Austria often do not see the foundation of a spin-off as an interesting career option. Therefore, special support programs are necessary to break down barriers for spin-offs.

In an Austrian study from 2020, five obstacles that prevent scientists from taking the step into business were identified.



01 Lack of know-how in business management and the non-existent network. Here, business management courses and training as part of education can provide support.



02 It is considered difficult to obtain funding.



O3 Often the fear of failure of the business prevents scientists from taking the first step towards founding a company.



04 In addition, scientists fear that time constraints for their research will occur if a company is set up in addition to research activities.



05 Furthermore, difficulties in **identifying potential partners and employees** may lead to or result in the start-up being abandoned. Universities can strengthen the entrepreneurial culture by bringing together investors, mentors, founders and potential partners and, thus, strengthening the network.² Lower Austria, with its institutions **accent** (incubator) and **tecnet equity** (technology transfer, venture capital fund), has developed a package of measures that offers a support chain for academic start-ups. Since spin-offs are characterized by high development risk and capital requirements, especially in the early phases, an essential contribution can be made. This program is absolutely unique in Austria. Thus, this Lower Austrian support for academic spin-offs has become very well established and numerous success stories have been generated.

The results of the last spin-off strategy were very positive. The new spin-off Initiative SCIENCE TO BUSINESS is based on the extensive experience and takes into account new trends and developments.

'An attractive package of measures has to be tailored to the needs of founders.'

² Spin-offs in Austria. White Paper. Start-up Manufaktur. 2020

04 MEASURES AND FRAMEWORK CONDITIONS FOR SUCCESSFUL SPIN-OFFS

4.1 The Three Key Areas of the Spin-off Initiative Lower Austria



Mobilization of potential



Idea to business concept



Support and coaching

Mobilization of potential

Addressing target groups through awareness measures, trainings, workshops, media and events

• From idea to business concept

Intensive support in the transfer of research project into a spin-off

• Intensive support and coaching Coaching of the spin-offs by mentors and experts

4.1.2 From Idea to Business – Our Concept

As soon as the decision to found a company has been made, accent begins to provide operational support. This phase focuses on the development of a business concept. Through intensive coaching and participation in initial **impulse** sessions, the business concept is developed and sharpened. Subsequently, a broad range of consulting services is provided by the experts of accent and tecnet. Initial considerations for a solid IP strategy and for the financing of the venture have to be made.



4.1.1 Mobilization of Potential

This focus area is concentrated on targeted public relations, training, media work and events that are intended to create awareness for entrepreneurship. For example,

together with selected cooperation partners, the 'Innovation Award' was introduced. Young scientists present their research results and the possibilities for commercial exploitation to a jury and are supported by the accent / tecnet team.

In addition, **accent** and **tecnet** implement relevant university start-up event formats in Lower Austria. The **'Creative Pre-Incubator®'** program is implemented in all universities of applied sciences in Lower Austria, thus forming another relevant pipeline for spin-offs.

The **technology transfer program** offers various formats such as coaching and workshops in which researchers learn how research results can be translated into valuable applications, products and business models.



4.1.3 Comprehensive Support and Long-term Assistance

In the context of incubation, an **individual support approach** and the specialized impulse sessions should be emphasized. This support is provided in particular through the ongoing development and revision of the business concept, through regular feedback loops and through networking with cooperation partners. The implementation of specific international **hackathons** expands the offer for spin-offs and incentivizes the development of innovative solutions to problems of the society in an entrepreneurial way.

An essential factor for the successful launching of spin-offs is a suitable **funding and financing strategy**. Venture capital is essential especially for early-stage spin-offs. 'With its financing instruments, tecnet offers start-ups in Lower Austria access to capital and know-how, from the idea to a successful company.'

4.2 Venture Capital Investments in Lower Austria

Venture capital offers start-ups equity capital for their growth. However, venture capital is more than just capital: spin-offs receive not only financing but also actively help in building their company

tecnet equity, the venture capital fund of the province of Lower Austria, is one of the leading equity funds in Austria with a fund volume of more than 50 million Euro. Start-ups with long-term growth potential not only receive financial support but can also benefit from the broad range of experience and extensive network of the tecnet team

For early-stage start-ups, it can be particularly challenging to get funding. tecnet reacted to this and created an end-toend financing offer: At the beginning of the entrepreneurial journey, when there is a particularly high degree of uncertainty, tecnet invests in a targeted and uncomplicated manner in the form of a Simple Agreement for Future Equity (SAFE). If a business angel can be found as a partner, tecnet can invest together with this partner (**Business Angel Instrument**). However, tecnet's core product is **seed financing**, in which it helps to prepare the company for the international market together with other investors.

In addition, **IST cube**, an internationally oriented venture capital fund with close ties to the Institute of Science and Technology Austria in Lower Austria, was founded. In order to strengthen the location of Lower Austria, the tecnet group of companies, along with other investors, invested in IST cube.

4.3 360° Support for Founders

accent and tecnet have earned an excellent reputation among research organizations / institutions in recent years. With the aim of a dynamic start-up landscape in Lower Austria, they have put together a comprehensive and highly professional support package.

Particularly noteworthy are the interlocking measures, which offer appropriate support in each phase of company development.

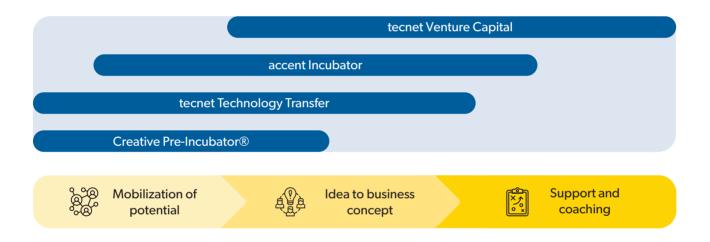


Figure 2: Support from accent / tecnet at every stage of the spin-off's development

'Spin-offs have exceptional expertise in their respective scientific fields. However, to realize the full potential of their technologies, they also need know-how in the business area as well as end-to-end support. The support chain provided by accent and tecnet is perfectly tailored to the needs of these spin-offs and forms an excellent basis for their development into one of Lower Austria's leading companies.'

Doris Agneter, Managing Director tecnet equity Michael Moll, Managing Director accent

05 SUCCESS STORIES AND OUTLOOK 2030

5.1 Success Stories Spin-off Initiative 2016-2021



New start-up dynamics generated in the academic environment

One of the objectives of the Initiative is to kick-start the cycle of start-up dynamics and mobilize potential. Through a comprehensive package of measures, the goal of 85 spin-offs was exceeded and more than 100 spin-offs were supported in Lower Austria. This has created more than 500 highly qualified jobs. The new start-up momentum was triggered in particular by the following measures:

- ✓ 'Creative Pre-Incubator®', the Accelerator Program of accent, at the Lower Austrian universities of applied sciences.
- Innovation Awards that identify and support spin-off ideas at an early stage.
- Boot Camp for spin-offs from accent's incubator program.
- \checkmark accent is the Austrian incubator of **CERN**.
- ✓ tecnet Path Finder Workshops for scientists to identify pathways for commercial application.
- ✓ tecnet m-power net, networking and training for spin-off leaders at universities and research institutions.
- Implementation of the Falling Walls Lab Austria
 2021 in cooperation with AIT.
- tecnet financing of spin-offs with venture capital.



Transfer of expert know-how through workshops and impulse sessions

tecnet Technology Transfer has supported founders developing suitable patent strategies. This was done in cooperation with more than 20 research institutions. In addition, access to quality knowledge was provided through close cooperation with European research institutions. Thus, companies could be accompanied and supported intensively from the business idea to the business concept.

Access to know-how was promoted in particular by the following measures:

- tecnet Technology Transfer has supported founders developing suitable patent strategies.
- Close cooperation with the two largest European research institutions, CERN and ESA, gave spinoffs access to high-quality know-how.
- Spin-offs were given the opportunity to attend the Berkeley Summer School in California or the annual Boot Camp in Lower Austria.
- The international presence of tecnet Technlogy Transfer in scientific journals and at conferences generates knowledge which, in turn, flows back to the Lower Austrian spin-offs.





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More than 100 new spin-off foundations

Cooperations with over 20 universities and research institutions

Creation of more than 500 highly qualified jobs

Goals of the Spin-off Initiative SCIENCE TO BUSINESS

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More than 250 spin-offs by 2030

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- Creation of minimum 1,000 new, highly qualified jobs



Additional focus on the topics digitalization, sustainability and climate



Increased international networking



5.2 What We Want to Achieve with Our SCIENCE TO BUSINESS Initiative

Digital access to know-how and financing

The new spin-off Initiative SCIENCE TO BUSINESS aims to make access to know-how and financing even easier and more digital. The individual spin-off support provided by tecnet and accent is continuously supplemented and adapted to the needs of the founders.

Through these measures, 250 spin-offs should be founded in Lower Austria by 2030. This will create more than 1,000 new highly qualified jobs. To achieve this goal, the following measures in particular will be taken:

- The expansion of the Accelerator Program
 'Creative Pre-Incubator®' to all Lower Austrian
 Universities of Applied Sciences.
- Increased networking of the Lower Austrian R&D landscape to bundle expertise. accent and tecnet as a hub in the areas of technology transfer and Spin-offs.
- ✓ **Training of those responsible for spin-offs** at universities and research organizations.
- Specialist know-how through individual coaching and online master courses.
- Technology transfer manuals as support for spin-off companies.
- First-hand financing, consulting and expertise for spin-offs.
- ✓ Financing of the spin-offs with **venture capital**.



Specific offers for societal challenges such as digitalization, sustainability and climate change

In addition to the existing focus areas, the upcoming societal challenges such as digitalization, sustainability and climate change should be managed with separate initiatives.

To achieve this goal, the following measures in particular will be taken:

- In pre-seed and spin-off support, ecological and social sustainability are integrated into business concepts at an early stage.
- Special coaching of spin-offs to exploit the opportunities of digitalization for their own business model.
- High level expert workshops in which current topics concerning spin-offs and technology transfer are addressed.



Increased international networking

Increased international networking gives founders access to international networks. This creates R&D and business partnerships as well as access to new markets.

To achieve this goal, the following measures in particular will be taken:

- Through international networking and participation in topic-specific EU projects, the offer for founders becomes even broader and more professional.
- The international cooperations create so-called 'soft landing' **platforms** for founders. These are locations with European partners that facilitate international market entry.
- ✓ Increased networking building on the cooperation with ESA and CERN as well as with other international R&D organizations.



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