

Briefing note - Jan Middendorf - May 2023

REINFORCING ACADEMIA-BUSINESS R&I COOPERATION

IMPROVING INNOVATION AND STARTUP SUPPORT CAPACITIES THROUGH INTER-UNIVERSITY COOPERATION



EXECUTIVE SUMMARY

In the area of collaboration between academia and business sector, a high level of heterogeneity among the universities' capabilities, strategies, structures and culture related to innovation management was identified as a major challenge.

Following a deeper analysis of the CIVIS member universities' strengths and weaknesses in this area, general guidelines were set up for the development of a university specific innovation strategy. This strategy forms the basis for further intensive project collaborations with companies, to be harmonized with the universities' research strategies, and for the establishment of a startup ecosystem. An important role is given to non-university actors such as lawyers, investors, the city or region as well as the chambers of industry and commerce and already established companies.

The guidelines enable the creation of a common understanding of the areas of innovation and startup activity while taking into account the specifics of each CIVIS university. Furthermore, common interests of the partners can be derived from these topics and subsequently worked on.

INTRODUCTION

RIS4CIVIS Module 3 is focused on the "innovation" side of the CIVIS Alliance, with the aim to help link business and research and to support further academia-business cooperation. The specific topic of «Strengthening R&I Cooperation between Universities and Business» was addressed in a three-stage approach.

A first benchmarking showed a large heterogeneity

among the partner universities with respect to different aspects of R&I cooperation between academia and business. This was to be expected, as all university partners had different histories, orientations, and foci, as well as financial capabilities or political and economic support available. Based on the strengths and weaknesses of universities that emerged in relation to innovation management, a subsequent tandem process allowed partners to address specific issues in detail and to share best practices and tools.

As a third step, it was decided to strengthen R&I collaboration between academia and industry by creating matrices for strategies in two different case studies: a **CIVIS Innovation Framework** that will identify university-specific and common challenges and propose joint actions to increase innovation capacity in the areas of e.g. technology and knowledge transfer, and a **CIVIS Startup Ecosystems Network** that will identify issues and challenges at the regional level that can be addressed together as an Alliance. Matrices applicable to all CIVIS universities were developed for the two case studies, to serve as guidelines for formulating specific strategies. The handling and implementation of the matrices are currently being tested at the university-level.

KEY FINDINGS

The strong general heterogeneity among universities was mainly related to basic characteristics such as the historical development, size, thematic priorities and goals, and the funding opportunities open to the universities. Consequently, an important finding was that the partner universities are also heterogeneous in the four core areas of innovation management (structures, capabilities, strategy and culture). In some cases, this resulted in different focuses per university with respect to the work carried out by the Module.

List of priorities for CIVIS universities:

The identified priorities of the individual member universities are:

1. the development and formulation of an innovation strategy,
2. the formulation, implementation and eventual adaptation of an innovation strategy,
3. the development & fostering of an innovation culture,
4. Startup support,
5. awareness raising using innovation measures,
6. transfer of knowledge and knowhow,
7. the establishment of a patent portfolio & portfolio of market-oriented innovations,
8. the exploitation of results & improvement of outcomes from basic and application-oriented research,
9. participation in larger EU projects

There is significant interest for the exploitation of research results, however the necessary prerequisites may not always be sufficiently in place. For example, transfer services have been offered without pursuing an overall university planning, i.e. innovation strategy, and startups have been promoted without ensuring that the ecosystem has already been sufficiently prepared for this. Two lines of action are recommended based on these findings:

- First, the individual goals and problems of each partner must be considered in order to jointly address specific issues. By formulating targeted innovation

strategies that take into account the specifics of the individual university partners, incentives are created both for further collaborations with companies and for the founding of new startups, which then in turn enrich and grow the ecosystem.

- Second, the scope of the topic covered by Module 3 requires the involvement of a broad range of experts from both university and non-university settings. Therefore, a new meeting format was set up to provide a space for experts to network on specific subtopics. Following the exchanges, the conclusion was already made that startup and innovation training is an essential part of promoting R&I collaboration between science and industry. Therefore, basic start-up and innovation trainings that should be available to all members of CIVIS Universities' were defined. This type of training is relevant for all partner universities and can be supplemented by additional training programs as needed, which are then designed to meet the specific needs of individual partners.

The need and possibility to offer joint trainings for PhD students and postdoctoral researchers is currently being explored, with diversity and differences in experience considered a valuable resource rather than a barrier to collaboration. The different perspectives are expected to allow the strengthening and improvement of the individual capacities of member universities for R&I collaboration between academia and industry.

RECOMMENDATIONS

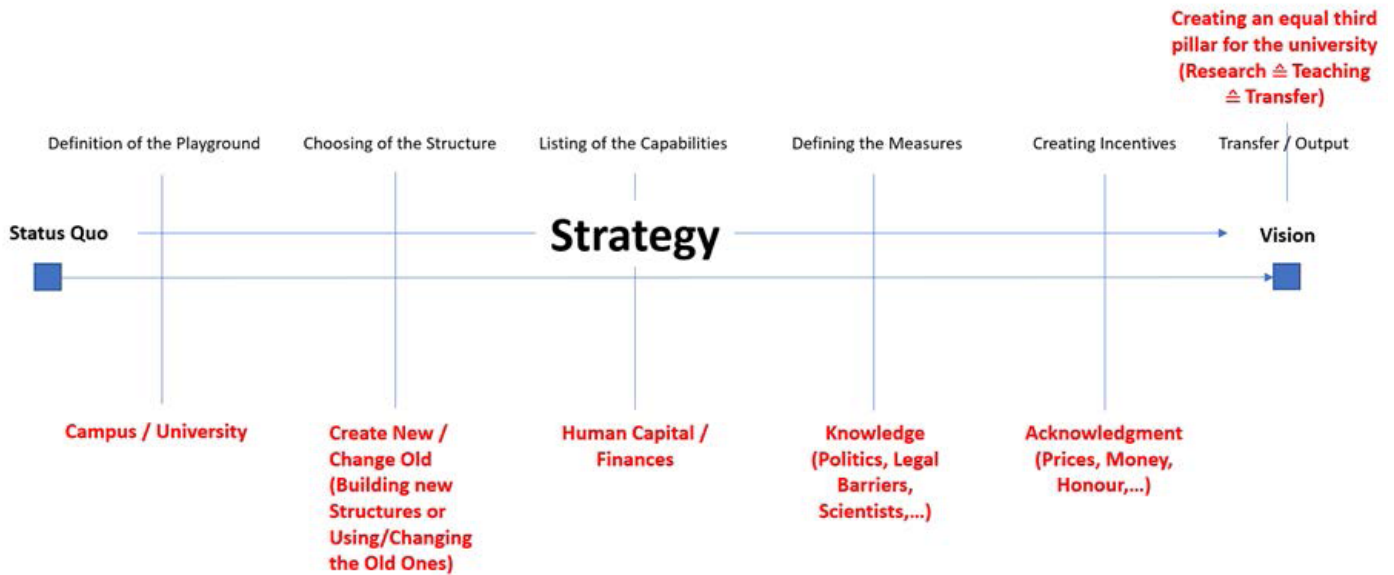
At this stage, we can mainly offer recommendations for university-level actions.

- In order to strengthen and improve R&I collaborations between academia and industry, there needs to be a common understanding among partners about the innovation strategy that will be used for implementation. This includes a shared vision, a flexible plan, and support with diverse structures and existing capabilities of partners.
- Before universities are to act as startup incubators, the conditions for a functioning startup environment need to be established first. This includes creating awareness for innovation, providing diverse educational formats, removing legal hurdles, and building an ecosystem of advisors and supporters.
- Since universities only act to a small extent as commercial enterprises, well-trained experts are needed in the international innovation business to support scientists in the upcoming challenges of a legal (including IP, business, tax and corporate law) and commercial (including negotiation, marketing, intra- and entrepreneurship, accounting and financial reporting) nature.

APPENDIX A: MATRIX FOR CREATING AN INNOVATION STRATEGY

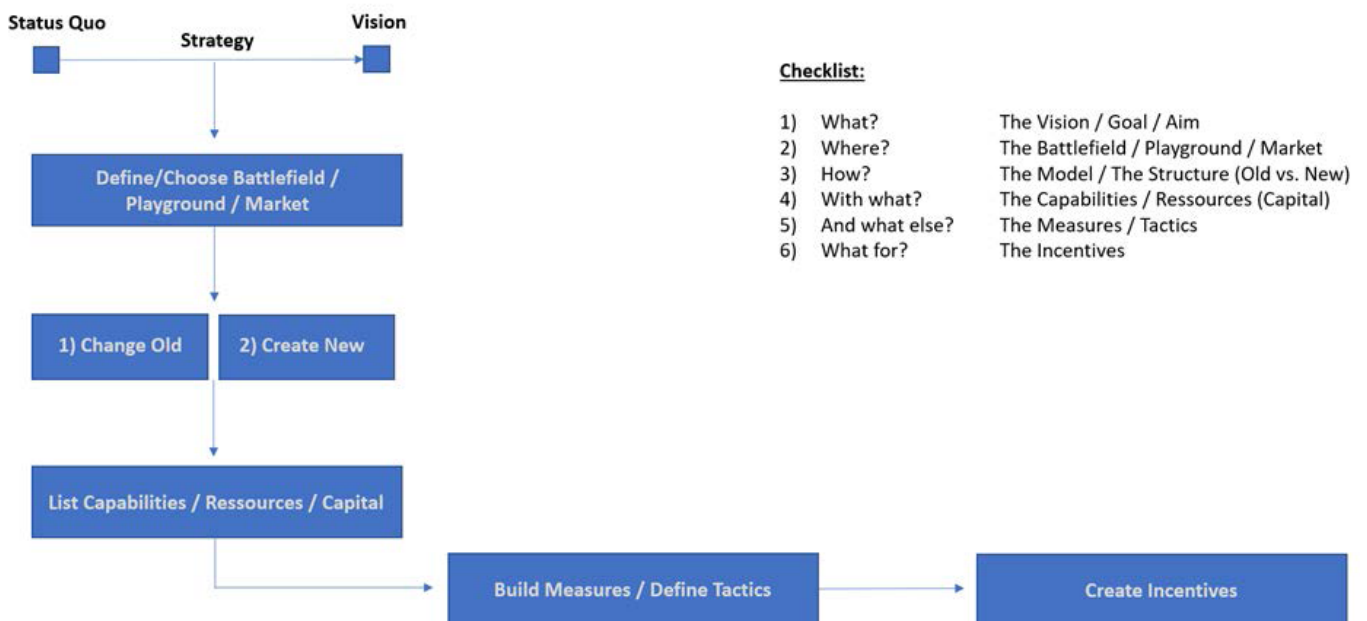
Matrix for Creating an Innovation Strategy

Strategia = "The Art of the General"; A general plan to achieve an overall goal under conditions of uncertainty.



Matrix for Creating an Innovation Strategy

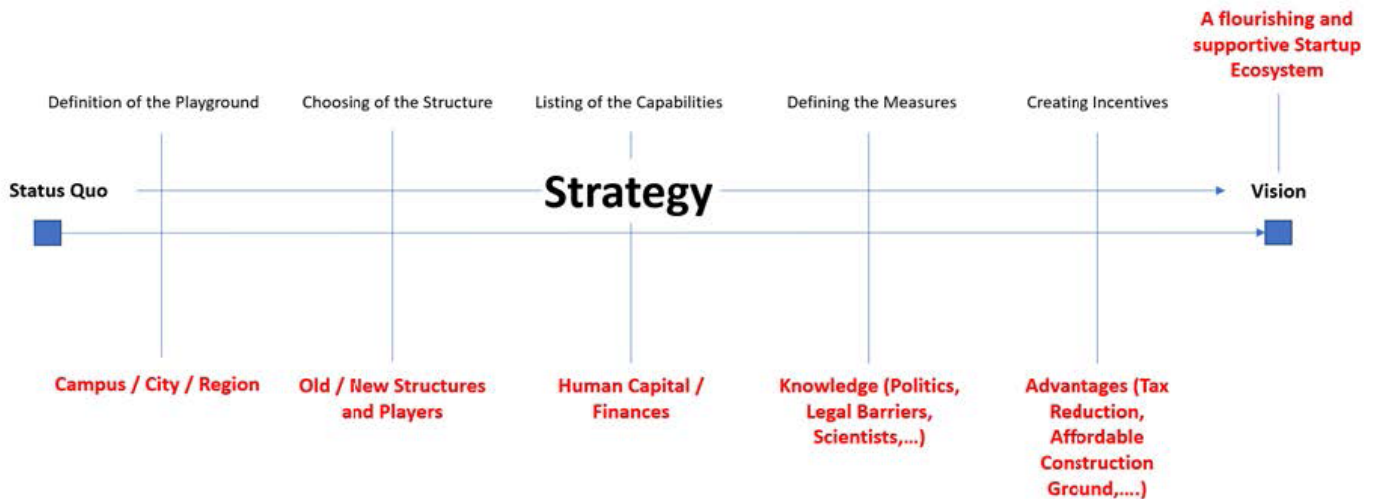
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APPENDIX B: MATRIX FOR CREATING A START-UP ECOSYSTEM

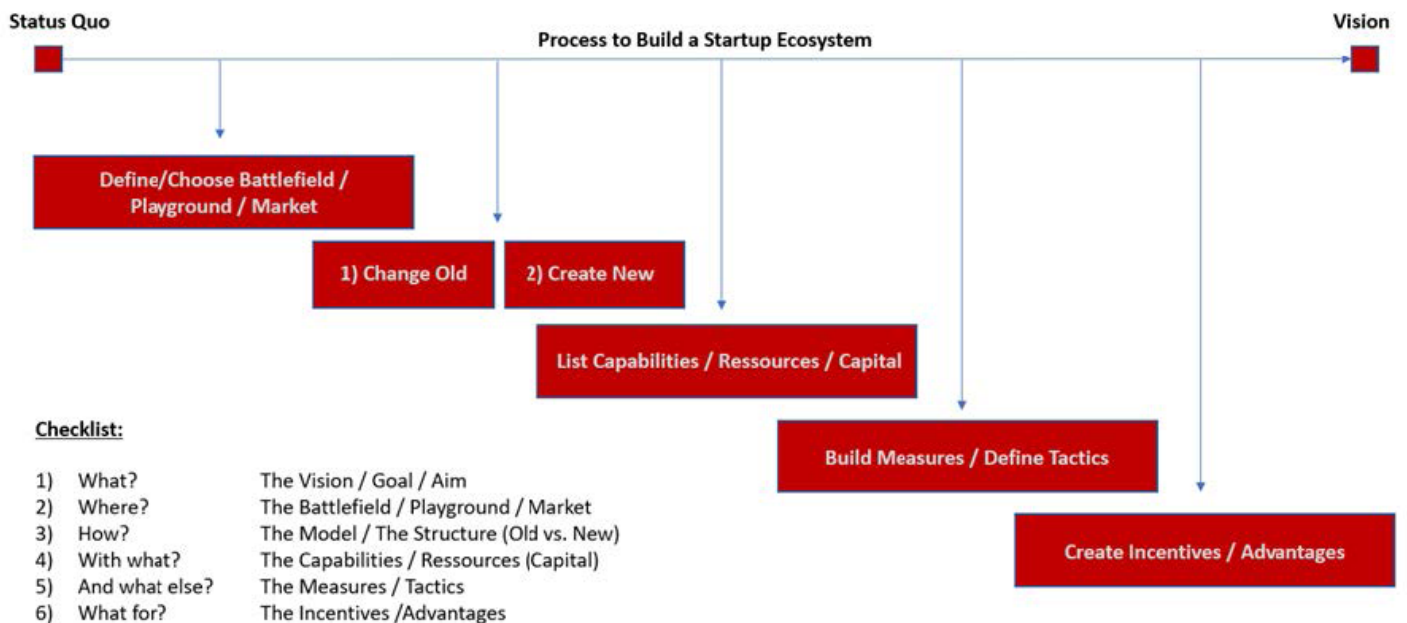
Matrix for Creating a Start-up Ecosystem

Startup Ecosystem = formed by people, startups in their various stages and various types of organizations in a location (physical and/or virtual), interacting as a system to create new startups.



Matrix for Creating a Startup Ecosystem

Startup = A company that's in the initial stages of business.



ADDITIONAL INFORMATION

Research and Innovation Strategy for CIVIS (RIS4CIVIS) is 3-year project co-financed by the European Commission under the Horizon 2020 «Science with and for Society» programme. RIS4CIVIS will define a common Research & Innovation strategy for the CIVIS European University Alliance and transpose the strategy into an Institutional Transformation Model to serve as a source of inspiration for other European Alliances and universities.

Briefing note written by Jan Middendorf, project coordinator Excellence Strategy, leader of RIS4CIVIS Reinforcing Academia-Business R&I Cooperation.



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