POLICY EXPERIMENTS: A RESPONSE TO RAPIDLY CHANGING SOCIETAL ENVIRONMENTS?

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Current societies are going through rapid processes of change in which social, economic, political and technological factors are interlinked. Arguably one of the most important change drivers is digitalization. Indeed, the digitalization of contemporary societies makes strides so fast that it has been termed the "Fourth Industrial Revolution". Current discussions on "Industry 4.0" are erroneously focusing mostly on industry, although an industrial revolution, like in the past, will have effects far beyond industry, therefore asking for a corresponding approach on "Work 4.0" and even "Society 4.0".

A new generation of science, technology, and innovation (STI) policies should take into account these large-scale changes as well as the interlinked nature of social and technological innovations. Similar to the broadening of science and technology into innovation policy in the 1980s and 1990s (Biegelbauer/Borrás 2003), new STI policies will have to reach deeply into even more policy fields, such as education, work, economics, ecology and social affairs.

Moreover, these changes ask for new policy instruments, which are better able to deal with the disruptive nature of upcoming technological, economic and societal developments. They will have to be more flexible, since if there is one thing we can learn from previous large-scale changes in society, it is that the exact nature of changes ahead cannot be foreseen.

POLICY EXPERIMENTS

A group of policy instruments, which carry some promise, are policy experiments. They share the metaphor of scientific experiments, evoking the idea of establishing a more or less strong causality between policy interventions and outcomes. Policy experiments come in different guises from controlled field trials, which have been used for a long time in education policy, to the more recent action-oriented experimentation fields in energy policy (Alliance for Useful Evidence 2015).

Controlled field trials stick more clearly to the original idea of experimentation in the natural sciences and feature a setup with random assignment to treatment and control groups (NONIE 2009). Experimentation fields and living labs are real-life laboratories, in which new technologies or practices may be tested in real-life settings (Schäpke et al 2017). In such a setting it is not possible to closely adhere to the natural science methodology, since the idea of random assignment cannot be strictly adhered to.

Policy experiments have risen in popularity with the debates on Evidence Based Policy-Making since the late 1990s (Martin/Sanderson 1999, Sanderson 2010). In Europe, policy experiments have a longer history in the UK and have spread over the continent mostly during the 2000s and 2010s (Frey/Ledermann 2010). They have been utilized for a longer time in the areas of health and education, extending into other policy fields only more recently. In addition, policy pilots, being also temporarily limited, share a number of characteristics with policy experiments and have been frequently debated alongside (Cabinet Office 2003).

Despite all their differences, policy experiments share a common trait: the expectation to learn from their results in a contained area (sub-field; limited problem area or limited action space) to obtain e.g. new instruments, regulations, structures and setups. And although there is no commonly accepted definition of experiments, several authors claim that the term "experiments" should be reserved to controlled field trials (Weiss et al 2006, Cabinet Office 2003). In some cases, the same authors point out that trials - though promising - are not always feasible under real-world conditions, where they are embedded in an environment with too many intervening factors which cannot be controlled (Cabinet Office 2003).

Policy pilots usually take place under more relaxed framework conditions than controlled field trials. They are also more likely to feature ongoing improvements during their lifetime, thus further harming the conditions of more natural science inspired experimentation such as controlled field trials (Sanderson 2002, McFadgen 2012). As will be shown, this was also the case for the experiment described here.

In this paper we understand policy experiments to be a set of closely interlinked, concurrent deployment and monitoring/feedback activities for immediately assessing the effects of policy interventions, which are limited to a specific economic sector, geographic space and time period. Whilst methodologies of experiment and assessment may vary from e.g. an effort to fully control variables during policy deployment to forming a policy design by changing it piecemeal, the goal stays the same: to immediately learn from outcomes of experiments to improve policies. Policy pilots, being closely monitored to analyse their effects, are therefore understood to be policy experiments.

THE ENTREPRENEURSHIP LAB

In 2017 a policy experiment has been carried out in Austria, which serves as a case study in this paper. The AMS[1] project "Entrepreneurship Lab" is a new labour market policy measure targeting unemployed persons, who might consider self-employment, providing them with important skills needed to cope with the upcoming Fourth Industrial Revolution. In this pilot project, new and innovative, often platform-based business models are emerging with the potential for value-creation and employment through on-demand services and crowd-work.

The pilot project was devised by the Federal Ministry of Labour, Social Affairs and Consumer Protection (BMASK), the Public Employment Service of Lower Austria (AMS-NÖ)[2], and two consulting firms, update training and ösb Consulting hired to co-design and execute the pilot project. As part of a 20-week training programme 15 unemployed persons develop their innovative business ideas, which may or may not be profit oriented. They support each other and are supported by two trainers from update training and ösb Consulting as well as by external trainers providing knowledge and training in business and soft skills supporting creativity. A vital part of "Entrepreneurship Lab" takes place in a co-working space, which aims to inspire the participants to build peer networks and exchange ideas and resources among each other through group-empowerment. They learn to utilise their individual skills and knowledge to team up and form new companies together. The participants learn new ways of working together and create new forms of work organization – for instance combining self-employment with belonging to a company with limited liability.

The co-working space also serves as a platform to invite other potential network partners from start-ups, start-up networks, venture capitalists etc. The participants are introduced to methodologies such as design thinking, customer journeys and business canvas models. They gain skills regarding ICT, social media and the Internet as tools for e.g. market analysis, product development and marketing activities. A network concept interlinks the participants digitally, thus supporting sharing approaches (Biegelbauer et al 2018).

A team from the Austrian Institute of Technology (AIT) was hired to monitor the progress of the pilot project and its participants and adapt processes necessary for the pilot's success. Upon the suggestion of AIT, all actors together decided to devise the pilot project as a policy experiment. The setup importantly foresees two groups of unemployed persons consecutively participate in the training programme with the curriculum adapted in-between.

Methodologically, the AIT team devised a number of measures for monitoring, analysing and evaluating the pilot project as well as feedback formats for the operating staff such as the trainers and political principals. Regarding the actual research work, participant observation was utilized for gathering data on the social interactions during 25 training days, resulting in short research reports of 5-10 pages with observations, and analysis and recommendations for the trainers. During these days 39 short and 74 extended problem centred interviews were carried out with pilot project participants. 23 expert interviews were carried out with the trainers and several more interviews with external experts.

Several short feedback rounds were organized with the trainers and four extensive focus groups with feedback elements were held with the trainers and managers from the two consulting firms responsible for the pilot project's operations. The latter was informally dubbed the "China group", since it was organized in an extra room of a nearby Chinese restaurant, which featured a large round table and formed an opportunity to step out of everyday practices by leaving the office spaces otherwise occupied by the participants of the group. Finally, a steering group of management staff from the two consulting firms, the Public Employment Service of Lower Austria, the Ministry and the head of the AIT team met three times to discuss preliminary results of the pilot project, adaptations and possible further steps in the medium and long-term run.

FIRST RESULTS

In 2017, the first group of unemployed persons participated in the programme from April to August and the second group from September to December. Several, sometimes substantial changes were implemented in the curriculum between first and second group, including e.g. a four-week element at the beginning of the programme. Thereby the second group started with the participants working on one business idea together, to set up their own ideas for different businesses only afterwards. Another set of changes was proposed in December for a possible follow-up, many of these originating from the AIT team.

The socio-demography of the participants changed from the first to the second group, with a more equal distribution of men and women as well as people with higher and lower formal education and a smaller share of persons with a migration background in the second group (changes in education and gender distribution happened, inter alia, upon suggestion of the AIT team).

Although not planned, all participants of both groups were long-time unemployed, with the mean age in the mid-40s. The reason lies in the recruitment channel and approach. The proposed participants were pre-selected on very broadly defined criteria by local Public Employment Service personnel – who decided who to inform about the Entrepreneurship Lab. Those unemployed persons were then invited to information days and subsequent assessment centres, both on a voluntary basis. Selection control therefore was possible only to a limited degree.

The pilot project "Entrepreneurship Lab" was a success with respect to the fact that two thirds of the participants of the first group founded firms within six months after the end of the measure. The start-ups were very different in nature, with a number focusing on service innovations, often Internet-based and social media related. Some of them were profit-, while others were non-profit oriented. An example for a mixed business model combining profit and non-profit elements is a service provided for pregnant women encountering health problems (the name of the company is "Babyou").[3]

Babyou. In a first stage an Internet platform was built, which served as a community building measure with the goal of allowing an exchange of experiences amongst the women. In a second step a variety of measures was implemented, from the establishment of various groups on social media, cooperation agreements with NGOs and presentations at conferences. The Internet platform and the Facebook group are for free, whilst upcoming measures, such as Internet-based courses (e.g. on You Tube, Facebook), will be paid services. The courses will cover issues such as training for women, who must stay in bed for several months and the reduction of fear of a miscarriage through guided meditations.

Not all participants decided to create start-ups. Two of them went into employment – ironically, one is now working in the Public Employment Service of Lower Austria – and a few participants are still struggling with various business ideas. It is a bit early to assess the outcomes of the second group, but first results seem to indicate an even greater success. As a result, agency and ministry in late 2017 decided to prolong the pilot project until the end of 2018. A decision on a possible rollout of the pilot project over a larger region will be taken during the year 2018.

RISKS AND OPPORTUNITIES OF EXPERIMENTS

What are the first insights into the opportunities and risks associated with a policy experiment such as the "Entrepreneurship Lab"? Opportunities are most importantly that a policy experiment can serve as a proof-of-concept for an intervention idea, which is specifically relevant for programs dealing with disruptive technologies and encompassing impact on society. Thereby less money is lost, in case a small pilot programme fails to reach its set targets. There may also be a larger likelihood of admitting that a programme failed - compared with a larger programme, where more money and stakeholder interests are involved and the likelihood of admitting the failure diminishes. The admittance of failure is of key importance as it is the basis for policy-oriented learning (Sabatier 1999, Biegelbauer 2013).

At least as important is the argument that if the pilot succeeds, the scaled-up version of the programme can already start from a solid knowledge base regarding strengths and weaknesses of the general approach as well as on the specific mechanisms of the programme, thus reducing the risk of failure significantly.

A potential risk is that policy experiments have the potential to contribute to policy heterogeneity and fragmentation of measures. Since experiments are - by definition - subject to sectoral, spatial and/or temporal limitations, they may also become a cause for concomitant disparities of sectoral and spatial nature. An example is Austrian education policy in the 1970s and 1980s, when the political blockade due to ideological differences between Conservatives and Social Democrats led to many school trials, which can be interpreted as pilot projects. The Social Democrats tried to overcome the political impasse with the Conservatives, who did not want to implement a number of reform efforts. Since many of these trials were renewed time and again, they in fact were not tem-

porally limited and led to a highly fragmented policy field, ripe with many different approaches.

Moreover, in case of failure, somebody has to stand up for the costs and carry them. In the case of higher visibility, e.g. due to political debates, politicians might not be up to take such a challenge. Risk averse behaviour and short-term thinking, moreover, is also known in most other organizations, as for example in the civil service.

Somewhat connected is the issue of the autonomy of researchers who monitor and evaluate the experiment. In a setting where real money and actors are involved, there is also a web of interests, which may or may not be easily visible. Researchers should be aware of the roles and interests of different actors as stakeholders, who may want to utilize researchers and the results of their work to further their own interests.

Summing up, one may conclude that experiments are a possible answer to rapidly changing societal environments. This is especially the case when factors such as time, money and risk management are issues to be considered - which in democratic politics always is the case. Experiments can serve as a proof of concept, thus minimizing costs for policymakers and stakeholders, making experiments more attractive than keeping on with muddling through, a collective activity which in Austrian policy-making is well known under the term "Durchwursteln".

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