HIGHTECH FORUM Social innovations

A discussion paper from the High-Tech Forum*







Social innovation as an instrument to tackle the major challenges facing society

Climate change, urbanization, demographic change, digitalization and migration are the major forces now driving social upheaval. These major challenges are too complex to be countered by means of new technology alone. This will require both technological and social innovation.

Social innovations are new social practices – behavioral changes – and modes of organization that aim to find viable and sustainable solutions to the challenges confronting our society.¹ They are part of the innovation ecosystem and therefore form a necessary component of a vigorous innovation strategy. Social innovations are not necessarily rooted in technology. Frequently, "technological innovations go hand in hand with social innovations, and they condition one another."²

In particular, disruptive technological advances necessitate changes in social behavior. On the one hand, social innovations accompany and respond to new realities in the labor market, for example, or the workplace - for instance, when digital workflows create social inequalities, impact employee data privacy or necessitate new forms of division between work and recreation. On the other hand, advances in technology can provide new answers to social challenges - e.g., when local authorities set up their own social platforms to promote neighborhood assistance or gather data on environmental pollution. Social innovations are often triggered by civil society. Yet they may also be part of a political process or born of business practices. Social enterprises can be an important catalyst here. These are nonprofit ventures that use business methods to pursue social aims. In practice, social innovations are diverse and dynamic. Their success is not always measurable and depends very much on local circumstances. And they may not always be scalable. The aim must be to think of social innovations in terms of the problem they are intended to solve and to make use of new stakeholder forums to develop solutions that foster an open and active culture of innovation within society.

Select topics for social innovations, as discussed at two expert workshops in July and September 2019.

Mobility: Transportation faces major challenges. On the one hand, commuters are traveling longer distances to work, and the number of cars on the road has substantially increased in recent years. On the other, the need for climate action has placed a question mark behind individual transportation. Here, initiatives seek to bring about social innovation on the basis of behavioral change – e.g., by means of car-sharing schemes, better use of public transportation, an increase in cycling paths and the redesign of public spaces. On one level, new service providers, social enterprises and public initiatives respond to this need. On another, industry is taking key decisions in areas such as vehicle design, emissions and consumption – as is the public sector in areas such as public transportation and the design of roads and public spaces. A productive alliance between government, business and civil society can combine technological innovations (low-emission propulsion systems such as electric motors) with social innovations (healthy mobility).

Community development and social integration: Society is changing fast in the face of climate change, immigration, demographic change and digital transformation of key areas. Both urban and rural regions need new social services and revamped public spaces. Key approaches here include the development of neighborhood help schemes, multi-generational housing, access to regional and "natural" foods, and the creation of essential infrastructure for rural areas. At the same time, efforts are being made to provide public services in rural areas, with trials underway to test new and efficient forms of provision such as mobile offices for public services, mobile banking and health care. Local authorities can also develop new solutions by providing participatory platforms and finding better ways of engaging citizens – e.g., e-participation formats and citizen funds.

2

Defining a social innovation strategy

Social innovations have to be thought in terms of the specific challenges facing society. The missions of the High-Tech Strategy 2025 are a means of targeting specific resources at these challenges. Social innovation, along with technological innovation and the interaction between them, is a key factor to help accomplish these missions.^{3,4}

Develop a national strategy for social innovations: Social innovations play a key part in mission implementation. At present, social innovations are viewed as an issue that straddles various departments of government. Policymakers have yet to pursue an integrative strategy to coordinate interdepartmental action. A national strategy is therefore required. This will boost the development of social innovations, increase their effectiveness, provide orientation, enable actors to plan more effectively, and exploit synergies. This strategy will need to define clear responsibilities and operationalized targets. And it must trigger concrete, interdepartmental action. Overall responsibility for social innovations should therefore be placed with a central body such as a commissioner. This strategy must be formulated as a process that involves continuous monitoring of whether targets are being met and a corresponding modification of strategy. Some European countries have already developed a national strategy for this purpose, including Sweden. In the longer term, a strategy for social innovation should also help advance the high-tech strategy. A future research and innovation strategy ought to combine social and technological innovation more closely than in the past.

A national strategy for social innovation should have three priorities:

Priority 1 - Identify the need for social innovations: Social challenges must be defined in consultation with citizens. Local people and practitioners know best what they need. They understand local problems and may be able to show where solutions might start. A genuine attempt to involve citizens from the very outset helps build confidence in measures and expedites the development of projects and services. In order to identify local needs, digital forms of citizen participation such as online platforms should be in place along with local participatory forums such as town hall meetings, citizen panels and neighborhood advisory councils. In view of their joint responsibility for the greater good of the community, multipliers such as neighborhood managers, social partners, welfare associations, companies and business development agencies should also be involved in the development of new forms of civic dialog. In particular, the need to include the disadvantaged and the elderly in a rapidly changing world must be systematically addressed. In the Netherlands, for example, the KENNISLAND agency undertakes neighborhood work in order to investigate and improve the living conditions of senior citizens in need of care.

Priority 2 – Step up competitions to promote innovation:

A broad-based stakeholder dialog can help identify missions and execute them. Competitions to promote innovation are a good way of addressing missions that are to be pursued in public-private partnerships. These competitions are advertised both domestically and internationally with all the relevant information such as technical details and a description of the goal on the basis of the specific challenge. In line with the participatory spirit of social innovations, the application requirements are kept low in order to attract a broad spectrum of applicants. One reason why society, science and government still fail to take proper account of social innovation is that conventional methods of monitoring success are still preferred. The application process for such competitions should therefore focus on a specific problem but without prescribing a specific way of approaching it and without restricting the pool of applicants. Successful competitions bring new actors into play and generate a number of potential solutions, thereby boosting the impact of funding. With the launch of its Clusters 4 Future initiative, German federal government has taken an important step towards creating a more open environment for innovation and ideas. In addition, there is a need for competitions that specifically target social innovations. This in turn requires the development of different validation targets for the evaluation of social innovations. A lot of social innovations cannot be quantified in the same way as technological innovations. Not only do they have a different scalability, but the effects of social innovations are also harder to gauge, not least because they can only be measured to a certain degree.

Priority 3 - Fund the use of livings labs: Living labs play an important role when putting ideas for social innovations into practice. They can help test regulations, practices, technologies and participatory forums in a flexible and creative way. And they can be used to develop new forms of regulation that involve the participation of civil society. This requires effective dialog between civil society, innovators and government, and a continuous modification of the framework conditions, followed by renewed testing. Such a process demands mutual trust, first and foremost, and a degree of flexibility on the part of policymakers along with a genuine willingness to adapt. Social innovations are also about the relationship between the state and its citizens. To identify any need for further action, the work of these living labs must also be flanked by accompanying research and ongoing evaluation.^{5,6} Switzerland's Staatslabor and Denmark's MindLab are examples of similar initiatives in other countries.7

3

Strengthening social enterprises as drivers of social innovation

Companies are key actors in the effort to tackle the challenges facing society. Social enterprises can be a key source of innovation here. In their use of entrepreneurial methods to pursue common causes, social enterprises are proof that the public interest and commercial gain need not be mutually exclusive. These enterprises are often active in the areas of education, local integration, health and urban development.

Perceive social enterprises as actors: Germany is already home to a lot of social enterprises. There are as many as 70,000 or even 108,000, depending on how the term is defined.^{8,9} The key criterion here is that a company should focus on the common good rather than it enjoys nonprofit status under tax law. The definition employed by the European Commission also imposes tight constraints on the use of profits.¹⁰ As the imprecision of the definition shows, this group of actors has yet to be sufficiently researched and understood.

Recognize social enterprises as innovators: Social enterprises are highly innovative. Recent studies indicate that a third of these companies transform new ideas into market innovations that did not previously exist. Only one in nine (11 percent) of other start-ups accomplish this.¹¹ Social enterprises are therefore an important source of innovation, even for established actors in public administration. Despite this enormous potential, social entrepreneurship does not enjoy

the day-to-day support it needs. Indeed, social enterprises deserve greater recognition. Alongside the creation of an advisory support system, they should also be provided with increased and sustained funding to improve their long-term viability. In particular, this should include funding for startups during their growth phase.¹²

Forge alliances with (social) enterprises: Given their use of entrepreneurial means to tackle social challenges, and given their broad and diverse networks, these enterprises should be an integral part of a national strategy for social innovation. Here, the aim should also be to encourage collaboration between established social service providers, welfare associations and social enterprises, with a view to promoting productive cooperation between old and new actors in business enterprises, municipalities, associations and civil society. Ideally, this will result in the joint development of new social practices.

4

Targeted support for the innovation ecosystem

The public sector has a wide range of instruments at its disposal for controlling and strengthening the innovation ecosystem. Many social innovations arise as a result of involvement and competition with public or social services. In order to provide the best support for social innovations and to make most use of them, public administration should be more open to – and also adopt – innovative practices and seek to collaborate with drivers of social innovation.

Use public procurement to promote social innovations:

Public procurement amounts to an annual budget of over 300 billion euros. This offers huge potential for promoting social innovations. A growth of awareness of – and openness to – social innovations on the part of public administration would bring about a shift in the role of the public sector from enabler to consumer of social innovations. At present, social enterprises do not compete for public contracts nearly enough. This means that much of the potential in public procurement remains untapped. The Competence Center for Innovative Procurement should prioritize this item and review the procurement practices for products and services accordingly.¹³

Expand existing programs to encompass social innovations:

Apart from a few pilot projects, the current system of public funding is geared mainly towards technological innovations and requires the definition of quantitative validation targets in its application procedures. Social innovations do not lend themselves to the same sort of quantitative evaluation as technological innovations. This requires the development of suitable indicators and methods. First, however, one must determine how to measure public benefit. One option is to evaluate the contribution made by such innovations to meeting the UN Sustainable Development Goals (SDGs), for example, or reducing CO₂ emissions. In general, there needs to be more research to identify suitable indicators for measuring success. Specifically, validation targets should be redefined in order to take better account of the nature of social innovations. In addition, the criteria for the receipt of public funding should be more open and more accessible to other actors. In instances where this has not yet been fully implemented, existing programs such as the ERP StartGeld start-up loan, the EXIST business start-up grant, the High-Tech start-up fund and the INVEST grant should be made available to social enterprises and social innovations, and adapted to their requirements and unique circumstances. Any increase in financial and staffing capacity must be commensurate with the number of eligible applicants and the magnitude of the challenge that is being addressed. The personnel tasked to manage these programs must also be provided with specific decision-making guidance, assessment criteria, definitions and training so as to enable them to assess social innovations.

Examine new sources of funding for social innovations:

Other countries are now testing or have already adopted other models in addition to available funding instruments. One such instrument are social impact bonds. The return on these investments is also based on social and ecological criteria. Such bonds help raise additional capital for social innovations. They offer potential investors a sustainable and socially responsible form of investment. Another potential source of financing are dormant accounts.¹⁴ These assets could be transferred to a state fund and their proceeds used to promote social innovations, much like a current scheme in the UK.¹⁵

Create hubs and an advisory support system: Nationwide contact points should be set up for people who have ideas to share. This will help build up expertise in social innovation, establish an advisory support system and provide efficient project management. Other European countries have already established innovation agencies for this purpose e.g., NESTA in the UK and VINNOVA in Sweden.^{16, 17} These agencies manage their own funding programs, tailoring them to fit current needs – e.g., migration and integration. In addition, large municipal authorities have set up agencies of their own. These engage in various forms of citizen dialog in order to develop solutions to local problems. Amsterdam Smart City is one example of this. At the same time, it is important to remember that social innovations are highly dependent on local circumstances. This is why schemes to promote and introduce social innovations should always factor in the local situation. The establishment of centers responsible for the introduction of social innovations can also be used to create a permanent advisory support system that can take account of local circumstances and hold additional sources of funding in reserve – much in the same way as the Regional Hubs for Sustainability Strategies (RENN).¹⁸ In addition, innovation scouts - either as part of the local authority or on behalf of it - could be used to observe trends, identify needs and bring together the relevant actors. Local authorities should train employees for this purpose and raise their awareness for the potential of social innovations. Equally, schools of public administration should expand their training programs accordingly. In addition, the scope of state innovation vouchers should be expanded to include social innovators and thereby provide this sector with extra financial support. In general, public and private innovation hubs should receive additional support and funding. It is here that people can meet across disciplinary boundaries, share ideas and use methods such as design thinking to develop joint solutions. This may also include existing forms of support, with the scope of such instruments extended to encompass social innovations. Such options to provide advisory support and networking might be modeled on the 12 digital hubs that German federal government has created to promote digital innovation. For this reason, it is recommended that such funding be made available to other social innovations and that support for impact hubs, which are already in place, be increased. As other countries have already demonstrated - in projects such as ShareLab Scotland - this type of center can function to good effect.¹⁹

Annex

References

- 1 Federal German Government (2018): Forschung und Innovation für die Menschen. Die Hightech-Strategie 2025, p. 11.
- 2 High-Tech Forum (2017): Gemeinsam besser. Nachhaltige Wertschöpfung, Wohlstand und Lebensqualität im digitalen Zeitalter, p. 3. At: https://www.stifterverband.org/hightech-forum | Accessed: 28.11.2019.
- 3 Cf. Mazzucato, M. (2019): Governing Missions in the European Union. Brussels: European Commission.
- 4 Federal German Government (2018): Forschung und Innovation für die Menschen. Die Hightech-Strategie 2025, p. 4.
- 5 The Prize in Economic Sciences (2019): NobelPrize.org. Nobel Media AB 2019. At: www.nobelprize.org/prizes/economic-sciences/2019/summary | Accessed: 28.11.2019.
- 6 Duflo, E. (2019): Innovations for Poverty Action. At: www.poverty-action.org/people/esther-duflo | Accessed: 28.11.2019.
- 7 Staatslabor. At: www.staatslabor.ch/de | Accessed: 28.11.2019.
- 8 Federal Ministry for Economic Affairs and Energy (2016): Herausforderungen bei der Gründung und Skalierung von Sozialunternehmen. Welche Rahmenbedingungen benötigen Social Entrepeneurs? At: www.bmwi.de/Redaktion/DE/Downloads/H/herausforderungenbei-der-gruendung-und-skalierung-von-sozialunternehmenzusammenfassung.html | Accessed: 28.11.2019.
- 9 Metzger, G. (2019): KfW Research. Social Entrepeneurs in Deutschland: Raus aus der Nische – 154.000 "junge" Sozialunternehmer im Jahr 2017. No. 238, 06.01.2019, p. 2.
- 10 Göler von Ravensburg, N., Krlev, G., Mildenberger, G. (2018): Social enterprises and their ecosystems in Europe. Updated country report: Germany. Luxembourg: Publications Office of the European Union, p. 32. At: https://ec.europa.eu/social/BlobServlet?langId=en&docId=20563& | Accessed: 28.11.2019.
- Metzger, G. (2019): KfW Research. Social Entrepeneurs in Deutschland: Raus aus der Nische – 154.000 "junge" Sozialunternehmer im Jahr 2017. No. 238, 06.01.2019, p. 3.
- 12 High-Tech Forum (2019): Wege zum 3,5-Prozent-Ziel. At: www.hightech-forum.de/wp-content/uploads/2019/08/HTF_ Impulspapier_Wege_zum_3-5-Ziel.pdf | Accessed: 28.11.2019.
- 13 Federal Ministry for Economic Affairs and Energy. Das Kompetenzzentrum innovative Beschaffung. At: www.koinno-bmwi.de | Accessed: 28.11.2019.
- 14 SEND (2019): Nachrichtenlose Assets. Reformvorschlag. At: https://www.send-ev.de/2019-10-02_aufbau-eines-social-impactfonds-%C3%BCber-nachrichtenlose-verm%C3%B6genswerte/ | Accessed: 28.11.2019.
- 15 Big Lottery Fund. At: https://www.tnlcommunityfund.org.uk/ | Accessed: 28.11.2019.
- 16 NESTA. At: www.nesta.org.uk | Accessed: 28.11.2019.
- 17 VINNOVA. At: www.vinnova.se/en | Accessed: 28.11.2019.
- 18 Regionale Netzstellen Nachhaltigkeitsstrategien. At: https://www.renn-netzwerk.de | Accessed: 28.11.2019.
- 19 ShareLab Scotland. At: https://www.nesta.org.uk/project/sharelabscotland/ | Accessed: 28.11.2019.

About this discussion paper

The committee examined and commented on this discussion paper at a meeting of the High-Tech Forum on November 20, 2019. It does not represent a unanimous decision of the committee.

The positions presented in this paper do not necessarily reflect the views of the German federal government.

This discussion paper was produced by the High-Tech Forum team appointed to work on the topic of "Social innovation." Its purpose is to advise German federal government on the implementation of the High-Tech Strategy 2025. The team comprises the following members: Prof. Anke Hassel (spokeswoman), Prof. Manfred Prenzel, Julia Römer, Prof. Birgitta Wolff and Prof. Christiane Woopen.

The paper is based on contributions to a workshop entitled "Social innovations in the application field of mobility" (Berlin, July 8, 2019) and a policy learning seminar entitled "Social innovation in the field of social integration" (Berlin, September 25, 2019), each attended by around 30 experts from science, industry and civil society; and on consultation provided by members of the High-Tech Forum.

Acknowledgments and participating organizations

The members of the High-Tech Forum would like to thank the following organizations for their input to the workshops:

Social innovations in the application field of mobility (Berlin, July 8, 2019):

Allgemeiner Deutscher Fahrradclub e. V., Bundesverband CarSharing e. V., Bundesverband der Energie- und Wasserwirtschaft e. V., German Federal Ministry of Education and Research, CleverShuttle, Companion2Go GbR, Coolar UG, Deutsche Bahn AG, Deutsches Zentrum für Luft- und Raumfahrt e. V. (DLR), e.2Go GmbH, Fraunhofer Center for Responsible Research and Innovation, Fraunhofer IAO, Fraunhofer IESE, Hertie School Berlin, IG Metall, Institute for Advanced Studies e. V., Institut Arbeit und Technik, Institut für sozialökologische Forschung, Institut für Zukunftsstudien und Technologiebewertung gemeinnützige GmbH, Goethe University Frankfurt, Katalyse Institut e. V., Social Entrepreneurship Netzwerk e. V., TU Berlin – Institut für Wirtschaft und Stadt, TU Berlin - Institut für Land- und Seeverkehr, TU Dortmund University - Sozialforschungsstelle Dortmund, University of Cologne - Cologne Center for Ethics, Rights, Economics, and Social Sciences of Health, VDI/ VDE Innovation und Technik GmbH, Verbraucherzentrale Bundesverband e. V., Verkehrsclub Deutschland e. V., WZB Research Group Science Policy Studies.

Social innovation in the field of social integration (Berlin, September 25, 2019):

Alexander von Humboldt Institute for Internet and Society, Amsterdam Smart City, Austrian Institute of Technology, Bit Lab Cultural, German Federal Ministry of Education and Research, German Federal Ministry for Family Affairs, Senior Citizens, Women and Youth, German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, German Federal Ministry of Transport and Digital Infrastructure, German Federal Ministry for Economic Affairs and

Social innovations

Energy, Goethe University Frankfurt, Hertie School Berlin, Lucerne University of Applied Sciences and Arts, Social Good Accelerator, Kennisland, Politics for Tomorrow, Social-Bee gGmbH, University of Cologne – Cologne Center for Ethics, Rights, Economics, and Social Sciences of Health, Waag, Zentrum für Soziale Innovation GmbH, Zentrum für Sozialforschung Halle e. V.

About the High-Tech Forum

The members of the High-Tech Forum were appointed by the German Federal Ministry of Education and Research in 2019. They are to serve for the duration of the current legislative period. Members serve on an honorary basis and alongside their professional capacity. The secretariat of the High-Tech Forum supports the chairpersons and members of the High-Tech Forum in their committee work and is financed by the Federal Ministry of Education and Research. The secretariat is located at the Fraunhofer-Gesellschaft.

Secretariat of the High-Tech Forum

Fraunhofer-Forum Berlin Anna-Louisa-Karsch-Strasse 2, 10178 Berlin, Germany www.hightech-forum.de

Tobias Schaaf

Project manager schaaf@hightech-forum.de Tel. +49 30 688 3759-1615

Contact | Press

Kathrin Kießling Press and public relations kiessling@hightech-forum.de Tel. +49 30 688 3759-1610

Date of going to press

November 28, 2019

SPONSORED BY THE



Federal Ministry