



**SMART  
CITY**  
STAVANGER

**FROM IDEA  
TO  
COMMERCIALISATION**

How to facilitate and stimulate innovation among residents  
in the local community?

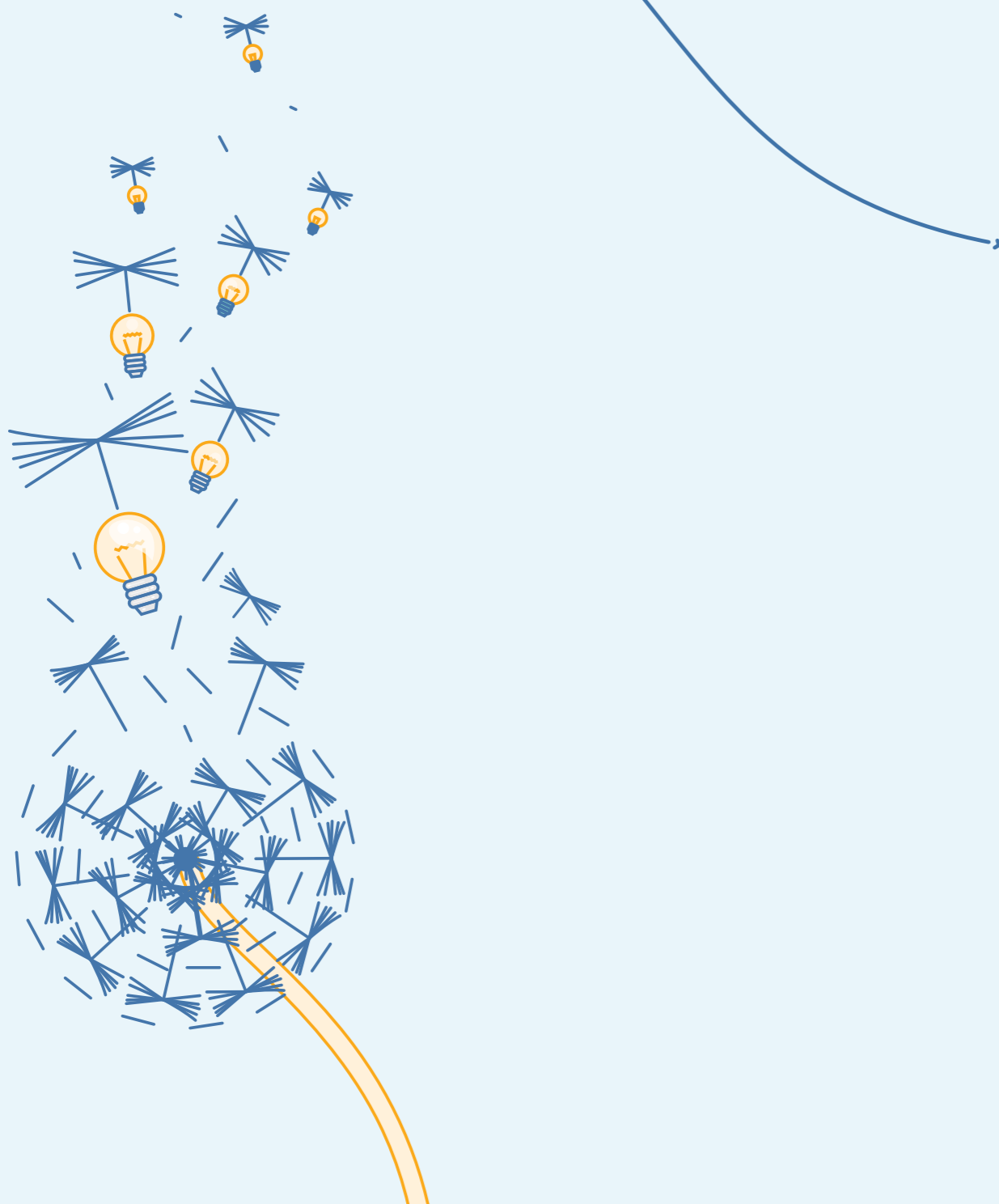


Stavanger  
kommune

NORCE

NORDIC  
EDGE

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## SUMMARY

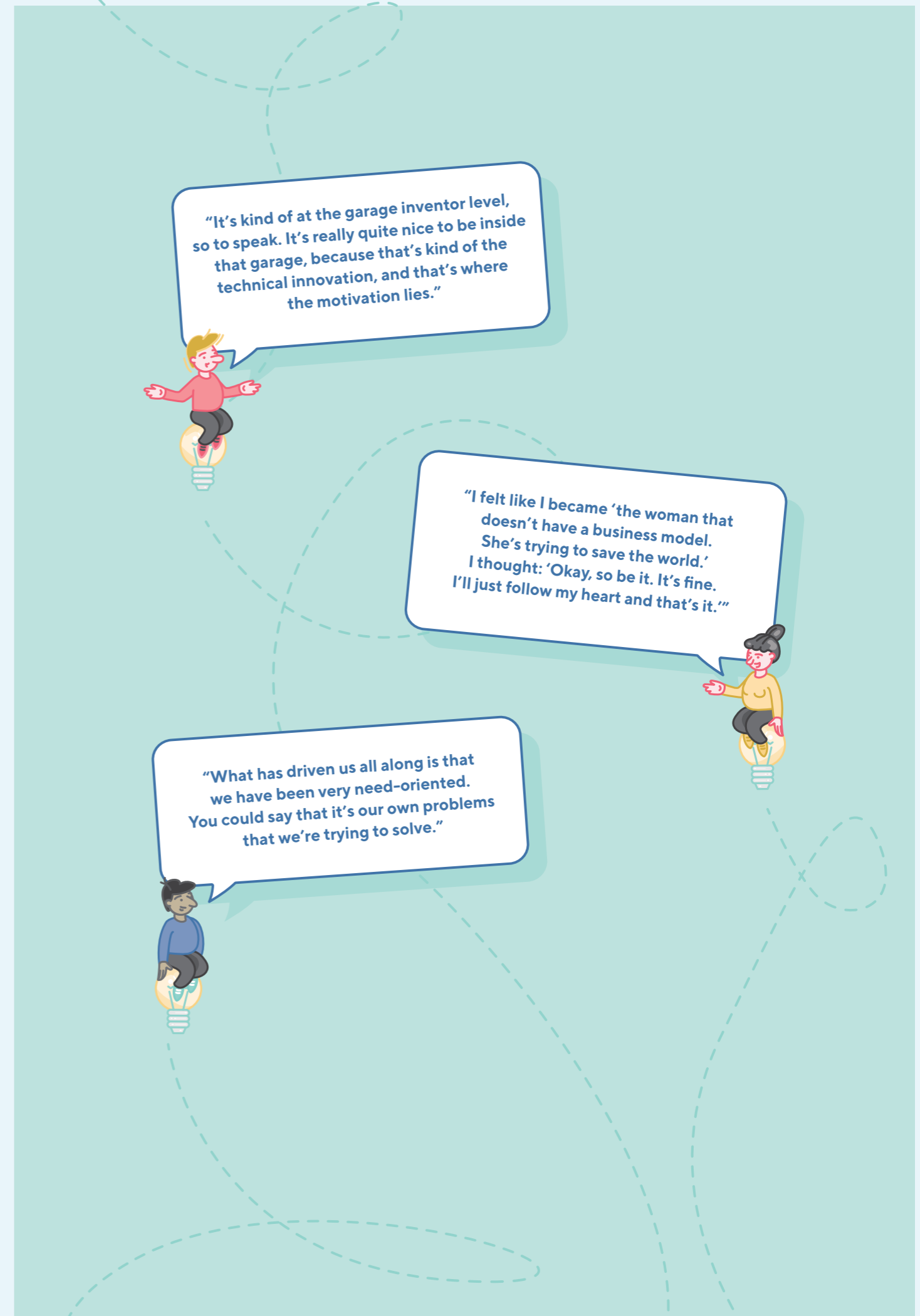
There is a growing need for innovation and renewal in the Norwegian business and public sector. Research has shown that around 11.5% of Norwegian residents spend their own money and leisure time on developing new products and services.

This leads to an enormous number of ideas, concepts and prototypes that have the potential to become innovations. The report is based on research findings and highlights the driving forces, needs and barriers that innovative citizens possess or encounter in their development work. The report also highlights factors that will increase the chances that such citizen innovations will lead to commercialisation, thereby contributing to more innovation under private and public auspices.

The report highlights the following four key points:

- 1 There is a *considerable potential* and a *great social resource* associated with *mobilising citizens* to solve societal problems and contribute with *innovations*. This potential is currently not harnessed and realized well enough.
- 2 Citizens who innovate, do not feel *completely at home* in many of the schemes currently offered by municipalities or public funding agencies which are aimed more at established companies or entrepreneurs, emphasising rapid growth and economic progress. Many citizen innovators are driven by personal or non-profit causes. There should be more dialogue with citizen innovators in the design of funding schemes.
- 3 Citizen innovators experience a *jungle of fragmented information* online that is difficult to navigate. A *shared digital portal* should be developed, aimed at citizen innovators, where they can access quick information, knowledge, advice, related to where to get assistance and support, and how to take their ideas further.
- 4 *Specially adapted arenas and ecosystems* should be developed, where citizen innovators are met and encouraged, where they experience a sense of security, enabling them to explore and develop further. These include meeting arenas, ways of cooperating, testing arenas, courses, simple and quick funding schemes, access to mentors and intermediaries in relation to the business sector, municipalities and investors. As part of this ecosystem, municipalities should develop purchasing schemes to better meet the needs of citizen innovators. An inter-municipal system should also be created where the solutions from citizen innovators are disseminated and piloted across the municipalities, to ensure a better utilisation of the innovations.

The development of both a digital portal and separate arenas and ecosystems for citizen innovators should involve municipalities, public funding agencies, entrepreneurial hubs and citizens. In order to succeed in realising these concepts, there is initially a need for public funding agencies and municipalities to recognise the value of innovation work among residents to a greater extent. They need to have a desire to organize and facilitate this in a phase prior to possible business establishment. It also requires viewing value creation in a larger context than merely growth and profits. Value creation can also lead to savings, a vibrant local community and enhanced quality of life.



# BACKGROUND

## CITIZEN INNOVATION IS AN UNTAPPED RESOURCE

The need for innovation and renewal in the Norwegian business and public sector is growing<sup>1,2</sup>. In the face of major societal challenges such as climate change, demographic changes and social exclusion, the need to develop new solutions increases. The traditional view of innovation is that innovation mainly takes place in businesses and/or public enterprises. However, research shows that consumers and households are also innovating.<sup>3</sup>

As much as 11.5% of Norwegian residents spend their own money and leisure time on developing new products and services. This amounts to approx. 30,000 people in the Stavanger region alone.<sup>4</sup> It adds to a large number of ideas, concepts and prototypes that have the potential to become innovations.

Several measures have been implemented to increase the innovation capacity of the Norwegian business sector, both through funding for entrepreneurs and for renewal and restructuring of established businesses. The public sector is also expected to place greater emphasis on innovation. These measures have a significant shortcoming in common; they disregard the innovation activities that take place in households. Consumers are primarily considered passive users.<sup>5</sup> Therefore, it is high time to put the spotlight on citizen innovation. Although many of the innovations are not scalable, highlighting them could improve quality of life for the residents involved. It shows citizen involvement in practice. However, when these innovations are not harnessed, many ideas that could be scaled up, but never enter the entrepreneurial phase, wither and are lost.

Citizen innovations can be both radical and disruptive, entrepreneurial and creative or small step-based through practical activity and learning. These are innovations carried out during leisure time, without payment. Work imposed by employers is excluded. Residents are happy to develop products and services with features that meet their needs and that they often discover before businesses do. They act as pioneers, following their own interests and priorities, and they are self-motivated.<sup>6</sup>

They are not bound by constraints that exist in existing organisations, such as formal strategies and established mindsets around existing markets. Citizens can contribute to increasing the innovation capacity of businesses and municipalities by developing what is referred to as a peripheral vision.<sup>7</sup>

At the same time, households rarely have the resources needed to produce, market or distribute their innovations. Cooperation with businesses or public enterprises is therefore a natural alternative, and the opportunities for synergies are therefore great. Citizen innovations can be incorporated into existing companies and organisations, in the form of collaborations or acquisitions, and form the basis for new commercial products and services. Businesses and municipalities can also offer information, guidance, expertise, and testing arenas to support citizens in the cooperation process or partnerships.<sup>8</sup>



## GOAL OF THE PROJECT

This report is part of the research project “Smart citizens in smart cities”<sup>9</sup>, where the goal is to increase the innovative power of the population, business and the public sector by elaborating and adopting innovations from citizens. The project will strengthen Stavanger Municipality’s focus on citizen involvement and stimulate increased innovation. The report is based on findings uncovered through a series of interviews and group dialogues with citizens who innovate, hereinafter referred to as citizen innovators. The report is also based on findings from a co-creation conference with *citizen innovators* and employees from various public funding agencies and municipalities.

In the report, we look at the driving forces and factors that foster citizen innovation, as well as barriers that foster the step to commercialization of the solutions. Based on the findings and input from the citizen innovators, we also propose measures that facilitate more innovators to take the step towards commercialisation, thereby contributing to more innovation under both private and public auspices.

**A citizen innovator is a private individual who**

- > has identified an unresolved need or unresolved challenge
- > has developed an idea and a proposal to solve the challenge
- > uses their own leisure time and resources for their work



Norwegian parliamentary announcement White Paper30 (2019–2020). An innovative public sector - culture, management, competence.  
<sup>1</sup> Norwegian Ministry of Trade, Industry and Fisheries (2015). *Good ideas - the workplace of the future*. The Norwegian Government’s entrepreneurial plan. [https://www.regjeringen.no/contentassets/05f1305cb2a94a379ff48c2f2c60d688/grunderplan\\_2015.pdf](https://www.regjeringen.no/contentassets/05f1305cb2a94a379ff48c2f2c60d688/grunderplan_2015.pdf)

<sup>2</sup> Von Hippel, E. (2016). *Free innovation*. MIT Press.

<sup>3</sup> Gjelsvik, M. and Einarsen, K. (2018). Innovation in households. *Magma* 2018(7), 70–78. (In Norwegian)

<sup>4</sup> Von Hippel, E. et al. (2012). Comparing business and household sector innovation in consumer products: findings from a representative study in the United Kingdom. *Management Science* 58(9), 1669–1681.

<sup>5</sup> Von Hippel (2016).

<sup>6</sup> Day, G. S. and Schoemaker, P. J. H. (2006). *Peripheral Vision: Detecting the Weak Signals That Will Make or Break Your Company*. Harvard Business School Press.

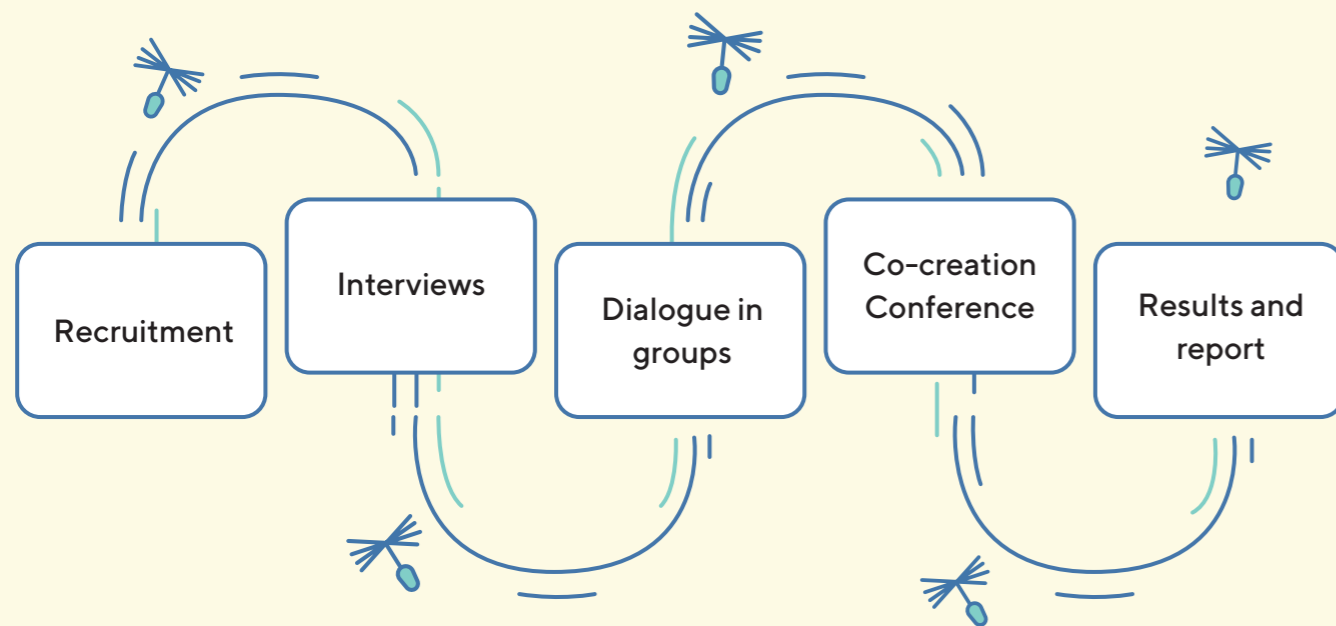
<sup>7</sup> Gambardella, A. et al. (2016). The user innovation paradigm: impacts on markets and welfare. *Management Science* 63(5), 1450–1468.

<sup>8,9</sup> “Smart Citizens in Smart Cities” is a regional research project by Stavanger Municipality, NORCE and Nordic Edge.

## PROCESS AND METHODOLOGY

Stavanger Municipality (Smart City Department), NORCE and Nordic Edge were granted regional research funding to explore citizen innovations in the Stavanger region. A number of citizen innovators were identified, and 13 were recruited and included as respondents in the project. The products and services developed by these innovators were in areas such as digital service innovation, digital technology, mechanical solutions and smart technology related to temperature and energy, health products, music and sports equipment. As part of the insight work, NORCE interviewed all 13 citizen innovators. Based on findings from these semi-structured interviews, they organised further group dialogues with the citizen innovators. Both the interviews and the group dialogues led to several findings where, among other things, driving forces and barriers to the innovation process of the citizen innovators were identified.<sup>10</sup>

Based on these findings, statements were made for voting at a co-creation conference, where the citizen innovators contributed. There, statements and opinions were rejected or confirmed through digital voting. The innovators also contributed with new suggestions during the conference, both alone and together with actors from public funding agencies, businesses and the municipality. The findings we present in this report derive from the interviews, group dialogues, votes and input from the conference. The report was validated finally by two citizen innovators who were part of the project.



Process of the project

<sup>10</sup> Fresvik, A. et al (2021). Smart citizens in smart cities. Interim report 73-2021. NORCE. (In Norwegian)

## WHAT MOTIVATES:

Contributing to **societal problem solutions** and creating a **better future**

Being able to create **new jobs**

Using **skills** and abilities to develop something **valuable**

Developing a **concept** and seeing it **take shape**

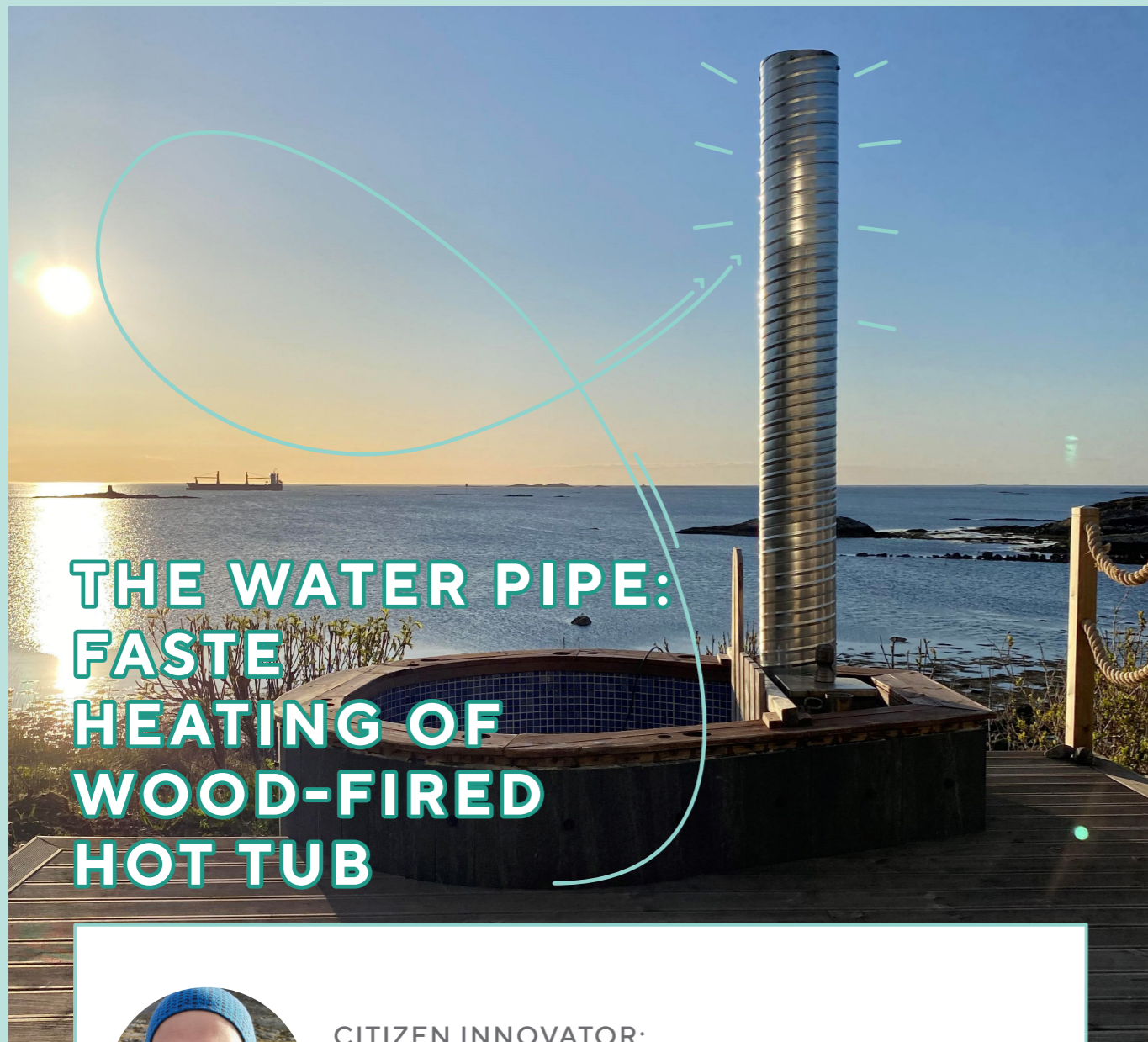
Being met with **respect and curiosity**, even if they are small actors

Finding **partners** who believe and invest in the project

Having easy **access** to useful **knowledge and guidance** that allows them to progress

Having good **arenas** for sharing **competence** with others

Spending as little time as possible on administration and **as much time as possible** on the innovation work



## THE WATER PIPE: FASTE HEATING OF WOOD-FIRED HOT TUB



CITIZEN INNOVATOR:  
**KRISTIAN HOFF**

The water pipe reduces the time it takes to heat the water in a wood-fired hot tub. Normally this takes five to six hours, but we reduce it to two to three hours.

The concept is based on utilising the entire surface of the furnace, including the one that is above water, using a circulation solution. Cold water from the bottom of the tub is pumped up through a pipe to the top of the chimney, and then flows down the outside of the chimney. As this is very hot, the water will heat up before it returns to the tub. I developed the concept with my father, and we have such a hot tub at the cabin.

### WHAT IS THE MOTIVATION AND DRIVING FORCE FOR WORKING ON INNOVATION?

It is nice to solve big and small everyday challenges through creative problem solving. The concept springs from an annoyance that it takes so long to heat a hot tub. The primary motivation along the way was the process itself and seeing that the solution actually worked the way we intended. I don't think it's necessarily a goal that the product, the innovation itself, should always turn into something commercial. On the other hand, we made an attempt for this specific product. We patented it but ended quickly because the market is very small and the eye of the needle is narrow, to get through to distributors.

### WHAT HAVE BEEN THE BIGGEST CHALLENGES IN THE DEVELOPMENT WORK?

The biggest challenges involved figuring out how to take a product that is built specifically in terms of functionality per se and adapt it to other aspects such as manufacturing, shipping, and distribution. We never solved these challenges.

### DO YOU HAVE A PROPOSAL FOR MEASURES THAT CAN ASSIST IN THE PROCESS, FROM PUBLIC FUNDING AGENCIES AND INSTRUMENTS OR MUNICIPALITIES?

Personally, I think hubs for exchanges of ideas, sparring and networking are of greatest use very early in the process. Citizen innovators need to meet like-minded people and others with complementary expertise. We need to be excited and inspired.

An early emphasis on financing, pitching and growth quickly makes the work too serious and often implies that the concept "must" be developed into something bigger.

### DO YOU HAVE ADVICE ABOUT THE PROCESS FOR OTHER PEOPLE WITH IDEAS FOR POSSIBLE INNOVATION?

Just get started! The process is enjoyable and does not have to cost much. Never let the idea that entrepreneurship is difficult stop a creative process. At worst, you'll enjoy yourself during the process. If the idea is good enough, but you don't have the desire or motivation to take it further, try to find others with more experience.

*It is nice to solve big and small everyday challenges through creative problem solving.*

*- Kristian Hoff*



# DRIVING FORCES AND BARRIERS

Citizen innovators have different driving forces and motivations for innovating and they encounter different barriers in the innovation process. These driving forces and barriers affect innovation work and are therefore important to identify. The main findings are presented below.<sup>11</sup>

## WORKING WITH IDEAS IS FUN AND MEANINGFUL

Citizen innovators state that it is fun to innovate and come up with ideas. The idea and development work is perceived as meaningful in itself. Many are also motivated by the idea that they can create new jobs and create a company that can provide them a living. They say that they themselves have identified lacks with existing products and services and are innovating to find solutions to these shortcomings, so that both they and other users can, among other things, enjoy a better user experience. They convey that they want to solve a need that they or their local community experiences, and they want to help solve a societal problem and make the future better. Most people also find it motivating to be able to use their abilities and skills for something more than traditional work developing something valuable based on these abilities.

## DEVELOPING IDEAS IS JUST AS IMPORTANT AS COMMERCIALISATION

Many of the citizen innovators do not have an unequivocal desire to commercialise their idea, at least not necessarily in the form it is commonly envisaged. They are not willing to sacrifice everything else to succeed in commercially. For some, developing the idea is just as important as making money from it. Moreover, citizen engagement is

not always well connected to the idea of commercialisation. It is challenging to put a price on your solution when you have an idealistic driving force rather than commercial interests. Furthermore, it is not necessarily the developers of the concept who can or will lift the concept further to commercialisation. Citizen innovators say that it is also important for the concept to be safeguarded in a potential commercialisation process. The balancing act between idealistic thinking and commercial thinking can be challenging.

## MANY PEOPLE ARE RELUCTANT TO TAKE TOO GREAT A RISK AND TO "WORK AROUND THE CLOCK"

There are many citizen innovators who value safety and leisure highly and do not want to bet everything and take too great a risk. They feel resistant to the idea of "working around the clock" on an innovation. Many convey that it can feel demanding to have sole responsibility and have to cover many roles in an innovation process. Many also see challenges in turning a hobby into a job, because some of the joy may disappear in the seriousness and demand to earn money. Many also feel uncertain about how much financial risk they want to take, and how such risk can affect everyday finances. The willingness to take risks must be weighed against the chances of success, and many are aware that the entrepreneurial journey is not effortless.

<sup>11</sup> It is important to emphasise that citizen innovators do not represent a homogeneous group. They have different experiences and do not always have the same perceptions. The findings we present nevertheless describe the main features that the majority of citizen innovators support. However, individual statements and quotes should not be interpreted as common perceptions in the group.



Table 1: Assessment of motivation and driving force for innovation work among citizen innovators (voting via Mentimeter, from the Co-creation Conference, average from 12 responses)

### IT IS DIFFICULT TO NAVIGATE IN THE "PUBLIC FUNDING JUNGLE"

Many citizen innovators find that they lack a safe enough framework to take the idea further. These frameworks concern both access to expertise and finances. They know too little about how to obtain financing, and they lack access to capital. Many also find the public funding agencies and instruments too cumbersome and confusing to manoeuvre, which is demotivating for starting the entrepreneurial journey. Many have a fear of getting stuck by the document requirements of the public funding agencies. Some of them point out that those who work in the public funding agencies seem to lack personal experience with entrepreneurial work and therefore do not have the in-depth understanding of the challenges citizen innovators face and what they need. It is easier to make demands than to respond

to these demands. Several point out that the bureaucracy should be reduced to a minimum, where simple funding applications are offered at lower fees. Some funding schemes are too narrow and function as silos that solve the same challenges. There should be more dialogue with entrepreneurs in the design of funding schemes. Funding schemes could otherwise involve more than pure capital, such as sponsored consultancies and advice. Many citizen innovators want to spend as little time as possible on administration, and most of their time on actual development of new solutions. Many people want the public funding agencies, such as Innovation Norway, to place greater emphasis on problem-solving objectives, rather than the purely economic and growth potential. This is especially true in areas such as social entrepreneurship, where new concepts add important societal values but have less emphasis on economic profit.



Table 2: Assessment of challenges in the innovation work of citizen innovators (voting via Mentimeter, from the co-creation conference, average from 12 responses)

### INNOVATORS ARE SEEKING MORE KNOWLEDGE AND GUIDANCE

Several citizen innovators highlight the need for more easily accessible knowledge and guidance, related to everything from finance, marketing, legal factors, team development to the innovation process. They often have several questions:

- › When to do things and in what order?
- › When and how do you attract new partners into the company, and how much of an ownership share should new partners receive?
- › How is the company valued?
- › What kind of seed funding is best to apply for first?
- › What can be demanded and expected from pilot enterprises?
- › How do you test the concept quickly and in the best possible way?
- › What is the best way to reach stakeholders and investors, and what do they ask for?
- › How to avoid using funds in a wrong way?

Employees in public funding agencies who have not experienced an innovation process on their own, may often have limited knowledge for contributing to a specific project or situation. There is a lot of information online, but it can be challenging to know what information you can trust. Each entrepreneurial project is unique, and there is therefore also a need for customised information and guidance. Citizen innovators desire more *practical assistance from the public funding agencies* to take the product or service to market, also in terms of marketing and sales. If you make too many wrong choices, this may halt progress, which in turn affects motivation and willingness to continue the effort.





### SALES AND NETWORKING ARE CHALLENGING FOR MANY

Several citizen innovators also explain that they are more concerned with the idea itself than with its packaging and marketing. There are several who refer to themselves as 'poor' or 'reluctant' sellers and find introductory sales to be difficult. They often lack training on introductory sales and do not feel confident enough in such situations. Several are also not very comfortable with networking in entrepreneurial environments, where you are expected to be very outgoing. The use of "right" language, tone and social interaction in the innovation environment may seem alienating to some, but not to all. Those who have become familiar with it have a different understanding and confidence in the use of language. Part of competence building to become an entrepreneur is to become good at presenting ideas and selling them; but there may be a lack of training access in this area. Citizen innovators must learn such pitching skills by trial and error, and not everyone is equally interested in taking the plunge.

### IT IS A SOURCE OF MOTIVATION TO BE MET WITH ENTHUSIASM AND TO BE TAKEN SERIOUSLY

Several citizen innovators state that it is motivating when their idea excites potential customers, investors and public funding agencies, and they see that it can be put to use. It is stimulating when they find partners who believe in the idea and who want to help develop it further. They find it equally demotivating if they are not treated with respect and are not taken seriously. Furthermore, they may lose some of their motivation when they encounter an industry comprised of heavyweight actors who have too much defining power and control. Even though citizen innovators are small and at an early stage of the innovation work, they can still be treated with respect. Showing respect is not the same as saying yes to their concept. It is far more motivating to get a pat on the back and a few pieces of advice along the way than to be flatly rejected.

### WHAT IS DIFFICULT:

Managing many **administrative tasks** in parallel with the development work

**Working alone a lot** and struggling to find the right partners

Taking greater **financial** and resource risks

Being perceived as insignificant and **not respected**

Entering into cumbersome and **resource-intensive interactions** with municipalities and the public funding agencies

Relating to a **one-sided emphasis on growth** and profits in the allocation of seed funding  
**Meeting the requirements** for seed funding early in the development process

**Knowing what the right steps are** to lift the innovation work further

Feeling a **lack of knowledge** about many **critical aspects** of the innovation work

Feeling **uncertain** about and **lacking experience** with introductory sales, pitching and networking

### MANY SEEK TO SHARE THE IDEA AND COLLABORATE ON IT

Most citizen innovators are seeking collaboration and are open to sharing ownership of the concept with others if they meet the right people. Many are also open to letting others influence the idea itself and are seeking external supporters who can drive the efforts and realisation forward. An important factor is to find key individuals and partners who can contribute towards commercialisation. Who is right for me and who will not be right for me? Who has a good reputation as a genuine investor? Who can complement my skills in a good manner? Most people are not afraid that others will steal the idea or parts of the idea. On the other hand, there are many who may be afraid that they will lose control of the development of the idea, where they are at the

mercy of demands from external partners. It is important for them to find out how they can maintain ownership and management control for as long as possible in a commercialisation phase. Citizen innovators desire more assistance in connecting with other companies, where they can play to each other's strengths, share and connect new competence and contribute to market access. They need arenas to find partners and potential employees. Some also see the need for arranged gatherings where they meet other citizen innovators, discussing opportunities and challenges relating to the innovation work. These are often people who are or have been in the same situation, and who can offer good advice about the process. They want to be able to learn also from those who have succeeded and hear about pitfalls in the development work from people who themselves have made some mistakes.



Table 3: Assessment related to collaboration in the innovation work of citizen innovators (voting via Mentimeter, from the co-creation conference, average from 12 responses)

### SOME ARE SEEKING AN ARENA FOR RAPID PROTOTYPING AND TESTING

Some citizen innovators are seeking easy access to an arena for rapid prototyping and testing of concepts or MVPs (Minimal Viable Product). They themselves lack both the competence and the natural arena for prototyping and testing. It is often only when concepts are materialised in the form of prototypes and tested by potential customers that they can determine whether the concepts have sufficient utility and market value. They desire easy access to test panels comprised of users corresponding to the user segment envisioned for their idea. If prototyping and testing were sponsored and well rigged, they would be able to quickly identify deficiencies and opportunities in their solutions.

### COOPERATION WITH THE PUBLIC SECTOR IS CHALLENGING

Several citizen innovators highlight that it can be difficult and challenging to establish cooperation with the public sector because their ideas may be perceived to be in competition with public sector projects.

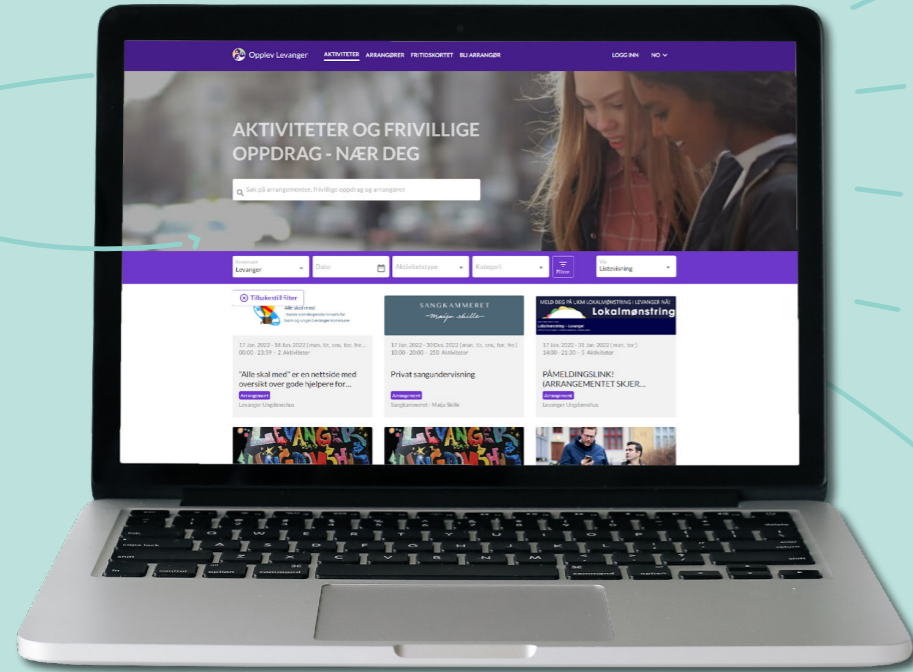
The public sector can also take on the role of innovator, and many find that the public sector may be afraid to collaborate with citizen innovators because they may have the same interests. The public sector may have cumbersome and lengthy processes with conservative organisational structures, which are not suitable for cooperating with small and vulnerable external actors. The sector may also lack the ability to understand and familiarise themselves with the perspectives of citizen innovators, who require security and sufficient income to be able to develop their concepts further into ready-made solutions. Furthermore, social innovations depend on political will and openness to private initiatives, something that citizen innovators often experience can be lacking in the public sector practice.

On the other hand, many want to become better acquainted with how the co-creation processes with small actors take place in the municipalities. They would like to have a better understanding

of the opportunities for connecting to existing projects or initiating new projects based on the ideas of citizen innovations. There is a lot of silent knowledge that is poorly communicated. Citizen innovators also want to get an overview of the municipal resources they can use.

In the discussion between citizen innovators, several highlighted that there is also an uneven power relationship between them and the public sector. The public sector has a lot of power and money. It is important to be met and taken seriously as a citizen with an idea that will contribute positively to the community.

“Everything in the public funding agencies is set up for everything to become huge. Unless you almost take over the world or become a giant, people in the system aren't interested. Everything has to be scaled up to the extreme.”



## DIGITAL COLLABORATION PLATFORM



**CITIZEN INNOVATOR:  
SIGRID PETERSSON NEDKVITNE**

Friskus.com is a modern digital collaboration platform for citizens, voluntary organisations and municipalities. In the platform, various services and activities from both the municipality and voluntary organisations are made available in the same place. Citizens learn about the opportunities where they live, and that makes it easier to meet other people. Information from, for example, the mayor, the scooter club and local associations is readily available. The platform is a safe space to motivate, coordinate, communicate and quality assure activity and participation.

### WHAT IS THE MOTIVATION AND DRIVING FORCE FOR WORKING ON INNOVATION?

There have been negative trends relating to loneliness, child poverty and social exclusion over the past 10 years. As a mother, child welfare educator and former professional in municipal health and welfare services, I am concerned about whether we can preserve our effective trusting society.

I want to be involved in influencing and improving the society our children will inherit, with a concrete solution. I believe that safe and sustainable communities are only created when people participate and contribute. I created Friskus because I believe it should be easy for everyone to belong in social communities, find arenas in which to practice new skills, meet friends with similar interests, contribute expertise and engagement and feel valuable in the local community.

### WHAT HAVE BEEN THE BIGGEST CHALLENGES IN THE DEVELOPMENT WORK?

The biggest problem is when innovation has occurred. Due to a lack of coordination, government ministries, directorates, county authorities, county governors and municipalities have allocated funds to solve problems that have already been solved elsewhere. There is no apparatus that disseminates the project results and knowledge nationally and learns from the project funds they have used. We have received many millions in government funds. Now I have to knock on all of the doors in the public sector to share the knowledge and tell them that we have assessed the problem and developed a solution.

### DO YOU HAVE A PROPOSAL FOR MEASURES FROM PUBLIC FUNDING AGENCIES OR MUNICIPALITIES THAT CAN ASSIST IN THE PROCESS?

I would have changed the regulations for public procurement and increased the minimum

amount of less than NOK 100,000 for procurement without tenders. As it stands, innovators are 'forced' to work for free for the public sector because innovators cannot wait for a public procurement process that often takes two years.

Second, the public sector needs to coordinate and systemise the actual allocation of project funding across 'silos'. Project results must be disseminated so that different municipalities do not initiate parallel innovation projects on problems for which solutions have been developed, and for which entrepreneurs and the public sector have previously spent a lot of time and resources. Instead, the municipalities should emphasise service innovation and citizen participation in implementation projects. This requires both a system development and a change in attitude.

A final point is that very few entrepreneurs enjoy pitch competitions and stands. They are passionate about solving the problem they are tasked with, and instead need help to highlight their innovation and knowledge in serious meetings with decision-makers.

### DO YOU HAVE ADVICE ABOUT THE PROCESS FOR OTHER PEOPLE WITH IDEAS FOR POSSIBLE INNOVATION?

Firstly, it is important to be very aware of whether you have the right conditions in life, such as finances, time and family situation. Being an entrepreneur is a struggle in many arenas. Do you want to spend five years of your life on the innovation? People underestimate the duration and capacity needed to succeed.

Furthermore, it is important to know if there is someone on the other end who will use the innovation. You must go directly to the customers and speak with them. If they're interested in joining the project and putting resources and money into it, that's a very good sign.

Finally, it is also crucial that you have enough knowledge and work experience pertaining to what you are going to solve. Then you can indulge in a completely different dialogue with the people with whom you will be working, serve as a sounding board, challenge the existing order and deliver a relevant solution.

# NEW CONCEPTS FOR BETTER FACILITATION

As previously noted, there is a considerable potential and a great social resource associated with mobilising citizens to solve societal problems and contribute with innovations. This potential is currently not utilised well enough. In the co-creation conference, where many citizen innovators met, participants were asked to come up with suggestions that can help solve the many barriers that citizen innovators face so they can better succeed. These are presented below. There is some overlap between the proposals. There are currently services that operate along the lines of the proposals, but they are evidently not reaching those who need and demand such services. Many citizen innovators are struggling to navigate the jungle of fragmented services in the field.

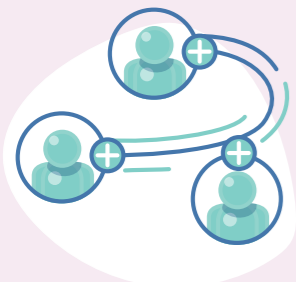
## LOW-THRESHOLD ARENA FOR SHARING COMPETENCE

A *physical space for sharing competence* is proposed. This should be a low-threshold service with professional gatherings throughout the year. In this arena, there should be a group of experts, resource persons and mentors available, and citizen innovators should have the opportunity to dialogue with them. There should also be opportunities to create quick prototypes and events for rapid testing and to establish contact. Citizen innovators are also seeking an arena where they can meet like-minded people in the same situation and share experiences.

*Meeting places* could therefore be arranged regularly in which participants can share experiences and where specific topics can be addressed. Courses could also be offered where citizen innovators learn the basics of commercialisation, including pitching and introductory sales.

Part of the service may also involve providing an *overview of instruments* and assistance in the application process and could be linked to an entrepreneurial hub. This would save time and serve as quality assurance. When innovators have higher levels of competence, the chances increase that more successful companies will be developed that manage to bring their products and services to market.

In the design of such a arena, the financial premises must be clarified. The danger with such a arena is that most of the funds go to pay employees rather than those who develop innovations. There currently exist some sharing arenas for established entrepreneurs with some of the desires mentioned above, but they are not as relevant for citizen innovators at an early stage.



## DIGITAL PORTAL FOR INFORMATION

A proposal from citizen innovators is a *digital portal* where information is collected and organised, where they can receive concrete advice and tips. Such a portal could be divided into different geographical areas. Currently, entrepreneurs must navigate a jungle of information and risk getting lost in Google queries, where the information is also not always quality assured. The basic idea is that it should be easy to find relevant competence and assistance, whether it concerns legal issues, ownership, establishing teams, methods for driving the innovation process forward or overview and access to cooperation with municipalities and established actors. Who can they contact, specifically, and what kinds of different resources and opportunities exist for cooperation in municipalities and organisations? Who is willing to invest upstream in entrepreneurial projects, and what are they looking for?

The digital portal would become a sort of *yellow pages for entrepreneurs*. Currently, it is challenging to know where to turn in different phases of the innovation process. Such a digital service could be supplemented with personal guidance, if the information in the portal were not sufficient.

A digital portal with quality-assured information, tips and advice would save time for citizen innovators. Similar to the previous proposal, it would contribute to providing a lower threshold for realising innovations.



## INTERMEDIARY SCHEME

This proposal is about having *intermediates* between entrepreneurs and partnering companies, investors and others. As previously noted, more citizen innovators are seeking assistance in establishing contact with relevant environments and potential partners and an intermediary activity should be able to contribute to this. This will increase efficiency in the innovation process, increase the success rate and provide greater knowledge on how entrepreneurs can collaborate with various actors. Both local government-sector and public funding agencies may be involved in creating such a scheme, since the need exists for both the public and private sectors.

This desire is a consequence of the fact that many citizen innovators find it challenging to network and find the right partners while developing the concept itself and managing financially. They also cannot afford to hire their own people who can perform the intermediary activity and networking.

These intermediates should be *neutral*. Citizen innovators are seeking a type of actor with no financial and personal interests in the innovations that arise.



## CHANGES TO PURCHASING SCHEMES



Several citizen innovators note that the current purchasing scheme from public sector is unfavourable to entrepreneurs and small actors because it requires resources and a lengthy time frame. *If purchasing requirements are changed*, it could make it easier for entrepreneurs and help solve societal problems and create new jobs. For example, greater emphasis could be placed on sustainability and social factors in the purchasing criteria.

Currently, new schemes such as *Quick Test (Kvikkttest)* exist in Stavanger Municipality, where the processing time and the project period are short.<sup>12</sup> In Quick Test, interested entrepreneurs, citizens and actors come up with proposals for solutions to a publicly announced challenge from the municipality, where new solutions are needed. The best proposals are selected, and the selected actors receive funding to quickly develop and test their solutions in real-life settings. In the process, they get to interact with the municipality. It leaves room for learning to both parties.<sup>13</sup> The municipality gains a better understanding of the given challenge as well as a range of possible solutions. Quick Test can be run as a pre-project for a possible subsequent purchasing process. Further refinement and dissemination of the Quick Test concept is envisaged for both the private and public sector.

At the overarching level, it is critical for citizen innovators to have access to testing the solution with relevant customers and to have the opportunity to access pilot customers upstream, who can trial and help further develop the solution. New and simpler *testing arenas* and more flexible purchasing arrangements can contribute to this. Another critical measure is to increase the minimum amount for purchases without tenders, to less than NOK 100,000. As it stands, innovators are 'forced' to work for free for the public sector because innovators cannot wait for a public procurement process that often takes two years.

Finally, the municipalities should place greater emphasis on using solutions that have already been developed by entrepreneurs in other locations and in other projects. Currently, many municipalities are initiating new innovation projects on problems for which there are already solutions. To avoid such a waste of resources, better coordination and a better dissemination of project results in the public sector are needed.

## WHAT STIMULATES COMMERCIALISATION:

The feeling of **reaching out with a message** and the value proposition for the solution

The ability to **preserve ownership and management** for as long as possible in the commercialisation phase

Practical **assistance from the public funding agencies** in order to place the product on the market

**Establishing a team with complementing competence** and not standing alone

Help with **identifying partners** who can contribute to commercialisation

**Market access** with key actors and pilot companies

**Funding schemes** across business areas and silos

A simple **overview and guide** for the possibilities of **cooperation** with the municipality and established actors

Assistance in **scaling up the delivery** and achieving a sufficient volume

**Follow-up assistance** and resources after the product/service has been launched

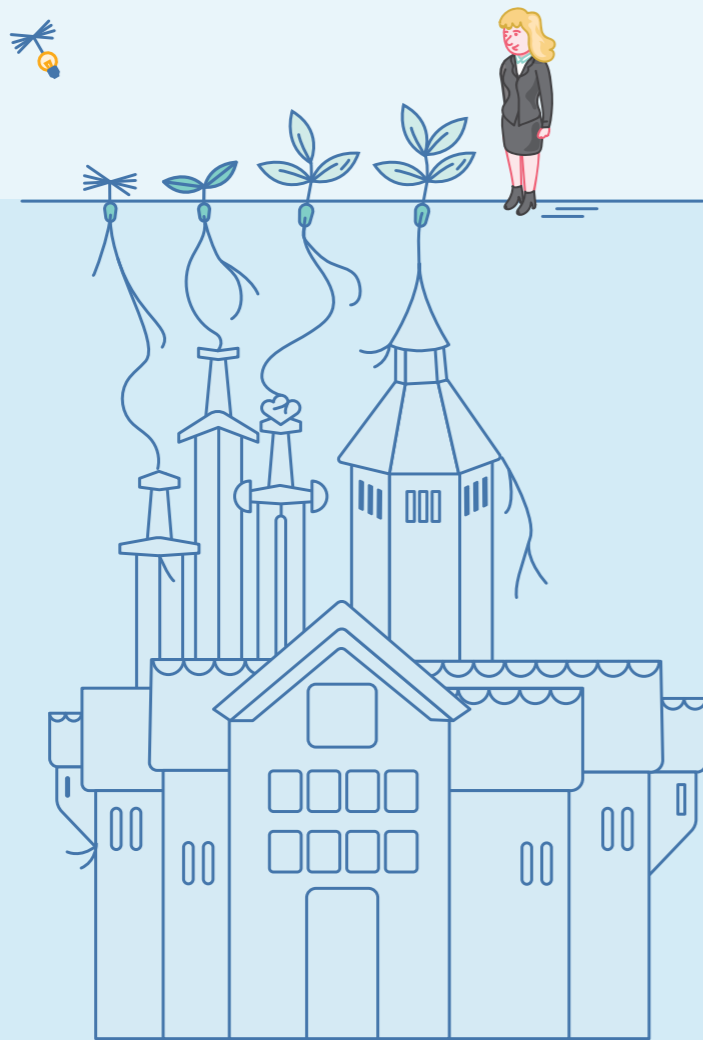


<sup>12</sup> Kvikkttest. Stavanger Municipality. <https://www.stavanger.kommune.no/samfunnsutvikling/smartbyen-stavanger/smartby-prosjekter/agile-piloting/> (In Norwegian)

<sup>13</sup> Agile Piloting programme. Forum Virium Helsinki. <https://fiksukalajatama.fi/en/agile-piloting/>

# PREMISES FOR FURTHER IMPLEMENTATION

The development of competence sharing arenas, a digital portal, an intermediary scheme and new purchasing schemes that are more adapted to citizen innovators should involve the municipalities, public funding agencies, entrepreneurial hubs and citizens in a co-creation process. Development work can take place at both the regional and national level, and this is a challenge and an opportunity that is equally relevant in all regions. A digital portal for information should preferably be located at a national level. In the continued efforts, the above concepts should be embedded, concretised, piloted and tested. Inspiration should also be drawn from solutions that already exist today.



to succeed in realising these concepts, there are also some *premisses* that are advisable to keep in mind, and which should be highlighted:

- ① The public funding agencies and municipalities need to recognise the value of the innovation activity that takes place among the citizens long *before* they have established start-up companies. This is about recognising the existence of untapped resources among citizens that will remain untapped without start-up assistance. Recognising the value and facilitating innovation activity is not the same as providing support for everything. Most ideas do not have the right to life or have little value in practice.
- ② The focus of the public funding agencies must be directed more towards *citizens* needs and their 'innovation journey' rather than focusing on deliverables and documentation requirements. The public funding agencies need to have customer experience and a design mindset from the outset and change the interaction with citizen innovators, so that it is experienced as less cumbersome. In general, there should be more dialogue with citizen innovators and entrepreneurs in the design of funding schemes.
- ③ The public funding agencies and instruments, such as Innovation Norway and the municipalities, must themselves seek to have enough advisers with practical experience with entrepreneurial and early innovation practice. The interaction with citizen innovators should not be limited to formal application processes. Rather, advisers must, to a greater extent, serve as *active sounding boards* for the citizen innovators.
- ④ The municipalities and public funding agency instruments should not only consider the potential for profit, but equally consider what citizen innovations can provide in terms of *savings*, what they can add to a *vibrant local community*, and how they can enhance the quality of life of citizens. Value creation must be viewed in a *larger context* than growth and profit, exclusively.

All four of these points are ultimately about raising awareness and changing attitudes. We must dare to *sow seeds before* we know if we have anything to harvest, and to be *proactive* rather than reactive in terms of citizen innovations.

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