

Urban Living Lab: Towards more Legitimate and Inclusive Participation in Urban Planning? Experiences from Bodø Living Lab

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1. Introduction

In recent years, Urban Living Labs have been promoted by both practitioners and scholars around the world as a desirable approach for local governments to engage with different stakeholders and citizens in discussions about urban development. Urban Living Labs are both physical and virtual arenas, allowing the public to contribute to urban planning in various ways. Although carried out differently across different urban scales and contexts, key ideas in the concept of Urban Living Labs are public participation, deliberation and co-creation between different stakeholders.

The UN's sustainability goal on cities and communities has as one of its targets to, by 2030, "enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries". Cities account for three quarters of global carbon emissions, and to reach the goals in the Paris Climate Agreement, drastic steps are needed to be taken in urban planning. This requires the involvement and commitment of the urban population in ways reaching far beyond traditional public hearings and written statements to plans. Moreover, developing innovative solutions that address both climate adaptation and mitigation demand new ways of engaging the private and public sector as well as the citizens at large.

During the last decade, several Urban Living Labs have been set up in different Norwegian cities (Hvitsand and Richards, 2017). Ranging from various initiatives in the capital of Oslo, to medium sized cities as Hamar, Moss and Fredrikstad. Even small towns as Svelvik. As pointed out by Hvitsand and Richards (2017), these initiatives seem to happen independent from each other, drawing on inspiration from abroad. Moreover, there is not a shared definition or understanding of what an Urban Living Lab is, rather, different adaptations to different urban contexts and challenges.

In this paper, we use Bodø Living Lab as a case to explore how such Urban Living Labs can contribute to secure and improve the legitimacy of urban planning in the face of climate change. We examine where the idea to establishing Bodø Living Lab came from and what the aim was envisioned to be. Further, we focus on how participation from diverse actors with interests in the future development of the city is enabled through the Living Lab and who participate in the Living Lab's activities. At the same time, we are interested in actors not participating in the physical and virtual Lab and the possible alternative voices and perspectives omitted through the processes. In this paper, we combine document studies, including social and traditional media coverage of the Living Lab, participatory observations from activities in the Living lab in Stormen library in Bodø and interviews with involved stakeholders.

The Bodø Living Lab is a project set up by the city, with an aim to look "at the whole society perspective in city development", and by this "to connect public health, education, welfare, environment, culture, governance, business development and technology development together", according to the city municipality's web page. The Lab was formally opened at the beginning of April 2018. The findings presented in this paper, thus, focus on the experiences from the establishing process and the initial phase of the Living Lab's activities. The field work

was conducted from April to June 2018, and the analysis is therefore related to public participation and citizen engagement in and through the Bodø Living Lab's establishing phase.

In the next section, we present the theoretical framework and background of the growth in Urban Living Labs, before we give a background to Bodø and the establishment of the Urban Living Lab. We then go on to describing the methods used and the empirical material the analysis draws on. In the following section, we present the findings before discussing these in light of the goal to increase urban planning's legitimacy before ending the paper with some final reflections and recommendation for future development of Urban Living Labs.

2. Theoretical perspectives

While the concept of urban living labs is not clearly defined, there is a consensus that citizen and user involvement is central, and that innovation takes place as a result of bringing together complementary knowledge, skills and resources in real-life experimentation (Bergvall-Kåreborn et al., 2015). According to McCormick and Hartmann (2017), urban living labs can be seen as both an arena (geographically or institutionally bound space) and as an approach for international collaboration between researchers, private business, citizens and local government.

While there is no unified definition of an urban living lab, the approach is based on the quadruple helix model of partnership "whereby government, industry, the public and academia work together to generate innovative solutions" (Voytenko et al. 2016:47). The focus on innovation in urban living labs is tightly connected to the concept of co-creation. This reasoning is in line with what Lund (2018: 12) describes in her discussion of co-creation in urban governance, as "shifting the focus of participatory processes and mobilisation strategies from power distribution to competencies; a result of moving the focus away from the right to influence towards the ability to identify and solve urban problems."

Following the aim of this paper, a key concept in the analysis of the Urban Living Lab in Bodø's city development, is legitimacy. It is a concept with strong normative connotations. The contested and constructed nature of legitimacy makes it challenging to derive 'objective' criteria for assessing the legitimacy of planning processes. Parkinson (2003) has argued that legitimacy cannot be fixed on a scale and that it should be approached as an ideal. Moug (2011: 130) has underlined that "Focusing on legitimacy cuts to the heart of power relations offering fresh insight into how context colors what is viewed as legitimate and how particular views and decisions prevail."

Increased participation from non-governmental actors in formulating and implementing public policies makes authority and accountability unclear and Connelly et al. (2006) have argued that diffusion of authority requires a refocusing from the formal, explicit exercise of power, to a broader definition of policy-making processes to understand how legitimacy is constructed. They underlined that the vital question affecting stakeholders' perception of legitimacy can no longer conform to the classical formulation of "...do we accept this body as appropriate to make decisions that affect us?" Rather, it becomes "do we accept this process as an appropriate way to make policy – here, now?" – with the corollary "how seriously should we therefore treat its outcomes as a guide to our actions and decisions" (Connelly et al., 2006: 270). This underlines the importance of approaching legitimacy and accountability of collaborative governance arrangements broadly and not limiting this to formal institutional arrangements or legal frameworks.

We approach the concept of legitimacy through the distinction between input and output legitimacy (Scharpf, 1999), along the three dimensions of participation, coordination and accountability. Scharpf's (1999) emphasis on input and output legitimacy have been particularly influential in studies of legitimacy and while input legitimacy rests on procedural logic and the policy process's inclusiveness, fairness, and participatory qualities, output

legitimacy focuses on the problemsolving capacity of the result and, thus, rests on consequential logic (Kronsell and Bäckstrand, 2010). Following Høgl et al. (2012), we identify three dimensions of legitimacy: participation, coordination and accountability. Using these three dimensions, our framework enables an analysis of how an urban living lab may contribute to the construction of legitimacy in urban planning.

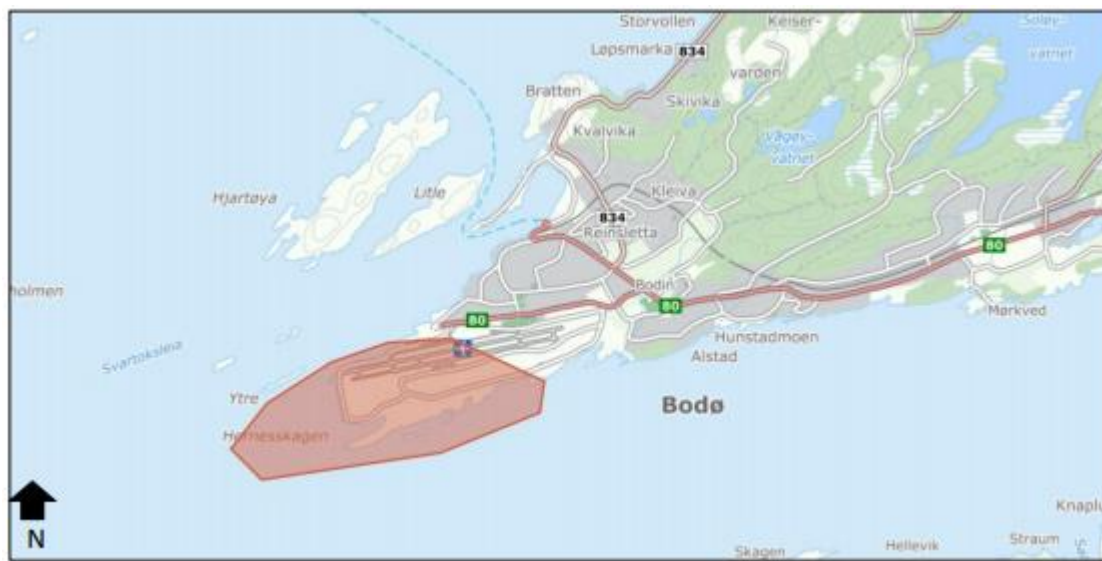
Dimension of legitimacy	Sources of legitimacy	
	Input legitimacy	Output legitimacy
Participation	Who participates? What do they do/participate in/to? What happens with inputs? Access – when?	Awareness (smart and sustainable) Acceptance (living in/at a construction site) Compliance with policies (willingness to follow restrictive climate policies)
Coordination/collaboration	Communication across sectors (private, public, civil society)	Coherence Mobilize resources Shared vision/strategy
Accountability/democratic control	Transparency Open information flows Accessibility to information	Improved local democracy Improved trust between different actors – reciprocity Improved trust to the governance system

Table 1: Different sources and dimensions of legitimacy

3. Context and case description

Bodø is a city in Northern Norway, located on a peninsula facing the Norwegian Sea. The city was founded in 1816 and reached a population of roughly 4700 people hundred years later (Jakhell, 2004: 16). In 2018 the population was about 50 000, and it is by this the second largest city in the northern part of the country (after Tromsø). As the capital of Nordland County, Bodø has few competitors as the main urban hub in the region, and while the rural areas of the county for the most parts have been seeing a decrease in population in the last years, Bodø is seeing an increase. The population is expected to reach around 60 000 by 2040, according to official estimates.ⁱ

A key driver for the growth of Bodø in the coming years, is expected to be related to the building of a new airport. In 2012 the Norwegian parliament decided to move the military airport from Bodø to another region further south. In connection with this, the civil airport, which is located right next to the city centre, will be moved 900 meters to the southeast. This will subsequently free areas roughly equal to today's city centre for future development. The municipality wants to use the freed area to build a "New City"ⁱⁱ. The area where the city wants to expand is indicated in the map in figure 1.

Figure 1 Area for Bodø's "New City"

Source: Planprogram områdeplan for ny sivil lufthavn i Bodø, Bodø kommune 2017

According to the municipality, the "New City" will be "the smartest city in the world"ⁱⁱⁱ. Implicit in this vision, is that the urban development processes in Bodø will be both sustainable and climate friendly. As part of this "smart vision" the municipality has set up an Urban Living Lab called Bodø ByLab. As already noted, the aim of the Lab is to look "at the whole societal perspective in city development", and by this "to connect public health, education, welfare, environment, culture, governance, business development and technology development together", according to the city municipality's web page. The Lab itself is both a physical place located in the main library and a virtual place available online.

4. Methods

In this study, we use a single case study approach as described by Yin (1994). This has allowed for an in-depth exploration of the experiences from the initial phase of establishing the Urban Living Lab in the public library in Bodø. We combine qualitative interviews, with document studies and participatory observations from activities in the Urban Living Lab during the first few months after it opened in the beginning of April 2018.

Initially, we planned to use participatory observations from the Urban Living Lab at the library as the main empirical source in this study. We thought that this would give us an opportunity to observe the interactions between municipal officials, developers, stakeholders and citizens coming to the Lab. Further, we hoped that that these meetings could provide a starting point for informal conversations with different actors interested in or involved in the development of the city. However, we experienced quickly by being present during the opening hours of the Lab (Tuesday to Thursday from 09.00 to 15.00) in the library, that there were few meetings or encounters between municipality representatives and the public. In total, we were present eight days (from one hour to full days), including the official opening of the Lab on April 5th. Some days, there would be no one from the municipality, while other days there would be no interactions. Organized events by the municipality in the Lab gave us, however, an opportunity to conduct participatory observations. This included a thematic meeting on universal design and public accessibility (May 24th). We developed a research diary from being present at the ULL, including notes from our observations of the physical environment, interactions in the ULL, presentations and discussions with people.

We conducted six semi-structured interviews with actors involved in the Urban Living Lab in Bodø, including public officials from Bodø municipality, both at the administrative and the

political level. We also talked to people present at the Lab or at the public library. We developed an open interview guide, with questions focusing on the background and purpose of the Urban Living Lab, as well as experiences so far. This allowed us to explore different perceptions of how the Urban Living Lab enabled participation and/or contributed to legitimacy in urban planning. The interviews were analysed with a focus on the experiences from the establishing phase and expectations for the future.

In the document study we have included both official accounts from Bodø municipality about the Lab, presentation of the Lab on social media and in traditional media coverage. In total, the document study has involved twenty-some documents. The written material has provided us with an insight in to how the municipality justifies/presents the Lab in official documents and how the Lab is communicated to the public/citizens of Bodø through social media, primarily Facebook. The media review has contributed to understand the public debates surrounding the Lab and how urban development/urban planning is put more widely on the public/political agenda.

5. Findings:

Setting up the Lab

In different strategies and plans, Bodø municipality has over the years stated its intention of being an open and inclusive municipality. The intention is not the least clear in the municipal master plan, which points out main challenges and focal points of planning policy for the years to come. In the recently revised social element part of the municipal's master plan (spring 2018), co-creation is identified as the number one priority for the municipality. Co-creation is in the plan roughly defined as a process that will “facilitate new creative solutions, increased well-being, real involvement and meaning for the citizens” (Bodø kommune, 2018b: our translation). In the plan the municipality states that “municipalities that co-create with its citizens are better equipped to handle complex societal challenges.” The solutions one choses “need legitimacy, and active participation is a prerequisite for this” (Bodø kommune, 2018b: our translation). One way of achieving this is to develop “new methods for citizen engagement and user involvement” (ibid.)

The urban living lab is emphasised as one method for achieving co-creation in planning documents and interviews. The idea of the setting up an urban living lab came from The Green Party (Guttormsen, 2015). In the political negotiations after the local election in 2015 the urban living lab ended up in the formal agreement between the governing coalition, as “an easily accessible branch of the planning office where citizens may familiarise themselves with and give input to the municipality’s planning processes” (Bodø kommune, 2015).

The city council adopted the mandate for the Lab in February 2018. One of the reasons for establishing an urban living lab was to involve citizens in the many development projects in the city. The project mandate stressed the need to create arenas for participation that would promote creativity, engagement and a sense of community. Participation would also ease the implementation of policies (Bodø kommune, 2018a). The project mandate built on other strategies in the municipality highlighting the importance of involvement and co-creation between the local government and the citizens. The Lab was presented as a place to “test co-creation and participation in a real environment”. According to the political document the Bodø ByLab concept would be the first of its kind amongst municipalities in Norway, and the Lab would be “breaking ground in its effort to become a more open and inclusive municipality that takes democracy and the role of the citizens seriously” (Bodø kommune, 2018a: our translation). The municipality had also a few years earlier tried to strengthen the local democracy by mapping the status of democracy in the municipality and suggest measures to strengthen participation from the citizens, in a so-called “democracy project” (Bodø kommune, 2014).

Prior to the opening of Bodø ByLab, the Lab was frequently mentioned in local media. In November 2017 the major local newspaper *Avisa Nordland* (AN) published an interview with

the organisers (Landstad 2017). In December AN published an interview with the project leader of the Lab and the head of The Green Party in Bodø, who was also the leader of the planning committee in the municipality. Here the ByLab was presented to the readers as one of a kind under the heading “They want to make you and me city planners: – This has never quite been done before” (Gulliksen, 2017).

A month prior to the opening of the Lab the municipality and a research institute who had insight on the workings of other urban living labs around Europe, presented the concept of urban living labs generally and the Bodø ByLab to specially invited participants in a workshop. The participant list included civil servants from the municipality and the county municipality, developers, other stakeholders and researchers. In the workshop the living lab was tightly linked to the concept of *co-creation*. This was again contrasted with that of *participation*, which was defined as the formal and legal right citizens have to be heard in consultation processes, and which applies to all citizens. In the picture presented, the urban living lab, to be successful, should first and foremost be an arena for co-creation and stakeholder involvement.

According to the project description, the Lab would first go through a trial period. The municipality would then use the experiences from the test period when planning a permanent Lab in the new City Hall, which was under construction in 2018 (Bodø kommune, 2018a). Although a pilot, the opening day on 4 April 2018 had all the spectacle of an official opening, with the major cutting the ribbon, announcing the Lab opened. Several hundred people turned out for the opening. The Lab was part of the “Smart City” project in the municipality, and the opening was announced on the Facebook page with the following teaser: “On the opening of ByLab tomorrow at 10 am you will hear from amongst others some of the world’s foremost experts in smart cities, technology, digitalisation and innovation!”^{iv}

Picture 2 Model of the city centre in Bodø ByLab



Following up

The Bodø ByLab was in the trial period located in the city’s main public library. The Lab was located on the library’s ground floor. There was no clear distinction between the Lab and the rest of the library. Tables often occupied by students and elderly people in the library, overlapped with the Lab. One of the markers of the Lab was a physical model a few meters wide visualising the city centre. There were also posters with the ByLab logo on them.

It was clear from the beginning that the Lab was a work of progress, and several items were added to the Lab during the first couple of months, including information posters, a projector and couches. Measures to more clearly contrast the Lab from the rest of the library, like

carpets and plants, had proved difficult to put in place because it broke with the interior design of the library, according to an informant. The installation of a mail box where people could insert their ideas about urban planning and other issues, was under negotiation between the organisers and the library when we conducted the fieldwork. Bureaucratic slowness was explained as being one of the challenges of making an Urban Living Lab within the framework of a local administration.

The opening hours of the Lab were announced to be Tuesdays to Thursdays from 9 am to 3 pm. The fact that most events happened during daytime on workdays, might have put limits on who could attend, as this would require people to take time off from work to present themselves at the Lab at the public library. The opening hours also seemed to be a little off-target if the goal is to reach those who usually doesn't speak their voice. As several informants from the municipality told us, one of the groups that is hardest to reach in ordinary planning processes, are families with small children. As one informant from the municipality put it: "At public meetings there is a lot of grey hair. The category we want to reach the most are families with children. They are a little bit invisible in the big picture, but very engaged when it comes to their own neighbourhood." It would seem difficult to attract this group given the opening hours on daytime. As a project run by the municipality, it is of course challenges associated with adjusting the opening hours. This would necessarily demand that civil servants spent their evenings or weekends working, a measure that is likely to meet some obstacles in the well-organised working environment of Norwegian public sector.

As important as the opening hours is of course the content of the Lab itself. As the Bodø ByLab project was organised directly below the Municipal Chief Executive, with a goal to involve and give ownership to the Lab to different parts of the municipality, different departments of the municipality were given responsibility to host their own thematic days. One of the ideas of the Lab was that by putting municipal officials together in an open setting – in the public space like the library – this would spur creativity and interactions between officials and the public, but also across established bureaucratic barriers. During the first few months the Lab was therefore hosted by civil servants with their laptops, working with issues concerning planning, building, welfare, public health, children and adolescents and digitalisation, amongst others.

Some of these days consisted of presentations or demonstrations (of welfare technology, the municipality's new website, etc.), others were more loosely organised, with one or more civil servants making themselves available to the interested citizen. The Lab was also being used for different types of meetings, as it was conveniently located in the city centre. For instance, the standing committee of planning, industry and environment put its monthly committee meetings in the Lab to open it up to the public. There was also a Children's City Lab on a Saturday.

Picture 3 Meeting of the standing committee on planning, industry and environment in Bodø ByLab

During the time we were observing the Lab, the turnout from the public was low, with some exceptions. This impression was confirmed by the Lab hosts we talked to. They didn't seem too surprised by this, however. They had several thoughts on how to attract more people, including better marketing of the Lab, expanding the opening hours and making it clearer who the civil servants actually were, so they didn't blend in with the rest of the library visitors.

One of the more successful events, in terms of interest from the public, was when the local building authorities hosted the Lab. According to the reports, a total of 14 building applications were discussed that day. This shows an apparent need for small developers to meet with the authorities, something that the Lab offered an arena for. In this case the participants had their own private interest in turning up. It was more challenging to get people interested in regulation plans – which was the topic of one of the days the local planning authorities hosted the Lab. According to one informant, those stakeholders who had an interest in regulation processes, had already given their opinion in the consultation process. Another day the topic was development of the “New City” that will double the size of the central parts of Bodø. This is a long-term development project with at least a fifty-year perspective. This also proved to be a challenging topic to sell to the public, with few people appearing at the Lab.

Despite that there clearly were some challenges in the establishing stage, everyone we spoke to in the municipality were eager to keep the laboratory going. They all agreed that the Lab was a useful initiative to get people interested in local affairs. A common theme among the urban planners we spoke to was that the municipality needed to do *something else* than what it was already doing to reach and involve the citizens. It was stressed that a lot of people were likely to have an interest in urban development, but it was a challenge to get them to participate.

Picture 4 The municipality lends it ear to the citizens: “You are the expert. We listen.”

From our observations and interviews, strengthening the communication about what Bodø



ByLab is, seemed to be a key issue. According to one informant, the marketing of the Lab should strive to be less “municipal” – meaning it should less resemble what usually comes from official channels. The main marketing and information channel of the Lab was its official Facebook page. The Lab also had its own website – the “virtual” part of the Lab – as well as an account on Instagram. These channels however lacked much in content and seemed to generate little attention in the first couple of months. The Facebook page contained for most parts information about coming events at the Lab and pictures of prior events. There was little response on the Facebook page from people outside the municipality, indicating that this first and foremost functioned as an information channel. Like the Facebook page, the Bodø ByLab website also demanded that the visitor created an online user to comment or “like” different posts on the site. There were some instances of input from the people outside the municipality on the website. One of these welcomed the Bodø ByLab initiative and asked for more information on the website about different development projects, before he could give input and participate.

6. Discussion:

In this paper we ask if an urban living lab is a viable method for making urban planning processes more legitimate. We have presented the Bodø ByLab as a case of an urban living lab in its initial stage, focusing on how this lab was initiated and justified, how it was marketed, what happened in the lab the first few months and who participated.

First it should be noted that Bodø ByLab was more than a laboratory for urban planning. Although that was where the idea of the Lab started – that is should be a branch of the local planning authority’s office, – in the first months it was a potpourri of different municipal initiatives. One way of interpreting this is to say that urban development was broadly defined by the municipality. As one of our informants told us: urban development is about much more than making regulation plans. This way of thinking was clear with the inclusion of for instance the health and welfare sectors, and this may be an effort from the municipality to create awareness both inside its own organisation and among the citizens that urban development concerns many more than those who are usually involved in consultation processes and so

on. One more pragmatic way to look at this, is that to fill three days a week with content, a broad understanding of urban development was necessary.

The Lab was marketed as an arena for testing ground-breaking new methods for citizen participation in urban development. In one way, this marketing strategy is understandable, given the need to “break through the noise” in the information age, and to get the necessary attention before opening. It seemed to have worked as a lead up to the opening day, when hundreds of guests appeared. The contrast to what took place in the Lab after opening day, is on the other hand striking. It was difficult to see the ground-breaking elements and turnout from the public was disappointingly low. This is one of the risks of making high promises.

From the viewpoint of urban planning, rather than being an alternative to traditional planning processes or offering something completely new, the Lab can be seen a supplement. The thought was that by being present at the Lab, civil servants from the planning authorities would engage in conversations and receive input from the citizens in matters concerning urban development – together they would “co-create” the new city. For this to work, some adjustments seem necessary. The planners in the municipality knew a great deal about what the challenges were, and this knowledge could be used in the design of the Lab. For instance, if one of the challenges in urban planning processes is connecting to families, the Lab could be used to target this challenge more precisely. This requires a close collaboration between the organisers and the planning professionals.

Looking beyond the “ground-breaking” rhetoric and the start-up problems, Bodø ByLab may be a way to open public policy processes, or “demystify the municipality” as one of our informants called it. Moreover, using Facebook as the main channel of information sharing could be problematic in a legitimacy perspective, as it excludes some groups who are not “logged in”.

One challenge that was mentioned several times by the organisers, was the strong “municipal grip” on the Lab. This concerned both practicalities of setting up the Lab within a bureaucratic system, but more important for our discussion of legitimacy, is the possible exclusion of other actors that this might lead to, whether this is developers, private actors or organisations. Even though several factors might explain the low turnout in the first period, like the lack of knowledge about the Lab among the public, there is a risk that the Lab was perceived as just another channel for information from the municipality. This is in some sense true; part of the content of the Lab was in large degree information from the municipality and had little to do with engaging or interacting with citizens.

7. Concluding remarks:

Bodø ByLab was established against the backdrop of large development plans in the city of Bodø, and a realisation amongst decision makers that this called for a greater deal of involvement from the public. There was, in other words, a need to secure the legitimacy of the development processes. As we have shown in this paper, some challenges stood in the way of making the Lab an immediate success in the establishment phase. This included practical as well as more content specific obstacles. Based on our findings, we would argue for making some adjustments, and have the following suggestions:

- The organisers should ask themselves who they want to involve in the specific events and target these groups more directly. What kind of input the municipality wants from the public could also be specified.
- If the Lab is to be a successful method for more legitimate urban planning, a close collaboration between the planning professionals and the organisers of the Lab seems necessary.

- As several of our informants pointed out, people are more likely to get involved in matters concerning them, so perhaps more locally specific events could be a way to attract people.
- A more clearly defined Lab, with more visual elements, maps and so on, might be a good way to create engagement and interest concerning urban development amongst the public.
- A way for people to interact with the municipality, give input and so on without the need to talk to official representatives, might lower the threshold to participate in the Lab.
- The marketing of the Lab, including the communications platforms, could be opened to a bigger public. To create more attention about the Lab, a collaboration with local news media might be effective. This proved to be a good strategy in another small city not far from Bodø, who wanted attention about urban development.

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ⁱⁱⁱ <https://bodo.kommune.no/nyby-nyflyplass> Bodø kommune, Verdens smarteste by, accessed on 15.06.2018

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