



**COLLECTIVE INTELLIGENCE
AND GOVERNING SERIES**

BETTER REYKJAVIK
MUNICIPAL OPEN INNOVATION

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BETTER REYKJAVIK

MUNICIPAL OPEN INNOVATION

<https://betrireykjavik.is>

Method
Online brainstorming

Participatory Task
Ideas, Opinions

INTRODUCTION

Betri Reykjavik, or Better Reykjavik, is the City of Reykjavik’s online engagement platform used for the crowdsourcing of solutions to urban challenges developed and launched by the Icelandic Citizens Foundation in May 2010. The website gives everyone the opportunity to submit original ideas and solutions to municipal-level issues within the city. Citizens of Reykjavik are given the opportunity “to submit, debate, and prioritize policy proposals and ideas” (Lackaff, 2015). Moreover, it allows residents to vocalize, debate, and amend a variety of ideas which they believe are crucial, and “gives the voters a direct influence on decision making” (“Better Reykjavik”, 2010). “My Neighborhood” is Better Reykjavik’s participatory budgeting project, where Reykjavik residents and the city administration collaborate to determine the amount of capital allocated for future construction and maintenance projects within the ten main neighborhoods of the city (“Betri Reykjavik...”, 2016). The “Your Voice At The City Council” project gives everyone the opportunity to submit original ideas and solutions to municipal-level issues within the city. These two projects involve different tasks, however, both have the same primary objective: to increase the capacity of consultation and influence of citizens on the decision making processes of the city (“Betri

Reykjavik...”, 2016). Above all, City Hall is directly involved in and committed to the implementation of ideas emerging from both processes.

As a CrowdLaw process, Betri Reykjavik has potential to be a model for many others since it is an example of digitally-enabled open innovation platform with uniquely high levels of ongoing participation, progress, and engagement. It is also unique in that (1) it is “developed and maintained by a grassroots nonprofit organization, and not by a government, (2) rapidly achieved significant buy-in from citizens, policy-makers, and public administrators, (3) has been normalized as an ongoing channel for citizen-government interaction” (Lackaff, 2015), and (4) uses the input from the public to identify and implement solutions to real urban challenges.

BACKGROUND

The financial collapse of Iceland and the resulting decline of trust in Iceland’s institutions created the impetus for Better Reykjavik. In October 2008, the global financial crisis caused Iceland’s banks to go bankrupt, leading to the bankruptcy of almost every bank within the country (Amadeo, 2018). Iceland’s top three banks—Kaupthing Bank, Landsbanki, and Glitnir Bank—had \$62 billion of foreign debt, and their bankruptcy led to a 50% decline of the Icelandic Króna within a week. The Icelandic Stock Exchange also plunged 95%. This caused Iceland’s government to collapse in January 2009, leading to a deficit of trust between the citizens and political administration (Amadeo, 2018). Recognizing the need to provide citizens with a voice within the government, avoid a similar collapse in the future, and “[develop] new models for more open institutions and infrastructures” (Lackaff, 2015), The day after the election, 1. June 2010, the Best

Party suggested that they wanted to use the Shadow City platform but that the name was too negative so the platform was renamed to Better Reykjavik and actively used during the coalition talks between the best party and the social democrats and made it into the coalition agreement.

The day after the election, 1. June 2010, the Best Party suggested that they wanted to use the Shadow City platform but thought that the name was too negative so the platform was renamed to Better Reykjavik and actively used during the coalition talks between the Best Party and the Social Democratic Alliance and was a part of their coalition agreement. The Your Voice at the City Council (then Better Reykjavik) project was officially launched by the city council on October 2011, with My Neighborhood following suit a month later (“Betri Reykjavik...”, 2016). The platform’s mission statement is:

“We believe that citizens need a strong voice in policy making, formal participation in the political process with a persistent and binding influence on the big issues”

- CitizensFNDN, 2014

FROM CAMPAIGNING TO GOVERNING

Better Reykjavik evolved from an earlier online platform known as Skuggaborg, or “Shadow City”, which opened May 25th, 2010, before the Reykjavík municipal

elections. Many differing grassroots activists, hackers, and entrepreneurs originally formed and supported the idea, but Róbert Bjarnason and Gunnar Grímsson were the developers who made it a reality (“Betri Reykjavik...”, 2016). Shadow City provided “branded” sections for each of the eight competing political parties for the simple purpose of connecting them with potential voters. However, “While most of the parties utilized [Shadow City] little or not at all, supporters of “anarcho-surrealist” comedian Jón Gnarr’s... Best Party were encouraged to help set their party’s agenda and platform by using the site, and approximately 1,400 citizens joined in this process” (Lackaff, 2015). After analyzing and incorporating the desires of citizens on Shadow City into their campaign, the Best Party successfully defeated the Independence Party, taking over the city council. This success led leaders of the Best Party to ask Bjarnason and Grímsson to modify the platform for the purpose of collecting opinions and ideas of citizens on the city council and community. At the same time the project was renamed “Better Reykjavik”, and “coalition partners encouraged citizens to use the site to share their priorities for the new government” (Lackaff, 2015). In September 2011, the Mayor committed to implement the top five ideas on Better Reykjavik each month (“Betri Reykjavik...”, 2016). Though the platform has evolved into a tool for participatory governing rather than campaigning and the Best Party is no longer in office, the purpose remains the same and Icelanders still use it today.

MECHANICS OF BETTER REYKJAVIK

Better Reykjavik is an umbrella for many different projects which all share the basic objective of connecting the City to its citizens. It has multiple democratic functions which can roughly be split up into three divisions: Agenda setting (Your

Voice At The City Council), Participatory budgeting (My neighborhood) and Policy crowdsourcing (“Reykjavík’s Education Policy”). The City has established a multi-step process for obtaining implementable solutions from residents. To facilitate participation, the Your Voice At The City Council project allows people to log in with their Facebook, Twitter, or email accounts. This integration with social media allows for easier diffusion of ideas and helps promote Better Reykjavik. However, when it comes time to vote in My Neighborhood, an electronic ID or a password delivered through the voter’s online bank is required for participation. In addition, advanced security measures are utilized to protect user and website information (Andruzzi and Spada, 2018).

MECHANICS OF YOUR VOICE AT THE CITY COUNCIL

After registration is complete, users can navigate to the proposal section of the website called “Your Voice at the City Council” to introduce their proposal. Before writing a proposal, however, residents label their submission with one of thirteen predefined categories of urban life and services. Proposals comprise a title and short summary with the option to insert photos, videos or audio and to select a specific location where their idea should be implemented. The terms of service make clear that when a user presents an idea on the Better Reykjavík forum, it is automatically considered the public property of the residents of Reykjavík in order to enable deliberation of and amendments to the original proposal and grant the City of Reykjavík the right to use the ideas.

Submitted proposals are then open to likes, dislikes, and debates, where users can publicly discuss the pros and cons of each issue. Proposal ideas vary greatly from building a new basketball court in Hlíðaskóli, to providing a care station for

the homeless in the central area of Reykjavik. Many suggestions revolve around the common urban themes of transportation, construction, and environmental issues. Occasionally, people will address reforming different aspects of the education system or improving maternity leave.

At 12 noon of the last working day of each month, up to the five top rated ideas as liked by registered participants, as well as the top ideas in each category, are collected by a project manager in the project management team at the mayor's office (Másdóttir, Interview with the author, 2018). To qualify, these ideas must not only have the highest number of likes, but they must also have a minimum requirement of 25 or more “likes” than their total amount of “dislikes.”

The project managers familiarize themselves with the proposal, what has been done before concerning that issue and determine whether the city has jurisdiction. If they qualify, the ideas are then transferred to the appropriate standing committee (categories for the committees include tourism, operations, recreation and leisure, sports, human rights, art and culture, education, transportation, planning, administration, environment and planning, welfare and elders). Once this is complete, the project manager changes the idea's status to “In Progress”, and depending on the final result, it will either be changed to “Success” or “Failure” (Másdóttir, Interview with the author, 2018).

The committee conducts feasibility analysis. To make the entire process transparent, “every stage of the assessment... is posted on the website - [and] sometimes professional teams call creators of the idea in for further details and further customization of the idea (“Betri Reykjavik...”, 2016). This all occurs in the span of 3-6 months, and the final result is sent by email to all participants involved

with the original idea (Bjarnason, Interview with the author, 2018). If an idea has been rejected, the author will receive an explanation by email, and if they are still unsatisfied, the author is invited to hold meetings with city officials to discuss the issue further (Másdóttir, Interview with the author, 2018).

Agenda setting is mainly through the “Your Voice At The City Council” project which gives residents of Reykjavik the opportunity to submit original ideas and solutions to municipal-level issues within the city. Citizens of Reykjavik are given the opportunity to submit, debate, and prioritize policy proposals and ideas. Moreover, it allows residents to vocalize, debate, and amend a variety of ideas which they believe are crucial, and gives the voters a direct influence on decision making. 450 ideas have been processed through this section of Better Reykjavik.

On the last working day of every month, the five top rated ideas, as well as the top ideas in each category, are collected by a project manager in the project management team at the mayor’s office for evaluation and possible implementation, To make the entire process transparent, every stage of the assessment... is posted on the website. From idea to decision takes 3-6 months at the end of which all the participants, including the proposer and those who voted for the proposal, are notified about the outcome. If an idea has been rejected, the author receives an explanation by email, and an invitation to come into City Hall for further discussion, if requested.

Your Voice In The City Council incorporates a Up/Down 'voting' system where users like and dislike not only ideas but also debate points from other users which results in a list of users prioritized ideas, without moderation or other administrative efforts. But not only that but also a prioritized list of the best points/

arguments for and against each idea. This makes it very easy for the city to evaluate which ideas are good and which are not as they are evaluated by the citizens.

Policy crowdsourcing has been the core of many projects, most recently in the 2017 project “Reykjavík’s Education Policy” where the City of Reykjavík decided to crowdsource ideas to co-create the City's education policy on Better Reykjavík. This was the first time that a specific policy of any government within Iceland was crowdsourced. The process is ongoing, having completed the first phase of prioritising educational objectives. The education policy project has generated almost 200 ideas and thousands of debate points.

Innovations include a unique debating system, crowd-sourcing of ideas and public evaluations, submission of multimedia content and extensive use of AI to improve the user experience as well as the content submitted. Other notable innovative elements are the possibility to use video and audio to record your ideas and debate points. This method attracts users that otherwise might hesitate to participate. This benefits both the city and its citizens as their opinions and expertise used to improve the city. Better Reykjavik also uses machine translation as well as AI to recommend ideas and do smart notifications and a toxicity sensor to alert admins about abusive content. There is also automatic classification of ideas.

MECHANICS OF MY NEIGHBORHOOD

In 2011, the Citizens Foundation and the City of Reykjavik added Better Neighborhoods (“Betri Hverfi, later renamed as My Neighborhood).

This 450 million ISK (4.2 million USD, 3.6 million EUR) participatory budgeting initiative enables the public to spend approximately 6% of the city's capital investment budget.. The process for My Neighborhood takes about a year. During a three-week span between February and March, the ideas from all 10 neighborhoods are collected on Better Reykjavik, and from the end of the “idea collection” period to May, the ideas are processed by both the project management team and the political district committees to decide which ones are reasonable and implementable. If the idea is too expensive, not on government-owned land, already being constructed, or the organizational process will require more than 18 months, they are automatically disqualified (Másdóttir, Interview with the author, 2018). In the end, 250 ideas (25 per district) are then finalized, and during the summer months, PDFs called ‘preliminary designs’ are generated for each idea by the planning office, including work by an architect and a cartographer. These experts help determine the budget, location, and logistics of the final product. Finally, from the 10th to the 25th of October, the voting process commences through an electronic, secure and binding vote platform designed by the Citizens Foundation for this purpose. Participation has increased steadily with new records reached almost every year. To vote, users must be 15 or older and live in Reykjavik to be eligible. Voters choose the neighborhood in which they want to cast their vote by simply clicking on it on a map of Reykjavik. Voters vote on projects until they have reached the amount of money the neighborhood has to spend. Next, the voter will get a confirmation that the vote has been cast. People can change their vote as many times as they want, but only the last vote is valid. Beginning recently, the platform also includes the option to add in one heart or a star for your favorite idea, which will count as two votes. After the election, the

votes are counted and the projects are decided—it is a binding vote, so the results are immediately announced and the city has a year to proceed with the implementation (Bjarnason, Interview with the author, 2018).

Both the Your Voice in City Council and the My Neighborhood processes culminate involvement of professionals who aid with turning proposals into implementable policies. Your Voice At The City Council operates throughout the year and returns issues to the city council monthly for ratification. My Neighborhood, on the other hand, works during different time intervals throughout the year, returns yearly results, and requires an online election. Government officials are required to be more involved with this process early on to formulate proper solutions and ideas.

PARTICIPATION

More than half (70,000) of the city's population (120,000) have participated. To date, 27,000 registered users have submitted over 8,900 proposals and 19,000 arguments for and against. Over 7600 projects have been implemented as a result of My Neighborhood with visible and usable results in all neighborhoods which thus have been made better for their citizens to enjoy.

In My Neighborhood participation was highest in the age group 35 - 39 years at 19.5% with 40 - 44 years measuring 18.5%. This unfortunately meant that young and older people were underrepresented (Andruzzi and Spada, 2018).

Interestingly, although the youngest people participate the least, those who do are the most satisfied with the experience perhaps reflecting the demand among young people for more direct forms of democratic engagement. Participation has

increased steadily with new records reached almost every year. Very little user data is available for Your Voice at the City Council as only email addresses are required.

With “450,000 unique visitors since 2008, [and] over 230,000 in 2013” (CitizensFNDN, 2014), participation is highest in the most populous district of the city, Breiðholt, where the proportion of foreign people is among the highest in the city. (“Betri Reykjavik...”, 2016). When analyzing the demographic of users, there seems to be only a small difference between the numbers of female and male participants. Furthermore, households with children have been found to be more active than those without. University students and high income earners are also much more active in terms of prioritizing ideas and voting for proposals compared to those with less education and lower income. It should be noted, however, that the Better Reykjavik platform itself only requires an email and a name/pseudonym and does not collect much demographic data. These numbers are compiled by researchers from Google Analytics and social media sites such as Facebook (Bjarnason, Interview with the author, 2018).

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In an audit conducted by the University of Iceland, just over 40% of Reykjavik residents report that they are pleased with Better Reykjavik and My Neighborhood; 55% of respondents among elected officials and 47% among administrative staff also agreed that the implementation of My Neighborhood was a success.

Better Neighborhoods has inspired many of the biggest towns in Iceland to do similar projects, including Kópavogur, Garðabær, Mosfellsbær and others. All those projects have been successful and are repeated regularly. Better Reykjavik's project, Your Voice At The City Council, has also been replicated in other towns and municipalities such as Hafnarfjörður, Fljótsdalshérað, Stykkishólmur and. Better Reykjavik and My Neighborhood were inspirations for the Decide Madrid project on which Citizens Foundation consulted. The Norwegian Consumer agency uses Your Priorities to connect with the public in Norway to help citizens help them prioritize their work. It's used to crowdsource questions to the government from two majority parliamentarians in France and for projects in Scotland, Norway, Hungary, Slovenia, Croatia and in the Estonian Rahvakogu (People's Assembly) resulting in law and policy changes. The Citizens Foundation open source software & services have been officially used in over 20 countries since 2010 and over 2 million people have used it to find and propose their priorities.

ADVERTISEMENT CAMPAIGNS

The government of Reykjavik heavily promoted Better Reykjavik as the bridge between citizens and government officials. When the website launched as Better Reykjavik in October 2011, they began the promotional campaign with an opening ceremony in Gerðubergi, the city's main library and cultural center, then proceeded to place posters throughout the city on billboards. The City issued multiple press releases ("Betri Reykjavik...", 2016). The main focus of their current promotional campaign is introducing the annual participatory budgeting competition.

To make sure all citizens know about the website, the Citizens Foundation and the government of Reykjavik promote Better Reykjavik through social media (Twitter, Facebook, Youtube, Better Reykjavik), News Outlets, TV Commercials (Mayor Jon Gnarr utilized comedy for attention), political campaigns, awards (European Award in the E-Democracy Awards in 2011). Given the small size of the city, word of mouth also works. A list of the campaign efforts by the city of Reykjavik in spreading awareness of My Neighborhood elections during 2012 - 2015 is shown in Figure 1. The possibility of having one's own bill or policy passed and the ability to see changes were strong incentives to participate, especially given the earlier rampant distrust of government.

Table 5. Presentation of District Elections Bh 2012-2015

year	Actions
2012	<ul style="list-style-type: none"> - Brochure distributed in each house with a list of all projects - Plates hung up widely - Conventional magazine ads and collective radio ads every day all the election aviation - Produced cheap videos with Jón Gnarr Mayor who became "viral" facebook - Media interviews with project staff - Traditional press releases at the beginning and end of the project.
2013	<ul style="list-style-type: none"> - Citizens' Meetings in all neighborhoods where the plan was Better Neighborhood - Advertised in neighborhoods and in the neighborhoods with posters - Traditional distribution of daily newspapers, radio - Distribution with concept list for each district distributed to home - Media interviews with project staff - Press Releases Shipped - The web site of Reykjavik.is. - Start using Facebook - Videos by Jón Gnarr Mayor (from the previous year) on facebook. - Traditional advertising in newspapers and radio, distribution to home.
2014	<ul style="list-style-type: none"> - Facebook used purposefully and purchased costly impressions on facebook. - Media interviews with project staff - The web site of Reykjavik.is - Markedly advertised on facebook and started before the election began - Advertised with web sites in DV, Mbl.is, Más, Karninn og Vísi - Mails sent through service centers, district councils, and parent companies school - Plates hung on multicolored sites in neighborhoods and articles and ads in all rotor blades.
2015	<ul style="list-style-type: none"> - Media interviews with project staff - Notification sent to all registered users BR - Distribution to all houses in Reykjavik - Videos with the story of Gardin and Steineyju on social media - The web site of Reykjavik.is

Figure 1: Advertisement Campaigns during 2012-2015. Source: ("Betri Reykjavik...", 2016)

COSTS

Many people are involved in the project. Beyond the programming team at the Citizens Foundation and members of the Mayor's Project Management team, the Mayor, members of the City Council, planning directors in different departments

and city council committees as well as citizens all have a role to play in this far-reaching engagement program that has become a way of life for the city,

The Project Management Team consists of 4 people—the two project managers (who work with PR, evaluate incoming ideas, and maintain communication between the citizens and the government, a communications representative (who works with the news), and a project coordinator (who oversees the execution of all projects and works in the Environmental and Planning department.. There are around 4 to 7 people in each of the 13 Individual Councils and Committees.

Usually there are enough members to handle the work as part of their job, but the Environment and Planning committee has recently received most of the ideas, making it necessary to expand staffing (Másdóttir, Interview with the author, 2018).

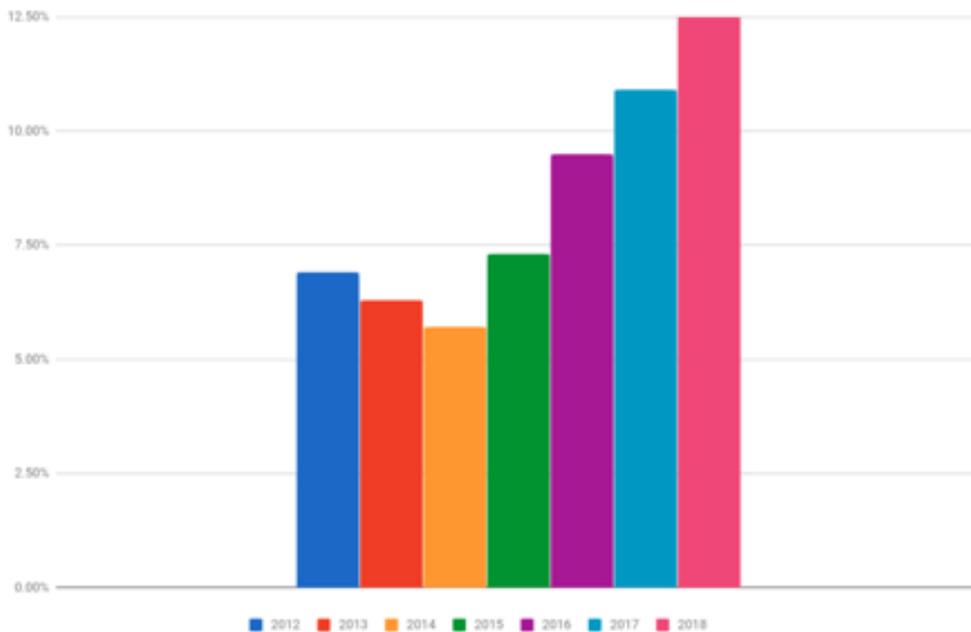
The cost of Better Reykjavik and My Neighborhood from 2011 to 2015 was almost 1.3 billion ISK (\$12 million USD, €10 million) - this includes the participatory budgeting outlay, costs such as the salaries of project managers, advertising and promotional costs, and the €2,500 service agreement with the Citizens Foundation, who operates the Better Reykjavik website (“Betri Reykjavik...”, 2016). However, this figure fails to measure the savings from the innovative proposals or the time of the citizens invested in making them.

RISKS AND CHALLENGES

When analyzing the impact and accomplishments of Better Reykjavik, it becomes immediately clear that the platform achieved its initial goal—giving citizens a voice within the policy-making process and the power to influence the outcome of big

issues—and is still currently accomplishing its goals. This is especially evident in 2018, when 76 My Neighborhood projects were voted on by 11,113 participating voters. Your Voice at the City Council also receives around 1,000 ideas annually, with around 25,000-35,000 visitors and 5,000-6,000 directly participating (Bjarnason, Interview with the author, 2018).

Better Reykjavik faces many challenges in areas including participation, cost, accessibility, consultation, and productivity. Though Your Voice At The City Council was popular when first introduced (as Better Reykjavik), the levels of participation slightly declined from 6.9% in 2012 to 5.7% in 2014. According to surveys conducted by the University of Iceland, there were many reasons behind the decline of participation: lack of knowledge of the platform, lack of time, lack of interest, and issues with the accessibility of the platform (“Betri Reykjavik...”, 2016). However, in 2015 participation rates recovered and have been steadily rising since with 2018 setting a record 12.5% participation in the voting phase.



My Neighborhood yearly participation rates

The city must determine if the ratio of people aware of Better Reykjavik (now Your Voice At The City Council) and My Neighborhood is acceptable, or if they must put in more effort in increasing the current amount. Since the promotional budget has also been kept to a minimum, the city administration must also propose effective ways of promoting the projects to serve their purpose and to get the maximum amount of participation (“Betri Reykjavik...”, 2016). While participatory budgeting is a major feature of My Neighborhood, not much more than 10% of residents participate in the annual process. City authorities must consider “a) Are budgets determined by little over 10% of the population legitimate? b) Would it be normal to set a benchmark for the minimum participation in My [District] constituencies? c) Is the cost of My [District] justified based on the participation” (“Betri Reykjavik...”, 2016)?

In an audit conducted by the University of Iceland, just over 40% of Reykjavik residents report that they are pleased with Better Reykjavik and My Neighborhood; 55% of respondents among elected officials and 47% among administrative staff also agreed that the implementation of My Neighborhood was a success (“Betri Reykjavik...”, 2016). Interestingly, although the youngest people are participate the least, those who do are the most satisfied with the experience perhaps reflecting the demand among young people for more direct forms of democratic engagement.

The developers at the Citizens Foundation have put a lot of effort into enhancing the accessibility of Better Reykjavik, however, there are several issues that still need to be addressed. Google Translate is incorporated to make the website

accessible to non-Icelandic speakers, but it is questionable whether it is sufficient enough to ensure access for immigrants. There are also no resources available for people with special needs and disabilities. Although most households in Iceland are connected to the Internet, accessibility and training must always be taken into account. The University of Iceland found that many citizens are struggling to distinguish the difference between Better Reykjavik (now Your Voice at the City Council) and My Neighborhood (2016).

Some have also raised concerns about the long-term sustainability and limitations of the Your Voice At The City Council project. Since the final decision of policy-making rests on government officials of Reykjavik, some have called it “Advocacy Democracy” instead of “Direct Democracy” (Andruzzi and Spada, 2018), and there is still a very obvious barrier between citizen influence and government procedure. This is also apparent when analyzing the type of proposals suggested by Reykjavik Citizens in My Neighborhood, as “citizens have developed policies to improve the quality of their everyday lives involving school field trips, pedestrian park and homeless shelters; they are largely precluded from taking on greater political and economic matters since those are usually managed by the specialists and experts in contemporary society” (Andruzzi and Spada, 2018). It is clear that citizens have little influence when the matter consists of governmental or economic matters, which raises questions of whether it is necessary for the Better Reykjavik platform to be further improved. However, it could also be unnecessary, as it is also a possibility that Better Reykjavik will lose momentum as the Icelandic economy and political climate stabilizes or continues to improve. These examples show that there are several pitfalls that could potentially appear in the future.

FUTURE PLANS

Though Better Reykjavik is facing many challenges, the team behind it has many future plans in place to continue evolving the project and the process. One effort is to attract more citizens from the younger generation, looking into options such as creating an Instagram account for My Neighborhood to more efficiently showcase the ‘Before’ and ‘After’ of every successful project, or creating a Snapchat account to more easily connect and inform young people of available opportunities to participate (Másdóttir, Interview with the author, 2018). The project management team has already started conducting interviews to capture the success stories of Better Reykjavik, and are planning to post them on social media to further inform the public of the potential impact they can make. The My Neighborhood project is making changes to its rules as well, lowering the voting age from 16 to 15 to “strengthen democratic thinking within the younger generation, and to get a broader spectrum of ideas” (Másdóttir, Interview with the author, 2018).

improvements — some recently completed and others still in development — to Better Reykjavik include a remodelling of the entire user interface to accommodate the quickly rising number of mobile users (Bjarnason, Interview with the author, 2018). Better Reykjavik has been using artificial intelligence and machine learning since 2014, not only to sift out relevant information for a better user experience, but also to build a proposal assistance system which would improve the quality of submitted ideas by advising people on how to craft their submissions (Bjarnason, Interview with the author, 2018). With many different ideas such as further incorporating Google Translate, more and deeper use of sentiment

analysis, and adding Facebook-style news feeds, the platform will most likely continue to evolve in the upcoming years (Bjarnason, Interview with the author, 2018).

CONCLUSION

Better Reykjavik is not the only open innovation website for brainstorming solutions to urban challenges. But having attracted the participation from half the population of the City makes this experiment unprecedented in its scale and scope. Though it is not implementing direct democracy, except in the My Neighborhoods participatory project, within the Icelandic city of Reykjavik, it is still a very large step towards a more transparent, cooperative government and society.

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