

Project Report muc.me

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Political communication and learning in the digital age How to bring citizens and politics closer together?

In times of digitalization, politics and the dissemination of political knowledge face many new challenges. One of them is that public opinion-forming processes are increasingly taking place in the digital space. This is becoming particularly important for democratic decision-makers. Conversations, newspaper articles and television appearances are no longer sufficient for an informed exchange with citizens. Today, chats or tweets find themselves among the new digital forums. However, there are still few formats that bring politicians and their constituents into a productive and sustained conversation. It is therefore an important task, especially for students of a technical university, to develop such formats at the interface of politics, society, education and new technologies. Two projects of the academic year 2017/I have done this, each with a different focus.

The group "Politics and Fun" has set itself a goal of making political education work with young people interactive, while remaining sharply focused on politics. For this purpose, it has developed a program that allows students in political education to witness the parliamentary week of a deputy, thereby helping them to understand the influence of politics on very specific everyday problems and, at the same time, providing them with an insight into the complexity of political decisions.

However, new information technologies are not just a way for citizens to learn about politics. Conversely, it is also important for politicians to record discussions on the Internet and to pick up articulated opinions and interests there. In this context, "muc.me" offers the possibility to make statements and preferences posted by citizens on the internet accessible and transparent to the political decision-makers. The voting tool developed in this project can provide valuable help in concrete decision-making at the municipal-political level.

As mentors of these two groups, we defined our task as sustaining the motivation of the groups over a period of eighteen months, during which our continual substantive input not only facilitated elaborate discussions, but also promoted more profiled projects, opened doors, supported the organization of the projects, and offered ongoing academic advice. At the beginning, both teams were struggling with the complexity of the task, the challenging scientific program of the Junge Akademie, and the considerable time constraints. However, the results achieved so far make us confident that, in addition to the benefits for the participating students themselves, not only innovative but also socially relevant products have emerged that are worth further development.

Sabine Maasen, Stefan Wurster and Alexander Lang



Since August 2018, there has been a new way to submit ideas and motions to the borough councils of Munich

Do you know who to approach if you had a suggestion for your immediate surroundings? Do you know which politicians you would have to contact if you had concerns about the local infrastructure? Do you know how public financing works for newly planted trees or public art installations? If your answer is "no" to all of these, you are not alone. A great number of citizens neither want to be bothered with the legal and political details of a formal application to their councils, nor do they have much time to sacrifice to delve into such matters.

A group of six students from the Technical University of Munich (TUM) hopes to offer a solution with its digital participation platform for local politics. Supported by the scholarship program TUM: Junge Akademie, the students have established a website, https://muc.me/, where citizens can easily post their own ideas on topics of local significance to Munich's borough councils.

This platform is intended to facilitate the introduction of ideas and motions to the relevant committees of local councils. Anybody can submit proposals in the platform's various categories and view the suggestions of other users, voting on them with a five-level rating system. The resulting picture of public opinion may then be used

for a formal motion to the respective council committee, to stress its importance.

The main goals of muc.me are to inform people about the possibilities of direct participation in local politics and to appeal especially to Munich's younger citizens. It is focused deliberately on borough-related topics. "We see a lot of potential in borough politics to reach out to politically disengaged citizens, because local decisions influence our everyday lives and the council committees are easily accessible – provided one knows how," says Prof. Stefan Wurster, Professor at the Bavarian School of Public Policy associated with TUM, and mentor of the team behind muc.me.

The council's budget as a cornerstone of muc.me's offering

Particularly worth mentioning is that muc.me offers a place for discussion of the so called council's budget ("Stadtbezirksbudget"), which was just introduced in 2018. This budget shall be used specifically for ideas proposed by citizens. The amount is defined by the number of inhabitants in a district: Each council has 2€ per citizen at its disposal for this. Thus, muc.me allows its users to submit proposals for the described council's budget which other users can then vote for or against.

The council's budget category stands equally next to muc.me's other categories which boil down to: Health & Environment, Construction, Infrastructure, Culture, Social Affairs, and Education & Sports. These are inspired by the organizational departments of the city council of Munich. This eases the processing of the resulting proposals in the councils because the responsibilities can be attributed directly.

When registering, users specify which district of Munich they live in. This information is supposed to be displayed in the poll results so that the borough councils know what their residents think about a specific topic or if a certain topic is seen differently across the boroughs. "It's indispensable information for a borough's politicians whether it's the local residents who favor a road rerouting or the commuters passing through the borough, for example," explains Jonas Ruchti, Electrical Engineering student and core member of the team.

Current outreach and plans for muc.me's future

On questioning, the students commented that their greatest specific challenge was to do with data privacy and all the bureaucracy

associated with it. "TUM puts great stress on data privacy and protection. But as we all know, this is very important and just has to be done," comments Simon Rehwald, co-founder of muc.me and Master's student in Information Systems. Additionally, the scientific evaluation of the work is important for the students. To be more precise, they want to find out how well users accept the platform and what demographic characteristics, such as age and level of education, registered citizens have. These results can be used to assess their efforts and improve the platform or other digital participation offerings further.

So far, the team has successfully convinced the politicians of the borough councils of Maxvorstadt, Aubing-Lochhausen-Langwied, Ludwigvorstadt-Isarvorstadt and Feldmoching-Hasenbergl to support and use muc.me. More boroughs will be approached in the future. The project will definitely run until the end of November 2018, i.e. until the end of the active membership of the respective students in the TUM: Junge Akademie. What will happen afterwards is not clear. One possibility under consideration by the students might be to seek a further collaboration with the city of Munich. However, concrete steps in this direction have not yet been taken.

muc.me - SWOT & In a nutshell

Strengths:

- Simple and minimalistic
- Low initial hurdle for participation
- Available everywhere at any time

Weaknesses:

- Continuous inflow of new content needed to keep platform interesting
- Large number of users required to generate reliable results

Opportunities:

- Unique in Munich
- Supported by local politicians

Threats:

- Incentives required to make users come back
- Problematic content (e.g. racism)

In a nutshell:

- Design and Development of the digital platform muc.me for civic participation in Munich
- Evaluation of marketing effectivity and demographic characteristics of the platform's users
- Groundwork for the research question: Which features does such a platform require to be successful?

Abstract

This paper outlines the relevant political processes for general affairs in Munich's citizen councils and the councils' budgets introduced in 2018. Based on these, an overview of the design process and operation of a digital citizen participation platform is presented. Our research's aim is to define features such a platform requires to be relevant and useful for Munich citizens. In the course of this, we conducted an intermediate evaluation based on usage statistics and a survey among newly registered users. The results suggest potential behind the idea, especially since the majority of our users were previously not involved in local politics. Nevertheless, a definitive conclusion cannot be drawn due to the short time span of platform operation and the small data set.

1. Background

Democracy is based on political participation. Human beings living in a democratic state have the powerful right to influence politics by voting for a specific party, taking part in meetings of local borough councils or generally expressing their opinion on certain topics. However, political participation is unequally distributed from a demographic perspective. Kroh and Könnecke [4] state that unemployed and low-earning people are less politically active than people who work and earn enough salary so that they live above the poverty line. According to them, inequality in Germany regarding political participation is higher than in other European countries. In Brooks and Hodkinson [1], the authors describe that interest in politics among young people has declined over the past years in many countries. They also note that digital media and the internet seemed very promising in the 1990s to reverse this trend, yet the expectations were too optimistic. Still, using new technologies in politics is of high interest. These results are similar to those of Zepic et al. [8]. They explain that e-participation among municipal households was implemented in many German cities, but the citizens' interest in it and their actual participation is rather low. As a result, the authors analyze and categorize potential barriers for the non-participation. Besides that, it is also worth mentioning that the degree to which citizens should be able to influence politics is controversial according to Vetter [7].

At the same time, Vetter [7] states that democracy needs participation and citizens can bring in valuable experience. Especially in relation to topics which directly affect them, citizens might be excellent consultants. This is particularly true for local politics represented by borough councils, as for instance in Munich. Unfortunately, experience from our own meetings with politicians has shown that citizens are either not aware of the different opportunities for taking part in political discussions or are not interested.

Consequently, our project is about the development and evaluation of a digital solution, namely a platform for enhancing civic participation in Munich's local politics. Even though there has been limited success in using digital media over the past years as we have explained, we think that our new attempt is worthwhile: On one hand, we can use our own experience and design the platform to fit the needs of actual users. On the other hand, recent developments, as for instance the greatly increased usage of smart phones, might have changed the situation as compared to the 1990s. In the course of our project, we developed and evaluated the online platform muc.me, which allows people to create posts other users can vote on and that can subsequently be transformed into a formal request submitted to a responsible council.

The ultimate question we would like to answer is which features such a platform requires to be relevant and useful for Munich citizens. Due to time restrictions, our evaluation is so far mostly based on demographic data obtained from the platform's users. A follow-up survey on the features of muc.me and how it is perceived in general is planned for the future.

The remainder of this report is structured as follows. In the next two sections, we continue with important background to our research. More specifically, we describe relevant political processes in Munich (Section 1.1) and the council's budget (Section 1.2). Following that, we present our goals and methods (Section 2). The outcome of our research and its discussion is part of Section 3. Finally, this report is concluded in Section 4 with a short summary and outlook.

1.1 Relevant Political Processes

The city of Munich is divided into 25 districts, e.g. Maxvorstadt, Ludwigsvorstadt-Isarvorstadt, Feldmoching-Hasenbergl, or Aubing-Lochhausen-Langwied, each of which has its own council committee. The latter consists of politicians democratically elected on a six-year basis by eligible citizens. The councils are usually concerned with topics that are local and very specific to them. For instance, they have to decide on where public restrooms shall be located in a specific area or whether they financially support cultural events, e.g. concerts, that take place within the borders of their respective district. Additionally, councils can be further divided into subcommitees that concentrate on a particular subject, e.g. infrastructure or culture. Items on the agenda of a meeting may not only come from the politicians themselves, but also from citizens who have a request or proposal. For this, they need to contact the council committee in written form, i.e. by letter or email, and state their matter. The committee then decides on when (and possibly if) this can be discussed during an official meeting. The proposer is expected to attend and has again the ability to describe what they want. Following that, each member of the council can state their opinion on it and finally a decision, i.e. whether they accept the proposal and follow up on it, is made based on a majority vote.

1.2 Council's Budget of Munich

In January 2018, the city of Munich introduced the so-called council's budget ("Stadtbezirksbudget") for each council, which shall be used specifically for ideas proposed by citizens. As described to us during meetings with local politicians, the amount each of the 25 councils has at its disposal is defined by the number of citizens living in a district in Munich, namely 2€ per inhabitant. For instance, Maxvorstadt with its approximately 53 000 residents¹ receives 106 000 €. However, according to the politicians we talked to, the problem seems to be that only very few people are aware of that budget and its possibilities. Additionally, official information about the council's budget found on the internet is currently rather sparse. We only found one web page² containing some general information. All in all, the general idea of the council's budget is very

promising, but further publicity and support during the process of handing in ideas is necessary to carry out its full potential.

2. Goals and Methods

In the following, we point out the goals and methods within our project and research.

2.1 Goals and Scope

As mentioned in the sections before, there is a need to enhance civic participation in Munich. With our project, we try to solve this issue by developing a digital solution that is concerned with Munich's local politics. Along with that, we evaluate our platform. In particular, we want to find out which features such a platform requires to be relevant and useful for Munich citizens. Our ideal goal is to especially reach young people who have not been politically active so far.

Our research comes with a few limitations. Due to a long period of ensuring that data privacy on our platform follows the requirements of TUM, its release was rather late. Therefore, we were only able to collect data in a first survey for a short period of time. Additionally, a second survey which we would like to run when users have had enough time of working with the platform, has thus not yet been sent out. Consequently, our current research results are still in a preliminary state.

2.2 Method: A Novel Digital Platform for Political Participation In this section we present our research method, a digital platform. We start with reviewing similar platforms and then describe the

We start with reviewing similar platforms and then describe the way we designed our own platform. Lastly, we give insights into conducted and planned surveys.

2.2.1 Review of Existing Platforms

Answering our research question presented in section 1 involves creating a custom-built internet platform. As a first step, we examined different existing political internet platforms. These were not

¹ https://www.muenchen.de/stadtteile/maxvorstadt.html (accessed: September 21, 2018)

² https://www.muenchen.de/rathaus/Stadtpolitik/Bezirksausschuesse/BA_Zuwendungen.html (accessed: September 21, 2018)

limited to the scope of our project (politics on borough level) and ranged from map-based services to call attention to inconveniences like potholes, to discussion platforms about statelevel politics.

Because this review justified the larger part of our design decisions for our platform, some notable examples are listed in this section.

mein-marburg-biedenkopf.de was one of the first platforms we investigated. Being limited to one district, it was a main influence towards our plan to work on the involvement of citizens in local politics. The platform focuses on the informative aspect of citizen participation but invites the citizens to voice their opinion with a combination of online surveys and real-world meetings. In all cases, politicians are responsible for bringing up a topic and starting the discussion. Initiative by citizens is not intended online.

represent.me, originating from and mainly used in Great Britain, is a featurerich platform centered around short, easily answered questions of opinion from a broad range of topics. Because of its extensive feature set, e.g. allowing subscribing to users' activities and joining sub-communities, and its feed of short surveys, it has the look and feel of a social network. Additionally, it provides detailed insights into a surveys' generated data with demographics and heat maps of each answer option. The minimal initial hurdle, also seen in the minimal set of personal data queried in the registration process, formed one key aspect in designing *muc.me*.

meinemaxvorstadt.de (now defunct) was established by the CSU fraction of the borough Maxvorstadt. It is clearly not a fully-featured internet platform, but nevertheless it was an early attempt by politicians to gather anonymous opinions from the general public online. In personal meetings with the politicians we discussed their experiences and heard that the platform was not successful. This was traced back to the fact that it consisted only of a few questions with large, empty free-text fields to be filled in by the citizens. It provided little to no user feedback and interactivity and had thus a similar initial hurdle like writing an email directly or using a contact form.

muenchen-transparent.de is Munich's purely informative platform for local and city-level politics. Politicians share all documents, protocols and reply letters disclosed to the public here.

The major difference of these platforms to what we developed as part of our project is that we focused on the support of the process of creating a proposal towards a council committee in Munich. Hence, our scope is not as broad as in *represent.me* and more specific than *mein-marburg-biedenkopf.de*. Additionally, we wanted to design an easy-to-use tool that offers a better user experience as for instance *meinemaxvorstadt.de*. At the same time, it is our goal to encourage users to actively create content; this is in contradistinction to *muenchen-transparent.de*, which is built for an information flow only from politicians to citizens.

2.2.2 Design and Operation of a Digital Platform

As our review included platforms with widely different scopes and orientations, the exact scope for our project needed to be clearly defined as a starting point for the user interface design. The representation in figure 1 symbolizes this orientation in a two-dimensional plane. The endpoints of the axes in this sketch are not completely contradictory, hence a platform can cover a larger area of focus. Yet the platforms we analyzed in our review revealed shifts in either one or the other direction, and we thus used this model as a visualization.

On the vertical axis, the diagram ranges from a platform which provides diversified entertainment (e.g. by focusing considerably on gamification), but would need sophisticated filtering tools or manual sorting to capture wellfounded, serious contributions, to a platform for exchange between people with in-depth knowledge, with a difficult to obtain user base.

The horizontal axis represents the amount of insight required from a user. On the left-hand side, the decisions the user can influence on the platform involve a large amount of background information the user would either have to have previous knowledge of or have

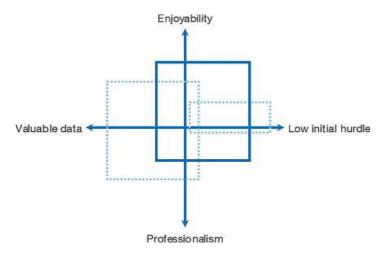


Figure 1: Example areas of digital platform orientation (dotted) and chosen orientation for *muc.me* (solid line)

to familiarize themself with. On the right-hand side, there are only trivial decisions to be taken. In our case, this axis correlates with the level of politics, with federal politics more to the left and local politics more to the right.

As the ideal case of combining all four axis end points would be an unrealistic aim, we needed to find the middle course which best fitted our hypothesis. Because we wanted to focus on younger citizens, we shifted the focus from the center towards the upper right hand side quadrant. This also allowed for a simpler platform design, because the amount of information to be provided is comparatively small.

In addition to our platform review and the chosen focus, *muc.me*'s design was influenced by feedback from politicians, mainly of Maxvorstadt, during the design and implementation phase and also during the later operation of the platform.

2.2.3 Conduct of Surveys

For measuring our impact on the public's interest and eagerness in political participation, solely using our website traffic or other usage statistics would be insufficient. Using our platform's builtin surveys provided an easy, but restricted in terms of question format, means for our evaluation. Thus, online surveys were used as another source of data, conducted using the survey system EvaSys.

Directly after registration, every new user was asked to fill out a short survey, because we wanted to determine the experienced development of our users' participation. This survey is presented to them before they were lead to the platform, but it was not required for using *muc.me*. Because the survey was opt-in, we tried to keep the questionnaire as short as possible. We focused on a few aspects:

- Because our target demographics are an important aspect of our research question, we wanted to know our participants' age and profession.³
- We queried our user's borough of residence and workplace. These questions were asked mainly because they facilitated interesting correlations to the posts we later saw on *muc.me*.
- We wanted to know about the participants' commitment to their immediate surroundings in the city. Thus, we included questions on how many years someone have been living in Munich and how much they (subjectively) identified with their borough.
- It seemed to us like the simplest measure for a person's general political interest to ask how often they discuss political topics with their family and friends.
- We had some questions about our users' prior knowledge of their opportunities to participate in politics on a local level, namely if they knew how they could approach the politicians of their borough, if they knew about muenchen-transparent.de and if they had heard of the citizen's budget. We also included a question on whether they had personally contacted their local city council.
- Based on the citizens' knowledge of their opportunities, we inquired about their general satisfaction with them, i. e. if they feel their concerns were valued and taken seriously by the politicians

³ The former was inquired by month and year of birth, while we used a selection list based on [3] for the latter.

and if there were sufficient digital means of citizen participation in Munich in their eyes.

■ The survey concluded with a question how the participants became aware of *muc.me* (for evaluating our marketing efforts) and a free-text field on what should be addressed in a digital political participation platform.

For the home and workplace location questions, we offered our participants the options to state their borough or their zip code. Since we are mainly interested in boroughs and not in the resolution provided by zip codes, the zip codes were mapped to boroughs in case no borough was given.⁴

After three months of platform operation, we plan another survey in order to monitor the development of *muc.me*'s participants' political engagement. At the time of writing, the questionnaire design for this survey, whose results we could compare with our first survey's, was not completely finished. This survey will thus include many of the questions from the first one to aid a direct comparison. Additional questions will be included about their experiences on our platform which we hope to improve further based on the feedback.

3. Outcome and Discussion

This discussion of our method's outcome is split into two parts: The first part contains a description of the final digital platform *muc.me* as the outcome of our research regarding digital political participation platform. The second part focuses on the outcome of our first survey, giving an estimate of *muc.me*'s success.

3.1 Final Platform

The final version of *muc.me* was launched on August 9, 2018. Nonetheless, the development is still active and various updates

have been published since the release. So far, we support the boroughs Maxvorstadt, Ludwigsvorstadt-Isarvorstadt, Feldmoching-Hasenbergl and Aubing-Lochhausen-Langwied. That is, we have agreed with these boroughs' politicians that posts created by users on *muc.me* relevant to one of these boroughs will be considered in the councils. The platform was built using the web framework *Angular*⁵ and *Node.js*⁶ on the server side. The web hosting is done on *Uberspace.de*⁷. Data processing and storage is performed using the infrastructure of cloud-provider *Heroku*.⁸

In the following, we present and explain the core features of *muc.me*. Additionally, we point out some usage statistics of our platform.

3.1.1 Core Features

muc.me's main purpose is to ease the creation and submission of proposals to a borough council. As such, a user can create a proposal or post, as we like to call it at that stage, that describes their matter. Other users can then vote on the created post, i.e. they express their opinion and specify whether they agree or disagree. Each post can belong to one or more topics, which we describe in the next paragraph, and one or more boroughs. After a period of four weeks, a post expires and voting is no longer possible. The user who created it will then receive an email that contains a template for turning the post into a formal proposal to the borough(s) it is relevant for. This template will also contain a reference to the post on the platform. Hence, the idea is that muc.me on the one hand makes it easier to submit a proposal and on the other hand allows us to create an overall picture, which could be helpful for the politicians deciding on a proposal. However, not each post needs to necessarily be turned into a proposal. Users and especially politicians might also just ask for opinions on a specific topic.

Having explained the functionality of *muc.me* from a high-level perspective, we now provide a walk through its most important

⁴ Because some zip codes are shared by multiple boroughs [6], the data analysis is complicated slightly. For ambiguous cases, all possible boroughs were counted, weighted with their respective population (based on current data from [5]).

⁵ https://angular.io; accessed September 23, 2018

⁶ https://nodejs.org; accessed September 23, 2018

⁷ https://uberspace.de; accessed September 23, 2018

⁸ https://www.heroku.com; accessed September 23, 2018



Figure 2: Landing Page

features by using actual screenshots. When accessing the platform in a browser, the user will see a landing page describing what this platform is all about, how it works, and some general information about data privacy and our team (figure 2). The user can then sign in or create an account. Signing in leads to a page showing the topics found on muc.me only (figure 3). The latter are Health & Environment, Council's Budget, Construction, Infrastructure, Culture, Social Affairs and Education & Sport. The user can now click on one of these topics or on the button "All Topics." This will lead him to a page showing all posts tagged with the topic selected or all posts in general (figure 4). Additionally, a filtering feature is available that allows the user to define which posts should be shown. Filter options are the topic as well as the borough the post is relevant for. When scrolling through the posts, the user can express an opinion on a post by clicking on buttons of a five-level rating system ranging from -- (strongly disagree) to ++ (strongly agree). The vote is immediately processed and a diagram will be shown afterwards that displays how other users voted (figure 5). Besides that, users can also create new posts on their own (figure 6). In the course of this, a subject and description as well as the topic and



Figure 3: Landing Page when Signed In

borough the post belongs to need to be specified. When submitting the completed form, the newly created post is immediately visible to all other users. Lastly, *muc.me* also offers a few general features such as showing a list of posts voted on so far, displaying a user's profile and the ability to change the password.

3.1.2 Usage Statistics

Currently, 225 verified⁹ users are registered on *muc.me*. So far, 21 posts have been created; nine of them were published by users outside of our project team. However, posts received between 3 and 121 votes and 21 votes on average. That is, users are genuinely interested in some of the topics. Nevertheless, we would like to have more activity and especially content on our platform. We consider the number of registered users in general as good for a start. Thus, we need to increase our advertising and make sure that citizens actually use *muc.me*. In particular, we experienced the problem that users do not re-visit *muc.me* after their registration and first usage. We therefore plan to implement a newsletter (including opt-out functionality) for bringing already registered users back to the platform.

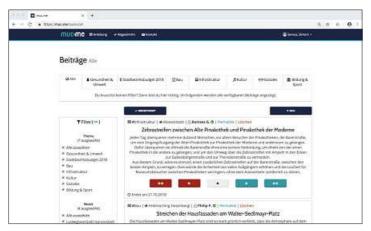


Figure 4: List of Available Posts

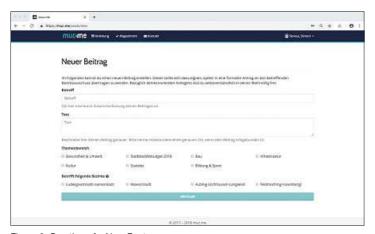


Figure 6: Creation of a New Post

3.2 Results from the first survey

In our first survey, we analyzed questionnaires from 128 participants. Some questions were omitted from this section as their results will only become relevant when compared to the results of our the second survey we are planning. This sections briefly presents the relevant results, which will be discussed in section 3.3.



Figure 5: Adding a Vote

3.2.1 Demographics

66 participants indicated they were male and 55 female. Figure 7 shows some additional demographics based on the collected data.

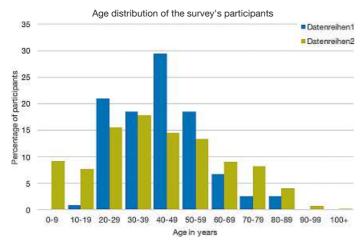
3.2.2 Political Involvement

Most of our survey's questions regarding political involvement were planned for an evaluation in contrast to the second survey, hopefully indicating some development. Nevertheless, figure 9 shows the answers of *muc.me*'s current user base to questions about their past political experiences. It is thus valuable for evaluating if our concept is able to attract people who would otherwise not be involved in politics.

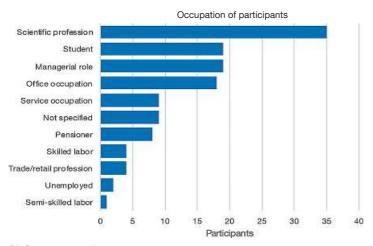
3.2.3 Marketing and Outreach

The most mentioned reason for registration in the survey was, by a large margin, information from friends and family (43 participants), followed by facebook (16 participants), direct contact from us (14 participants) and newspaper articles (12 participants). Our information stands at the TUM main campus and the StreetLife festival were indicated a total of two times.

Because of the small numbers, no meaningful correlation between the mentioned reasons and our marketing campaigns could be

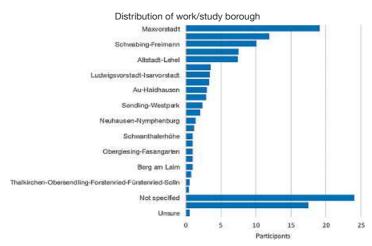


(a) Age distribution, compared with 2017 Munich census data [2]

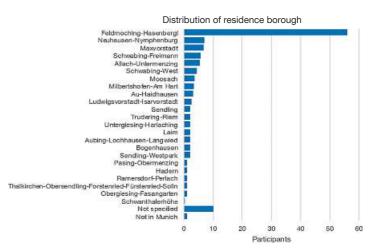


(b) Current occupations

Figure 7: Demographic insights



(a) Work/study borough distribution



(b) Residence borough distribution

Figure 8: Participants' boroughs of residence and work/study place

made. Thus, just the number of registered users on the platform over time, as displayed in figure 10, was used for the analysis.

3.3 Discussion of the Results

The collected data allows for some preliminary assessment of the demand for a solution similar to our platform, but also lets us evaluate our marketing strategy so far. It is thus a first step towards answering our actual research question.

3.3.1 Survey Sample Size and Bias

On their own right, the results from our first survey have little significance for general cases. This is mainly due to two reasons:

- The sample size is comparatively small with 128 participants.
- The sample suffers from a strong bias: The initial user base for the platform was formed mainly from our and the participating politicians' acquaintances. The marketing channels provided by TUM also had their effect, reaching mainly people with a scientific background.

Later, we reached a broader audience with our marketing campaigns (cf. section 3.2.3), but a small number of groups, e. g. citizens active in *Interessengemeinschaft Fasanerie aktiv* e. V., an association cooperating with the local politicians supporting our project.

The sample bias can be seen best in figure 7b, where the prevalence of scientific occupations and students is apparent. Similarly, figure 8a shows a dominance of Maxvorstadt, the location of TUM and LMU main campuses, as a work/study borough. The noticeable number of participants from Feldmoching-Hasenbergl in figure 8b can be traced back mainly to Interessengemeinschaft Fasanerie Aktiv e. V.

Our primary concern was acquiring a large enough user base for our platform. We thus accepted the resulting bias for our survey as a deliberate selection of participants would have either decreased the number of users or necessitated additional means of acquiring participants for our survey. As a consequence, our research question cannot be reliably answered at this point in time. Nevertheless, the gathered data provide means of intermediate evaluation of our efforts.

3.3.2 Demographics and Political Involvement

Because of this strong bias, the results are to be taken with a grain of salt. The age distribution visible in figure 7a indicates that our platform gained popularity outside our targeted younger audience. Instead, 40 to 49 year old citizens are disproportionately over-represented in our user base.

Similarly, the answers to the yes/no questions graphed in figure 9 show that the user base acquired satisfies key aspects of our aim:

- The majority of users were not in contact with their council (figure 9b). This means we did not only motivate citizens who already took advantage of their possibilities in Munich. Additionally, a large portion would not even haven known whom to approach with their suggestions (figure 9a).
- An even larger number of users did not know muenchen-transparent.de, which is the most direct source of information from the city councils (figure 9c). We hope to change this as some posts on *muc.me* link to documents on muenchen-transparent.de.
- As we suspected when conceptualizing the platform, the knowledge of Munich's council budget is still not very widespread (figure 9d).

As the platform operation and our marketing efforts continue, we hope to acquire more citizens previously not involved in politics as users for *muc.me*.

3.3.3 Marketing Effectiveness

As mentioned in section 3.2.3, the number of users over time provided a sensible way of determining the effectiveness of our campaigns. In the plot in figure 10, some jumps are visible. These correlate with some specific events:

 The most notable increase coincides with our article in the Süddeutsche Zeitung¹⁰ from August 12, 2018

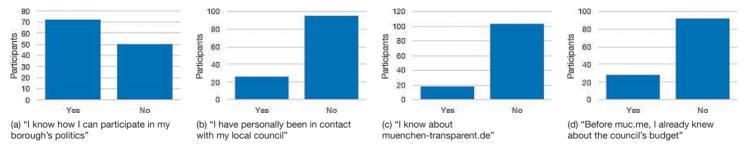


Figure 9: Several yes/no questions regarding political involvement

- (2) Our facebook campaigns took place between August 30 and September 6, and from September 12 onwards. Naturally, they did not effect a sudden increment, but rather a increase in the slope of the graph.
- (3) Our presence at StreetLife on September 8 and September 9 did not have any visible effect. Indeed, there was only one mention of the festival in the survey.
- (4) Another "step" in the graph could be explained with the Future-Lab II of the TUM: Junge Akademie on September 14, where we were able to reach additional people within our scholarship program.
- (5) On September 16, a post¹¹ went online. Usage statistics suggest a large number of our users registered solely for this post, as the author further publicized it themself. Thus, we trace back the large number of users joining around October 5 to this post.

3.3.4 Conclusion

Our preliminary results show that people are, in general, interested in the idea of a digital platform for civic participation. The fact that a large portion of our users registered after reading about *muc.me* in the newspaper or hearing about it via facebook indicates that our platform seems to be reasonable and valuable at least in theory. However, we so far can answer neither whether muc.me is really needed in Munich nor whether its design is sufficient for the use case, mainly because of two reasons: First, we do not track how often users visit our platform because of privacy concerns and thus

cannot measure their interest in new topics and ideas. Second, we yet have to discuss the quality of the created posts with politicians, as the launch of our platform coincided with the summer break of the councils. As a consequence, we can only estimate that there is some general interest in our concept at this point in time.

4. Summary and Future Goals

Within our project we were able to develop and finally launch a digital platform called *muc.me* for enhancing civic participation in Munich. Our main research question was which features such a platform would require for being successful. For this purpose we planned two surveys, one asking for general information at registration time and another one specifically focusing on our research question. While the former is already in progress and currently has a sample size of 128, the latter is still part of our future work. That is, our research results are still preliminary and cannot decisively answer our original question. However, our data show that the idea is promising: The majority of the citizens we reached has not been actively involved in political participation.

In general, we see a lot of potential in our idea for a very simple and easy-to-use way of participating in local politics and the number of users we managed to acquire in the short time frame is a sign of the demand for a solution. In the short term, we thus want to continue our platform development ourselves and develop a num-

^{11 &}quot;Sondernutzungsgenehmigung "Digitale Geschwindigkeitsanzeige" Pappelallee" at https://muc.me/posts/23 (accessed October 20, 2018)



Figure 10: Number of registered users over time

ber of additional features like more data analysis capabilities, better filtering and other usability improvements. Our aforementioned second survey will provide additional insights into the demand for a digital platform for local politics in Munich. It will help us to improve *muc.me*'s offering further by validating our key assumptions in the design process.

For the long run, however, we are looking for a partner to take over the platform operation. We hope to permanently establish *muc.me* or a successive platform in Munich's local politics, not only simplifying the ways citizens can submit their suggestions and work closer together with the politicians, but also motivating citizens about their rights and opportunities for influencing Munich's local politics.

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Self-reflection muc.me

Citizen Engagement in post-Brexit times

"It is a truth universally acknowledged" that the year 2016 marked a before and after in how citizen participation in politics was perceived by society and academia: On June 23, 2016 the majority of British citizens voted in favour of leaving the EU in the "Brexit" Referendum. On October 2, 2016, 50,2% of Colombians rejected the Colombian Peace Agreement Referendum that proposed to put an end to fifty years of conflict between the Colombian government and the FARC guerrillas. Finally, on November 8, US citizens elected Donald Trump as President in the US Presidential elections against Hillary Clinton. While "the majority" of people who voted were celebrating their victories, a large number of people, including ourselves, could not believe what was happening in front of our eyes, asking ourselves the question: "How did we get here?" The general belief that citizen participation in politics was always beneficial was no longer an uncontested truth.

"Idee-Kommunikation-Partizipation" (Idea-Communication-Participation): Participating in a TUM: Junge Akademie project on citizen participation

In the following months after these traumatic events, TUM's Junge Akademie raised a call for the Class of 2017/I titled "Idee-Kommunikation-Rezeption" (Idea-Communication-Reception/Processing). At our first get-together at Lake Starnberg in May 2017, a large group of scholars assembled around the project title: "Politics and Participation." In other words, many of us were interested in researching the communication process of decision-making by politicians to citizens and in analyzing the involvement of citizens in those decision-making processes – all of which links back to the Year's call: Idea-Communication-Participation.

What we did not know back then was that in order to move forward from a project title to a 20-month project, a lot of participation from our side would be needed. With more or less uncertainty, we set out on a journey to understand the processes of citizen participation by participating ourselves in this joint endeavor.

From a Group of 13 to a High Performance Team in a Network of Excellence

The first memorable experience regarding our group formation was the project definition phase. In our endless "Group of 13" discussions, more than half of the group had a different idea in mind regarding the methodology to follow. Agreeing to disagree, two teams separated out, one of them focussing on Digital Political Education in schools (PiA), and ours, with the aim of researching citizen participation in political decision-making.

The months that followed were important to define our problem statement and project goals. At the same time, however, the engagement of our five members (back then) in the discussions and meetings provided each of us with understanding of our own team-building process and of each team member's characteristics. In getting to know each other's strengths and weaknesses, interests and motivations, participating in the development of this project became a much more engaging and exciting task. Our output became no longer a combination of several individual efforts put together but the result of a unified team moving forward as a "High Performance Team." This feeling became even stronger when we successfully managed to incorporate our sixth member into the team, allowing us to grow in diversity and to learn about inclusiveness in team structures.

But our feeling of togetherness was not only experienced within our team. Without a doubt, our collaboration with several partners within the TUM: Junge Akademie's "Network of Excellence" provided us with the necessary experience, insight and perspective (and sometimes a well-deserved call for driving forward our project according to our project plan) i to guide our research toward a successful outcome and a tangible end-product. For that reason, we would like to express our most sincere gratitude to our Tutors, Matthias Lehner and Dominik Irber, and to our Mentors, Prof. Dr. Sabine Maasen, Dr. Alexander Lang and Prof. Dr. Stefan Wurster, who supported us tirelessly and contributed with their enthusiasm

and creativity in making our project happen. Our "Network of Excellence" certainly reached out much further than that. Special thanks to the excellent Management Team of the Junge Akademie, Maria Hannecker, Peter Finger and many others, to the Board of Members, Advisory Board, Emeriti of Excellence, TaskForces and Alumni, and last but not least Prof. Müller for his extraordinary engagement and support.

This list of gratitude could not be concluded without sending special thanks to our colleagues of the Class of 2017 I and II, with whom we had the opportunity to learn and grow together and whose valuable input in and outside the project realm was essential for our success and will continue in the form of lifelong friendships.

muc.me – a project on digital citizen participation in Munich's districts

It was only then, on a dark Tuesday night in one of TUM's rooms in the Main Campus, after a long brainstorming session by our team members, that the name of our project emerged: muc.me – digital citizen participation. After almost ten months of work, our concept began to take shape. And the pace and intensity at which it developed from that day on to our present day's project is indeed something to be proud of.

Deciding to do a project on citizen participation at district level is surely an exciting task. Along the way, we believe that the encounters we have had with countless district representatives, often ordinary citizens who feel passionate about improving their living environment and that of their neighbors, have been one of the best experiences of this journey. In the process of researching citizen engagement at district level and trying to propose a tool to foster it, we have become ourselves active participants in our own district's politics. This is, we believe, a "Windfallprodukt" or "unexpected externality" of our project. Our personal interest in local politics has grown considerably and our ambition to share our tool with the rest of society has grown as well.

As it is often the case in participatory planning, the process is often more important than the outcome. We believe that muc.me has initiated a process for Munich's citizens that can lead to a more sustainable way of decision-making at local level in the future, thus contributing to the fostering of trust among citizens in open and inclusive ways of doing politics.

Participation, quo vadis?

With these reflections, we come to the end of our journey. Sadly, nowadays many people would agree in saying that Democracy, as understood by Western society, is under threat. Populism, media manipulation and fake-news have a strong influence on people's opinions, often affecting political decisions with strong implications for the world's society...

Our project has shown us an answer to the question raised by ourselves at the beginning of this text and of our journey: Participation, quo vadis? Our answer is not that participation is in itself automatically beneficial for society, though neither do we believe that a society is sustainable without participation. We believe that informed decision-making by citizens is the key to a democratic system. Inclusive, transparent and informed participation can indeed help to fight back against populism and fake-news. For that reason, new digital and physical tools that foster informed citizen engagement and spark inclusive decision-making processes are essential for the sustainable development of our societies.

Citizen Participation



ABSTRACT Ongoing discussions and our research have shown that there is a lack of political participation opportunities and some people even have no idea of the significance of their political contribution. Therefore, our vision is it to tackle especially the first of these two findings by providing an easy and direct way for civilians to communicate their ideas and opinions.

GOALS

- Investigation of motivation and benefits for politicians in the engagement with citizen participation
- Establishment of a platform to connect politicians, NGOs and the citizens
- Simplification of communication
- and participation on political subjects

 Promotion of citizen consultation
- Enabling larger numbers of participants in grassroots democracies
- Encouragement of politicians to consult citizens directly
- Development of efficient feedback pathways

HYPOTHESIS

direct and objective exchange of views and information strengthen citizens perceived influence and political participation

CITIZEN CONTROL JOINT PLANNING CONSULTATIONS CITIZENS FEEDBACK Less INFORMATION More

TEAM STRUCTURE, PROCESS AND OUTCOME

Analysing the subject brought us to the conclusion that the citizens' perceived influence on decision making processes and information exchange are the two major problems concerning public participation. To solve this problem a digital platform offers significant advantages among all proposed methods – the main being avoiding the typical problem of grassroot democracies in the physical world.

After determining the scope of the project we will design and develop a digital platform for direct communication between citizens and politicians. We plan to test and evaluate the platform in a delimited pilot project. The platform holds the potential to be further developed.

SUMMARY

Our group's vision is to prevent a feeling of neglect and impotence in citizenry, to improve the integration of the folks in politics and to provide an easy and direct way for civilians to communicate their ideas and views.

OCTOBER 2017

MEMBERS H

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POSTER 1: As the name indicates, our team wanted to work on the topic of citizen participation. For determining the scope of the project, we first had to analyze the predominant state of affairs. We did so by identifying the current problems of citizen participation and then researched their possible origins in order to understand their roots at first hand.

The main problem we identified was a general lack of interest – in participation (even where opportunities are available), information and communication. The decisive reasons for this problem are, in our eyes, as shown in the first poster: an often non-existent sense of political responsibility, the relatively large effort needed to get information, the lack of visible political influence and the lack of opportunities to participate.

To get a deeper understanding of civic participation and create an effective tool for the improvement of this initial situation, the hierarchy of participation possibilities was analyzed. As can be seen on the first poster, the lowest level of possible participation of citizens is in receiving information. Higher levels are: the feedback of citizens; consultation; joint planning; and, finally, citizen control. Citizen control gives people the opportunity to decide on topics themselves.

With all this in mind, we decided that we wanted mainly to address the two, in our eyes, most important deficits concerning participation: the citizens' perceived lack of influence on decisionmaking processes and the low levels of information exchange.

From our findings, we have derived the first hypothesis: "A direct and objective exchange of views and information strengthens citizens' perceived influence and political participation."



POSTER 2: By the time the second poster was designed we had changed our project slightly. During research it turned out that, beginning in 2018, Munich's boroughs would have responsibility for a yearly citizens' budget. We agreed that this should be a core of our project. We decided to develop a digital platform to enable citizens to propose concrete projects on which that money could be spent, but also to come up with any city-improving ideas. All users should be able to rate these proposed projects and ideas. Furthermore, the proposals with good feedback should be forwarded to the responsible politicians to influence their decisions concerning these subjects. A non-negligible benefit of such a platform is the possibility of using it also for the evaluation of the created participatory processes.

Focusing on this idea we tried out existing participation platforms and had meetings with experts and politicians. The outcome of our research and the feedback of the consultants reaffirmed our plans. We are convinced that an innovative, simple and interesting platform that is specialized in just a few topics and allows citizens to communicate their demands and desires can be an enrichment for today's political world.

This idea led to the altered hypothesis: "A digital platform for the collection of ideas and opinions can help to lower young people's inhibition threshold regarding politics, build trust in civic participation, improve transparency and generate important information for Munich's local politicans (for example, concerning the citizens' budget)."

This platform should create a simple communication channel between citizens and politicans and at the same time reduce feelings of neglect and impotence concerning political matters. All, but especially young people, should be motivated to contribute.



1. WHAT IS OUR RESEARCH ALL ABOUT?

Our research is about civic participation in local politics of Munich. We want to evaluate whether an online instead of more traditional and established ways of interaction with the local politicians like mail or e-mail can bring more young citizens into contact with politics.

To offer citizens of Munich a simple and intuitive tool to introduce ideas, requests, or polls to the local politicians, we decided to develop the digital platform muc.me. We want to investigate whether the transparency brought into political decision making processes through muc.me and the time-efficient approach of a digital platform will lower the threshold of contacting local politicians.

We believe that using muc.me, citizens will learn how easily they can influence their environment and solve problems instead of getting frustrated about politics.

2. UPDATE: WHAT HAPPENED SO FAR: a) Process and milestones

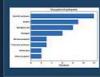


b) Most important results

Our main source of data so far is our first survey where each user is asked to participate directly after their registration. Since this survey is still open, and our platform is only live for some weeks, any analysis of the survey data is to be considered premature and not representative. With 46 questionnaires, the dataset is clearly too small to show any meaningful correlations, as well. It can, however, be used in comparison with an evaluation at a later point in time.

As one of our main goals is encouraging especially younger citizens, we can use the data we obtained so far to assess and re-align our marketing efforts. Regarding our users' source of information about muc.ms, we identify our newspaper articles as the, apart from our personal contacts, cumulatively most effective means (11 mentions) so far. The Facebook campaign is promising as well, with 5 mentions despite only a few days of advertisements.

The participants are up to now strongly biased towards a scientific occupation, which we trace back to our personal environments and immediate contacts. We expect this distribution to change with ongoing marketing efforts and further spread of the platform.





The age distribution is near our striven one, with a slight elevation towards younger participants. It will be monitored closely in the future as an effective way of marketing evaluation.

3. WHAT ARE THE NEXT STEPS?

As muc.me was released recently, our most important next steps concern the middle- and long-term evolution of our platform muc.me. One possibility would be to hand muc.me over to a chair at TUM for maintenance and further development. Another interesting prospect would be a cooperation with the Landeshauptstad! München or with the _Bezirksausschüsse*. However, we still need to check which ontions are viable.

In the remaining project time, we additionally plan to add features like statistics displaying the users' district or automatization of messages to muc.ms. The last step during our active project time will be the evaluation of the data currently collected.

SEPTEMBER 2018

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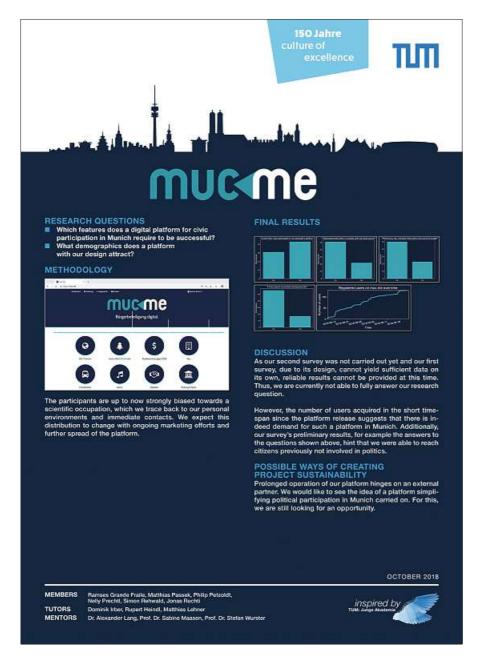


POSTER 3: During the time before the third poster was introduced, the platform "muc.me" was actively developed. The research questions we want to answer with the platform changed slightly from the last hypothesis. We now want to derive the features that a digital platform for civic participation in Munich requires to be successful. In addition we are interested in the demographics of the people who are attracted by the platform design.

Launch day was August 9, 2018. During the creation of "muc.me" the collaboration with the borough councils of Ludwigsvorstadt-Isarvorstadt, Maxvorstadt, Feldmoching-Hasenbergl and Aubing-Lochhausen-Langwied led to further co-operation. Furthermore the third poster states clearly the goal we are trying to achieve with our project: We want to use "muc.me" to research the effectiveness of such a tool and the features it needs for success in Munich. The platform allows all registered users to propose and rate ideas and projects for Munich's benefit and to inform responsible local politicans about the outcomes of frequently rated ideas. We want to find out whether this time-efficient way of interaction and participation, which brings some degree of transparency into political decision-making processes, lowers the threshold of contacting local politicans.

We are collecting information by analyzing questionnaires that are filled out by the platform users. To get reliable results we are trying to attract as many participants as possible. The project has already been mentioned in newspaper articles in "Hallo München" and "Süddeutsche Zeitung".

The age and activity spread of the first "muc.me" users can be seen on the poster. Still unanswered is the question about the future of the platform: Possibilities might be to hand the platform over to a chair at TUM or to establish a cooperation with the Landeshauptstadt München or its borough councils.



POSTER 4: As mentioned before, we want to extract the features of a successful platform for civic participation and to identify the relevant demographics of engagement with the platform. To answer these questions we are on the one hand using data that is generated by the users of the platform and on the other hand two online surveys among the platform users. The users are presented with one survey when they first log in and with the second one after three months of using the "muc.me."

Since the second survey's data is not yet collected, we are not able to answer our research questions fully at this stage.

The relatively high number of registrations over a short time on "muc.me" has already enabled us to conclude that there is a demand for such a means of participation. Furthermore the first survey indicated that it is mainly people who are not involved in politics who are drawn to the platform.