**Table S1:** Publications and presentations of the ‘*Bürgercockpit*’-application piloting phase and commercial roll-out

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| Year | Author(s) | Title | Scientific conferences and  stakeholder community symposia |
| 2021 | Atzmanstorfer, K. | Das Bürgercockpit. | Gemeinde 4.0 – Neue Technologien im Dienste der Alpenbevölkerung. Allianz in den Alpen – Das Gemeindenetzwerk. Online-Symposium. |
|  | Atzmanstorfer, K. & M. Bartling | Corporate Social Responsibility und Bürgerbeteiligung - Das Bürgercockpit. Workshop. | Angewandte Geoinformationstagung – AGIT 2021. University of Salzburg, Salzburg, Austria. |
| 2020 | Atzmanstorfer, K. | El GeoCiudadano viaja entre Cali, Quito y Salzburgo. | ForoMundoUNIGIS Latin America 2020. Online-Symposium. |
|  | Atzmanstorfer, K. | Pilotprojekt Bürgercockpit. | Methodenlabor Bürgerbefragung 2020 – Regionalmanagement Oberösterreich. Kremsmünster, Austria. |
| 2019 | Atzmanstorfer, K. | Das Bürgercockpit – Agenda 21. | Austauschtreffen der Digitalen Dörfer Bayern 2019. Kirchanschöring, Germany. |
|  | Atzmanstorfer, K. & T. Blaschke | The GeoCitizen geoweb-participation framework - applications and critical success factors. | ISPM Conference 2019. Aalto University, Espoo, Finland. |
| 2018 | Atzmanstorfer, K. | Das Bürgercockpit – Denkräume Beteiligung Agenda 21. | Netzwerktreffen Zukunftsakademie Oberösterreich 2018. Kronstorf, Austria. |
| 2017 | Atzmanstorfer, K. | Das Bürgercockpit – Workshop Digitale Beteiligung. | 8. Österreichischer Agenda 21-Gipfel 2018: Innovationskraft Beteiligung −Chancen für Stadt und Land. Salzburg, Austria. |
|  | Blaschke, T. & K. Atzmanstorfer | The GeoCitizen Participation Framework. | Modern Methods and Tools for Public Participation in Urban Planning 2017 Symposium. Poznan, Poland. |
|  | Atzmanstorfer, K., Eitzinger, A. & R. Resl | MOOC for Local GeoExperts - How to empower citizen engagement with GIS. | ESRI User Conference 2017. San Diego, USA. |
| 2016 | Resl, R., Atzmanstorfer, K., & A. Eitzinger | Application of geospatial web-platforms in participatory community planning - the ‘Barrio Bonito (Pretty Neighborhood)’ - GeoCitizen approach, Quito Sur, Ecuador. | ESRI User Conference 2016. San Diego, USA. |
|  | Atzmanstorfer, K., Eitzinger A., Marin B.E, Parra Arteaga, A., Bryan Gonzalez Quintero, B. & R. Resl | HCI-Evaluation of the GeoCitizen-reporting App for citizen participation in spatial planning and community management among members of marginalized communities in Cali, Colombia. | GI\_Forum 2016. University of Salzburg, Salzburg, Austria. |
| 2015 | Atzmanstorfer, K. | Aplicación de plataformas geoespaciales en la planificación comunitaria – Plataforma GeoCiudadano e Iniciativa Barrio Bonito Quito Sur. | ForoMundoUNIGIS Buenos Aires 2015. Universidad de Belgrano, Buenos Aires, Argentina. |
|  | Atzmanstorfer, K., Eitzinger, A. & R. Resl | Community Engagement Application - GeoBarrio, Quito - Ecuador. | ESRI User Conference Europe 2015. Salzburg, Austria. |
| 2013 | Eitzinger, A., Atzmanstorfer, K. & R. Resl | The GeoCitizen approach – Implementation of a collaborative participation framework for citizen collaboration. | International Conference on Environmental Information and Communication 2013. Bogotá, Colombia. |
|  | Atzmanstorfer, K. | Community-based spatial planning with social geo-web platforms. | AGILE PhD School 2013. Schloss Herrenchiemsee, Germany. |
|  | Atzmanstorfer, K. & A. Eitzinger | Iniciativa GeoCiudadano. | ForoMundoUNIGIS 2013. Universidad ICESI, Cali, Colombia. |
| 2012 | Resl, R., Eitzinger, A. & K. Atzmanstorfer | Platform for Collaborative Problem Solving within the Citizen´s Spatial Context - the Geo-Citizen framework. | ESRI User Conference 2012. San Diego, USA. |

**Table S2:** CSR-questionnaire (Questions and Responses)

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| --- | --- | --- | --- | --- | --- | --- |
| # | Question | Answer type | | No. of responses | | Question tree |
| 1 | How important is it for your company to show engagement in socially relevant issues? | Rating scale from 1 (less important) - 5 (very important) | 29 | |  | |
| 2 | Are you familiar with the concept of Corporate Social Responsibility-CSR (or Corporate Citizenship-CC)? | Single choice: Yes/No | 29 | |  | |
| 3 | Have you already carried out CSR-projects with your company? | Single choice: Yes/No | 29 | | If Yes, then question 4; if No, then question 11 | |
| 4 | Has your company already supported specific community planning projects at your company location? | Single choice: Yes/No | 22 | | If Yes, then question 5; if No, then question 11 | |
| 5 | How experienced is your company in supporting specific community planning projects? | Rating scale from 1 (less important) - 5 (very important) | 16 | |  | |
| 6 | How did your company contribute to these projects? | Multiple choice:   1. Donating money 2. In-kind donations 3. Workforce 4. Providing company owned equipment, infrastructure, etc. 5. Know-how 6. Other contributions (please specify) | 16 | |  | |
| 7 | Which kind of community planning projects has your company supported in specific? Please describe them with a few keywords. | Text | 16 | |  | |
| 8 | With whom did your company discuss/decide which projects were supported? | Multiple choice:   1. With the municipal administration 2. With local associations 3. With educational institutions, NGOs, church associations, etc. 4. With the affected citizens 5. Solely within the company 6. With other people/interest groups/institutions (please specify) | 16 | |  | |
| 9 | Are you currently using a digital tool (mobile application, website, etc) to support your company's CSR-initiatives or have you used one in the past? | Single choice: Yes/No | 16 | | If Yes, then question 10; if No, then question 15 | |
| 10 | Which digital tool in specific, do you use/have you used? | Text | 2 | |  | |
| 11 | Can you imagine carrying out CSR-projects with your company in the future? | Single choice: Yes/No/Possibly | 13 | | If Yes or Possibly, then question 12; if No, then question 15 | |
| 12 | At which geographical scale can you imagine carrying out such projects? | Multiple choice:   1. At the company location (municipality, city) 2. In the region 3. Elsewhere (please specify) | 13 | |  | |
| 13 | What would be possible contributions of your company when supporting specific community planning projects? | Multiple choice:   1. Donating money 2. In-kind donations 3. Workforce 4. Providing company owned equipment, infrastructure, etc. 5. Know-how 6. Other contributions (please specify) | 13 | |  | |
| 14 | Which kind of projects/topics could you imagine that your company would support within a community planning process? Please describe them with a few keywords. | Text | 13 | |  | |
| 15 | Where do you see the potential or the opportunities for your company (or for companies in general) to support community planning processes/project at the company location? | Text | 29 | |  | |
| 16 | Where do you see challenges or risks? | Text | 29 | |  | |
| 17 | Assuming that you have decided to support a community planning process/project at the company location with your company: How important do you consider the participation of the citizens in the selection and implementation of the process/project that is supported by your company? | Rating scale from 1 (less important) - 5 (very important) | 29 | |  | |
| 18 | Assuming that you have decided to support a community planning process/project at your company location with your company: would you use a digital tool (mobile application, website, etc.) for collaborating with the affected citizens and the (local) administration when designing the project and monitoring its implementation? | Single choice: Yes/No/Possibly | 29 | |  | |
| 19 | How should such digital tool be designed, or what functionalities should it comprehend in your opinion? | Text | 23 | |  | |
| 20 | How many people work in your company? | Single choice:   1. 1 - 5 employees 2. 6 - 10 employees 3. 11 - 50 employees 4. 51 - 249 employees 5. 250 or more employees | 29 | |  | |
| 21 | Where is your company location? | Single choice:   1. Rural municipality (< 5000 inhabitants) 2. Small town (5001 - 19999 inhabitants) 3. Medium town (20001 - 99999 inhabitants) 4. Big city (100000 or more inhabitants) | 29 | |  | |

**Table S3:** Set of responses provided to Questions Q6, Q7, Q10, Q12, Q13, Q14, Q15, Q16 and Q19

|  |  |  |
| --- | --- | --- |
| # | Question | Answers |
| 6 | How did your company contribute to these projects? (answer category ‘other contributions’) | sponsoring of local associations; private-public-partnership for the provision of local amenities; securing local amenities, provision of jobs in the local community and for disabled persons |
| 7 | Which kind of community planning projects has your company supported in specific? | support of charity events (money and in-kind donations), provision of infrastructure and basic services for a local music festival); provision of a meeting room for local events; continuous money donations to local associations and public entities; monetary support of local associations (sports/traditional associations); donations (computers, money, infrastructure); planning and implementation of projects in the area of sustainable energy supply; support of educational and sports associations; support of community development and local recreation projects; sponsoring of local associations and festivals; support of charity and social events, educational programs for young people, money and in-kind donations, support of local energy-supply associations; support of social and ecological project at a local level; free-of-charge provision of housing facilities to refugees; free-of-charge provision of infrastructure for regional events (flea market, pop-up gastronomy, open air cinema, skatepark); donations of money and groceries to local Social Markets; money donations to local associations (fire patrol, sports and cultural associations); implementation of local amenity stores in cooperation with the municipal administration; support of projects for young and elderly people, as well as adult education; securing local amenities in small municipalities; integration of (employee) housing, kindergarten, and social facilities into planning of new supermarkets; integration of local amenities and projects that foster the inclusion of disabled persons in cooperation with local social organizations; sponsoring of local associations (such as Caritas); fostering of diversity programs in local enterprises |
| 10 | Which digital tool in specific, do you use/have you used? | websites, programs for optimizing processes and systems |
| 12 | At which geographical scale can you imagine carrying out such projects? (answer category ‘elsewhere’) | support of educational project in developing countries worldwide; CSR-activities as part of business operations at a global scale; Province of Salzburg; at a global level |
| 13 | What would be possible contributions of your company when supporting specific community planning projects? (answer category ‘other contributions’) | providing know-how for social initiatives; voluntary work as part of a company activity |
| 14 | Which kind of projects/topics could you imagine that your company would support within a community planning process? | support of the next generation of young people; e-mobility and energy; support of non-profit organizations such as fire patrol and red cross; transfer of know-how; support of start-ups; environment protection initiatives (diminishing abatement costs); child-care projects; integration of disabled persons; code of conduct; carpooling; community projects for improving local Quality of Life; sustainable housing projects; mobility projects; inclusion projects of young and elderly people and community interaction at a local level; employee branding projects (housing); transparent communication and design of international supply chains; educational initiatives for scholars and students |
| 15 | Where do you see the potential or the opportunities for your company (or for companies in general) to support community planning processes/project at the company location? | stronger employee loyalty and positive perception of company through social engagement; raise perception of company in the region; reliable partner in the region and better external perception of company; networking with other companies and recruitment of new employees; it helps the company to show presence in the local community what is especially important for fostering the company’s profile as an attractive employer in the region; climate action, socially-minded employer, motivated and healthy employees and securing the company location; image cultivation, positive representation of corporate culture, cross-selling through customer loyalty and promoting activities of local associations; advertising, marketing, and improving the company image; ethical responsibility and enhancement of company reputation; further development of the core business; image, partnership with local community; employee loyalty; public perception of the company is positively influenced, local connection and attractive employer; responsibility as an employer in the community and the region; it is part of the company's DNA to promote and support the region, the opportunities lie in particular in customer acquisition and long-term customer loyalty; the focus is very much on working directly in the communities, CSR-activities are most efficient where the company meets people; employee acquisition and loyalty; employee loyalty, improving the company image in the local community, feeling pleasure when interacting with communities; public relation and preserving business activities (especially in regions where it is no longer economically viable to operate); involvement of local sports clubs and motivating people to engage and participate; build local awareness and reputation, positive publicity; housing is a permanent value and has a major impact that young people stay in their communities; creation of local jobs, contribution to regional value creation, strengthening of regional purchasing power, creation of living space for employees (strengthening of employer attractiveness), strengthening of the positioning as a regional company, promoting new company locations, promoting coexistence between commercial and e.g. residential zones (e.g. avoidance of noise and odor emissions through joint definition of suitable zones, no negative impact on the living situation), reduction of individual traffic through developing intelligent communities (e.g. through a mix of commercial, residential buildings, etc.), supporting local businesses that contribute to every-day life in the community (e.g. grocery stores, pharmacy), networking with politics and citizen representatives to jointly work out solutions, branding: increasing the attractiveness of the location; networking; responsibility towards the "neighbors", employee motivation, image; promoting regional sustainability; a community that is alive also gives something back to a company, quality of life and better living conditions for everyone; a livable environment increases the chance of keeping employees and recruiting new ones, higher employee satisfaction, increasing local added value; employer branding, supporting young people has positive marketing effects |
| 16 | Where do you see challenges or risks (for your company (or for companies in general) when supporting community planning processes/project at the company location)? | that the positive impact is lost; commitment of company resources; justification of specific actions; the more a company supports projects, the more "begging requests" it gets: one must therefore achieve a good level of publicity without appearing too generous. Otherwise, you get daily requests from associations and institutions to support festivals, direct financial support or other donations; costs, volatile conditions regarding business operations, economy, society, logistics, and politics; donations are often taken for granted; with the ‘watering-can approach’ positive effects get lost, focusing on fewer projects results in bad publicity amongst those institutions whose requests get rejected; we currently only support small projects investing limited resources - so there is no incalculable financial risk; resources are tied up, there may also be follow-up requests (especially for monetary donations); rapid change of project environments, new competitors on the market; high expectations of third-parties, proper selection of projects, sustainable support instead of symbolic donations; transparency has to be assured in order to prevent opposition to projects, requests and expectations exceed the possibilities of support; ‘you can never please everyone’; additional effort for employees; additional work for the employees; mobility, climate protection, education (what are values, how are they lived in the community?); justifying CSR-projects towards CEOs as the consume resources; ‘it is never enough’; pseudo-activities, keyword ’green washing’; politics; big effort for coordinating projects compared to other projects, taking into consideration of all relevant stakeholders, networking with project managers and the community, changing legal environments, conflicting interests that hamper cooperation; risks are very low; focus on specific projects as it is impossible to support every project request, ‘what has an added value for the company’?; small but various initiatives typically result in bad coordination; change of mind-set within companies from short-term to medium- and long-term planning and management, it is both an opportunity and a risk; complex legal, environmental and educational frameworks (international/national/regional) |
| 19 | How should such digital tool be designed, or what functionalities should it comprehend in your opinion? | improving the efficiency of projects; it should be a safe tool; simple to use; interactive tool for all stakeholders; easy-to-use; meeting data protection standards by not saving cookies, easy-to-use, well structured, free of charge; surveys and participatory tools sometimes also suggest a right of participation. However, if the decision and implementation does not meet these expectations of the users, there is often more resentment than benefit; intuitive, user-friendly; online voting; digital maps with complete information such as cadaster, number of inhabitants, age structure, simple representation; communication platform; simple, direct and transparent communication and exchange options; requirements very much depend on the specific project; ‘very, very easy-to-use’ and very clear in terms of design; user-friendly, easy-to-access; easy handling; presentation of the planned project, its aims, project managers and the responsible persons, branding and presentation of the benefits of the planned project, sufficient opportunities for information; list of possible projects including contacts and added value for the company, presenting possibilities how a company can contribute, clear structure, possibility of smaller contributions (does not always have to be monetary), showing how e.g. individual employees can contribute; easy-to-use; easy-to-access without much training; user management and user verification, communication tools (broadcast, discussion, commenting), visualization; feedback, communication options with initiators of CSR-projects |