

PAS QUICKNOTES

COMMUNITY CO-CREATION IN THE DIGITAL ERA

Co-creation is a collaborative approach to civic engagement that empowers community stakeholders to act as co-designers and co-initiators of environments, services, and related policy changes. Today, many communities have become more self-organized and self-aware, expecting their voices to be heard. Co-creation reflects a shift in power distribution in democratic societies that recognizes the significant value of collaboration.

New technologies—including AI-powered apps, the metaverse, and digital twins—have provided planners with more tools to co-create with communities and reduce barriers to participation. However, it is crucial to ensure that all participants, including under-resourced groups, have access to these co-creation opportunities.

BACKGROUND

Public participation in decision-making is not a new concept. However, the forms, breadth, and intensity of participation are constantly evolving. Co-creation is an approach to public engagement that represents a high level of stakeholder empowerment on [Arnstein's ladder of citizen participation](#). Originating in the business sector, where it was used to involve customers in the production process, co-creation has made its way into the public realm and planning.

Co-creation in the public sector involves developing new solutions for urban issues *with* people rather than *for* them. This approach engages key stakeholders at the earliest stages of decision-making, focusing on collaboratively identifying and solving problems. Urban co-creation encourages residents to view the city as a collective project, fostering efficiency, interactivity, adaptability, and inclusivity. Unlike traditional outreach methods, in which planners organize public events to discuss existing proposals or regulatory changes, co-creation taps into the creativity of the community to generate solutions for pressing issues. Co-creation approaches also value openness and transparency in collaboration, which creates more trust among participants and potentially eliminates major friction points of traditional engagement.

Co-creation is gaining momentum as a civic engagement framework, driven by the rise of generative artificial intelligence (Gen AI), the metaverse, extended reality (XR), and crowdsourcing online platforms. However, these technologies should supplement, not supersede, the fundamentally human-oriented core of co-creation. In today's context of limited resources and uncertain futures, local governments and other stakeholders can greatly benefit from co-creating with residents and the private sector to find innovative and context-relevant solutions. But to fully leverage the wide range of existing and emerging technologies for co-creation, planners will need to sharpen their digital engagement skillsets.

CO-CREATION TOOLS AND TECHNIQUES

The advent of Gen AI with platforms such as [ChatGPT4](#) and [Midjourney](#) has revolutionized the co-creation process. These tools and a growing market of specialized technical solutions now enable the transformation of stakeholders from mere commentators to active change-makers, enabling them to see the impact of design decisions on the environment in real time with the help of a laptop or tablet. [Connect East Cleveland](#) is one example of an inclusive co-creation process initiated by Ohio's Cuyahoga Land Bank. Using [UrbanistAI's](#) AI-powered platform, the land bank collaborated with the local community to rethink and redesign a part of the city of East Cleveland. In addition to using traditional tools such as mapping and community ideation during the workshop, participants saw a visualization of development scenarios they proposed and the impacts on the environment.

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New digital technologies like [CityScope Andorra](#), a 3D-augmented reality platform developed by MIT Media Lab's City Science Initiative, allow community members to co-create for urban innovation. (Credit: Ariel Noyman/City Science group, MIT Media Lab (CC BY-SA 4.0))



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Creating Great Communities for All

Co-creation using [digital twins](#) can be a valuable tool for achieving sustainability goals and creating more resilient places. For instance, the comprehensive [6D digital twin](#) of the [Kera district](#) in Espoo, Finland, involved future businesses and residents in setting collective goals and adjusting urban development plans. The local government facilitated the co-creation process by ensuring that all involved parties worked together cohesively. Additionally, with the wider spread of [XR](#), planners might consider [using metaverse platforms](#) for public engagement or [creating strategic plans](#) in virtual reality.

Crowdsourcing mapping platforms such as [Map.Social](#) further enhance co-creation by inviting residents to create maps of their communities, identify issues, suggest solutions, and contribute to the planning process. A creative application of crowdsourcing mapping is the [Tekkon app](#), which has been used in Japan to gamify infrastructure assessment and data collection. Users earn cryptocurrency by reviewing images of aging infrastructure that requires repair. The app then provides verified data to municipalities, facilitating timely and accurate infrastructure maintenance. Another crowdsourcing approach is the European project [WeCount](#), which enables residents to initiate policymaking initiatives for mobility and air quality using automated traffic data.

CO-CREATION BENEFITS

Although the co-creation process requires time to organize the participatory process, an extended team including tech experts, and potentially higher costs, it provides planners with a deeper understanding of community needs and aspirations. It also fosters collaboration between planners and stakeholders, promoting mutually agreed-upon solutions. Key benefits include the following:

- **Innovative ideas for complex problems.** A co-creation framework that uses advanced technologies, such as Gen AI, enables residents to devise creative solutions to specific problems and present them effectively, even without professional design knowledge.
- **Broader engagement and participation.** Online user-friendly tools for co-creation can engage individuals who typically do not attend public meetings or participate in other activities. Combined with an offline component, the co-creation process can bring previously unheard voices to the table.
- **Community ownership of planning outcomes.** The co-creation process outputs align with the community's vision for its future. Empowered community members are more likely to advocate for the solutions they helped develop.

EQUITY AND INCLUSION CONCERNS OF CO-CREATION

Co-creation in an urban context aims to bridge the gap between professionals and residents, allowing participation and engagement regardless of participants' backgrounds. However, some have more resources to participate in co-creative processes than others. Therefore, it is important to identify who participates in these processes.

Like any participatory framework, co-creation has its shortcomings, such as limited public involvement due to the digital divide and access to technology. Planners should always evaluate who was included in a co-creation process, who was excluded, and why. To ensure inclusive and equitable co-creation, planners can consider using a combination of digital and traditional tools to involve those who couldn't access the co-creation platform or use a specific application.

CONCLUSIONS

Recent technological advancements have boosted the popularity and potential of co-creation approaches to stakeholders' involvement in planning processes worldwide. Co-creation enables community members to co-design targeted solutions for pressing issues and directly impact the decision-making process. For planners, the co-creation framework fosters creativity among involved groups and brings more people into the conversation, expands the range of potential solutions, and helps establish trust and a shared vision for preferred futures.

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FURTHER READING

Published by the American Planning Association

Hurtado, Petra, Benjamin Hitchings, and David Rouse. 2021. *Smart Cities: Integrating Technology, Community, and Nature*. PAS Report 599. Chicago: American Planning Association.

Hurtado, Petra, Sagar Shah, Joseph DeAngelis, Ievgeniia Dulko, Senna Catenacci, and Scarlet Andrzejczak. 2024. "Immersive City for and by the People." Pages 38–40 in *2024 Trend Report for Planners*. Chicago: American Planning Association and Lincoln Institute of Land Policy.

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Other Resources

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