How might we inform design research through participatory design approaches?

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ABSTRACT

The City of Indianapolis, through the Department of Metropolitan Development, invited the graduate program in Design to collaborate on a project seeking to understand the experiences and desires of both users and stakeholders of the Downtown Canal Walk and surrounding areas. Multiple stages of a human-centered design process aimed to understand the past and present and reimagine the future of Indianapolis public spaces. This summary focuses on two phases of the data collection process where, through a participatory design approach, people contributed with their vision for the future of Indianapolis.

Author Keywords

Participatory design; open innovation; equitable cities; design research.

DESCRIPTION

Public spaces are the common ground where people carry out the functional and ritual activities that bind a community, whether in the regular routines of daily life or periodic festivities [1]. According to the United Nations [2], the world's population will continue to grow, from an estimated 7.7 billion people worldwide in 2019 to around 8.5 billion in 2030. This rapid growth poses a challenge to new and existing cities alike to make crucial changes to the assumptions for planning and prioritization [3]. One way to redefine how planning and prioritization happens is through active citizen involvement, which means a paradigm shift in the relationship between people and government [4].

Correspondingly, this shift from the public sector tradition of expert-driven creation and delivery to a mode of co-creation is critical [5]. In this context, designers play a significant role in facilitating such co-creation processes recognizing people as the true experts of their experience. This summary presents the use of participatory sessions and an open-innovation event as data collection mechanisms to understand people in their context.

This project was part of a course setting titled: Collaborative Action Research in Design and undertaken during the Fall of 2019 and Spring 2020.

The research framework for this project was the Herron Design Process Model. There are seven stages included in this model: Understand, Define, Ideate, Prototype, Evaluate, Plan, and Act. This summary concentrates on the Understand phase, defined as: "actively seeking opportunities in fuzzy situations through understanding people's behaviors, experiences, and desires in context."
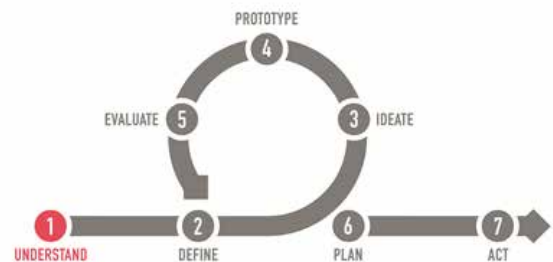
Figure 1. The Herron Design Process Model consists of seven action steps. This summary covers the first: Understand.

Sampling Strategies

The authors conducted preliminary research to understand the vast spectrum of users and stakeholders in the public space. The following table shows the identi-

fied categories with a brief description of each, and the methods for engagement accordingly:

Perspectives	Role in the public space	Methods
Visionaries	Decision-makers and authorities	Interviews
Operators	Maintenance and operations of infrastructural elements in the space	Interviews
Service providers	Providers/owners of services and cultural experiences in the space	Interviews
Local collaborators	Organizations working to support people and communities	Interviews
Future users	People with desires for the space	**Open innovation event**
Current users	People using or living in the space	Observations & **Participatory sessions**

Figure 2. Identified perspectives after preliminary research.

Participatory Sessions

Through participatory sessions, the research team learned about users' behaviors and experiences in the Canal Walk. Participants engaged in a series of generative activities, which enabled them to collaboratively and visually share their problems, insights, and desires in the area.
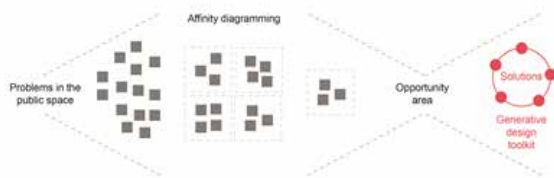

Figure 3. Participatory session process during Fall 2019.

Figure 4. Participants during generative activities.

Open Innovation Event

During the Spring 2020 semester, students hosted an open innovation event to reimagine the future of downtown Indianapolis. The main goal was to include the perspective of the future workforce and ideas for places where people want to work, learn, and play. The session design included activities that facilitated divergent and convergent thinking amongst multiple groups of people. The main final output of the session was a set of scaled prototypes that respond to the criteria of being inclusive, impactful, and sustainable.

Figure 5. Open innovation process and criteria.

Figure 6. Participants during the Open Innovation event.

The data from both events was examined and synthesized into thematic maps. This information allowed the team to move forward on the next stage of the project, which dealt with defining opportunity statements to inform the project partners and other interested parties.

CONCLUSION

This summary provides an example of how participatory design approaches could act as a data collection strategy for a design research project in the public realm. Participatory Design increasingly occurs in the context of various public and private institutions operating in the public realm. It is imperative to include people's perspectives on such processes to ensure that

the social and cultural functions of public space respond to those who inhabit it. Finally, it exemplifies the role that designers can play as facilitators of social, democratic, and co-creation processes that contribute to building more human-centered and equitable cities.

ACKNOWLEDGMENTS

REFERENCES

[1] Stephen Carr, Mark Francis, Leanne G. Rivlin, Andrew M. Stone. 1992. Public space. Cambridge University Press, New York, NY. DOI: 10.4236/ijaa.2016.62011

[2] United Nations. 2019. World population prospects. New York, NY. Retrieved May 1, 2020 from https://population.un.org/wpp/

[3] Jan Gehl. 2010. Cities for People. Island Press. Bogværket, Denmark

[4] Christian Bason. 2010. Leading Public Sector Innovation. Policy Press, Great Britain. DOI: 10.2307/j.ctv1fxh1w

[5] Jean Hartley. 2005. Innovation in Governance and Public Services: Past and Present. *Public Money & Management*, 25(1), 27-34. DOI: 10.1111/j.1467-9302.2005.00447.x