Facilitating Multidirectional Communication between Government Officials and Citizens to Support Urban Planning in the City of Brisbane

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Irina Anastasiu
Diploma Thesis Final Presentation
What Are We Going to Talk About...?
FixVegas2 is a mobile tool to submit maintenance requests and exchange improvement ideas and development plans between city residents and the Brisbane City Council. Its goal is to encourage multidirectional communication.

10.01.2012
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Motivation: Urbanization, Technology, eGovernment and Smart Cities
FixVegas1 can be augmented to empower citizens through an active crowdsourcing role.

eGovernment trends towards eParticipation

urbanization means more/bigger cities

technology goes mobile/location aware

citizen as active stakeholder in urban planning

tap into local knowledge

smart cities

convert FixVegas from a reporting tool into an urban planning engagement tool

Irina's Diploma Thesis
Problem Statement and Solution
The new FixVegas features can solve three categories of problems through a set of new features.

1. No Real Citizen Involvement in Urban Planning
2. Inefficient Request Management
3. No Public Dialog Between Citizen and City Councils

The New FixVegas
- user accounts
- social features
- filters
- web portal
- the notion of „idea“

API

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Related Work: Web, Mobile, Web+Mobile
Systems engage citizens to report, discuss, suggest, improve and/or clarify issues.

PublicStuff [9], SeeClickFix [8], FixMyStreet [6]

NEXTHAMBURG [7]

311 Universal [10]

OPUS Forums [4]

WebMapMedia (WMM) [2]
Related Work: Public Displays, Multimedia-Aided Systems, TUIs and Mixed Reality Systems engage citizens to report, discuss, suggest, improve or clarify issues.

**Shared Design Whiteboard (Shadow)** [1]

**MR Tent** [5]

**TaS (Tell a Story)** [1]

**New Precinct Wish List**

**Discussions in Space** [3]
Procedure
After assessing user needs, design principles, prototyping and evaluation through a focus group followed.
User Needs
Both major stakeholders have been looked at.

MOGDy Forum
Know status, location, direct cooperation with city council, commitment from city council (feedback, time estimation, ticketing), CMS integration, contacting officials, knowing who is responsible, see future development plans, can’t attend open council meetings

App Reviews
Know who to report to, contact responsible person for feedback, feature requests or bug reporting

FixVegas1 Feedback
Should be bug-free, extra categories, saving draft requests, editing history one by one

User Study Insights from Systems from Related Work
High degree of usability, direct and strong involvement of city council needed

Citizen Needs

Government Needs
Talking to Brisbane City Council
Manual feeding into CMS, building an interface is time and cost intensive

Governmental Portals such as smartcity.info
Make processes more efficient, build trust through transparency, involve more people
FixVegas2 Step by Step
After assessing user needs, design principles, prototyping and evaluation through expert feedback followed.

Designing the User Interface 5th Edition
Ben Shneiderman & Catherine Plaisant

Designing the iPhone User Experience
Suzanne Ginsburg

Who should mark maintenance requests as solved and how?
• Should users need to sign up to comment etc.?
• At which point should users register?
• When should ideas be submitted to the city council?
The Outcome

Requests and Ideas can be publicly viewed in the preferred visualization.
The Outcome

Requests and Ideas can be submitted to be added to the platform.
The Outcome
All the stakeholders can interact with the posts and with each other.
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All the stakeholders can interact with the posts and with each other.
The Outcome

Comprehensive filters ease the management of submissions.
Preliminary Evaluation
A small-scale dry run to verify study design, identify bottlenecks and get first insights has been set up.

Interview

Three Tasks

Questionnaire

Participants
Number: 6
Male: 6
Female: 0
Average Age: 29

People at Urban Informatics Research Lab

Interview

Three Tasks

Questionnaire

Participants

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Limitations
The laboratory context would falsify findings on community dynamics.

- People are very different
- Emotions are important
- No real context
- But all influence motivation, type and amount of interaction.
- No genuine Simulation of Social Features
- BCC makes difference
- No genuine Interaction

Real World User Study

Falsified Findings on Community Dynamics
Conclusion

FixVegas2 will be provided as a technical tool, nonetheless a real-world evaluation is crucial.
Thank you!
References

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Online Environments Shake Up Urban Planning
*Digital Tools in Participatory Planning*, 2010, 79-91

Supporting community engagement in the city: urban planning in the MR-tent
*Proceedings of the fourth international conference on Communities and technologies, ACM*, 2009, 185-194


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