Generating data-driven housing scenarios

CCM family product is a data-driven platform that assists housing market stakeholders and city authorities in the planning, designing and execution processes by achieving timelier efficient, socially inclusive, and economically sustainable developments.

As a reference, the real estate developer can receive design scenarios from a data catalogue of public feedbacks at an early conceptual phase; thus, addressing citizens’ demands within a shorter timeframe, with fewer conflicts, and higher acceptance rate. The overall goal is to support all stakeholders in productive negotiations and executions under one analogue-digital platform in accordance to EU housing policies.

The current sustainable housing and real estate markets are suggested by a disparity between adequate demand and supply, mainly due to late citizen engagement in traditional planning processes; disparate and misinterpreted urban and demographic data; and miscommunicated and conflictual interests between stakeholders. The CCM responds to these lacunae by proposing (3) phase-specific approaches to improve and accelerate new and existing housing projects.
Competitive Advantages

- Maximization of occupancy rate by matching supply to demand;
- Digitalization of stakeholders’ interactions to enable faster negotiation and execution time;
- Early-stage participatory / feed-back processes using semantic learning + sentiment analysis to give more decision power to citizens;
- Integration of curated urban and demographic data on one platform, accessible and comprehensible to all stakeholders;
- Gamification methods to engage interest and foster dialogue between all stakeholders;
- Interactivity and flexibility of design parameters to offer an array of real-time solutions, easily understood via scenario dashboards.

Target Markets

- State-owned housing associations
- Private real estate developers
- City authorities
- Concerned stakeholders (e.g. citizens)

Status/Traction

The product family CCM collects an expansive amount of accessible/available data about the customers through the integration and adaptation of already developed technologies by our team, in respective order:
- TU Berlin with its “Urban Gallery” (UG), a data-drive platform containing a data set of text-based information from existing online/offline citizen engagement, and its first-run front-end “UI Dashboard” and “City Scenario Generator” (CSG);
- Engineering (ENG) with its Data Visualization and Analytics tools for urban data processing of CDP and CSG;
- Expert System (EXP) with its Cogito Intelligence API, a deep semantic learning software that analyses natural language contents stored in the “City Data Platform” (CDP) and develop the ML Engine for CDP and CSG;

Road Map

2020
- Improvements in semantic analysis technology software (English)
- Hosting of analogue and digital workshops

2021
- Berlin prototypes in dual language (e.g. English and German)

2022
- Prototypes/first runs beyond the city of Berlin
- Implementations in other EU cities (scalability of project).

Leveraged Technologies

The technologies have been developed and proven in the H2020/EIT projects CEDUS (by ENG), SSD (by TUB), COGITO Intelligence AP (by ES). The innovation lies in the combination of semantic ML technologies with state-of-the-art citizen engagement methods. The MVP will be made up of a set of dashboards and APIs to guarantee a more organic and homogenous solution to exchange data and information to pass from an analogue/physical workshop to digital data ones.

Contact

Prof. Raoul Bunschoten
Activity Leader

e: raoul.bunschoten@tu-berlin.de
t: +49 (0) 30 31421934 (sekr.)
Strasse des 17. Juni 152 | 8th Floor, Room 805 | 10623 | Berlin | Germany

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