DESIGNING PLATFORMS FOR ACTION & INFLUENCE:
Lessons Learned from a Case Study of Five Data Platforms

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INTRODUCTION

Local data provides policymakers, community organizers, and scholars with the tools needed to identify inequities and target resources for action. Disaggregated data allows these stakeholders to make decisions at a highly targeted level, with the ability to create precise solutions for specific audiences. Although many data platforms have emerged in recent years, the abundance of data platforms makes it increasingly difficult for users to discern which platform best meets their needs. And, data providers benefit from guidance on how to best showcase key features such as credibility, freshness of data, and the ability to stratify and graphically depict results. In short, despite the wealth of data platforms, few guidelines exist on how to effectively communicate existing data, how to ensure that data is shared with those who can drive change, and how best to share and visualize data for the greatest impact.

The report, titled Designing Platforms for Action & Influence: Lessons Learned from a Case Study of Five Data Platforms identifies a set of best practices and features that enable data platforms to inform policy and practice, and catalyze action towards health equity. By closely studying five data platforms — the John Hopkins Coronavirus Resource Center, University of Chicago COVID Atlas, City Health Dashboard, Neighborhood Data for Social Change and Opportunity Atlas — this report explores the specific needs each platform was designed to meet, and assesses their success in reaching their intended audiences.

Based on the data gathered and analyzed across the scope of this project, the research team identified the following recommendations for data providers seeking to share data to inform action and influence:

■ **Clearly establish unique contributions.** Data providers should clearly articulate the unique contributions of their data resource compared to other platforms.

■ **Keep data as current as possible.** The Covid-19 pandemic has underscored the need to make decisions based on the most recent data available. Users appreciate being able to easily access the date collected and method of sampling of a dataset.

■ **Highlight indicators of credibility.** Journalists prefer relying on government data sources such as the United States Census, but also recognize university affiliation as an indicator of credibility.

■ **Curate data for intended audiences.** Different audiences (e.g., practitioner versus academic) require different kinds of data, communication strategies, and features. Therefore, it is critical that data managers understand the current and potential users of their platforms and are familiar with each audience's unique data needs.

■ **Design visualizations to meet users' needs.** Based on findings from a series of experiments, simple graphics such as bar charts proved to be most effective at increasing information comprehension, whereas more complicated graphics (for example, line graphs representing change in different groups over time) may overwhelm general audiences and undermine retention. Testing and tweaking visual designs in response to user feedback is worthwhile for platform usability.

PROJECT FINDINGS

Project findings stem from four separate but interrelated research projects:

- Stakeholder Engagement
- Journalist Insights on Data Platforms
- Media Content Analysis
- Data Visualization Experiment

STAKEHOLDER ENGAGEMENT

Each platform in this study took a different approach to engaging stakeholders and media. Some platforms conducted their primary outreach activities in the run-up to the platform's launch or during beta testing — "static engagement". In contrast, others applied "dynamic engagement", a more iterative strategy that continuously invites feedback to improve the platform. This variety leads to a spectrum, where stakeholders are engaged based on what is most appropriate for each platform (see Figure 1).

FIGURE 1: SPECTRUM OF USER ENGAGEMENT

Discussions with data users and platform leaders revealed that stakeholder engagement, as well as narrative-based data stories and partner collaboration, are all highly effective in leveraging the data for action and impact. Further, policymakers and stakeholders expressed a strong desire for real-time data that can be disaggregated readily and is available at a granular level.

JOURNALIST INSIGHTS ON DATA PLATFORMS

Journalists play a crucial role in driving awareness about specific data platforms, frequently using data to shape and enhance stories. Journalists should be considered key stakeholders when designing data platforms, as their experience directly informs how the public will interpret the data. Journalists expressed the importance of a platform's credibility, suggesting that transparency in funding and methods as well as clear interpretations of the data could increase credibility at the start. Lastly, visualizations on data platforms should be understood to not only be used by journalists to share with their audience, but also to help journalists better understand key data trends.
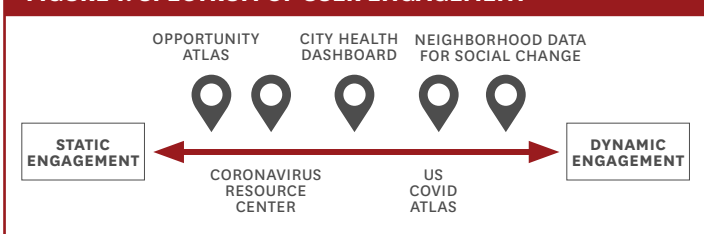
MEDIA CONTENT ANALYSIS

The research team conducted a content analysis across various media channels (including print news articles, tweets on Twitter, and television nightly news) to assess the exposure, use, and visibility of the five data platforms. Research revealed that journalists were likely to draw from multiple sources and create their own graphics rather than use visualizations directly from the platform. However, visualizations of platform data were found across important national media, suggesting an opportunity to provide additional effective data visualizations to achieve media exposure.

DATA VISUALIZATION EXPERIMENT

Through a randomized trial experiment, the research team attempted to examine how data visualization and numeric data present in a news story affect a reader's understanding. The results suggest an ideal middle ground of visualizations, as simple graphics strengthen comprehension but complex graphics may undermine retention. Overall, maximizing information processing and retention can be achieved through augmenting simple graphics with in-text numeric data.