

Public Data Visualization and Social Connectivity

Introduction

For a society that seeks inclusive participation from citizens towards governance, open data is key. Giving public data to citizens in the 'five star open linked' data format has the potential of driving social action from an informed position. Nevertheless, poor visualization or presentation of data even in reusable text formats can put facts in an opaque structure which communicates nothing. Hence, if data doesn't promote discussion or provide contextual understanding, it may be of limited value to the public.

In this generation where several online activities such as gaming, social connections and blogging compete for user attention, there is a need to refine data engagement strategy to build a community of active citizens. To the citizens, especially those with limited form of financial education and short span of attention, data about public finance needs to communicate much more. Public data needs to be transformed to a social object which puts citizens in enlightened position to demand better governance.

Creative Engagement

Creative presentation of public data promotes information equity, triggers discussions and allows citizens to demand more transparency and ensure accountability from government. It is a sequential flow of getting people more involved in the content of a budget, arming them with relevant information about the breakdown and how it concerns their local environment and provide a communication link between citizens and government.

With the rise of mobile devices and tremendous growth of web connectivity enabled by high speed networks, data needs to be truly visualized and put in the social sphere to truly enable action from citizens. A snapshot of the data could start as a 140 character tweet or a simple infographic which provides an opportunity for a more sustained engagement, thereby using a more interactive platform to give users a bigger picture.

Social Network and Public Data

Crafting a social network strategy towards public data should aim at achieving the following:

1. Ensure mass literacy on Public Expenditure and build a community of active citizens
2. Initiate robust discussions across individual and social networks that prompts effective government monitoring
3. Strengthen Civic Participation in Public Governance especially through budget access.
4. To use customized data representation tools to revolutionize engagement with citizens

Starting out with exploring data visualization themes and knitting it with a social network strategy, content creators have to consider the following factors:

1. Users Classification

Most users to be engaged are classified into these three classes below and need specific form of engagement:

- *Occasional Users*. These are users who want information simply and quickly. They are interested in getting a picture of the data, not detailed analytics. An engagement model could simply employ short form writing via tweets, sms or simple interactive graphics.
- *Active Users*. Users who stimulate discussion, and use the data to increase their knowledge of a given area or challenge the assumptions of the data. For these users we want to provide feedback mechanisms and the possibility to share insights with their peers via social networks.
- *Data Hogs*: These users with depth in public finance want raw data in a reusable format for their own visualisation or analysis.

2. Data Appreciation Level

When visualizing data it is important to understand the level of data literacy/appreciation of users. As beautiful as data presentation may be, complex diagrams and interactive applications might not meaningfully communicate to our users based on their previous experiences with interpreting data. A good visualisation will speak to the user in a language they can understand, and bring forth a story that they can easily connect with. Symbols, themes and user interface should put the data appreciation level of users into context before development.

3. **Platform and Access Speed:** Data Visualisation must take into account Internet access speed of users and developing an application that make the user experience as pleasant as possible through a mobile, SMS or workstation. Defining the bracket of data users is critical in which form of technology which is leveraged upon to deliver data to citizens. Bandwidth-hungry application in a developing world with limited speeds will limit data appreciation by users.
4. **The Share Strategy:** A core factor into driving usage of data is to build a social network share (Facebook, Twitter and Google+) mechanism into data visualization development. Embedding it in every stage of visualization is critical to enable others have an experience of public data in a simpler way.

BudgIT – Nesting Social Media with Public data in Nigeria

Nigeria currently has a population of approximately 167 million people and has also strong mobile presence with over 90.58m active mobile subscribers. A persistent gulf in data interpretation in the most Nigerians about the key items of the budget, specific allocation to local environment, and performance metrics is highly noticed.

To engage every literacy span, BudgIT (an organization which I founded in 2011) sees the need for the budget as a public document to be redesigned in a more interactive format. As a social enterprise, committed to transparency and sound governance, BudgIT bridges a gulf of ignorance and uses tools such as mobile phone, Internet and Townhall forums to strengthen budget access. We also encourage citizens to use the available data to understand specific projects that have been earmarked for in the budget. We have had a budget cut app at yourbudgit.com which has been used by over 3,000 Nigerians within two weeks. Our Twitter stream is a hive of commentary on the budget with several comparative analysis of government item. Our core strategy which has put public data as a social object is defined around the following:

1. *Stimulating Discussion around Current Trends.* BudgIT keeps track of online and offline discussions and seeks to provide data around these topics. For example, with the fuel strikes in January 2012 there was constant agitation among the protesters on the need to reinstate fuel subsidies and reduce extravagant and unnecessary public expenditure. BudgIT tracked the discussion via social media and in 36 busy hours built an app that allows citizens to reorganize the Nigerian budget.
2. *Good Feedback Mechanisms.* We engage with users through discussion channels and social media. Many users want to know about stories behind the data and many ask for our opinion. We make sure that our responses only explain the facts behind the data and our not biased by our personal or political views. We need to keep feedback channels open, to actively respond to comments and to engage the users creatively to ensure the community built around the data is sustained.
3. *Make it Local.* For a dataset targeted at a particular group, BudgIT localizes its content and promotes a channel of discussion that connects to the needs and interests of particular groups of users. In particular we're interested in engaging users around issues they care about via SMS.

Conclusion

Making Public data social must a keen focus on engaging the user by leveraging on appropriate technology platform. Social media can be used to scale reach among the users in process developing active citizens.

