Calling all "Fiberhoods": Google Fiber and the Politics of Visibility

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Abstract

This essay examines the promise of transformation and initial outcomes of Google's "Fiber for Communities" project in Kansas City, Kansas and Kansas City, Missouri. Through a discourse analysis of industry and popular press, press releases, Google's official blog and YouTube channel, and user-generated content from Kansas City residents from 2010-2012, the essay highlights the ways in which Google promised to transform the image and significance of Kansas City, upgrade experiences of internet access and use, and experiment with new deployment models for large scale fiber optic infrastructure in the US. However, the author focuses on how the process of transformation rendered certain pre-existing digital divides and inequities more visible rather than erasing them.

Keywords

Introduction

Tania Lewis observes that, "'the popular idiom of reinvention' has found its way into every aspect of our social world, with calls to makeover everything from 'style-deficient infants' to the US government." (Lewis 2008: 441). Marketing materials for digital hardware and software echo this discourse by convincing people to "upgrade" their devices and their lives, investing in technologies that are faster, higher resolution, maintain stronger signals, or offer larger coverage areas. These discursive tropes and promises of transformation are evident in Google's "Fiber for Communities" project, more commonly known as Google Fiber. Through its promises of reinvention, Google Fiber – Google's effort to bring high-speed fiber optic network infrastructure to a city or region in the US -- presents a complex case of transformation of urban infrastructure worthy of further interrogation. An analysis of the positioning of Google Fiber in industry and popular press, press releases, Google's blog and YouTube channel, and reactions of Kansas City residents during Google Fiber's initial implementation phase reveals that its

implementation did not erase pre-existing digital divides but actually rendered these divisions more visible.[i]

The Promise of Digital Transformation

In February 2010, Google announced that it would build an experimental fiber optic network in "a small number of trial locations" within the United States (Google Blog 2010a). The 1 Gigabit per second network would provide residents and businesses with download and upload speeds up to 100x faster than any pre-existing US service. Cities interested in hosting Google Fiber had approximately one month to fill out forms, organize campaigns, create Facebook pages, stage elaborate stunts (often temporary transformations such as Topeka, Kansas changing its name to Google, Kansas), upload YouTube videos, collect signatures, and otherwise present their demand for Google's services. The contest to win the bid for Google Fiber transformed this usually invisible aspect of Internet connection -- the infrastructure – into something visible within popular culture. During the month-long campaign for Google services the company received over 1,000 requests from communities across the US and nearly 200,000 from individuals (Google Blog 2010b). The selection process mimicked the codes and conventions of the reality makeover show: potential makeover candidates created heartfelt, eye-catching applications that demonstrated their need and desire to be transformed. Kansas City, Kansas (KCK) was selected as the winner of the competition and this selection was expanded to include Kansas City, Missouri (KCMO).

Technology and technological infrastructure have been directly linked to economic and urban renewal. Richard Florida (2002) has argued that there are three cornerstones of urban transformation and economic development: technology, talent, and tolerance, and that through these a city can attract and sustain a creative class of people who work within the knowledge economy, think creatively, lead innovation, and spur economic development. Community informatics research has shown that the adoption of information and communication technologies within neighborhoods can enrich social capital, increase community efficacy and participation, and augment sharing of local information, experiences, and collective or individual memories (Chen et al 2012, Hampton 2003, Hampton and Wellman 2003, Kavanaugh and Patterson 2001, Purcell 2006, etc). Press coverage of Google Fiber as well as blog posts, videos, and mission statements from Kansas City residents[ii] and public officials[iii] echoed these perspectives, emphasizing the capacity of next generation technological infrastructure to

transform the city's ability to attract and keep creative talent, the potential for increased levels of safety, education, cultural and artistic production, innovation, and economic and emotional investment at neighborhood and municipal scales.

Throughout the competition and selection process Google proposed many types of transformations. The company promised to give the Internet a makeover, and offered winning cities "A different kind of internet" with no buffering, loading, or waiting (Google Fiber Blog 2012a). The project was also framed as having the potential to provide access for households and organizations on the wrong side of the digital divide, and to "build products that will help improve our users' lives" (Google Fiber Blog 2012a). One of Google's initial intentions was to transform the United States' newly established broadband policy and the business of broadband provision. It suggested that all US households should be provided with at least 5 Mbps upload and download speeds by 2012, and urged the government to deploy fiber optic networks across the nation – especially to low-income communities, libraries, schools, healthcare centers, and public housing facilities (Whitt 2009).

Google Fiber was touted as a network that could transform a city's schools, public services, and online entertainment activities, while jumpstarting technology industries and fostering development in underdeveloped urban areas. In videos released on YouTube, Google executives employed the construction of the railroads in the 1800s as a metaphor for the growth, innovation, and transformation that Google Fiber would provide (Google 2011). Google employees stated that: "We're very excited about building Kansas City, KS and Kansas City, MO. . ." (Google 2011). Google even promised to "re-place" Kansas City (Halegoua 2012) -- reorganizing the meaning of place within KCK and KCMO through the union of digital technologies and physical location.

The Implementation of Transformation

The KCK and KCMO state officials, residents, and business owners in the project's YouTube videos reacted to the announcement of their success like participants in a makeover show – giddy, hopeful, emotional, and eager to begin the transformation of Kansas City. However, when the initial maps of the "fiberhoods" -- the neighborhoods that would receive Google Fiber -- were released, the "before" and "after" Google Fiber images looked startlingly familiar.

The Google "fiberhoods" were based on pre-existing neighborhood delineations and zoning boundaries. In order to acquire Google Fiber, "fiberhoods" had to pre-register at least 5% of their residents (Google Fiber Blog 2012a) and this required a $10 fee. Google monitored the progress of "fiberhood" pre-registration via a color-coded map on their website. Green meant that the pre-registration goal had been met. Yellow signified that the pre-registration goal was yet to be achieved.

After the deadline, the maps on the Google Fiber website illustrated that not all Kansas City "fiberhoods" had met their goal. Closer investigation showed that historically wealthy and predominantly Caucasian neighborhoods met their pre-registration targets while lower income, predominantly African-American neighborhoods, did not. The expressions of need that presumably played a role in the selection of KCK and KCMO, and the digital inequities and exclusions that the presence of Google Fiber proposed to ameliorate, were actually made more visible via brightly color-coded visualizations. Troost Avenue in Kansas City, MO – which has historically served as an economic and racial dividing line – separated the western, green sections from the eastern, yellow sections, and those who would receive fiber optic cable from those who would not. Investigations began to reveal that many of the households that did not participate in the pre-registration process had never had Internet access (Canon 2012; Eligon 2012; Wohlsen 2012). Despite the fact that community groups specifically targeted disadvantaged neighborhoods, their participation rate was low. Eventually, Google Fiber changed their criteria and extended the deadline for the "fiberhoods" that did not meet their targets in the first round of selection. Currently, 89% of all "fiberhoods" will be wired with Google Fiber. Hanover Heights in Kansas City, KS and Crown Center in Kansas City, MO will be the first neighborhoods to be wired.

At present the Kansas City start-up communities and local technology industries are achieving a very different type of visibility. Collectives of start-ups and digital technology companies are clustering around the first streets to be laid with fiber optic cable. Hanover Heights has seen its antiques district morph into a "startup village" (Nicas 2012). However, contrary to some popular press reports (Roberts 2013), Google Fiber did not "create" these start-ups, if anything, the presence and expectation of the fiber optic network made these pre-existing companies more visible, with organizations such as KC Startup Village encouraging them to cluster in active "fiberhoods."

Conclusion

There are several lessons to be learned from the Google Fiber implementation process that can be applied to community networking initiatives, infrastructure implementation, and grassroots organizing around digital infrastructure. Google's experimental network offers insight into the benefits and limitations of a competition model for large-scale network development that includes those who have never benefited from digital inclusion initiatives. However, Google Fiber also serves as an example of how privately funded, large-scale digital infrastructure projects may run the risk of further networking urban residents who are already networked, rather than providing new media infrastructure and services to a new population of broadband users. Additionally, the example of Google Fiber in Kansas City highlights a complex politics of visibility within this digital "makeover" process. In this case, discourses and practices of transformation highlighted historical geopolitical inequalities, disparate power relations and relationships to new media that the offer of exceptional digital infrastructure alone could not ameliorate. As the task of making sense and making use of Google Fiber rests in the hands of Kansas City communities only time will tell if the "after" looks better or at least different than the "before," or if certain inequities remain the same.

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[i] A discourse analysis of a range of online texts (gathered from 2010-2012) that describe and evaluate the Google Fiber project were archived and analyzed in order to unpack the

imaginations, ideologies, power relations and rhetoric of transformation surrounding the deployment of Google Fiber in Kansas City.

[ii] For example see discussion forum at http://www.googleconnectskc.com/Gig-Ideas.aspx

[iii] For example see "Playing to Win in America's Digital Crossroads" published by the Mayor's Bistate Innovation Team, Beta Version May 22, 2012