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Restorative Buildings: Tbilisi

A comprehensive project submitted in partial
satisfaction of the requirements for the degree
Master of Urban & Regional Planning

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**Does the *Restorative Buildings: Tbilisi* application have the
potential to effectively incite protest and political participation
from the Georgian people regarding building demolition in the
historic core of Tbilisi?**

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2014

Digital Version of Report:



Web Application
Restorative Buildings: Tbilisi:



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EXECUTIVE SUMMARY

Looking at the impetus for the youth revolt in Georgia, during the Rose Revolution, this report is interested in looking at the how technology has the potential to be catalyst for knowledge distribution and engaged citizenry in the country today. First considering the effects of technology and decentralization at the individual level in ‘digital participatory planning’ and then more specifically in the country of Georgia. Particularly determining if the mobile application, “Restorative Buildings: Tbilisi”, has the ability to reach the necessary people to propel involvement and policy reform. These questions of the potentiality of such an app are considered using the country’s recent Rose Revolution of 2003 as a template for reform and successful transformation of power, referencing three major components of the revolution as described by the US Institute of Peace: (1) youth participation by student group Kmara, (2) lessened political apathy garnered by opposing political parties, and (3) independent news media influence. This paper also examines why the preservation of historic buildings is necessary for economic development and how the application will be distributed to Tbilisians for future use.

DECENTRALIZATION THROUGH TECHNOLOGY

We live in a time of momentous change in communications technology. The expansion of the Internet to the mobile realm holds great promise for people to not only connect and socialize but to *mobilize* among communities. Improved information technology means that data can flow more freely than ever before. Instead of information only flowing “down” from decision-makers, data can move “horizontally” to incorporate interested neighborhood organizations, entrepreneurs, and most importantly the citizens that are directly affected by these policies. This way, citizens are able to band together and work towards a collective objective.

Location-based technology – where citizens can provide real-time feedback – is an emerging field with great potential for political change and decentralization.¹ Particularly it is a method of participatory planning, an urban planning paradigm that emphasizes the involvement of the entire community for contribution of processes of urban development. The UN Habitat

¹ Gruteser, Marco, and Dirk Grunwald. 2003. “Anonymous Usage of Location-Based Services Through Spatial and Temporal Cloaking.” In *Proceedings of the 1st International Conference on Mobile Systems, Applications and Services*, 31–42. MobiSys '03. New York, NY, USA: ACM. doi:10.1145/1066116.1189037. <http://doi.acm.org/10.1145/1066116.1189037>.

underscores the necessity to have “inter-linkages between the public, private, and civil spheres”.² This is particularly important for promoting transparency and accountability by the government and propels civic engagement. It is a method that is working toward democratizing research, planning, and decision-making

Inclusive planning in the digital realm, through mobile applications, has the potential to open up this dialogue further. Two billion around the world already have mobile broadband subscriptions.³ This creation of “digital participatory communities” has been effectively been utilized in a number of instances. Recent events such as the Arab Spring, Iranian Green Movement, the Haitian earthquake, and Philippines 2001 revolution or the “coup de text” all had technological components. These methods of outreach have reached audiences at the local or national level where the crisis is happening, but also have also gained media attention beyond country bounds from a global audience.

Ushahidi, a nonprofit open source software company, similarly grew from this national level to becoming integrated globally in various countries. The company originated in Kenya and was a response to the post-election violence that broke out in 2008. Because it was so instrumental in demonstrating what was actually happening on the grounds and managed to receive as many as 45,000 responses from the people of Kenya, it became an example of a successful method of crisis mapping. In terms of Internet reach, it is expansive. It combines input from people through the website, mobile application, tallies from tweets, as well as Facebook posts relating to a particular project. Shortly thereafter, it became open source; it

² “Participatory Planning in the Digital City | Magical Urbanism.” 2014. Accessed March 18. <http://www.magicalurbanism.com/archives/5789>.

³ “Emancipating Citizen Voice.” 2014. *Huffington Post*. March 3. http://www.huffingtonpost.com/danny-sriskandarajah/emancipating-citizen-voic_b_4892052.html.

was a used as a resource used by numerous organizations throughout the world as an effective means of endemic mapping. With thirty different language configurations, Ushahidi is easily integrated in multiple regions around the world.

Using Ushahidi, there is a dispersion of information to people, lowering barriers for individuals sharing their stories. Also there is the encouragement of effective public interest groups to support these concerns of these citizens. Political decentralization, as defined by Litvack and Seddon, is a method to give citizens and their elected representatives more power in public decision-making.⁴ Advocates of this system assume that decisions made with greater participation will be more relevant and better respond to the diverse interests of the society. It is not a means of devolution or delegation, the transfer of responsibility to semiautonomous units of local government but rather *decentralization to the individual level*, where citizens are involved in the dialogue and have say so in issues that directly affect them. There is no guarantee that these methods will change policy or directly influence governing bodies but there is a sense, evidenced by previous Ushahidi deployments, that there will be higher potential for engaged citizens as well as more political participation due more transparency and better access to data and information. Planners more often have a conflicted history with the communities they are purported to serve. Too often, planners or foreign agents take the role of experts. Their pursuits are viewed as technical, elitist with set rules that could be applied universally, regardless of local context or history. Local knowledge is starkly different from technical expertise: it is situated and contextual; as social scientists Marian Barnes and Chris Skelcher say, local knowledge

⁴ “Public Sector Reform & Decentralisation : Litvack, J. and J. Seddon (eds.) (2000) Decentralisation Briefing Notes. |.” 2014. *capacity4dev.eu*. Accessed March 16. <http://capacity4dev.ec.europa.eu/public-pub.sector-reform-decentralisation/document/litvack-j-and-j-seddon-eds-2000-decentralisation-briefing-notes>.

encompasses “meanings, values and beliefs as well as cognition.”⁵ Using local knowledge testimonies, Ushahidi is bringing forth a more contextual understanding of a regional issue.

Specifically, this report will consider the potentiality of the mobile application, “Restorative Buildings: Tbilisi” as an effective means of voicing the concerns the Georgian people confronting the issue of demolition of historic and endangered structures in the capital city.

THE APPLICATION

Restorative Buildings: Tbilisi is a spatial project mapping the locations of historic churches, national landmarks, and endangered housing that are at risk of demolition in the capital city of Tbilisi in Georgia. Its goal is to include the Georgian people in the policy-making process where information can be freely shared relating to these civic buildings in question. The issue at hand is contesting interests. On one hand, there are residents of Tbilisi that want to preserve their historic and community landmarks, believing that the structures are of national importance. On the other side, there are developers and financial stakeholders that are working to modernize the city and create more economic development for the country. According to local NGOs on the ground and in Tbilisi, it is no question that the interests of the private developers are primarily for profit without regards for structural soundness or historic preservation. With the Old City Development Fund, a Tbilisi local government beneficiary, the investor is authorized to demolish historic buildings rather than restore them and create new structures, compromising the region’s architectural authenticity

⁵ Marian Barnes, Chris Skelcher. 2002. “Local Knowledge and Local Representation: Discourses and Designs in Participatory Governance.”

The construction of an interactive map with the Ushahidi platform will work to dispute the demolitions. Users of the application would be able to tag certain buildings in the capital, particularly in the historic core, that they do not want to see dismantled and redeveloped. As tags accumulate, that particular region of the map will illustrate a clustered of reports from users. Users will also be able to upload photos and documents relating to the buildings in question. Case in point, some of the uploads could include construction documents demonstrating structural soundness that the government may have ignored, when deciding to demolish certain buildings in question. The application will also send alerts to people who wish for more information about possible approaching demolition dates or other coinciding events. This project is working to create ‘digital communities’ of people that would not have had means to join together otherwise. Also the application is a means to educate the citizens of Tbilisi of demolition dates or resident protest dates so as to create a dialogue among government officials and the Georgian people about the importance of these historic edifices toward their national identity.

However, the question in this case proves to be how effective will such a platform when considering the current sociological and political climate in Georgia? Will it have the potentiality to reach a large number of people? These are questions that are considered using the Rose Revolution as a template for successful protest and effective political change in the country.

ROSE REVOLUTION CASE STUDY

In the afternoon of November 21, more than 100,000 gathered in Tbilisi’s Freedom Square to pressure then Georgian President, Eduard Shevardnadze, not to enter the chancellery for the parliament’s first meeting. Shevardnadze feared violent street protest and the risk of civil, deploying hundreds of soldiers on the streets of Tbilisi. The protestors, many of whom were

students, had no plans of violence, but decided to hand red roses to the soldiers. Overwhelmed by the number of people, troops stood by and laid down their guns as protestors passed them by.⁶

The roses were a symbol of the protestors' peaceful intention, with which Mikhail Saakashvili, carried to the parliament hall, and that was the moment when the Georgian people called the protest the Rose Revolution. Georgia in the eleven years since the revolution has grown substantially as a more equitable nation.

Georgia has made significant progress since 2004 in tackling different forms of corruption. The country's anti-corruption legislation has also improved and the transparency of government activities in a number of areas has increased. The most notable examples include procurement services provided to citizens by public service halls and most visibly the disappearance of petty bribery in everyday life, a reality that would not have been imaged by the people of Georgia prior to 2003.

At the same time, there have been important gaps in the country's anti-corruption framework in 2004 -2012. According to the Corruptions Perception Index of 2012 (CPI), the weakness of parliament and the judiciary has undermined the democratic system of checks and balances and resulted in a dominant executive branch. Also according to Transparency International, officials at the top of the executive branch have operated without proper accountability and oversight, creating significant opportunities for abuse of power and corruption. Some institutions led by powerful officials have been allowed to bypass existing transparency and accountability mechanisms.

While there has been significant progress in anti-corruption since 2003 and previous President Eduard Shevardnadze's thirty year reign from the Soviet era Communist part, new

⁶ "How the Rose Revolution Happened." 2005. *BBC*, May 10, sec. Europe. <http://news.bbc.co.uk/2/hi/4532539.stm>.

issues must be addressed in Georgia today. Considering the results of the Rose Revolution, would technological methods of ‘knowledge sharing’ from mobile applications (apps) provide similar motivation for peaceful protest and change in Tbilisi, Georgia?

The legacy of the Rose Revolution is great. As the first bloodless change of power in the region’s history, it rekindled hopes for democracy, which many believed intrinsically foreign to this part of the world, and sparked what many called Europe’s fourth wave of liberation. Many observers refer to the Rose Revolution as an inspiration for future reform in post-Soviet Union countries. Particularly, the effectiveness of such an application,

The effectiveness of the “Restorative Buildings: Tbilisi” is determined by assessing the three essential features of the Rose Revolution that proved so triumphant in propelling political change in 2003. The three features in question for the application will be (1) its ability to reach the youth population of Tbilisi, (2) reducing political apathy by voters and residents of Tbilisi, and (3) using media and technology resources such as Rustavi-2 that was so effective in providing non biased and trusted information to the Georgian people. As these tenets are met, the application has great potential to begin to engender political energy to challenge these private developers that are stripping Tbilisi of valuable architecture.

1. YOUTH PARTICIPATION

According to the CIA World Fact Book estimates of 2014, people aged between 15 and 24 years old make up 14% of the population, and most of the population, 72% are younger than 54, composing a group of people that would be likely to use mobile devices and web applications. More youth participation in many elections, such as in Georgia in 20003, alters the results of elections as youth are very often underrepresented in political issues. The hope of the Restorative Buildings: Tbilisi project is to attract youth participation through primarily its

social networking appeal and mobile interface. Ideally the youth will be users of the potential mobile application as younger generations are known to be more apt to technology and connected to mobile devices.

In the Rose Revolution, the youth group Kmara (Enough) played an important role in combating widespread political apathy among the Georgian public and youth in particular. The successful mobilization of so many young people continues to reverberate as former Kmara members maintain their interest in politics. It emerged as a nonpartisan force with a horizontal organizational structure. The “Restorative Buildings: Tbilisi” project hopes to emulate this horizontal structure. Open source mobile applications are a method of horizontal integration of residents. The goal of using a web-based mapping platform is the ability to create a more transparent and democratic mechanism for relaying information to the public. All users are equally represented as reports are equitably imputed into the algorithm of the web site. No particular person is in charge; rather local NGOs facilitate the use of the application through the reaching residents and increasing visibility of the platform.

Similarly, from the outset, Kmara avoided hierarchy. It had no readily identifiable leaders, and by default, all activists were considered equal. Although repression in Georgia never evolved into mass arrests, this aspect of the horizontal structure proved highly effective for avoiding political persecution of leaders. Many of the activists did not even know one another. Similarly in the application, there are no user profile with adjoined user information or details, rather users are mostly anonymous and can choose to include names or not when reporting instances.

Also the group’s horizontal structure encouraged a greater feeling of ownership and participation among the activists than would have been possible within a hierarchy. Because it is

an open platform with the ability to stay anonymous, users are not fearful of reproach from the government by providing challenging documents relating to the buildings in questions. These include photos, architectural documents, construction letters, and other official or unofficial papers. This way, they are unknown to one another but are concurrently and collectively participating in ending unjust practices by the government.

During its initial stage of the revolution, Kmara resorted to marketing techniques that created a pretense of the organization and portrayed it as much more powerful than it was in actuality. One noticeable example was the graffiti campaign. This was where the actions of twenty protesters, created the perception of thousands of protesters through a strategic plan. Some twenty Kmara founders armed with brushes and paint split into subgroups of three to four and wrote “Kmara” tens of thousands of times on Tbilisi roads and streets. The next day the graffiti were the top news story, with journalists stressing that the effect of Kmara, especially the threat it faced then president Shevardnadze. This campaign was effective for gaining attention by both media and other residents of the country. It appeared as if Kmara had many followers, rather than its twenty, and therefore provided a sense of agency and legitimacy to the group. Similarly the Ushahidi map has similar capabilities. With each report about building history, legacy, or general support for preservation, users are able to contribute to the cause. They are not limited to one report, however. Users are able to report as much information as they choose to, therefore increasing the number of reports on the site overall. There could be a set number of people vested in the cause, similar to Kmara’s twenty graffiti artists. Each user of the application has the ability to issue as many reports as they can, increasing overall tags of buildings that are deemed by the public for preservation. As more reports are submitted, the strength of the cause increases, demonstrating vast public interest and participation.

The sum of the reports on the application is quantifiable data, representing the public's determination for preservation of the civic buildings. These methods are helpful in shifting the focus from emotion, frustration, and helplessness when there is inequity, to data. This data is the enumeration of people against the actions of the government and private developers. Data cannot by itself solve urban inequities or ensure meaningful participation, but can be a part of a more transparent, democratic process, demonstrating the statistics of public approval or disapproval. It can facilitate a dialogue, and become the first step to more public participation in politics. In the Rose Revolution, Kmara became a group of young people with extremely high motivation, courage, and knowledge, capable of carrying their pleas for more political involvement to all parts of Georgian society. Ideally this project, the Restorative Buildings: Tbilisi project will play out in the same vein as the Rose Revolution and Kmara's participation. When apathy of young civilians is reduced, overall apathy diminishes as well. With its 'app' appeal as well as integration within social media site such as Twitter and Facebook, this project will hope to attract the youth population of Tbilisi. With the participation of this youth population, the influence of the application will be substantially expanded.

2. MORE PUBLIC PARTICIPATION

According to Kandelaki, a protestor in the Rose Revolution, Georgians' attitude toward both the political process and political parties was "nihilistic and distrustful prior to the Rose Revolution. Georgia is a typical post-Soviet society. For many people, achieving a change of government peacefully is nearly impossible. Corruption ran high in Georgia pre-revolution. Future president Mikheil Saakashvili first became popular for his anti-corruption rhetoric. A project that is anti- corruption is more readily accepted by the public and deemed more legitimate.

In the Rose Revolution, opposing parties to the incumbent Georgian communist party gained many followers by targeting members of the lower middle class, provincial populations, and middle-aged Georgians. Various rallies showed the opposition's tactics of corruption and energetically and courageously confronted the Shevardnadze autocratic regime. As a result, more Georgians took an active role in voting and then further defended their vote as corruption and electoral fraud became apparent.

This method of raising the collective consciousness was effectively achieved by giving agency to participants and making apparent the inequities of the political party in office. Voters in Georgia were apathetic before the revolution, as they believed that corruption was rampant in the country and nothing could be done when confronting bureaucracy of the system. With the Rose Revolution, there was an onslaught of anticorruption rhetoric against the administration. As there were more participants for the revolution, more people decided to join the cause. It appeared that Georgian in many regions urban and provincial became less apathetic.

This is the type of rhetoric that hopes to be captured by the “Restorative Buildings: Tbilisi” application. By demonstrating instances of injustice such as displaced families, demolition of endangered housing, or the replacement of historic buildings with new low quality high rise buildings, there is the hope that these complaints will be noticed by the government if compiled to demonstrate mass dissent or frustration at a more macro level than just dealing with individual cases.

With this platform, there is more sense of agency amongst individuals, as they are able to recount their own experiences and incorporate them within the collective cause. It is a method of thick mapping or a more participatory method of digital mapping.⁷ Thick mapping is

⁷ Presner, Todd. 2014. *Hypercities: Thick Mapping in the Digital Humanities*. [S.l.]: Harvard Univ Press.

a method of critical interrogation and an interpretation of the multiplicity and heterogeneity of culture within a region. This is apparent with the illustration of the various voices and ‘knowledge sharing’ of the multiple users of an application.

Rather than faced with a static traditional map, this application of an interactive map creates a method of “exploring, participating, and listening.”⁴ This interaction adds a sense of collaboration and influence. At the core of such an endeavor is the possibility of expanding participation and knowledge in the service of the public good. In this case it is the creation of more preservationist legislature in regards to the architecture in Tbilisi.

According to Presner, thick mapping give rise to forms of counter-mapping or alternative cartographies demonstrating the varying perspectives of multiple voices as well as the contention of these viewpoints. Thick maps are not simply “more data” or more layers of data, but rather an interrogation of specific data of the space and the visualization of varying voices.⁸ Taking a cue from the Rose Revolution, more participation means more action. With more users involved in the application, “Restorative Buildings: Tbilisi”, there is more hope for collective action and change.

Looking particularly at the use of an application for mapping, the Ushahidi program provides a new paradigm for humanitarian work. The old paradigm, according to Giridharadas, was one of journalists, foreign aid workers, and NGOs flown into precarious regions.⁹ These workers would catalogue the situation for people from other parts of the world to envision. Now however, there is a shift from these agents to a more individual basis. Victims supply on-the-ground data. They become a self-organizing mob of volunteers using text messages to help

⁸ Presner, Todd. 2014. *Hypercities: Thick Mapping in the Digital Humanities*. [S.l.]: Harvard Univ Press.

⁹ Giridharadas, Anand. 2010. “Ushahidi - Africa’s Gift to Silicon Valley: How to Track a Crisis.” *The New York Times*, March 13, sec. Week in Review. <http://www.nytimes.com/2010/03/14/weekinreview/14giridharadas.html>.

further a cause or bring light certain political or social injustices. Journalists and aid workers then use the data to target responses. More participation from more people creates more political engagement and propels change from a variety of agents.

The word Ushahidi is Swahili for “testimony.” Testimony, according to the dictionary, means the recounting of an experience or bearing witness to. With every new application, Ushahidi is transforming the notion of bearing witness to a calamity. It becomes a project of narration of story telling, recounting one’s experience. This method in aggregate reveals truths about populations or trends that previously were unable to be captured. It is a counter narrative to the status quo, a depiction of the public’s perception and experience during a political event. Combining a series of testimonies, the application Restorative Buildings: Tbilisi is working to create a more inclusive depiction of public opinion. It is a crowd-mapping mechanism that empathizes participatory learning and collaboration, where users can add media objects, curate and shape their application with the ability to annotate and ‘geotag’ specific locations. It is a collective ‘knowledge sharing’ experience that works to challenge the corruptive capitalistic pursuits of the government, as is the present case in Georgia for more transparent economic practices and incorporating preservationist legislature. With this open platform, ideally residents will be more apt for participation.

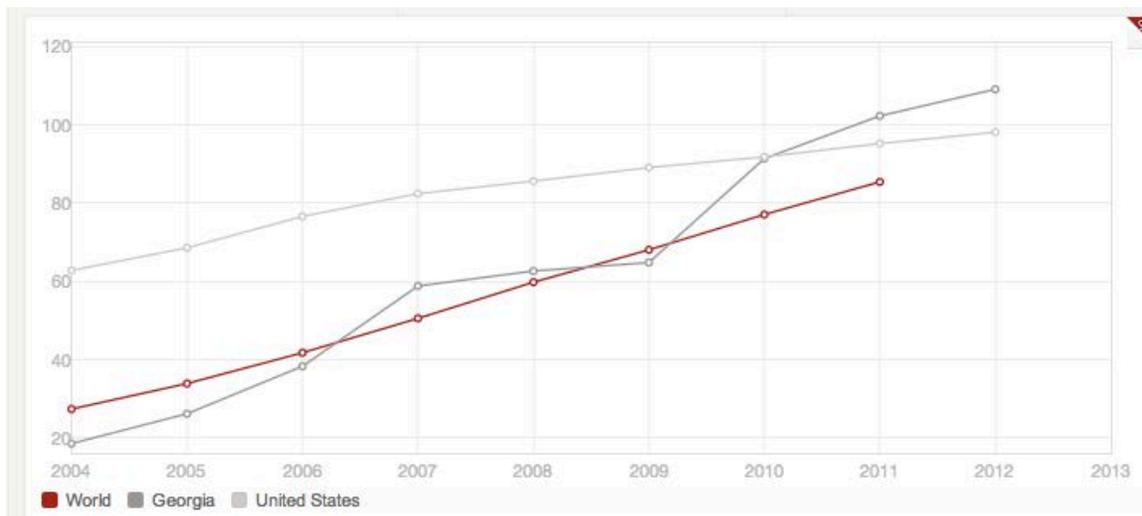
To further rescind perceptions of bias or corruption, the project “Restorative Buildings: Tbilisi” has no monetary interests. There are not methods of making or spending money as it is an open-sourced application, run from non-profit organizations, Transparency International and the Tbilisi Heritage Group. This should reduce hesitancy of participants from contributing to the site.

As anticorruption rhetoric is precipitated through the application, the project “Restorative Buildings: Tbilisi” will run in the same vein as the Rose Revolution, reducing political apathy.

3. INDEPENDENT NEWS MEDIA

Independent media outlets were essential in exposing the electoral fraud in the political dispute that resulted in the Rose Revolution. Rustavi-2 was the prominent news channel in Georgia. Rustavi-2 emerged as key supporter of the protestors and was a reminder of the importance of an open discussion forum free from bias and corruption. Ten years after the Rose Revolution, the emerging platform for news reporting has moved away from the television into online media and reporting. While there may be bias and inconsistent reporting through more crowd sourced and ad hoc means, there is less a fear of an autocratic or coerced method of information fabrication for the agenda of certain political parties. Media has become now become a method of whistleblowing.¹⁰

Mobile Cellular Subscriptions 2012 (per 100 people)



Source: The World Bank 2012 data.worldbank.org

¹⁰ “Georgia’s Rose Revolution: A Participant’s Perspective.” 2014. *United States Institute of Peace*. Accessed March 17. <http://www.usip.org/publications/georgias-rose-revolution-participants-perspective>.

Web applications have become another form of independent news media. It has become a pervasive form of media in many countries. Particularly looking at Georgia, World Bank data from 2012 demonstrates that the number of cell phone users or mobile cellular subscriptions have vastly grown from 18.6 in 2004 to 109.2 subscribers in 2012. It is important to note that that mobile subscription refers to the number of SIM cards being used in each country, not the number of people using a mobile device.¹¹

This media outlet also visualizes data in a new method, previously unacknowledged. Particularly is it the demonstration of data at varying zoom levels. Walter Benjamin considers zoom as a historical method for narrating the city: zoomed in means close reading and close analysis of details, whereas zoomed out means macro-level, comparative perspectives.¹² Considering that there are not any easily accessible land use or parcel level maps available for Tbilisi, this application provides a new perspective and method for accessing the space at both a macro and micro level. These are new methods of accessing the historical character of the city of Tbilisi, necessary for the Restorative Buildings: Tbilisi project as it provides new methods to assess the demolition of historical structure and creation of new commercial buildings in the city. This method of historical viewing and zoom ability engages users and provide more media content that is relevant to the cause.

The current situation in Georgia is a contentious one. The majority of Tbilisi's historic buildings are being irrevocably destroyed and replaced with concrete-and-steel structures, facsimiles of the previous structures. The people of Tbilisi, especially residents of the historic

¹¹ "Global Mobile Statistics 2013 Part A: Mobile Subscribers; Handset Market Share; Mobile Operators." 2014. Accessed March 17. <http://mobithinking.com/mobile-marketing-tools/latest-mobile-stats/a#subscribers>.

¹² Walter Benjamin, *The Arcades Project*, trans. Howard Eiland and Kevin McLaughlin (Cambridge: Harvard University Press, 1999), 476 (translation slightly modified). The original German is: "Geschichte zerfällt in Bilder, nicht in Geschichten." *Das Passagen-Werk*, ed. Rolf Tiedemann (Frankfurt am Main: Suhrkamp, 1983), 596.

core of city, are outraged by the lack of government policy toward cultural heritage and historic architecture. So much for that there was an organized protest facilitated through Facebook, called the “minifest”.¹³ As many as one thousand people showed up to the event, and it received considerable attention in the Georgian news presses. The Internet social media resource of Facebook was instrumental in creating this event; however consecutive events were hard to come by. With the Ushahidi platform, there is a holistic method of incorporating social media such as Facebook and Twitter posts to the larger mobile application with the ability to receive alerts and emails when there is an upcoming demolition of a building in Tbilisi’s historic core. Ideally this media method would create more of a digital community where users would become participants in the larger scheme of historical conservancy and preservation in Tbilisi. Using web media, there is a facilitation of communication and collaboration among residents of Tbilisi, creating more prospects of effective protest events and civilian action. With more of a public following, comes more support for historical preservation.

Importance of Historical Preservation

According to Randall Mason, historic preservation has become a fundamental tool for strengthening communities.¹⁴ It has proven to be an effective tool for economic development including neighborhood sustainable development, job creation, promotion of the arts and culture, and heritage tourism. In Tbilisi, the issue of preservation already has a following, as demonstrated by the protests and initiatives set forth by NGOs such as the Tbilisi Heritage Group and Transparency International, Georgia. The presence of historic structures is woven into the

¹³ “Tbilisi – Where ‘restoration’ Means Redevelopment.” 2014. *openDemocracy*. Accessed March 17. <http://www.opendemocracy.net/od-russia/salom%C3%A9-jashi/tbilisi-%E2%80%93-where-%E2%80%98restoration%E2%80%99-means-redevelopment>.

¹⁴ Randall Mason. 2014. “The Economics of Historic Preservation.” *The Brookings Institution*. Accessed April 30. <http://www.brookings.edu/research/reports/2005/09/metropolitanpolicy-mason>.

fabric of Georgia culture, as many other these structures are a reflection of Georgian history and culture. Buildings in the old town are in styles ranging from Russian and French classical to Art Nouveau. Many buildings cannot be classified strictly by one style. The travel section of the New York Times recently characterized the architecture in Tbilisi as a blend of styles that included spiral staircases that wind up along ivy-covered facades, deep wooden balconies, Persian archways, fine masonry patterns and courtyards shaded by mulberry trees.¹⁵ For a visitor and resident of the city, this architecture creates an ambiance that is a reflection of the city's history. Persian, Byzantine, Ottoman, Russian, and Soviet elements are present in the many of the structures. This illustrates the presence of the multiple empires that have shaped Tbilisi's culture. It is also a testament to county's resiliency in becoming an autonomous and sovereign country it is today despite these occupations. Residents recognize this importance and would like to retain this architecture and the art and culture of the city core. A gallery owner in the city explained, "there's so much history in this area; we can't let it fall apart. Unfortunately, some of the people who have their eyes on this neighborhood just want to wreck what makes it so interesting. We need to find a way to fix it up without ruining it."¹⁶As historical preservation is rooted in nationalistic culture and history, support for such an application that would challenge the demolition and razing of the historic district is sure to be expected and have a high potentiality to rally residents.

¹⁵ Beehner, Lionel. 2009. "With War Over, Tbilisi Works to Become Tourist Friendly." *The New York Times*, May 7, sec. Travel. <http://www.nytimes.com/2009/05/10/travel/10next.html>.

¹⁶ Beehner, Lionel. 2009. "With War Over, Tbilisi Works to Become Tourist Friendly." *The New York Times*, May 7, sec. Travel. <http://www.nytimes.com/2009/05/10/travel/10next.html>.

Economic Revitalization

The creation of new buildings, rather than rehabilitation of older structures, is the chosen scheme by the current Ivanishvili administration and private developers for economic revitalization in Tbilisi. This results in the razing of dilapidated structures for new buildings. Residents of Tbilisi, however, are not applauding the new skyline of modernist structures in the city today. Residents are calling the new buildings, “slapstick commercialism.”¹⁷ New housing oftentimes takes the form of “ugly concrete apartment complexes”, as one writer called it,¹⁸ with little architectural merit and poor use of building materials.

The complaints come in a variety of voices, some loud and others even louder. The preservationists accuse the government of handing out inducements to private developers, who favored private gains over historical authenticity in restoring Old Tbilisi. The local artist Gio Sumbadze calls it “facadism.”¹⁹ Much of the old city center was declared a historic district in 1975, but although that decree has preserved much of its character, little has been done to restore deteriorating facades and interiors. Advocates of historic architecture are hoping for local support as well as international help for a large-scale preservation program. As Maia Mania expressed, “Most people here understand that the old town is something very precious. We have to go further, to show them that it is a monument of worldwide importance and that with the

¹⁷ “In Tbilisi, Georgia, Bold New Buildings Rise From the Ruins of Dead Empires.” 2014. Accessed May 31. <http://tmagazine.blogs.nytimes.com/2013/11/01/in-tbilisi-georgia-bold-new-buildings-rise-from-the-ruins-of-dead-empires/>.

¹⁸ Kinzer, Stephen. 1998. “Tbilisi Journal; A Historic Trove of Houses, in Need of Handymen.” *The New York Times*, August 5, sec. World. <http://www.nytimes.com/1998/08/05/world/tbilisi-journal-a-historic-trove-of-houses-in-need-of-handymen.html>.

¹⁹ Kinzer, Stephen. 1998. “Tbilisi Journal; A Historic Trove of Houses, in Need of Handymen.” *The New York Times*, August 5, sec. World. <http://www.nytimes.com/1998/08/05/world/tbilisi-journal-a-historic-trove-of-houses-in-need-of-handymen.html>.

right care it could again be something truly glorious."²⁰ Rather than create new structures, the literature shows that historic preservation has the means to create revenue. The following demonstrates why Tbilisi should consider rehabilitating endangered housing instead of the construction of new architecture.

Heritage Tourism

Tourism, a sector in economic development, has strong connections to the historic. Much tourism is done because of historic value to the site. There is evidence that a substantial amount of tourism activity is specifically motivated by visiting heritage sites—43% of American adults traveling in 2001 included a visit to an historic site in their itineraries.²¹ Heritage tourism is a term used to describe the economic investment of tourism in historic preservation. A study conducted by David Listokin and Michael Lahr of Rutgers' Center for Urban Policy Research about heritage tourism found that heritage tourists stay 4.7 nights longer than the average tourist, and spend 78% more in restaurants than other travelers.²² The study also reports that “preservation in New Jersey creates 21,575 jobs each year, 10,140 of them in the state”, and concludes that historic preservation investments create more wealth and more jobs than an equal investment in either new construction or highway construction.

In the historic core of Tbilisi, many of the residents are poor, but some are young professionals who have begun fixing up old buildings and opening restaurants, cafes, boutiques and art galleries. This is assisting families and residents in the area as more income comes into the region. Rather than creating new buildings, developers should capitalize on heritage tourism

²⁰ In Tbilisi, Georgia, Bold New Buildings Rise From the Ruins of Dead Empires.” 2014. Accessed May 31. <http://tmagazine.blogs.nytimes.com/2013/11/01/in-tbilisi-georgia-bold-new-buildings-rise-from-the-ruins-of-dead-empires/>.

²¹ Pennsylvania Tourism and Lodging Association. 2003. Heritage Tourism Development: a Policy Framework for Pennsylvania. Harrisburg, PA: Pennsylvania Tourism and Lodging Association.

²² Listokin, David and Michael L. Lahr. "Economic Impacts of Historic Preservation." New Jersey: New Jersey Historic Trust, 1997.

as it is a revitalization mechanism. Evidenced in Europe and various cities in the US, tourism is a major profit mechanism and is a form of sustainable development.²³ Rather than the residents solely investing in rehabilitation, there should be assistance from the local government or even private developers intending to make a profit. To garner more support for heritage tourism and preservation, the application can work to spread word about the importance of both.

Multiplier Effect

An appraisal of the economics of historic preservation by academics in the urban planning field notes the basic relationship of investing in historical preservation: "... the direct benefits associated with historic preservation, such as enhanced rehabilitation and heritage tourism spending, have advantageous multiplier effects."²⁴ This is particularly good news for working class families through accessibility to more economic opportunity. The table below from this article from this study compares the measurable economic impacts of \$1 million investment in historic preservation (residential rehabilitation) versus equal investments in other industries such as book publishing, pharmaceutical production and electrical component production. Nearly any way the impacts are measured—generation of jobs, income, state and local tax revenues—historic preservation exceeds the other sectors. The Economic Impacts of Historic Preservation in Florida also revealed the startling statistic that for every dollar generated in Florida's historic preservation grants, two dollars return to the state in direct revenues.

²³ "UNESCO World Heritage Centre - World Heritage List." 2014. Accessed June 2. <http://whc.unesco.org/en/list/>.

²⁴ Listokin, Listokin and Lahr (1998), a pro-preservation scholarly essay on "The Contributions of Historic Preservation to Housing and Economic Development."

Economic Impacts per Million Dollars of Initial Expenditure

Economic Effect (National)	Residential Historic Rehabilitation	Book Publishing	Pharmaceutical Production	Electronic Component Production
Employment (jobs)	36	35	28	30
Income (\$000)	1,240	1,160	1,045	1,018
GDP	1,672	1,722	1,546	1,483
State taxes (\$000)	106	103	93	87
Local taxes (\$000)	89	86	79	74

Source: Listokin, Listokin and Lahr 1998

These multiplier effects have the potential to revitalize older regions in the Tbilisi. Although street patterns in the old town are ancient, there exists architecture from various time periods, with many of the housing and other civic buildings dating from the 19th and early 20th centuries. Residents claim that these buildings are being defaced by “tasteless renovation” and “poor materials”, and others risk decay and neglect. Rather than razing these structures and subsequently displacing resident and damaging the architectural heritage of the ancient city, more policy should be enacted to preserve and rehabilitate, rather than demolish. In return, such investment creates stability and security for residents, while propelling tourism and investment in the region. In order to initiate any action that would challenge the commercialism that is replacing the historic structures, there needs to be greater public participation and a larger assembly of proponents for historic preservation. The creation of a web and mobile application has the potential to network these people together creating a digital community where residents can work together for preservation. Because this is an issue that is present in the lives of people living in Tbilisi, the most populous city in Georgia, there is less political apathy about the issue. The prospective of preserving culturally valuable architecture as well as challenging unjust governmental oversight will act as an incentive and motivation for using the application.

Next Steps

In the upcoming months of summer 2014, the application will be able to reach the residents of Tbilisi and become publicly launched. The promotion of the application will be administered by various NGOs in the region that are interested in the cause and creating greater awareness and public participation in the issue of historic preservation in Tbilisi. These NGOs include: (1) the Tbilisi Heritage Group, (2) the Norwegian Directorate for Cultural Heritage Preservation, the Georgian National Committee of International Council on Monuments and Site, (3) the Georgian Arts and Culture Center “Isatoriali” (GACC) and (4) Transparency International Georgia.

The application has many statistical and data features as a site administration. Before the application is launched, I will guide the directors of the Tbilisi Heritage Group and Transparency International Georgia as lead administrators of the site, verifying accuracy and validity of the inputted building locations. As admins to the site, they have the ability to see numbers of viewers of the site and where people are inputting data and information about the architecture. There are also a number of statistical graphs and clustering capabilities, showing where there are the most instances of reporting and locations of reports. More of the admin capability and functionality is listed in Table II of the appendix. The directors of the NGOs will then oversee the application and encourage public usage through outreach and local communication.

CONCLUSION

The goal of the project is to increase transparency and accountability of elected bodies in both the local and national levels, and to protect the historic buildings in Tbilisi. The project also hopes to shed light on instances where government controlled entities have bypassed existing provisions and laws dealing with preservation of civic housing and buildings. Laws such as the

Law on the Protection of the Cultural Heritage of Tbilisi were established as early as 1920s and having undergone quite a long development was finally formed into a special decree in 1985, specifying boundaries and landmarks be protected with local regulation. However although the legislative exists, it often fails to be properly executed. This results in the vulnerable state of Old City today, where demolitions are frequent in many historic cores of the city. Following the Rose Revolution template, this project hopes to curtail these demolitions by (1) receiving support and a following from the youth population in Tbilisi, (2) reducing political apathy among residents, and (3) using Internet open media. Using these methods as a reference point, the application has well founded reasons to be an instrumental tool to challenge the redevelopment agenda of the Georgian government.

This is achieved through political decentralization using location based technology, and the application of Restorative Buildings: Tbilisi. Hypothetically, this application will be a method of thick mapping, emphasizing context and meaning making through a multiplicity of interpretations rather than a singular objective and static representation. It will do so using the Ushahidi platform.

Some of the shortcomings of using the Ushahidi platform as expressed by Giridharadas in the article “Africa’s Gift to Silicon Valley: How to Track a Crisis” are instances of false reporting, exaggeration of a situations, or lack of a following, where users of the platform are not representative of the residents of a region.²⁵ These shortcomings are diminished with more users of the application. As the data collects with large numbers, crisis maps reveal underlying maps of the reality they are encapsulating.

The reports when amassed should work to curtail the effects of demolition of civic

²⁵ Giridharadas, Anand. 2010. “Ushahidi - Africa’s Gift to Silicon Valley: How to Track a Crisis.” *The New York Times*, March 13, sec. Week in Review. <http://www.nytimes.com/2010/03/14/weekinreview/14giridharadas.html>.

buildings as well as increase the accountability of the local Tbilisi government and national Georgian government to effectively work to preserve the historic structures that have helped shaped the Georgian identity over the past thousand years.

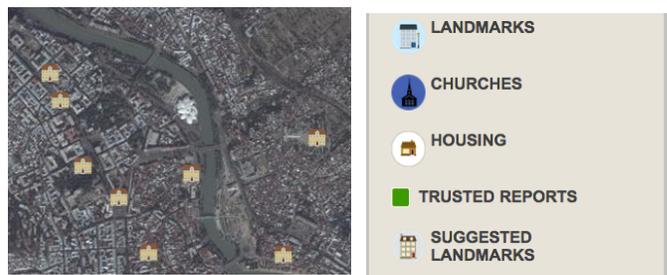
APPENDIX

TABLE I: How to Use Restorative Buildings: Tbilisi Site

Step 1: Choose from navigation box: (1) home page with main map, (2) list of reports, (3) write report, (4) get alerts about reports given, (4) about project description, and (5) view large map



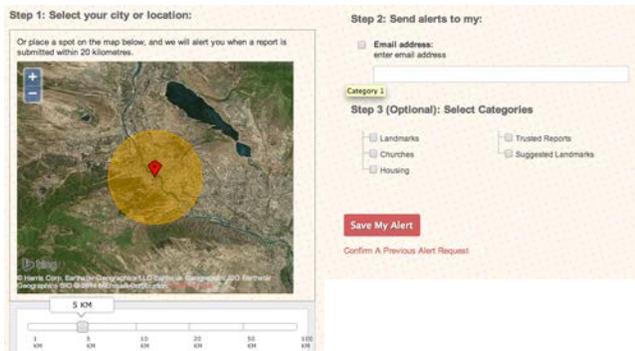
Step 2: View reports from report panel (below) or from map (right)



Step 3: Submit report (with the option to submit image, news link, and/or video)



Step 4: Get alerts sent to your email or phone number (option for Facebook and twitter)



Step 5: View large map. Turn on clustering to see what regions have the most reports



TABLE II: Administrator Data Graphs

Statistical Graphs on Administrator Login

1. Number of people who have visited the site



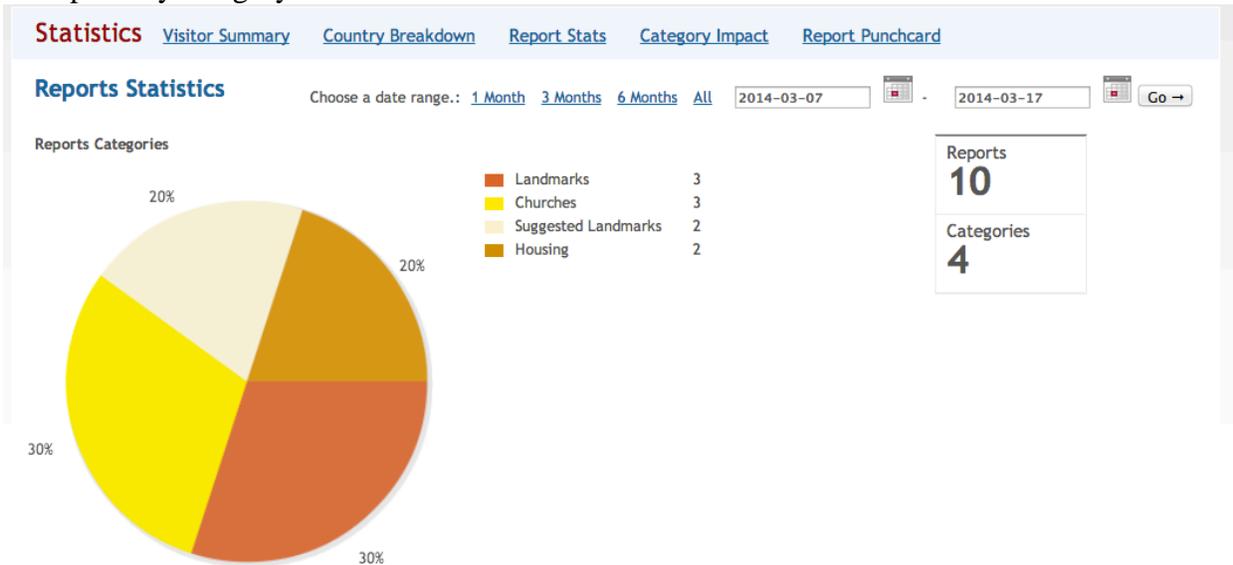
2. Number of reports by date



3. Map showing where visitors are looking at the application



4. Reports by category



5. Liner view of reports by category

