

Include your Digital Storytelling work at the top of the page. Many of you have already been experimenting with this idea of how to bring images, audio, video into a narrative framework through your City Sensing work. You should use those experiences and material as a good first step in thinking about how to do digital storytelling. People narrated over a video trail walk, narrated over images, and told really beautiful stories that placed themselves, humans and material together. We are asking that you repeat this, but focus on aspects of the topics you have chosen. Tell a human, emotional story.

You can find resources here: <https://digitalstorytelling.coe.uh.edu/page.cfm?id=22&cid=22>

If you want to see stories without the media richness, but beautifully told narratives here are some from our own community: <https://news.virginia.edu/content/double-take-take-two>

If you want a depiction of how to integrate a narrative over digital media to help evoke an emotional response coupled to narrator insights (not solving) check out this item that was shared from the IX sensing (thanks Sean): <https://youtu.be/ESyJop31cmY>

Vision

Deliver a solution to security deficiencies with a small city, including implementing technology that will provide sensitive data protection for local municipalities while allowing the open sharing of data for research through portals that will encourage improvements in infrastructure and safety for all. This includes developing urban planning to ensure local emergency personnel and first-responders have the resources and information they need to make smart, competent, and efficient decisions when it matters most, protecting the lives of everyday individuals as well as dealing with cyber security threats against both large businesses or government entities and your everyday citizen.

Background and Literature Review

<https://www2.deloitte.com/us/en/insights/focus/smart-city/making-smart-cities-cyber-secure.html>
 This article from Deloitte talks about the inherent cyber security risks that come with developing a smart city. It talks about the blurring between the physical services a city provides like transportation, waste management, etc. with the cyber world and how they are becoming more intertwined as these smart cities develop. The three key factors they say influence cyber risk in cities are convergence of IT and OT infrastructure, interoperability or the frequent interaction of old and new systems, and finally the integration and co-mingling of services through digital technologies.

<https://www.forbes.com/sites/danielnewman/2019/01/08/are-privacy-concerns-halting-smart-cities-indefinitely/#1e72d5f69ba>
 This article speaks on the privacy problems that come with a smart city. The author speaks about personal privacy concerns of people who may not be comfortable with government entities or companies having access to their personal data. It also raises questions like what data will be available to the public, can people opt out of having this data released, and how will this data be used within the community.

<https://securingsmartcities.org/>
 This website is for a nonprofit called Securing Smart Cities who's global initiative is to solve current and future cyber security problems in smart cities. This website provides a lot of research and articles on the current state of smart cities and their battle with cyber security. They collaborate with companies, governments, and media outlets to try and provide solutions to these problems

<https://iiss.tandfonline.com/doi/full/10.1080/00396338.2018.1448577#.XZ9gXEZKg2w>
 Research article about the dangers of a more connected smart cities. Provides statistics on such attacks, examples, and what is being done around the world to prevent these sort of attacks.

Research Questions and Division of Labor

Matt Moore (mtm5ef)

1. What kind of measures/initiatives are currently being taken in smart cities to protect from cyber attacks?
2. What are some recent cyber attacks in smart cities and what can we learn from them?
3. Are there any laws that have passed or are being proposed to help out with this issue?

My role within this group will be to explore what is being done in current smart cities to protect from cyber attacks. This ranges from finding any laws or initiatives within these cities that are being implemented to increase security as well as researching recent cyber attacks on cities to see what we can learn from these attacks. This will include but not be limited to conversations with the international Chinese student from Shenzhen to see what is being done to combat these issues in China.

Edwin Sompayrac (ers8ss)

1. What do ordinary citizens already think about cyber-security? Do they think it is important to be secure or not? Why?
2. Why should ordinary citizens of Charlottesville care about cyber-security?
3. How do you present cyber-security solutions to the citizens in Charlottesville in a manner where they will understand not only the importance of cyber-security but also understand how to keep themselves secure online.

My role in the group will be to tackle cybersecurity in terms of the average individual of Charlottesville. This person ideally wouldn't have any real responsibilities (i.e. not a business owner or entrepreneur), but maybe like a college student or adult, using their computer or phone to surf the web, go shopping, or do work on. The aim of this would be to inform and protect the everyday citizen.

Brian Lembo (bpl4kb)

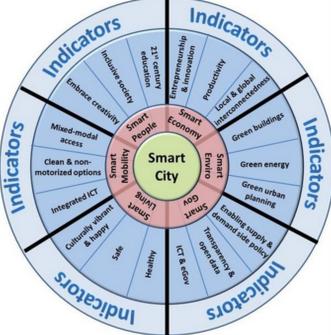
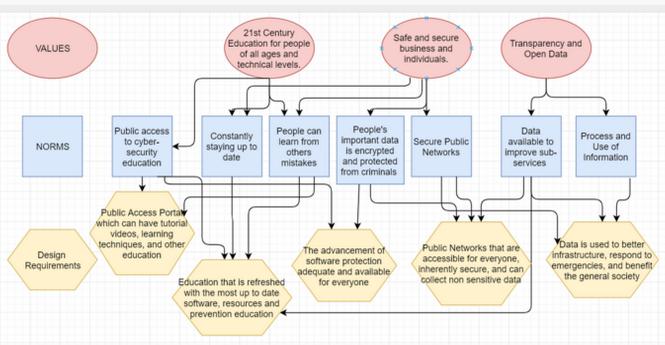
1. Are there any systems or laws currently in place to protect the startup community in Charlottesville from cyber security attacks?
2. What methods have already been employed by smart cities to promote transparent and open data among growing small businesses?
3. How have smart cities attacked cyber security initiatives on a macro and/or micro scale? (i.e on a government or business scale)

My role within the group will be to uncover the current conditions of data transparency and security as it relates to such topics as the securitization of sensitive data or the process of sharing open information. The person that I would be speaking with would ideally be a small business/startup owner or employee that has had experience dealing with personal and company data. The aim of this would be to discover whether the current political, legal, and social conditions in Charlottesville are optimal for encouraging the growth of a smart city.

Stakeholder Diagram and Analysis

This would be best depicted through a diagram, such as the SCOT style of depicting the relevant social groups, problems, and artifacts. You should then augment the diagram by explain how we arrived at our current situation and who is currently present who might inform us of how to alter the current situation. For example, who is attempting to define a problem, redefine a problem, what current interpretive flexibility exists among the relevant stakeholders, and what current and proposed technological systems or policies or actions are being discussed.

Value Mapping and Hierarchies



The values of smart security does not fall under just one of the parts of the smart city wheel but rather multiple. These values being a 21st century education under Smart People, Safe under Smart Living, and Transparency and Open Data under Smart Government. We believe that these three values are essential in having a society that is not only knowledgeable of the threats of a more digital world, but also have a smart city that can run more efficiently with the integration of these systems while keeping the citizens safe from cyber attacks.

Our values originated from a discussion our group had together on what "smart security" meant to us here at UVA or here in Charlottesville. While Charlottesville may not be considered a smart city, it is certainly a rapidly developing city as we move further into this technical era. I believe that UVA has done a little bit in educating, at least us students, about the dangers of cyber attacks and hackers by sending out reminders not to give passwords or personal information as well as the fishing emails that they send out to students. This ties into the idea of a 21st century education in how to keep your personal information safe from potential threats. While UVA has this I have not heard of such a program being implemented into the Charlottesville community to educate the citizens of these potential threats and what they can do to protect themselves.

Another big thing we talked about is the security of personal data. As personal data has been more and more readily available to the public it is a huge talking point of smart cities about what data should be available and what should not. Privacy is hard to come by as the world becomes more connected through technology and different platforms, but as we move forward into the age of smart cities we believe it is important to have some sort of open data to improve the services provided by the community. Transparency is also very important if we are going to have this kind of open data being used by the community. Transparency is also very important if we are going to have this kind of open data being used by the community. Transparency is also very important if we are going to have this kind of open data being used by the community. Transparency is also very important if we are going to have this kind of open data being used by the community.

This led to the alternative objective of how to keep all this information safe from cyber attacks. This problem will always be there as technology keeps advancing and these attackers are becoming more sophisticated to beat even the most up to date security measures.

Bibliography

Formal documentation of articles and other media.
 Millennials Throw Caution to the Wind Regarding Internet Security. (n.d.). Retrieved from <https://secrethoughts.com/younger-generations-throw-caution-wind-internet-security/>.

Vaughan, F., & University of Birmingham. (2017, October 24). Open Data, Transparency and Accountability: Topic guide. Retrieved October 10, 2019, from <https://opendatacharter.net/open-data-transparency-accountability-topic-guide/>.

Carolan, L. (2016). Open data, transparency and accountability: Topic guide. Birmingham, UK: GSDRC, University of Birmingham. Retrieved from https://assets.publishing.service.gov.uk/media/5857fdbc40f0b60e4a000d6/OpenDataTA_GSDRC.pdf

Joo, J. Y.-M., & Lee Kuan Yew School of Public Policy. (n.d.). Smart Cities: A New Age of Digital Insecurity. Retrieved October 10, 2019, from <https://iiss.tandfonline.com/doi/full/10.1080/00396338.2018.1448577#.XZ9gXEZKg2w>.

Home. (n.d.). Retrieved October 10, 2019, from <https://securingsmartcities.org/>.

Newman, D. (2019, January 8). Are Privacy Concerns Halting Smart Cities Indefinitely? Retrieved October 10, 2019, from <https://www.forbes.com/sites/danielnewman/2019/01/08/are-privacy-concerns-halting-smart-cities-indefinitely/#1e72d5f69ba>.

Making smart cities secure. (n.d.). Retrieved October 10, 2019, from <https://www2.deloitte.com/us/en/insights/focus/smart-city/making-smart-cities-cyber-secure.html>.

