***“Alexa, what can you do for the City?”***

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**Introduction**

The year is 2017. There are no flying cars yet but humans have made progress towards self-driving cars using machine learning and artificial intelligence. We live in a day and age where you can use a simple voice command to tell a virtual assistant chatbot to turn your lights on and off -if you have everything configured of course. And there are several virtual assistant bots to choose from such as Alexa, Cortana, and Google Assistant, to name a few. The hottest on the market right now is Amazon’s Echo and Echo dot which use a voice control system named Alexa. Using simple voice commands, Alexa can play music and audiobooks, stream podcasts, create a list, set an alarm clock, and provide real-time information such as the current weather and traffic. Alexa also makes ordering a pizza or an uber easier than ever. So what does this cool technology have to do with the government? How can the government tap into the technological advances that come with Alexa? Cities can take advantage of this technology and use it to make city services more seamless and user-friendly, thus bridging the gap between citizens and their local government. Alexa can put a face to the local government and is a platform for citizens to interact with and get things done is a more efficient way.

Imagine being able to make a service request or check the status of a permit or a city application using a simple voice command. Integrating this technology would make the government more readily available for the people it serves. This is not to say we are going to get rid of traditional community and town halls but for such a large city like Fort Worth, it is hard to connect to the 833 thousand people that reside there. Thus, the City of Fort Worth can use this technology to connect to all of its citizens. There are two other cities that have already started forging the way with the implementation of technology teams to create Alexa skills.

**LA and Vegas Integrate Alexa**

*My Vegas* is an Alexa skill created by the City of Las Vegas that currently gives information on scheduled council and planning meetings, as well as fun facts about the city, and information on city parks and how to report problems and contact departments [1]. This skill can also answer questions about who is part of the city’s management and the city’s elected council members [1]. A hotel in Las Vegas, The Wynn, is the first in the world to install the Amazon Echo into all of its 4,748 rooms by this summer and allowing their guests to “verbally control every aspect of lighting, temperature, and audio-visual components of a hotel room.” [2] Instead of calling the front desk, the idea is that guests can use Alexa to get information about their room, the hotel, and its services. Guests can also use *My Vegas* to get information about the city, events, and attractions. Implementation of Alexa in The Wynn will undoubtedly attract visitors to stay at the hotel and visit Las Vegas, which of course is great for the City.

The City of Los Angeles has also started working with Alexa in creating a skill that gives information about special holiday events. Like Vegas, LA aims to get to the point where a person can ask Alexa about local news, attractions and events, and more information about the city. Next month they are hoping to add to this skill and enable its citizens to ask Alexa about events at nearby libraries and parks [3]. Someday they hope citizens will be able to use Alexa to request 311 services such as locating non-emergency police services, fixing potholes, and reporting the location of a dangerous beehive, to name a few [3]. Since they launched their MyLA app, 24% of its 1.5 million service requests were made through the app [3]. It is clear that the citizens of LA are making use of the current technological capabilities of their city to utilize city services.

**So What’s Next?**

So where should we start with this whole Alexa thing? Brainstorming and coming up with a shortlist of commands and applications that can be used with Alexa would be the first task. Start small and work up to much larger skills. Create an account on Amazon’s developer site so that we can start coding using Python to create a basic skill and go from there [4]. Think about skills that can be created quickly and actually make sense to use with a voice interface. What we don’t want is to have a 10 minute conversation with Alexa just to get something done. [5]

**Further Exploration**

Another interesting direction to implement with Alexa is the Open Data Portal. In my analysis of Open Data Datasets (see [OpenDataCFW](https://github.com/jessicawheeler/OpenDataCFW)), the most accessed governmental datasets were about Permits, Application Filings, and Police Active Calls. Some citizens don’t want to work with tabular data but instead just want to ask a simple question such as “what is the status of my Permit?” or “How much crime occurred in my zipcode today?” Connecting Alexa to open datasets would make the information in these datasets more fruitful not only for the citizens but also those who work for the government. Yet another avenue is the use of Alexa internally- a manager can ask about project budgets or how much vacation time he or she has left.

**Conclusion**

It is just the beginning with Alexa. She can already do so many tasks for the average person with simple voice commands. It is about taking this technology and running with it- optimizing it to our advantage. There is a ton of untapped potential from this technology that the City can use not only to connect its citizens to its services but also to visitors that want to know more about the city that they’re in. Citizens can potentially access their local government’s calendar of events with a simple question to Alexa from the comfort of their living room or stream the mayor’s speech. The possibilities are endless but we have to start small. Starting with one simple command, like LA did in connecting their calendar to Alexa is a huge first step into developing more complex skills. Equipped with the potential and the technology, all the City of Fort Worth has to do is get to work!

**Resources**

* [1] Munks, Jamie. (Dec 2016). *City of Las Vegas looks to build high-tech relationship with Alexa.* Las Vegas Review-Journal [Online]. http://www.reviewjournal.com/news/politics-and-government/las-vegas/city-las-vegas-looks-build-high-tech-relationship-alexa
* [2] Raz, Nicole. (Dec 2016). *Amazon Echo a ‘game-changer’ for Wynn Las Vegas.* Las Vegas Review-Journal [Online]. <http://www.reviewjournal.com/business/casinos-gaming/amazon-echo-game-changer-wynn-las-vegas>
* [3] Johnson, Khari. (Jan 2017). *Why Los Angeles made an Alexa Skill, and what the city wants to do with it.* Venture Beat [Online]. http://venturebeat.com/2017/01/16/why-los-angeles-made-an-alexa-skill-and-what-the-city-wants-to-do-with-it/
* [4]Amazon Develper Website, available: <https://developer.amazon.com/alexa>
* [5] LA City Skill, Alexa Skill information, available: https://www.amazon.com/dp/B01MXYESZY/ref=sr\_1\_2?s=digital-skills&ie=UTF8&qid=1481847062&sr=1-2&keywords=l.a.+city