# Electric Growers Home Security System

## Project Proposal

The best Target Segment and Location for a New Security System

## Agenda

- Executive Summary
- WHY Notable Stats and Facts / Objectives
- WHO Stakeholders/Audience/SME
- WHAT Dataset
- HOW Formats
- CHALLENGES

## Executive Summary

Electric Growers wants to launch a New Home Security System utilizing the right strategy

The project is expected to provide to best way to launch a new EG Home Security System targeting customer segments which have the highest potential new customers and also the highest switch potential, through a story within Tableau. These suggestions would be a result of an in-depth analysis of the customer data including several variables as a collected socioeconomic survey questions in 5028 markets of US cities/regions. The steps of this analysis as well as subsequent suggestions would be shown in form of points within the story.

### WHY

### Notable Stats and Facts

- According to the FBI, Home <u>Burglary</u> is the most common threat to our homes.
- In the U.S. a home burglary occurs every <u>13 seconds</u>.
- More than <u>2M home burglaries</u> are reported each year in the United States.
- Nearly <u>66% of all burglaries are residential</u> (home) break-ins.
- Only <u>17% of the homes in U.S.</u> have a security system.
- Homes without security systems are up to 300% more likely to be broken into.
- The average property dollar loss per burglary is a staggering \$2,251.
- Burglars tend to <u>avoid homes with security systems</u>.

### **Objectives**

We should identify customers who are economically ready to purchase a new Security System regarding potential markets and their respective locations.

### **WHO**

#### Stakeholders **Audience** SME Board members and Members of the Members of the Data + BI Positions and Managerial level Marketing and Sales + R&D departments Roles departments Use dataset to prove or disprove Analyse variables from the Survey Illustrate trends to generate new initial set of hypotheses previously researched opportunities Goals Leverage dataset to generate Leverage the survey to generate • Define strategies with commonly insight provoking visuals understood and drive value insights to develop a new product Identify and download source data Promote understanding of and Create propensity indices under a Challenges and launching product process for a Select appropriate variables between disparate sets of data Facilitate data driven decision market segments providing right attribute Needs making in a short time • Electric Growers wants to launch a • Findings are presented and KPIs Demographic and socio-economic are prepared according to the contexts to data under different New Home Security System utilizing Context Survey previously researched the right strategy scenarios are provided

### WHAT> Dataset selected

The dataset is related to a survey questions researched in 5028 US cities/regions considering their socio-economic and demographic variables with levels of granularity and attributes.

Data Source	Description
<ul><li>Survey Data</li><li>Segments</li><li>Variable Names</li><li>Variable Count</li></ul>	Survey Data will have the segment distribution for the variables providing the right attribute which will be used to calculate propensity indices for the segments or markets.
<ul> <li>Market Data</li> <li>State, City</li> <li>Land/Water Area</li> <li>Population Growth Rate</li> <li>Housing Construction Rate</li> <li>Crime Rate</li> </ul>	Market data will have attributes like combine crime rate, population growth, housing growth and penetration of top segments at state city level so as to device a metric to find the top 10-20 markets for the client to enter.  Data Timeliness: 2017

### Data Quality >Exploratory Analysis of the data

- Missing Value Imputations
- Identifying key attributes in different datasets
- Summarize data through numerical groups

### **HOW> Formats**

### **Data Preparation**

### Analysis

### Insight Generation

Combined customer and demographic *data sheet generated* for further analysis

Comprehensive **analyses created** including footprint and competition act as input to visualizations

**Visualizations** will be analyzed into a Tableau Story providing access to all the relevant users.

The Final Dashboard can be export into a presentation file which will be assumed to be viewed from a laptop.

### **CHALLENGES**

Create a city wise master dataset with attributes like combine crime rate, population growth, housing growth and penetration of top segments

Normalize the variables to the same scale and calculate attractiveness score or opportunity for all cities

Using the final score, we must rank the cities and create a Tableau Story with the combined strategy