# SkyFoundry

**The Antisocial Thermometer:** A Smart-Cities Application of SkySpark®

Case Study January 2020

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#### The Antisocial Thermometer

Combining Data Science and City Governance

In the Fall of 2018, Disclosing Social Science started a partnership with Sensitive Data a SkyFoundry Partner located in Barcelona, Spain.

This collaboration brought together social science professionals and a firm that specialized in analysis of energy and building-performance data to work together to create a new tool to perform analytics of social data.

The resulting Antisocial Thermometer is a platform that helps communities make better decisions when dealing with antisocial behavior. The innovative Antisocial Thermometer shows how the use of analytics can help communities improve governance by integrating diverse data from human activities across a city.

# A Collaboration Between Data Science and Civic Science

The Antisocial Thermometer team members are Carlos Choclán, CEO of Sensitive Data, and Manel Lozano, Project Manager.

Carlos Choclán brings years of experience working with data related to energy efficiency and Dr. Manel Lozano brings a wide, all-encompassing view of factors that make for sustainability. Their intersection is a deep sense of commitment to improving cities.

Dr. Manel Lozano Rodríguez, Disclosing Social Science

Manel Lozano is a social scientist whose focus is on smart cities. He holds a MS in Sustainability, Peace and Development. As a content creator, he also is a reference in smart cities news. Thus, his idea of a civic-minded person grows from a street-level.

Engr. Carlos Choclán Roca, Sensitive Data

Carlos Choclán has founded three companies linked to energy efficiency. He has 10 years of experience in the field. During this time, he has participated in about fifty projects. Most of them, are related with treatment and analysis of data.

In addition to Carlos and Manel, the Citilab's environment and the professional and human qualities of colleagues also contributed to the advancement of this project. The Antisocial Thermometer work will see new challenges, questions and cause for assessment and consultation, but the team is committed!



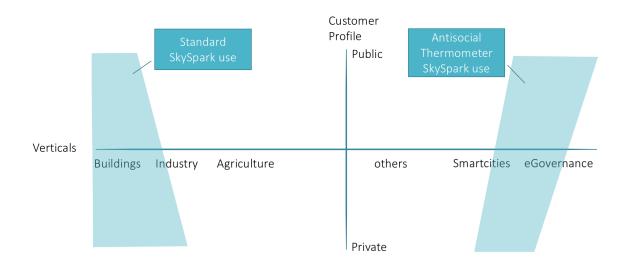


# Open Data

Open Data is an essential part of the project - the team considers it the DNA of the mission. The Antisocial Thermometer platform has been tested with data from Barcelona City Hall and the results compared to their surveys on citizen perception of their quality of life.

## The Value of SkySpark Analytics to this Project

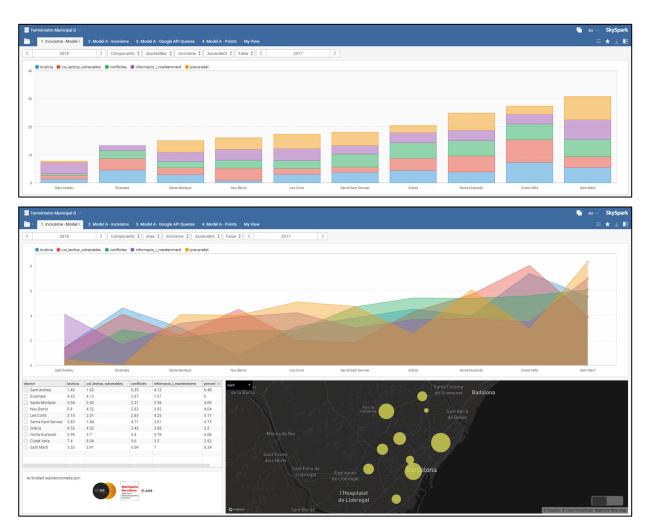
This ground-breaking work demonstrates how the advanced data analytics capability of SkyFoundry's SkySpark analytics software can be applied to applications far beyond energy efficiency and fault detection in equipment systems and buildings.



#### **Improving Governance**

Daily we hear of abuse, family issues, distrust among neighbors, pejorative language, dogs howling when confined, and noisy driving. The Antisocial Thermometer detects these behaviors and habits that can be shown to degrade the quality of life in our normal coexistence. These types of antisocial behaviors are a reality of modern-day life in virtually all major cities. Incivility has led people to a loss of meaning when it comes to social responsibility and the role all people play in creating an optimal environment for true development and peaceful life.

# Real World Examples of SkySpark® Analytics in Action



Sample Screens from Antisocial Thermometer Project Showing Metrics and Locations of Various Activities Being Tracked

#### More Than Data from a City

Many projects aimed at improving governance have focused on collecting raw data from the city and graphing and charting it based on the raw values. While this provides an initial ability to visualize activity in a city, the added value of the Antisocial Thermometer is achieved by putting people at the center. How? The team performed a scientific study of peace and development before writing a single line of analytics code. This step created a basis of understanding antisocial behavior, one that reaches beyond facts of vandalism or destruction, to the various factors that affect quality of life. An important factor in combating incivility is evaluating the integrity of social programs and regulations, and their intended or unintended impacts. The team worked with the hypothesis that the same can be determined through computer applications. The information on antisocial behavior, when transformed into data can assess the "social capital". It could provide better insight for policy makers, to anticipate the societal cost of common crimes and patterns of changing behavior.

# Using Data is Now Fundamental to Society

Another important perspective of the project was that the use of social impact data to raise the quality of life in a city should not be viewed as simply an "advantage", but a necessity since we live in a world where cities see more rapid change often due to waves of newcomers and challenges faced in assimilation.

# **Antisocial Behavior**

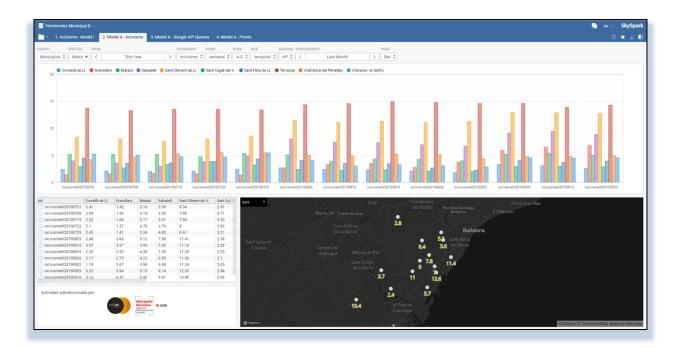
Analytics, Big Data and AI technologies provide a ground-breaking opportunity to evaluate antisocial behavior using diverse data sources, some of which present data in near real time. Incivility leads to social disempowerment in the urban areas and a disorderly urban landscape damages general health. It produces sleep deprivation, mental illness and even obesity. The effects of antisocial behavior and its potential to contribute to the spiral of poverty are insidious. This incivility reduces goodwill.

The goal and hope of the team is that the Antisocial Thermometer platform will bring cities a better understanding of social behavior and impacts, and enable city leaders to improve urban governance.

In order to achieve success, it is essential to gain trust and increase participation. This means raising awareness of the antisocial behavior problem, developing new and better tools to deal with it, and involving more people in the effort and use of the tools.

# Putting People at the Center

Technology-based assessment of social policies is a reality. Today, we can't help but put people in the center. What does it mean to "put people in the center? It means that theories and assumptions, that are part of any project startup, must be tested and validated against published surveys. Here, data analytics tools are essential to effectively accomplish this. The Antisocial Thermometer focuses on moral perceptions. It is not limited to activities that would be considered intentional wrong-doings. For example, a shopkeeper's fear of vandalism has a weight in analysis algorithms even if no such vandalism occurs, as do actions such as sexual harassment events and evidence of illegal drug activity. The Antisocial Thermometer platform also takes into account factors such as accessibility of city assets for physically challenged members of society. All of these elements are components civic-minded measurement to achieve livable cities and communities.



# Conclusion

Disclosing Social Science and Sensitive Data look forward to enhancing the Antisocial Thermometer team with new members, partners and investors.

See how the Antisocial Thermometer works at this link! https://antisocial-thermometer.disclosingsocial.science/antisocial-thermometer/

# Real World Examples of SkySpark® Analytics in Action

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## SkySpark® – Analytics for a World of Smart Device Data

The past decade has seen dramatic advances in automation systems and smart devices. From IP connected systems using a variety of standard protocols, to support for web services and xml data schemas, it is now possible to get the data produced by the wide range of devices found in today's buildings and equipment systems.

Access to this data opens up new opportunities for the creation of value-added services to help businesses reduce energy consumption and cost and to identify opportunities to enhance operations through improved control, and replacement or repair of capital equipment. Access to the data is just the first step in that journey, however. The new challenge is how to manage and derive value from the exploding amount of data available from these smart and connected devices. SkyFoundry SkySpark directly addresses this challenge.



#### About SkyFoundry

SkyFoundry's mission is to provide software solutions for the "Internet of Things". Areas of focus include:

- Building automation and facility management
- Energy management, utility data analytics
- Remote device and equipment monitoring
- Asset management

SkyFoundry's software helps customers derive value from their investments in smart systems. Learn more and request a demonstration at www.skyfoundry.com. The new frontier is to efficiently manage and analyze data to find what matters<sup>m</sup>.



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