Motivation: Make Switzerland Safer

Approach: Prevention Through Technology

Research Questions:

1. How to design an IS which supports crime prevention?
2. How to motivate individuals to undertake preventive measures?
3. How to support collective actions?
4. How to take advantage of advanced analytics to predict and prevent future crimes?

The approach that we are taking is to take advantage of existing solutions and approaches and bring them together on one platform. Data used for the first iteration is represented by claims data from a Swiss insurance company. The aim is to be able to predict future incidents based on past data. For this we are planning to use time series prediction algorithms. In addition to this, work will be extended to supervised machine learning algorithms to predict the person’s likelihood to be a victim based on personal details, mainly demographics data. We are also looking into integrating additional sources of data (i.e. Swiss national statistics office) in order to improve the accuracy of our model.

Solution: Mobile Application

Our first iteration of the project consisted in a web portal that includes features like heatmap for the historical burglary data visualization, crowdsourcing for the people to share their experiences on the portal, and tips in order to motivate people to take preventive measures. The next version will consist of a native mobile application that will include additional features like data analytics functionality to be able to predict future crime incidents and also provide risk estimation based on personal profile, and also the inclusion of the community concept to bring people together within their neighbourhood.