



EXperimental
Learning

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Big Data and Social Analytics certificate course

MODULE 8 UNIT 1
Video 5 Transcript

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Speaker key

AP: Alex Pentland

HY: Hapyak

AP: So, let's talk a little bit about what we did in the most recent living lab. So, this was in Andorra, which is a mountainous country, a very small country, half way between France and Spain. And what they're interested in is attracting more people as tourists and improving their economy by having a better tourist experience, having the people stay longer. And to do this what they do is they have events like Cirque Du Soleil or mountain bike championships, but they don't know how well each one works. And so what we were able to do is use cell phone data, purchase data, other sort of data to be able to analyze these and say well look the Cirque Du Soleil guys bring in so many tourists, a certain fraction of those are new tourists, they stayed in the periphery versus the center. They spent this much money versus that much money, they congested roads this amount.

HY: How do you think these insights would be useful for Andorra?

Thank you for your reflection. Please continue watching to find out how these insights were used to improve the planning of tourist events held in Andorra.

AP: And by comparing each of the events in Andorra they could figure out what sorts of things they should do more of, and which sort of things they should do less. How they should build up their infrastructure – their roads, their hotels, and what really isn't as important. We also looked at energy. Andorra doesn't generate a lot of its own energy, it has to buy it. And by analyzing the movement of tourists in and out of Andorra we found we could predict spikes in energy use and the Andorrans could use that to buy energy cheaper because they could anticipate it by looking at the demand generated by human movement.

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That's another type of thing that is very typical in these living labs. Humans generate demand, demand is something you need to predict so that you can deliver it and service that demand in the best way possible.

The final type of thing we did for Andorra is to help with travel navigation. So everybody has travel navigation aids in their car or on their phone now, but those are averages, and they're just you know how can you shorten the time it takes you to get some place. What the Andorrans wanted to do is reduce congestion for everybody. And that meant people would get different recommendations about what to do at different places based on the behavior they'd already exhibited. And by looking at the behavior patterns of people we were able to come up with travel recommendations - navigation aids - that cut the time of travel by half because we made travel recommendations that didn't interfere with each other, so there was much less congestion on the road.