



MIT BDA Module 1 Unit 1 Video 5 Transcript

Speaker key

AP: Alex Pentland

HY: Hapyak

00:00:00

AP: So, let me give you some examples of this type of social physics thinking. If we look at the pattern of behavior that people have, with the habits in the middle and the exploration, this foraging behavior, and we look at whether it gets out of whack or not - in other words, someone's main habits begin to fall apart or they begin to explore all the time or not at all - what we find is the way they degrade can be used in many ways.

So, for instance, in a city in Europe of about 1.2 million people we found that if we saw this sort of change in foraging behavior, that that was prediction that they were under stress and were going to get in financial trouble within the next three months. So it wasn't what they bought or how much they earned; it was that their habits were falling apart. Their life was falling apart and that was the indication that financial trouble was coming and, in fact, we were so good at this that we could beat the banks by more than 50%.

HY: Analyzing shifts in behavior patterns, in either regular habits or irregular exploration episodes, has proven to be up to five times more accurate in predicting financial well-being than analysing individual demographic data typically used by banks.

True

False

00:01:17

AP: Another insight is there's other sorts of things that people do where they stop exploring at all, very quickly, and that's usually indicative of disease. You're feeling sick in some way and, in fact, we've done field trials where we've shown that we can predict when people are getting sick before they even know they're getting sick. And the Chief Technical Officer of the United States said, this is an innovation that will save our health system because it's like a check engine light; if you know when people are getting sick you can reach out to them and if you get the disease early you can fix it easily and cheaply.

Today, we don't have such a check engine light and as a consequence we don't actually get around to treating diseases until they get really bad. So, those are some examples of things that this type of social physics thinking gives you in terms of credit scoring, disease, and we'll see lots more in the rest of this course.