Researcher developing a new reputation management system for the digital world

December 18 2015

Ferry Hendrikx, who graduated last week with a PhD in computer science, is researching ways of building reputation profiles online that draw information from multiple sources.

"The widespread use of the internet for social and commercial use has made traditional methods of gathering reputation, such as word-of-mouth or personal associations, insufficient for gaining a clear picture of an individual or organisation," says Ferry.

"Many websites have features designed to build trust, but these only provide a narrow perspective of an individual. They don't allow for a fuller, more substantial impression. Someone might be an honest trader on Trade Me, but a poor mechanic. A company might give generously to charities, but be a bad employer."

Ferry's thesis proposes a network-based framework that automatically extracts information about an individual or organisation from multiple sites and stores this information in a profile. The system decides what's important, reliable or relevant based on online activity.

The reputation associated with a profile will develop and change over time as new information comes to hand and old data becomes less significant.

"The profile develops as a result of online actions and associations. While the individual or organisation can host their own profile, it's not

something they can necessarily modify—you can't lie about yourself," says Ferry.

"A key aspect of the research is the establishment of an access control feature, meaning that, as a reputation develops, the individual or organisation will gain (or lose) access to relevant online services or groups. They're not required to apply for these things—it just happens.

"Examples might be access to industry relevant publications, a wider database of customers to trade with, or membership to online societies."

The technology is still at a nascent stage, however Ferry believes this approach has significant potential for reputation management as social and commercial activity continues to grow and develop in the online space.

Provided by Victoria University