How Do I Trust Thee? Let Me Count The Ways ...

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Abstract
The new internet based technologies and web based commercial activities require software systems that mimic cognitive concepts that we normally take for granted in normal human discourse and commercial activities. Amongst these are power, delegation, trust, etc. Some of these concepts have been studied (for times varying between decades and millennia) by philosophers and legal experts. For the new internet age, we require ‘engineering’ models of these concepts that can be used to construct software that is effective and controllable. By ‘engineering’ we intend characteristics that enable us to construct mechanisms that are fit for purpose, but do not necessarily solve all the legal and philosophical problems associated with concept in question. By ‘controllable’ we mean that the systems we build must be analysable by humans so that we understand what it is that we have let loose on the world. We will use the concept of trust to illustrate our point of view.