



A computational model of facilitation in online dispute resolution

Karl Branting¹  · Sarah McLeod¹ · Sarah Howell¹ · Brandy Weiss¹ · Brett Proffitt¹ · James Tanner¹ · Ian Gross¹ · David Shin¹

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Abstract

Online dispute resolution (ODR) is an alternative to traditional litigation that can both significantly reduce the disadvantages suffered by litigants unable to afford an attorney and greatly improve court efficiency and economy. An important aspect of many ODR systems is a facilitator, a neutral party who guides the disputants through the steps of reaching an agreement. However, insufficient availability of facilitators impedes broad adoption of ODR systems. This paper describes a novel model of facilitation that integrates two distinct but complementary knowledge sources: cognitive task analysis of facilitator behavior and corpus analysis of ODR session transcripts. This model is implemented in a decision-support system that (1) monitors cases to detect situations requiring immediate attention and (2) automates selection of standard text messages appropriate to the current state of the negotiations. This facilitation model has the potential to compensate for shortages of facilitators by improving the efficiency of experienced facilitators, assisting novice facilitators, and providing autonomous facilitation.

Keywords Artificial intelligence & law · Machine learning · Human language technology · Online dispute resolution · Discourse analysis · Cognitive task analysis

1 Introduction

“Equality under the law” is a principle enshrined in Article 7 of the Universal Declaration of Human Rights and in the Equal Protection Clause of the 14th Amendment to the United States Constitution. As a practical matter, however, equality under the law is often elusive for moderate-income and poor individuals. According to a recent estimate, 80 percent of people living below the poverty line and a majority of middle-income Americans receive no meaningful assistance when facing important

✉ Karl Branting
lbranting@mitre.org

¹ The MITRE Corporation, McLean, VA 22102, USA