Abstract. This research offers some important insights into online trust and explores how to make online legal services trustworthy, efficient, useable, and secure. The research uses a mixed methodology. There are three key areas to be considered when evaluating online technology. The key areas can be categorised as "The Law Firm", "The Website", and "The End User". Firstly, part of the research examines the perceived trustworthiness of the website; this research involves a set of eight heuristics drawn from a systematic review of 160 papers, which formed the trust heuristics that affect online trust. The final part of the research explores the user's perception of online trust, with five mock sites from features found in real legal sites, including one with artificial intelligence. The five sites will allow us to measure the impact of perceived trust caused by different design features. Both the solicitors and end-users will then test the sites. The trust Model will be used to display the results.

Keywords: Cognitive Computing, Future of Law, User Design, Trust, human computer interaction

1. RESEARCH QUESTION

RQ- How can we transform online legal services to be trustworthy, efficient, useable, and secure? The research question will be achieved through the following objectives:
(i) Understand what trust cues within a legal site affect the client's trust? – perceived trust
(ii) Determine if legal sites are trustworthy? – actual trustworthiness
(iii) Establish the effect that emerging technology, such as an artificially intelligent conversational chatbot, has on trust? – the effect that new technology has on user's trust

2. TRUST MODEL

A literature review to investigate trust models was completed. The purpose was to find a model that could be expanded and used to explain the findings, which resulted in 34 models being studied. These works were then analysed to understand how other researchers had tackled drawing a model that incorporates trust aspects.

Figure 1 is a research model which explains how all the strands of this trust research fit together. The model presented in 2018 has been updated to allow for trust transfer, as trust in a company often allows users to trust in new software solutions built into websites.

3. THE DEVELOPMENT OF TRUST HEURISTICS

question was applied to the systematic review. The search identified 1,451 articles. The inclusion criteria were (a) articles with a clear description of features that affect online users' trust and (b) articles that explained trust. After reviewing all the papers, 160 were used for the complete study. This resulted in eight trust heuristics. A Heuristic Evaluation was then done on forty real legal sites. This evaluation underlines the essential design considerations that should be followed when developing a legal site and brought attention to some unique challenges that legal websites have when visualising law. The results from the evaluation were then considered and then further developed into the eight trust heuristics for legal services.
Table 1: Online Trust Heuristics

1. Use Images to increase trust
   - Some of the Images should contain people interacting (Riaz et al., 2018)
   - There should be NO missing images or images where the face is cropped off, hidden, or obscured (Cyr et al., 2009)
   - No images that create negative emotions (handcuffed, arguing, accidents, graves) (Riaz et al., 2018)
   - Images should be of a superior quality (Lian & Yu, 2019)
   - Text and Images must correspond, especially on carousels. (Riaz et al., 2018; Cyr et al., 2009; Lian & Yu, 2019)

2. Confirm that the business is a real company
   - By providing an office telephone number
   - An actual address
   - Directions on how to find the office include a map and travel advice
   - Display images of staff members at the premises
   - Create synergies between the physical and online parts of the business
   (Beatty et al., 2011; Toufaily et al., 2013; Alec Davies et al., 2019)

3. Incorporate Trust cues into the design
   - Include Client Recommendations (Beldad et al., 2012)
   - Add all Third-Party Accreditations (Pappas, 2016)
   - Make a Feature of Awards
   - Consistent and recognisable branding throughout the site
   - Client reviews (Bonsón Ponte et al., 2015; Sebastianelli & Tamimi, 2018)
   (Beldad et al., 2012; Pappas, 2016; Bonsón Ponte et al., 2015; Sebastianelli & Tamimi, 2018)

4. Provide proof of ability (Beldad et al., 2012)
   - Display Solicitor’s Qualifications, University
   - Indicate any Competence Awards and Specialist Training for each solicitor
   - Present evidence of case history

5. Maintain the website
   - Continue to keep the design of a high-quality and current (Yasin et al., 2020)
   - Use a multi-channel approach
   - The site should be search engine optimised
   (Yasin et al., 2020)

6. Easy to use with a good flow
   - The site should be easy to use
   - Increase the user enjoyment by incorporating interactive features (Steinhoff et al., 2019)

7. Secure and Available
   - The site must be secure and available.
   - Articulate to the user that the site is safe by using the padlock icon

- Do not link to any HTTP pages.
- Run security checks regularly to find any insecurities or syntax errors
- Add a privacy statement to the site

8. Show Benevolence (Lee & Turban, 2001)
   - Have a blog with free advice
   - Showing charitable work
   - Give No service, No FEE offers

4. THE DEVELOPMENT OF LEGAL SITES

Five legal sites were developed to test the effect of trust, security, HCI, ELM and the effect of new technology on trust. The developed sites will allow for a conversation about faults found without embarrassing any law firms and allow us to test with greater accuracy the design features to ensure the hypothesis is correct.

Figure 2: The five legal sites

5. PROGRESS SINCE 2018

Since 2018, a new trust model has been formed and will play a pivotal role in explaining how the research fits together. An in-depth systematic literature review of trust research resulted in a new set of trust heuristics. The trust heuristics were used in heuristic evaluations of 40 legal websites, which resulted in a new set of heuristics for building trust in online legal services.

Four factitious legal websites have been built based on the findings of heuristic evaluations, plus one website to demonstrate the future of online legal services. This site includes an AI legal bot built, and a new Will writing software also developed for this project. This research has evaluated legal websites and then looked at how emerging technology could be implemented to build trust and create a better online experience for users of legal services. A separate paper has also been submitted for this conference, that covers the development and testing of AI for legal services. This PhD is entering the write-up stage to be completed by September 2022.