

## **A Framework for Supporting User-Centric Collaborative Information Seeking**

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### **Abstract**

Collaboration is often required or encouraged for activities that are too complex or difficult to deal with for an individual. Many situations involving information seeking also call for people working together. Despite its natural appeal and situational necessity, collaboration in information seeking is an understudied domain. The nature of the available information and its role in our lives have changed significantly, but the methods and tools that are used to access and share that information in collaboration have remained largely unaltered. This dissertation is an attempt to develop a new framework for collaborative information seeking (CIS) with a focus on user-centric system designs. To develop this framework, existing practices for doing collaboration, along with motivations and methods, are studied. This initial investigation and a review of literature are followed by a series of carefully created design studies, helping us develop a prototype CIS system, Coagmento. This system is then used for a large-scale laboratory experiment with a focus on studying the role and the impact of awareness in CIS projects. Through this study, it is shown that appropriate support for group awareness can help collaborators be more productive, engaged, and aware in collaboration without burdening them with additional load. Using the lessons derived from the literature as well as the set of studies presented in this dissertation, a novel framework for CIS is proposed. Such a framework could help us develop, study, and evaluate CIS systems with a more comprehensive understanding of various CIS processes, and the users of these systems.

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