

Preface

Information and communication technologies enable the capture and storage of vast quantities of data for decision-makers to use. The same technologies also bring together groups of geographically dispersed individuals, either synchronously or asynchronously; therefore, it is not surprising to find decisions increasingly being made by groups rather than by individuals. Examples abound. Medical decisions are often made by multi-disciplinary teams of experts rather than single practitioners. Citizens in democratic communities expect a greater level of opportunities for participation in decisions that impact them and greater transparency of the decision-making that affects them.

Having groups operate effectively as reasoning and decision-making entities is not an easy task, and there have been spectacular disasters that have occurred from pathologies such as ‘groupthink.’ Clearly, information and communication technologies provide the tools to capture and store data and to facilitate communication between group members. However, these technologies do not readily help in the task of reasoning by groups. A fundamental aim of this book is to explore how technologies can be applied to enhance group reasoning for decision-making. In order to achieve this, a new perspective is adopted on the nature of group reasoning, the interplay between individual and collective views, tacit and explicit knowledge, narrative and structured reasoning, and diverse approaches to decision-making.

The notion of a *reasoning community* as a device for structuring the reasoning that groups use towards making judgments is advanced. Central to the notion is the idea of *coalescing* reasoning from the individuals in the group into a *co-operative product* that does two key things: it acts to provide each individual in the group with the broad structural wealth of reasoning from the group to support their reasoning, and it also acts as an explicit structure that technological devices for supporting reasoning within a group can hook onto.

The book presents the ideas in an accessible form for a broad audience of people ranging from community decision-makers, decision-makers and leaders within organizations, as well as reasoners and decision-makers in technical areas. There are some technical sections in later chapters that are more interesting for those who might be interested in implementing technologies to support dialogue and reasoning activities in groups. These sections are not necessary for the reader who is interested in following the broad set of ideas put forward here.

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