Information Technology & Lawyers: Advanced Technology in the Legal Domain, from Challenges to Daily Routine

Edited by Arno R. Lodder and Anja Oskamp
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This book is an insightful composition of pieces from various authors, created both for legal academics and practitioners to learn more about the ways in which Information Technology is applicable to the legal world. *Information Technology and Lawyers* is highly informative and well organized, making it ideal for use within a class on this subject matter. This work not only shows lawyers what is possible within the legal field with the use of information technology ("IT"), but also shows those with an IT background the vast opportunities available to them within the law. Although dealing with a complicated subject matter, the editors have created a book that is easy for those with no legal or technological background to understand, yet informative enough for experts to utilize. The work is created by authors from various countries making it a useful book for those within the legal profession across the globe.

Information Technology and Lawyers is divided into seven distinct chapters, written by different authors, which examine different areas of information technology and its relation to the law. These chapters include; 1) Introduction: Law, Information Technology, and Artificial Intelligence, 2) Case-Based Reasoning, 3) Argumentation, 4) Knowledge Discovery from Legal Databases—Using Neural Networks and Data Mining to Build Legal Decision Support Systems, 5) Improving Access to Legal Information:

How Drafting Systems Help, 6) Internet, WWW, and Beyond, and 7) Artificial Intelligence in the Real Legal Workplace. Each chapter is further subdivided to give a clear explanation of the topic. For those looking to reference a particular subject, the table of contents allows them to do so quickly and effectively.

In the first chapter, Introduction: Law, Information Technology, and Artificial Intelligence, the editors, Arno R. Lodder and Anja Oskamp, provide a brief overview of the various topics discussed within the book, as well as a description of the history of the introduction of IT into the legal field. The chapter describes the evolution of IT from something commonly thought to those outside the field as completely separate from the law as recently as 1995, to the world today where IT is a staple in the legal profession. Lodder and Oskamp make a distinction between IT Law, the legally oriented field where the legal impact of technological issues are explored and litigated, and IT and the law, which deals with the relation of IT services to the legal practice.

After defining various words and identifying certain concepts, the authors begin their discussion of the controversial topic of Artificial Intelligence ("AI"). AI is discussed by briefly describing its development, how it works, and the relationship between AI and legal reasoning. The chapter is concluded with an explanation of how the internet and other IT tools have enhanced the legal experience and affected legal systems across the globe.

Chapter two, Case-Based Reasoning by Kevin Ashley, deals with theoretical research and examines both AI and Law research. Ashley examines case-based reasoning, a subset of IT and AI research. This chapter starts by looking back thirty years to the "Visual Representations of Case Patterns" and works its way up to the present day

and the strong presence of the computer in today's legal field. The chapter also looks at the concept of the computerized case-based legal assistant and the aide that such technology could provide to those within the legal field. Ashley stresses that using a computer to solve problems and analyze situations is a viable tool that should become a widely used asset in the legal world in the near future. He supports his work with valid arguments about how these tools operate and how they have been know to perform successfully in the past. However, perhaps more consideration should be given to the ethicality of depending on a computer to reason and solve important legal questions for one's client.

Argumentation, the third chapter, written by Trevor Bench-Capon and Henry Prakken, also addresses theoretical research by touching upon many of the underlying issues of this topic, rather then giving a full analysis. This chapter looks at the ways that AI can be used in the law in the field of argumentation and in doing so sheds light on an area that few in the field really understand and one that is still in the developmental stage. Although many in the field believe that AI can only be used to apply to a set of proven rules, the authors examine how AI can be used in areas where there are conflicting interpretations of a situation or legal rule. The authors also point out to the reader the important distinction between an argument and a legal conclusion, recognizing that that this system would provide compelling arguments supporting an issue, however it should not count as conclusive proof. The authors do a thorough job of explaining the different programs and technology that have been used in the area of argumentation and where this field is heading in the future.

The fourth chapter, Knowledge Discovery from Legal Databases—Using Neural Networks and Data Mining to Build Legal Decision Support Systems by Andrew Stranieri and John Zeleznikow, examines the issue of research leading to practical applications. The authors lay out the steps for discovering knowledge from legal data, which include data selection, preprocessing, transformation, mining, and evaluation. It is recognized that advances in the technological area of law are slower then in other fields such as medicine, because legal data is often unstructured. The authors suggest that in order to prevent a misrepresentation of data, an evaluation of the legal domain law and its characteristics must be considered. This is a very technical chapter that can be difficult for someone not familiar with these concepts to understand, however the authors provide many charts, graphs, and figures in order to aid with the conceptual understanding of the topic.

Chapter five, Improving Access to Legal Information: How Drafting Systems Help, by Marie-Francine Moens, also demonstrates the relationship between research and practical applications. This chapter looks at the drafting of documents and the effect of both human and computer handling of the information in a legal society that becomes more and more complex as time goes on. Moens discusses what is needed in order for future legal information systems to remain as a reliable and helpful tool in legal drafting. She acknowledges that currently systems at times can be unreliable because of the complexity of the law, however she sees this as and area that could provide in the future a way for ordinary citizens to find information relating to their legal questions. Although figures are used to illustrate Moen's points several are not in English, so for the English reader this could be problematic. Overall this chapter is very clearly written and is less

technical then many of the other chapters making it easier for someone not familiar with IT to understand.

Chapter six, Internet, WWW, and Beyond, by Gerald Quirchmayr, is dedication to the use of IT in practice. The author focuses on the place of the internet in the legal world and also hypothesis on what other electronic devices may come to fruition in the upcoming years that will impact the legal world. One such concept, "live spaces," is described as a tool that should one day become the backbone of the IT side of the legal field. However, these "live spaces" are just briefly touched upon and a more thorough examination of this topic would be interesting. This chapter, as with all the chapters, is written by an author abroad, which enables the reader to see a survey of this topic from an international perspective and not just of that within the United States.

The last chapter, Artificial Intelligence in the Real Legal Workplace by Marc Lauritsen, is an evaluation of the most recent applications in the legal technology field and as well as an exploration of possible future uses of AI and IT in the legal world. Lauritsen argues that long before the age of computers the law has been highly artificial because the law in and of itself is a societal technology. Although this chapter is much briefer then the others, Lauritsen describes what exactly AI is, and in doing so recognizes that in fact there is no one definition for the term. This chapter is a good brief introduction to the topic, but it could be expanded upon to provide a more complete evaluation of this complex tool. However, Lauritsen addresses that by the reasons why its use is still often restricted.

In creating this book, the editors have brought together a comprehensive compilation of works on this topic which combined creating an informative and

authoritative work on a technical and constantly evolving subject within the legal field. These pieces cover a broad spectrum of concepts within the field of IT in the legal profession. While many of the pieces focus on AI, which is a controversial tool within the legal field and in other fields, the authors do a good job to explain the benefits of AI and also to clear up many of the misconceptions that are commonly had about this technology. In an area such as the law where the attorney is trained to think, reason, and form an argument in their application of rules to a set of complex issues, many are hesitant to depend on a computer to do this for them. However, this work as a whole does a convincing job of showing while a computer cannot replace the mind of a lawyer, it can be a significant resource in the process. Those who read this book, whether an expert or someone new to the field, will have a better understanding of the past, present and future of this ever changing and growing area of the law.