CONTENTS

Preface . . . . . *page* xi
Acknowledgments xvi
Table of Significant Codes, Restatements, and Statutes. xviii

1 **Why Autonomous Organizations?** 1
1.1 Even if Software Can Buy a House, Why Would It Want To? 4
1.2 Algorithms in Conventional Legal Context 9
1.3 Modern Approaches to Software "Rights" 11
1.4 A Comment on "Rights" and "Personhood" 14
1.5 Layout of the Book 15

2 **The Legal Role of Algorithms** 18
2.1 Algorithm As Agreement 21
2.2 Algorithms As a Comprehensive Basis for Contract Formation 27
2.3 Dynamic Agreements 34
2.4 The Unsuitability of Agency Law for Software 35
2.4.1 The Ambiguities of Agency Law As Applied to Algorithmic Agents 37
2.4.2 The Ambiguous Principals of Algorithmic Agents. . . . 40
2.4.3 The Complexity of Liability in Agency Law. 43

3 **In the Company of Robots** 46
The Creation of Autonomous Organizations
3.1 Background: Legal Personhood As "Legal Technology". 47
3.2 The Novelty of Modern Entities in Enabling Nonhuman Autonomous Systems. 51
3.3 The Zero-Member LLC. 58
3.4 Models of Private-Law Personhood for Software. 67

3.4.1 Frameworks for Granting Legal Personhood 68
3.4.2 Formal versus Substantive Legal Personhood 70
3.5 Conclusion 73

4 The Legal Viability of Autonomous Organizations 76
4.1 The Focus of the Objections to Autonomous Organizations . . 78
4.2 The Workability of LLCs without Ongoing Human Internal Governance 80
4.2.1 Cross-Ownership 81
4.2.2 Vetogates 83
4.2.3 Defiance 89
4.3 The Legal Soundness of Autonomous Entities Under Current Statutes 92
4.3.1 Statutory Definitions 93
4.3.2 Business-Law Foundations 98
4.4 Are Autonomous Organizations "Absurd," So That Courts Will Strike Them Down? 104
4.4.1 Timing and Justice 104
4.4.2 Identifying the Absurdity 107
4.4.3 The Context of Technological Change 108
4.5 Autonomous Organizations and the Internal-Affairs Doctrine 110
4.6 Conclusion 116

5 The Advantages of Autonomous Organizations 117
5.1 Apparent Problems That Aren't Really Problems 119
5.1.1 Disaggregating the Rights of Legal Personality 122
5.1.2 The Dignity of Contracting with Software 124
5.1.3 The Renewed Vitality of Dead-Hand Control 133
5.1.4 Dangers of Artificial Intelligence 138
5.2 Practical Autonomy and Legal Function 142

6 The Limitations and Legal Implications of Autonomous Organizations 147
6.1 The Role of Intent in the Private Law 149
6.1.1 Intentional Torts, Conventional Organizations, and Autonomous Organizations 150
6.1.2 Intent and Contracts 158
6.1.3 Punishing Bad Intent 160

6.2 Drift, Abuse, and Formalism in Organizational Law 161
6.2.1 Legal Recognition of Evolving Expectations. 163
6.2.2 Judicial Administration and Dissolution. 164
6.2.3 The Equitable Doctrine of Reformation. 166

Conclusion 169

Index 171