

Contents

Part I Applying Knowledge of Brain Functionality Without Neuroscience Tools: The Approach

1 Introduction	3
References	5
2 Knowledge Production in Cognitive Neuroscience: Tests of Association, Necessity, and Sufficiency	7
References	10
3 Applying Knowledge of Brain Functionality Without Neuroscience Tools: Three Example Studies and Abstraction of the Underlying Logic	13
3.1 The Cyr et al. (2009) Study	15
3.2 The Pavlou and Dimoka (2006) Study	19
3.3 The Qiu and Benbasat (2005) Study	23
3.4 Formalizing the Logic Behind Our Argumentation	27
References	32
4 Notes on the Application of the Approach	37
References	41
5 Conclusion	43
References	44

Part II Appendix

Appendix A: Review of Empirical NeuroIS Literature	49
References	56
Appendix B: Major Statements in the NeuroIS Literature on the Importance of Cognitive Neuroscience Knowledge Acquisition	59
References	60

**Appendix C: Conceptual Description of Basic Brain Functioning
from a Cognitive Neuroscience Perspective. 61**
References. 66

**Appendix D: Description of Background Information
on Online Trust 69**

D.1 Why Did We Select Trust as an Example Topic?. 69
D.2 Structure of an Online Trust Situation 70
D.3 A Conceptual Framework for Trust in Online Environments 73
D.4 Four Major Sub-processes of Trust. 75
D.5 Reward 76
D.6 Uncertainty 78
D.7 Mentalizing 80
D.8 Learning 82
D.9 Summary 84
References. 88



<http://www.springer.com/978-3-319-48754-0>

Neuroscience in Information Systems Research
Applying Knowledge of Brain Functionality Without
Neuroscience Tools

Riedl, R.; Davis, F.; Banker, R.; H. Kenning, P.

2017, VI, 93 p. 13 illus., Softcover

ISBN: 978-3-319-48754-0