Contents

Acknowledgments —— XV

Preface —— XVII

Part I: **Foundations of Creative Transformation**

Chapter 1
Introduction to Creative Transformation in a Co-Intelligence World —— 3
The Promise of Machinic Life-Experience Ecosystems (MLXEs) —— **3**
Digital Twins as Catalysts for Dynamic Relationality —— **6**
Industrial Metaverse as Platforms for Creative Transformation —— **9**
Machinic Life-Experience Ecosystems in Action —— **13**
The Journey Ahead —— **17**
Suggested Readings and Resources —— **21**

Chapter 2
Machinic Life-Experience Ecosystems (MLXEs) —— 23
Organizational Ecosystem Challenges in a Co-Intelligence World —— **23**
Mapping Subjective Potential: Existential Life Territories (L) in AI-Integrated Ecosystems —— **25**
Navigating Real-Time Transformation: Energetic-Signaletic Flows (E) in Intelligence-Driven Ecosystems —— **28**
Shaping Meaningful Trajectories: Incorporeal Experience Universes (X) in Human-AI Co-Creation —— **32**
Designing Adaptive Futures: Abstract Machinic Phyla (M) in Platformized Ecosystems —— **35**
Weaving Complexity: The Four Domains of the Creative Plane of Immanence —— **38**
Modeling Co-Evolutionary Intelligence: Machinic Life-Experience Ecosystems in Dynamic Organizational Contexts —— **41**
Case Application: Microsoft —— **43**
Organizational Transformation Takeaways —— **57**
Suggested Readings and Resources —— **59**

Chapter 3
Relational Dynamics of Creative Transformation —— 61
Organizational Ecosystem Challenges in a Co-Intelligence World —— **61**
Navigating the Relational Universe: Virtual and Actual Dimensions in AI-Orchestrated Ecosystems —— **63**

Actualization as Creative Differentiation: Translating Potential into Organizational Reality —— 65
Counter-Actualization and the Rhizomatic Dynamics of Organizational Becoming —— 68
Possibilizing the Virtual: Toward Life-Experience and Machinic Ecosystem Integration —— 70
Realizing the Virtual: Architecting Machinic Life for AI-Driven Co-Creation —— 73
Case Application: Microsoft —— 75
Organizational Transformation Takeaways —— 88
Suggested Readings and Resources —— 89

Chapter 4
Understanding Networked Complexity via Assemblages and Categories —— 91
Organizational Ecosystem Challenges in a Co-Intelligence World —— 91
Agencial Assemblages and the Dynamics of Machinic Desire in Organizational Ecosystems —— 93
Lines of Flight and Becoming: Navigating Open-Ended Organizational Transformation —— 96
Modeling Relational Dynamics through Objects and Morphisms —— 99
Cross-Domain Translation through Functorial Mapping —— 102
Modeling Adaptive Evolution: Natural Transformations and Monadic Structures in Dynamic AI Ecosystems —— 105
Architecting Emergence: Diagrammatic and Higher-Categorical Structures for Strategic Adaptation —— 107
Case Application: L'Oreal —— 111
Organizational Transformation Takeaways —— 127
Suggested Readings and Resources —— 128

Chapter 5
Navigating Values and Practices via Sheaves and Gauges —— 130
Organizational Ecosystem Challenges in a Co-Intelligence World —— 130
Structuring Local-Global Coherence: A Sheaf-Theoretic Framework for Decentralized Organizational Intelligence —— 132
Sheaf Morphisms and Dynamic Value Transformation in Decentralized Organizations —— 135
Stacks and Strategic Integration: Modeling Twisted Assemblages in Complex Organizations —— 138
Modeling Dynamic Consistency in Organizational Ecosystems: A Gauge-Theoretic Perspective —— 140
Structuring Organizational Coherence through Fiber Bundles and Gauge-Theoretic Connections —— 143

Modeling Organizational Tensions through Lagrangian Dynamics: Structuring Innovation and Stability — **146**
Case Application: Lockheed Martin — **149**
Organizational Transformation Takeaways — **161**
Suggested Readings and Resources — **163**

Part II: **Dynamic Relationalities in Organizational Ecosystems**

Chapter 6
From Complex Networks to Innovation through Organizational Dynamics — 167
Organizational Ecosystem Challenges in a Co-Intelligence World — **167**
Navigating Complexity and Emergence in Networked Ecosystems — **168**
Harnessing Rhizomatic Interactions for Innovation — **170**
Scaling Innovation Across Interconnected Systems — **172**
Adapting to Territorial Shifts in AI Ecosystems — **174**
Aligning Organizational Policies with Ecosystem Resilience — **177**
Creative Transformation Blueprint #1: Modeling Dynamic Assemblages and Ecosystem Flows — **179**
Case Application: Deere & Company — **182**
Organizational Transformation Takeaways — **197**
Suggested Readings and Resources — **199**

Chapter 7
Aligning Operations with Ecosystem Dynamics for Systemic Impact — 201
Organizational Ecosystem Challenges in a Co-Intelligence World — **201**
Navigating Territorialization Across Multiple Assemblages — **202**
Managing Dynamic System Forces through Vector Fields — **205**
Understanding and Navigating Stratification in Assemblage Networks — **208**
Fostering Innovation through Lines of Flight — **210**
Enhancing Interconnectivity Across Systems with Functorial Transformations — **212**
Optimizing Machinic Desires and Human Interaction in AI-Driven Systems — **214**
Creative Transformation Blueprint #2: Aligning Territorialization with Systemic Operations — **217**
Case Application: Infosys — **221**
Organizational Transformation Takeaways — **239**
Suggested Readings and Resources — **240**

Chapter 8
Harnessing AI for Organizational Change and Growth —— 242
Organizational Ecosystem Challenges in a Co-Intelligence World —— **242**
Toward AI-Augmented Creativity: Conceptual Foundations for Experiencial Transformation —— **244**
Natural Transformation and the Dynamics of Organizational Becoming —— **247**
Reterritorialization as Epistemic Alignment: Structuring Cognitive Transformation for Strategic Renewal —— **250**
Toward Sentient Engagement: Enriching Experience Ecosystems through Machinic Generalized Intelligence —— **252**
Lines of Flight and the Dynamics of Identity Transformation in AI-Integrated Systems —— **255**
Creative Transformation Blueprint #3: AI-Driven Creativity and Organizational Becoming —— **258**
Case Application: Siemens —— **263**
Organizational Transformation Takeaways —— **278**
Suggested Readings and Resources —— **280**

Chapter 9
Optimizing Organizational Systems via Differential Transformation —— 282
Organizational Ecosystem Challenges in a Co-Intelligence World —— **282**
Dynamic Relationalities through Differential Transformation: A Theoretical Foundation for Organizational Flow and Adaptation —— **284**
Measuring Systemic Flows and Organizational Connectivity through Differential Forms and de Rham Cohomology —— **287**
Monadology as a Dynamic Framework for Structured Organizational Transformation —— **289**
Homotopic Modeling of Continuous Organizational Transformation —— **292**
Differential Transformation and the Cognitive Metamorphosis Toward AGI —— **294**
Creative Transformation Blueprint #4: Differential and Homotopic Transformation Modeling —— **297**
Case Application: DIKSHA —— **301**
Organizational Transformation Takeaways —— **317**
Suggested Readings and Resources —— **319**

Part III: **Creative Transformation of Organizational Dynamics**

Chapter 10
Organizational Transformation from Global Vision to Local Action —— 323
Organizational Ecosystem Challenges in a Co-Intelligence World —— **323**

Navigating Molar and Molecular Interplay for Dynamic Organizational Transformation — **325**
Sheaf-Theoretic Structuring of Global-to-Local Strategy Adaptation — **327**
Modeling Organizational Change through Sheaf Morphisms: Induction, Translation, and Transduction — **330**
Structuring Transversal Strategies: Induction, Translation, and Transduction Across Ecosystem Layers — **332**
Creative Transformation Blueprint #5: Sheaf-Theoretic Strategies for Global-Local Alignment — **335**
Case Application: Unilever — **338**
Organizational Transformation Takeaways — **353**
Suggested Readings and Resources — **355**

Chapter 11
Diagrammatic Thinking for Organizational Convergence and Divergence — 357
Organizational Ecosystem Challenges in a Co-Intelligence World — **357**
Organizations as Functorial Trajectories within Ecosystems — **359**
Embedding Belonging and Agencing through Diagrammatic Structures — **362**
Diagrammatic Structuring for Strategic Mapping and Organizational Insight — **364**
Strategic Integration and Expansion through Limit and Colimit Constructions — **367**
Structuring Complex Organizational Systems through Higher-Order Category Theory — **370**
Creative Transformation Blueprint #6: Diagrammatic Modeling for Organizational Reconfiguration — **373**
Case Application: Apple — **378**
Organizational Transformation Takeaways — **393**
Suggested Readings and Resources — **394**

Chapter 12
Organizational Evolution through Adaptive Stakeholder Ecosystem Alignment — 396
Organizational Ecosystem Challenges in a Co-Intelligence World — **396**
A Category-Theoretical Foundation for Typological Diagnosis of Organizational Morphology — **398**
Organizational Morphotypes: Structured Corporations, Agenced Corporations, Structuring Collectives, and Agencing Collectives — **401**
Toward a Theory of Organizational Morphogenesis: Signification, Transversality, and Gauge Dynamics — **404**
Creative Transformation Blueprint #7: Morphogenetic Diagnosis and Ecosystemic Typologies — **407**

Case Application: Healthcare Ecosystem —— **412**
Organizational Transformation Takeaways —— **438**
Suggested Readings and Resources —— **440**

Part IV: **Co-Intelligence Architecture of Organizational Ecosystems**

Chapter 13
Architecting Organizational Change with a Multi-Layered Strategy —— 445
Organizational Ecosystem Challenges in a Co-Intelligence World —— **445**
Extending Sheaves to Stacks for Multi-Layered Ecosystem Integration —— **447**
Navigating the Complex Dynamics of Order and Scale in Organizational Ecosystems —— **450**
Strategic Architecturing through Diagrammatic Transformations: Addressing Organizational Misalignments via Category-Theoretical Methods —— **453**
Pragmatic Semiotics of Diagrams: Foundations for Designing Life-Experience Ecosystems —— **456**
Creative Transformation Blueprint #8: Sheaf-Stack Integration for Multi-Layered Change —— **459**
Case Application: Mobility Ecosystem —— **462**
Organizational Transformation Takeaways —— **478**
Suggested Readings and Resources —— **479**

Chapter 14
Redesigning Organizational Ecosystems —— 481
Organizational Ecosystem Challenges in a Co-Intelligence World —— **481**
Immanence and Differentiation: Foundations for Strategic Transformation in Organizational Ecosystems —— **483**
Monadic Structures and the Differentiation of Organizational Ecosystems —— **486**
Differentiating Ecosystem Sectors through Double Articulation and Transformational Cycles —— **488**
Navigating Sectoral Transformation through Domainal Monadic Operations —— **491**
Creative Transformation Blueprint #9: Monad-Driven Differentiation Across MLXE Domains —— **494**
Case Application: Tesla —— **497**
Organizational Transformation Takeaways —— **511**
Suggested Readings and Resources —— **513**

Chapter 15
Systemic Change in Organizational Ecosystems — 514
Organizational Ecosystem Challenges in a Co-Intelligence World — **514**
Grounding Organizational System Dynamics through Gauge-Theoretic Modeling — **516**
Fracturing Global Immanence: Modeling the Evolution of Well-Being, Wealth, Empowerment, and Welfare through Gauge-Theoretic Structures — **519**
Differentiating Machinic Life-Experience Ecosystems: From Virtual Realities to Actual Possibilities — **522**
Dynamic Relationality of Emergence and Evolution: A Foundational Framework for Strategic and Modeling Practices — **526**
Creative Transformation Blueprint #10: Gauge-Invariant Transformation for Societal Systems — **530**
Case Application: Tennessee Valley Authority (TVA) — **533**
Organizational Transformation Takeaways — **549**
Suggested Readings and Resources — **550**

Chapter 16
Toward Next Practices in Creative Transformation — 552
Transforming Healthcare Ecosystems: Palantir Foundry and the NHS as a Model of MLXE Alignment — **553**
Industrial Coherence at Scale: Ontological Integration and AI-Driven Adaptability in Foundry's Industrial Deployments — **555**
Operational Intelligence in Strategic Environments: Palantir's Role in Defense, Security, and Public Sector Transformation — **558**
A Twelve-Step Agenda for Designing next Practices — **561**
Future Organizational Questions and Challenges — **563**
Suggested Readings and Resources — **566**

List of Figures — 569

List of Tables — 571

Part V: **Appendices**

Appendix A A Primer to Dynamic Relationality Theory — 575
Introduction — **575**
Conceptual Development of Dynamic Relationality Theory — **577**
Theoretical Implications of Dynamic Relationality Theory — **581**
Policy and Governance Implications of Dynamic Relationality Theory — **582**
Dynamic Relationality and Systemic Evolution — **587**

Appendix B Machinic Life-Experience Ecosystems —— 591

Appendix C Background on Organizational Cases —— 597

Bibliography —— 607