

## Preface

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“A Perfect Day” by Lou Reed

Game-based simulations are increasingly recognised as powerful tools for learning, decision-making, and innovation in economic and managerial contexts. This book explores the theoretical foundations, design principles, and practical applications of simulation games as artificial environments that reproduce essential features of real-world systems, enabling users to learn through repetition, experimentation, and most importantly exploration. At the core of this work lies a conception of learning not merely as the accumulation of knowledge or skills, but as a process of discovery. Game-based simulations provide structured yet open-ended contexts in which individuals and organisations can explore complex situations, test hypotheses, observe emergent behaviours, and uncover novel strategies without incurring the costs and risks associated with real-world experimentation. In this sense, simulations act as epistemic devices: they are not only instruments for training existing competencies, but also laboratories for generating new insights.

The publication places particular emphasis on exploratory learning, distinguishing it from purely exploitative or repetitive forms of training. While repetition supports skill consolidation and procedural fluency, exploration enables learners to navigate uncertainty, confront unexpected outcomes, and develop adaptive

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mental models. Game-based simulations are especially suited to this purpose because they combine formal rules with meaningful freedom of action, creating environments where learning emerges from interaction, feedback, and experimentation rather than prescription. From an economic and managerial perspective, simulation games offer a powerful approach to understanding and addressing complex adaptive systems such as markets, organisations, supply chains, and innovation ecosystems. By abstracting and formalising key variables while preserving dynamic interdependencies, simulations make it possible to analyse strategic behaviour, coordination problems, path dependency, and unintended consequences. Managers, policymakers, and students can experiment with alternative decisions, governance structures, and incentive mechanisms in a safe yet realistic setting. A distinctive feature of the book is its guidance-oriented approach. Readers are systematically led to understand the internal mechanisms through which games generate learning, including rules, feedback structures, incentives, and player agency. Building on this understanding, the book supports readers in the conception and design of their own simulation games and in the development of applications to concrete economic and managerial problems. Attention is devoted to problems that require the ability to connect concepts, notions, models, and frameworks both existing and novel across disciplinary boundaries and levels of analysis. Simulation games are presented as integrative tools that foster systems thinking and cognitive flexibility by making such connections explicit and operational. A central contribution of the book lies in the application of game design principles to the construction of effective learning simulations. Concepts such as meaningful choice, uncertainty, feedback loops, progressive challenge, and exploration spaces are discussed not as entertainment devices, but as cognitive and organisational design criteria. The book argues that the effectiveness of game-based learning depends less on technological sophistication and more on the coherence between learning objectives, conceptual models, and gaming structure. Finally, the work situates game-based simulations within a broader anthropological and philosophical perspective, drawing on the enduring notion of *Homo Ludens*. Far from being trivial or merely playful, gaming activity is presented as a serious and foundational mode of human sense-making. Simulation games, in this view, reactivate an ancient human capacity for learning through play, adapting it to the challenges of contemporary economic and managerial environments characterised by complexity, uncertainty, and continuous change. By integrating insights from economics, management science, game studies, and learning theory, this book provides both a conceptual framework and practical guidance for researchers, educators, and practitioners interested in leveraging game-based simulations as tools for learning, exploration,

and innovation. No specific technical, managerial, or economic expertise is required of the reader to engage with the themes of this book, except for a dose of curiosity, interest, and a lightness of spirit.

