

# Introduction: Toward Futurizing Intellectual Capital Theory and Practice

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## Abstract

This editorial introductory chapter sets the stage for a forward-looking exploration of intellectual capital (IC) in both theoretical and practical contexts. It addresses the evolving landscape of IC in an era marked by rapid technological, institutional and socio-political disruptions and demonstrates the need for futurizing the field of IC. By providing a cohesive framework for the book's thematic sections, this chapter highlights the novel viewpoints and visions from leading experts concerning future directions for IC research and practice. It also summarizes the book's 16 main chapters and discusses how each of them pushes the boundaries of conceptual and empirical insights in the field of IC. This comprehensive introduction contributes to deeper understanding of the proposed new paradigms to align IC theory and practice with future economic, social, and technological changes.

The intellectual capital (IC) movement began approximately 30 years ago, with the fundamental realization that knowledge plays a crucial role in economic value creation. And what an influential realization that was!

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Along with the advancement of information technology in the 1990s, companies began investing in knowledge management systems and tools, attempting to capture the valuable knowledge of their employees. Simultaneously, firms became interested in reporting their intellectual capital to promote their capabilities to external stakeholders. Concurrently, scholars were alerted to these new realities and began crafting the strategic perspective we now know as the IC school of thought. Indeed, the IC perspective gained momentum and spread globally, burgeoning into a legitimate scientific field of its own.

The initial idea for this book stemmed from our personal realizations that, although we have found the IC approach useful and inspiring in our work as scholars, educators, and work-life developers, the technological, institutional, ecological, and sociopolitical disruptions in recent years necessitate a more radical update to the IC school of thought than we had previously seen in either scholarly publications or practical applications.

Therefore, the vision of this book was to provide a platform for new thinking concerning what IC theory and practice should look like to address not only the current but, even more importantly, the future challenges of work-life and societies at large. When sending out the Call for Chapters to a targeted shortlist of potential contributors, we hoped to receive brave and courageous new ideas about the future of IC theory and practice.

We could not be more satisfied with what the authors have developed. The targeted call for chapters yielded 16 contributions from leading minds in the IC field worldwide, which together form a veritable wellspring of new avenues for IC research and practice. The chapters reveal pertinent changes and trends shaping the current business environment and their implications for IC theory, critically examining IC theory in light of associated opportunities and challenges. Keeping the future in focus and searching for answers to fundamental questions related to the development of IC theory and practice, which are essential for sustainable growth and social well-being, all chapters foresee novelties, such as new economic and societal models, new industries, and professions, and create novel understandings and viewpoints concerning the nature of IC, its effective management mechanisms, and the potential impact of IC on organizations and societies.

The book explains how emerging technologies and digitalization are changing the role of IC in organizations, how IC can contribute to solving sustainability challenges, which new risks organizations and managers face, and how to manage IC in an increasingly complex environment. The book advocates the adoption of a multi-level understanding of IC—a comprehensive approach that includes individual, team, organizational, national, and societal levels of IC—and emphasizes the interaction and dynamics between these levels. The thought-provoking chapters guide different interest groups on how to solve complex problems, inspire experimentation, and provide new perspectives for the development of IC theory and practice. Finally, the challenges discussed in the book expand the understanding of future individual, organizational, and national prosperity and open up new opportunities to strengthen IC as a dynamic driver of innovation, manage organizations and state

institutions more efficiently, and improve public services and politics for global smart growth and peace.

This book offers a collection of 16 future-oriented chapters that present diverse insights from leading scholars and practitioners in the field of IC, providing readers with novel viewpoints and visions concerning IC theory and practice. The book is organized into four sections, each addressing a key area of future-proof IC research and practice. Although the chapters present individual narratives, they are gathered around a central theme to deepen the reader's comprehension of the subject matter.

In Part I, *Intellectual Capital in Flux: Navigating Complexity*, the authors challenge prevailing linear, static, and unidimensional thinking about IC and highlight a complex, dynamic, and multilevel structure of IC as essential to align and adapt the IC paradigm to global complexity. This section captures the essence of the holistic nature of IC and enhances our understanding of the dynamics of interactions between IC elements, IC levels, and a shared context in complex and multilevel IC ecosystems.

In the first chapter, "A Complexity Framework for Understanding Intellectual Capital," Constantin Bratianu demonstrates how IC is transforming from a potential form into a kinetic form through knowledge management as a moderator and presents the multiscale framework of IC (microscale, mesoscale, and macroscale) that includes rational, emotional, and spiritual capital at the individual level, social IC at the level of teams, and the basic triad structure of IC at the organizational level.

Addressing IC as a dynamic driver of innovation, Noboru Konno, in the chapter "Unleashing Intellectual Capital: Toward Dynamic Theory through the Humanization of Intellectual Capital," discusses IC within an ecosystem, underscoring the importance of "Ba" (dynamics of a shared context) and the humanization of the IC concept for sustainable growth in the era of advanced technology.

Tomi Hussi and Aino Kianto, in the chapter "Intellectual Capital as a Basis for Cash Flow and Renewal," adapt IC terminology for practitioners and introduce (human) energy, (organizational) platform, and demand (perceived and understood by the company) as a triad of organizational knowledge assets while also addressing IC dynamics by adding knowledge flows (offering, dialog, and reflection) that integrate knowledge assets and transform them into short-term value (cash flow) and long-term value (renewal).

In the chapter "Individual-Level Intellectual Capital—A Framework for Future Management and Reflection," Sanna Mari Alppivuori and Aino Kianto delve into individual intellectual capital and propose a model that includes five dimensions (human, structural, relational, renewal, and emotional capital), contributing to a multilevel IC theory and a more holistic understanding of the complex IC ecosystem from the perspective of the individual actors embedded therein.

The last chapter in this section, "The Liability of Tacitness in Intellectual Capital: Overcoming Research Challenges with Grounded Theory Designs," by Carla Curado and Tiago Gonçalves, emphasizes the critical role of tacit knowledge. The authors propose the concept of tacit IC, guide readers on how foundational principles of grounded theory (GT) may assist in addressing challenges in tacit IC research, and point to new theoretical and empirical directions in tacit IC research.

In Part II, *Smart Societal Growth: Intellectual Capital in Sustainable Ecosystems*, the authors address the role of IC in social ecosystems, illustrating the potential of IC in facilitating sustainable development and societal well-being. This section explores how IC extends beyond organizations and operates within public sectors, nations, and global communities. Three inspiring chapters examine the broader impact of IC on sustainable economic and societal growth, global competitiveness, and, most importantly, global community well-being.

Günter M. Szogs introduces intellectual companionship as a valuable paradigm to advance IC methods and approaches, and in the chapter “IC as Intellectual Companionship,” he sets the stage for a discussion on the pivotal role that IC plays in achieving sustainable societal growth. He develops the concept of IC companionship to highlight how using holistic humanistic sources and focusing research on the interdependencies of disciplines and areas of interconnectivity may leverage IC’s “treasures within” and facilitate a worthwhile and integral social transformation.

The chapter “Sustainable National Intellectual Capital (SNIC) and Its Applications” by Carol Y. Y. Lin presents an SNIC model and its applications that not only provide important guidelines to policymakers and decision-makers in international business but also propose an IC ecosystem that might serve as a foundation for future multilevel, multidisciplinary, and multicountry research on sustainable IC.

The final chapter in this section, “Relevance and the Future of Intellectual Capital Management in the Public Sector,” completes the discussion on the role of IC at the societal level. Harri Laihonen and Paula Pusenius explore IC management in the public sector and propose how governments and public organizations can design policies to harness the full potential of IC for societal benefit and community well-being, as well as for building sustainable societies.

The chapters in Part III, *Intellectual Capital Meets Artificial Intelligence: Reimagining the IC Landscape*, explore the dynamic interplay between artificial intelligence (AI) and IC and examine how AI technologies are reshaping the IC landscape. Through three forward-thinking chapters, we delve into the implications for knowledge workers and organizations, innovation processes, and organizational strategies, offering insights into how AI can be harnessed to unlock the full potential of IC in the digital age.

First, Bror Salmelin in “Intellectual Capital and the Era of Raising AI” provides a snapshot of how AI is transforming the IC domain and management. Considering current AI to be “a semantic parrot, not more!” but also anticipating AI as the lifeblood of organizations and societies, the author emphasizes the humanized, tacit, and emotional aspects of IC and identifies “IC guardians” to play an essential role in the AI era.

Second, Henri Hussinki and Josh Morton, in the chapter “From a Data-Driven to Information-Driven Management Paradigm: Reflections on Generative AI and Intellectual Capital Management,” present a research agenda for Gen AI and IC management, along with research themes and illustrative research questions, to guide future studies in the field. The authors highlight the rich potential to unearth

the nuanced interrelations and potential causal linkages between Gen AI, IC, operational efficiency, and complex problem-solving.

Finally, Susanne Durst in “IC-Related Risks and AI—Friends and Foes!” invites a more holistic and balanced thinking about positive and negative IC-related risks created or amplified by the increased use of AI. Viewing AI as both a complementary resource and a substitute will inspire further IC theory development and open up the scope for novel IC practices.

Part IV, *Reenvisioning Intellectual Capital: Rethinking Economic Models, Value, and Progress in the Knowledge Era*, delves into the transformative future of intellectual capital, offering visionary perspectives on how we can redefine and harness value and progress in an increasingly complex and interconnected world. Through a series of thought-provoking chapters, we explore alternative economic models, the morality of shared-value businesses, and the revaluation of success to facilitate the development of a foundational IC theory and the emergence of new paradigms that prioritize sustainability, social equity, and holistic well-being.

The first chapter in this section, “Considerations Towards the Development of a Foundational Theory of Intellectual Capital,” by Anthony Wensley and Max Evans, provides a fundamental overview of IC research; discusses its historical development, boundaries, and commonalities with knowledge management; and critically reviews existing theories of the firm to provide valuable insights for developing a foundational IC theory.

Günter Koch, in “Futurizing Intellectual Capital: New Economic Models and the Venue of AI Requests for an Update,” further illuminates alternative economic models and other aspects, such as natural capital accounting and AI, to address sustainability crises and proposes a renewed IC reporting (ICR) model that might help companies better communicate intangible assets related to sustainability.

Ante Pulic announces a new era called “knowlism” in his thought-provoking chapter, “The Future of Intellectual Capital in the Era of Artificial Intelligence: Analysis from the Perspective of Value Creation.” This chapter highlights the complexity economy, AI as a part of structural capital, and entropy as a measure of work efficiency. It also presents an improved version of the well-known Value Added Intellectual Coefficient (VAIC) model as a suitable tool for multilevel IC measurement and optimization of value-creation processes in the knowledge economy.

In the chapter “Effective Intellectual Capital Management as the Enabler of Future Value and Success in a Knowledge Economy,” Stefan Güldenbergl challenges the outdated and backward-looking normative understanding of value and success by linking the IC framework with the attention-based view of the firm, system dynamics, organizational learning, and sensemaking and suggests new principles for IC measurement and management.

In the final chapter, “Being Critical about Intellectual Capital in 2024: Chocolate as a Manifesto for Social Change,” John Dumay questions the morality of shared value business models in international business and ties together diverse discussions throughout the book about worthwhile IC research that contributes to the betterment of society and the environment. The Chocolate Scorecard serves as a manifesto for

continued change in the way researchers conceptualize and undertake IC research to build a better society for everyone.

Our aspiration is that this book will pave the way for more future-proof IC research and practice and serve as a key reference volume for emerging and established scholars and practitioners in the field. We hope that it will inspire new thinking by breaking old patterns, making new connections, and gaining fresh perspectives on IC, thereby provoking future research impetus and offering ways forward with a revised understanding of IC and its role in organizational viability and global sustainability. Our hope is that this book will serve as a catalyst for future research, dialog, and concrete knowledge-based activities relevant to the future prosperity and well-being of knowledge societies.

This book is the result of wonderful intellectual companionship and a collective spirit and motivation to reenergize the IC community by sharing knowledge. We are deeply grateful to all the contributors for their exceptional work and dedication and their willingness to share their unique ideas and expertise, which makes this book a valuable resource for readers worldwide. We also want to acknowledge the outstanding and invaluable administrative assistance we received from Thanh Thuy Nguyen.

We hope that this book will also be a powerful tool for readers' personal and professional growth and an inspiration for forward thinking and exploration.

Thank you for embarking on this journey to the future of IC with us!

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