Preface

This book

This book introduces the potential of gamification and games to solve the great societal and organisational challenges that corporations and public institutions are dealing with today. It is written for innovation professionals, entrepreneurs, game designers, and students who seek to understand and apply the potential of gamification and games in different organisations.

Part I introduces the power of games to drive innovation and tackle grand challenges. It also provides the conceptual foundations on games and gamification, learning and innovation management. Part II introduces a pattern approach to configuring, creating games and using games to drive innovation. Part III demonstrates the approach and presents different games that have been developed to solve innovation challenges in leading European firms – each of these formats is available online and can be adapted for different organisations. The final part IV presents educational approaches to training innovation professionals and teaching students how to create their own games. It ends with an outlook into the future of games and gamification, and provides some starting points for your own future with games. Appendices include a short version of the 36 gamification design patterns and a collection of 76 games already used for innovation and entrepreneurship. The whole book builds on insights we gathered in the gamification of innovation at leading European firms, and leverages knowledge from over 150 experts in the fields of gamification and innovation management.

GAMIFY

The essential insights from this book build on results from the European GAMIFY project: It leverages the knowledge of more than 150 experts we interviewed and the lessons learned from developing games responding to innovation challenges in leading European firms. It draws from the insights and outcomes of our research, and from our experiences with conducting and evaluating numerous gamified trainings and educational sessions.¹

GAMIFY stands for ‘Games as Methods to enhance Innovation and Entrepreneurship’.

The project was motivated by the observation that games and gamification have been successfully used to increase productivity within organisations, and in isolated initiatives, also to facilitate the innovation and entrepreneurship (I&E) capabilities of organisations. However, the documentation of existing formats was scarce and inconsistent,
design guidelines and criteria for applicability and quality based on comparative evaluation were missing. Researchers, professional innovation managers and consultants from different organisations and industries discussed these observations at several conferences of the International Society for Professional Innovation Management (ISPIM) and an international workshop in Berlin. In some initial workshops on gamification in innovation at the 2017 ISPIM conference and 2016 at the University of Applied Sciences for Media, Communication and Management (HMKW) in Berlin we began to explore the potential of gamified formats in innovation management, education and training in a more systematic way. Through these events, we sharpened our understanding of the needs of managers and scholars that act as change agents in their organisations.

The partner organisations are leading institutions with strategic objectives that include the adoption of games and gamification for innovation in products and services, on the strategic level of business modelling and for entrepreneurship. They build on firsthand experience in the research, design, development and implementation of gaming approaches. Four universities from Germany, Denmark and Spain (HMKW Berlin, Design School Kolding, Complutense University of Madrid, HHL Leipzig School of Management) and six corporate partners from different industries (telecommunication, conglomerate, banking, metering, airline subsidiary for IT services and insurance: Deutsche Telekom AG, 3M España, Danske Bank, Kamstrup, Lufthansa Systems, Generali Group) set up a knowledge alliance together with ASIIN Consult and ISPIM (International Society for Professional Innovation Management). Later, several associated partners joined: UXBerlin – Innovation Consulting, and Play Serious Academy as consultants, ACTEE as a gamification software platform provider, and University College from Denmark. They were also supported by a wide network of innovation professionals from the ISPIM Special Interest Groups for ‘Values-Based and Sustainable Innovation’ and ‘Teaching and Coaching Innovation’.

From the outset, all partners were convinced that gamification and gaming provide relatively new, attractive, and experiential learning approaches to promote corporate and academic innovation and entrepreneurship capabilities. They (respectively we) also understood that these approaches still needed to be further explored and developed. Together we designed, evaluated and refined many of the materials presented in this book. We conducted a comprehensive literature review and a needs analysis with our industry partners. Collaboratively, we created and evaluated most of the games presented in part III and tried several interactive formats to train trainers and teach students and professionals in the new approaches we developed. In sum, we found that gamification and games provide a unifying and fresh perspective across innovation domains and industries, allowing for transfer of best practices in compliance with established quality criteria. We also discovered the potential of a design
pattern approach to document, teach and advance existing knowledge for future designers of gamification and games to tackle grand challenges.

**IMPACT**

The Gamification Design Patterns themselves (see chapter 4), the overview of games to facilitate values-based and sustainable innovation (chapter 5.3) and the collection of games were then created and validated by Henning Breuer and Kiril Ivanov as part of the IMPACT project. IMPACT stands for ‘Creating values-based innovation cultures for sustainable business impact’. The project was based on the observation that many companies in Europe adopted sustainability goals as part of their mission and strategies, but few have established practices in their organizational culture and manage innovation based on values of corporate sustainability. The purpose of IMPACT is therefore to identify good practices as well as barriers for values-based and sustainable innovation, and to create appropriate methods to overcome the barriers and establish sustainability-oriented innovation cultures. Gamification and games provide a golden path to facilitate these developments and were therefore systematically explored and included (see chapter 5.3).

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- The **Corporate Sustainability Innovation (CSI)** game was developed by Henning Breuer and Kiril Ivanov from the University of Applied Sciences for Media Communication and Management (HMKW), Berlin and in collaboration with industry partners from Deutsche Telekom. We thank Barbara Costanzo (Vice President Group Social Engagement) & Melanie Kubin-Hardewig (Vice President Group Sustainability Management, Miriam Beljaars (Telekom Design Gallery) and Stefan Kohn (Innovation Manager at Deutsche Telekom Service GmbH) for their indispensable contributions to framing the challenge, creating the dilemmas and improving the game through their feedback, ideas and suggestions. Thanks to Marcel Oelschläger for redesigning the prototype of the game into a visually appealing format.
- The **Customer First Change** game was developed by Sune Gudiksen in collaboration with Lisa Weber of the German insurance company Generali and with use of Actee game software and guidance from CEO Leif Sørensen, as well as Gamify consortium feedback.
- The **Business Model Branching** game was created by Sune Gudiksen in collaboration with a number of SME companies and Danish design and innovation leaders from these companies.
- The **Shift** game developed in collaboration with Industry partners Lufthansa, Danske Bank, Kamstrup & Arla Foods. The Shift game was created by Emilie Bech Jespersen, Klara Birgisdottir, Lea Chenot and Sune Gudiksen in collaboration with Lufthansa, especially Carina Leue-Bensch and Jörg Liebe.
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The *Ecosystem Canvas* game was created by Jacob Thomsen & Sune Gudiksen and tested with UCL teachers and ecosystem stakeholders in Odense, Denmark.

*Lego Serious Play* is a method developed by LEGO, which is frequently and enthusiastically used in workshops by HHL Leipzig. Special thanks go to Sandra Dijk, Claudia Lehmann and Sina Plietzsch, who put their knowledge and experience with this method in the framework of this book.

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