

# INNOVATION AND ENTREPRENEURSHIP

Our aim is to understand, inform and co-create  
innovation and entrepreneurship in a rapidly changing,  
globally interconnected digital economy.

## MISSION

The Innovation and Entrepreneurship Group (IEG) was founded based on three years of action research within the context of HIIG's Startup Clinics, followed by several sector-specific research projects. Our current work builds on this legacy, focusing on three work streams that investigate the mechanisms and enablers of digital innovation and entrepreneurship at different levels.

## VALUE CREATION AND CAPTURE



The first work stream investigates how firms use digital technologies to create and capture economic value. We use integrative concepts (such as business models) that can help us understand the increasing complexity and diversity of value creation and capture processes in digital economies. The research questions are:

- How do firms and users create value through digital technologies, and how can individual actors capture their fair share?
- How do firms design and innovate digital, data-driven and platform-based business models?
- What kind of knowledge do digital entrepreneurs require?
- How can enterprises position themselves at the centre of digital innovation processes?
- How can enterprises position themselves at the centre of digital innovation processes?
- What challenges do traditional firms like SMEs and large multinational corporations face when attempting digital business model innovation?

### Several research projects aim to answer these question:

[Gemeinsam Digital – SME 4.0](#), funded by the Federal Ministry of Economics and Energy (BMWi), examines the challenges SMEs face when developing digital business models.

[Competing and Complementing – The Relation of Co-determination and New Participatory Platforms within Companies](#), funded by the Hans Böckler Foundation, studies innovative ways of collaboration and participation in firms.

[Internet of Things: Entrepreneurship & eGovernment](#), in collaboration with Cisco, studied applications and regulatory implications of IoT technologies.



## COLLABORATION AND OPENNESS

IEG's second work stream seeks to understand how diverse actors can collaborate productively and across boundaries. In the digital economy, it becomes possible for previously distinct and distant actors to work together. Yet, new challenges arise as well, for instance, when different organisational cultures clash or when traditional firms have to fundamentally adapt the way they do business. We address questions such as:

- What challenges and opportunities arise from open innovation in traditional sectors?
- What does customer-centric and customer-driven innovation look like in sectors that are being digitised?
- What are the most effective ways for startups to collaborate with SMEs and corporations?
- What role do intermediaries like corporate accelerators or innovation labs play in facilitating digital innovation?

### Research projects that address these questions include:

[How to Collaborate with Startups?](#), which, in collaboration with Spielfeld, developed a novel methodology to connect startups and SMEs.

[User Innovation in Smart Energy Technologies](#), in collaboration with innogy, studied how users and communities drive innovation in the German energy market.

[Open!](#), funded by DFG, examines the potential of open source hardware for business model innovation.

[Outsourcing Creativity](#) examined corporate accelerators as a particular channel for open innovation.



## STRUCTURES AND ECOSYSTEMS

Digitisation also changes innovation and entrepreneurship at the structural and systemic level. In our third work stream, we analyse some of the processes within the structures and ecosystems that make up the digital economy, tackling questions such as:

- What are the mechanisms through which digital innovation and entrepreneurship contribute to structural change and transformation at different levels (e.g. national, or city vs. rural)?
- What types of markets and networks do technological platforms enable? What are the opportunities for diverse actors (e.g. multinational corporations and SMEs) that are increasingly coordinated through platforms?

- How do new paradigms of the digital economy, such as platform capitalism and the sharing economy, affect traditional economic actors and structures? What are the risks and opportunities?
- How are digital entrepreneurship ecosystems changing over time? Which actors can effectively fulfil which roles?
- How does the global digital revolution intersect with the specific context and the diverse stakeholders of urban economic development?
- What levers do policymakers have to bring about digital innovation and entrepreneurship at the national, regional or city scale?

**Our prior work has focused on:**

[Germany's national innovation system](#), offering insights into the relevance of entrepreneurship for a national innovation system and illustrating pathways to encourage entrepreneurial behaviour and startups. Based on [data collected during Startup Clinics](#), we also analysed supporting and hindering factors for internet-enabled startups in Berlin.

## RESEARCH APPROACH

By co-developing innovative research methods and designs with stakeholders from academia and practice, IEG creates applicable knowledge faster and involves project partners from day one. Outputs are customised and co-created, often leading to innovative knowledge transfer and exchange formats. For example, Startup Clinics provided Berlin-based internet-enabled startups with valuable coaching while also documenting lessons on supporting and hindering factors for startups more generally. During rapid mini projects within the [Gemeinsam Digital!](#) project, IEG researchers helped German SMEs understand their digitisation needs. We also frequently leverage open event and workshop formats to enable collaboration, such as TOA Disrupted! (an unconference at [TOA 2017](#)), or the [Learn, Match, Partner](#) methodology.

We also acknowledge that digital innovation and entrepreneurship can only be successful if legal, societal and political challenges are identified and incorporated at an early stage, as they might affect technological and industrial developments. This is where IEG works closely with [HIIG's Research Programmes](#), leveraging their expertise in domains such as privacy, governance, online learning, regulation, internet security or European law.

## PUBLICATIONS

### Key publications value creation and capture

Richter, N., Jackson, P., Schildhauer, T. (2018). *Entrepreneurial Innovation and Leadership – Preparing for a digital future*. Cham, Switzerland: Palgrave Macmillan. [Publication details](#)

Richter, N. & Schildhauer, T. (2016). Innovation, Gründungskultur und Start-ups made in Germany. *APuZ*. [Publication details](#)

Dopfer, M., Fallahi, S., Kirchberger, M., & Gassmann, O. (2017). Adapt and strive – How ventures under resource constraints create value through business model adaptations. *Creativity and Innovation Management*, 26(3), 233–246. [Publication details](#)

Sauer, R., Dopfer, M., Schmeiss, J., & Gassmann, O. (2016). Geschäftsmodell als Gral der Digitalisierung. In O. Gassmann & P. Sutter, *Digitale Transformation im Unternehmen gestalten* (pp. 15-26). München, Deutschland: Hanser Verlag. [Publication details](#)

Schmeiss, J., Möllers, T., & Tech, R. (2017). A Venture's Business Model Design Modes - A process perspective on business model design. R&D Management Conference 2017 . KU Leuven, Leuven, Belgium: 04.07.2017

Schmeiss, J., Dopfer, M., & Sauer, R. (2017). From dinosaurs to business model masterminds. SMS Special Conference 2017 . Strategic Management Society, Banff, Canada: 04.06.2017

### Key publications openness and collaboration

Wrobel, M., Schildhauer, T., & Preiß, K. (2017). Kooperationen zwischen Startups und Mittelstand. Learn. Match. Partner, . Eine Studie des Alexander von Humboldt Instituts für Internet und Gesellschaft. [Publication details](#)

Friederici, N. (2018). Grounding the dream of african innovation hubs: two cases in kigali. *Journal of Developmental Entrepreneurship*, 23(02), 1850012. <https://doi.org/10.1142/S1084946718500127>

Richter N., Jackson P., Schildhauer, T. (2018). Outsourcing creativity: An Empirical Study of Open Innovation using Corporate Accelerators in *Creativity and Innovation Management*. *Creativity and Innovation Management*, 27(1), 1-10. [Publication details](#)

Jackson, P. & Richter, N. (2017). Situational Logic: An Analysis Of Open Innovation Using Corporate Accelerators. *International Journal of Innovation Management*, 21(7), 1-21. [Publication details](#)

Neumann, E.K., Send, H., Tech, R.P.G. (2017). Central components of open business models. What makes an open business model open? HIIG Discussion Paper Series. [Publication details](#)

Schmeiss, J. & Dopfer, M. (2017). Making the customer king - A qualitative study on customer centric business model innovation of SMEs. SPIM Innovation Conference 2017 . ISPIM, Vienna, Austria: 19.06.2017

### Key publications structures and ecosystems

Hebing, M., Ebert, J., & Schildhauer, T. (2017). *Startup Ökosysteme*. Berlin: HIIG. Retrieved from <https://www.hiig.de/publication/startup-oekosysteme/>

Dopfer, M., Grafenstein, M., Richter, N., Schildhauer, T., Tech, R., Trifonov, S., & Wrobel, M. (2015). Fördernde und hindernde Faktoren für Internet-Enabled Startups. (Supporting and Hinderling Factors for Internet-Enabled Startups.) <https://www.hiig.de/publication/foerdernde-und-hindernde-faktoren-fuer-internet-enabled-startups-supporting-and-hinderling-factors-for-internet-enabled-startups/>

Richter, N., Jackson, P., & Schildhauer, T. (2017). Entrepreneurship und Nationaler Wohlstand – Warum Deutschland mehr für seine Gründer tun muss. HIIG Discussion Paper Series. [Publication details](#)

Jackson, P., Dobson, P., & Richter, N. (2017). The situational logic of entrepreneurship: a realist approach to national policy. *Innovation: The European Journal of Social Science Research*, 1-24. [Publication details](#)

Jackson, P., Runde, J., Dobson, P., & Richter, N. (2015). Identifying mechanisms influencing the emergence and success of innovation within national economies: a realist approach. *Policy Sciences*, 1-26. [Publication details](#)