



ANNUAL REPORT

2023

Jackstädt Center

EXECUTIVE SUMMARY

Dear readers,

With the appointment of Prof. Dr Christian Rupietta to Queens University Belfast and the announcement of a W2 professorship at the Jackstädt Center, 2023 is a year of transition. Despite these changes, we successfully concluded a significant project, funded by the Federal Ministry of Education and Research since 2020, focused on researching the scaling of social innovations. The research results achieved by Christian Rupietta and doctoral students Jana Coenen and Markus Thomanek, together with colleagues from the University of Groningen, are particularly noteworthy.

Our research covered diverse topics, including the development of sustainable bioenergy villages, support for social enterprises, and strategies for improving sustainability in supply chains. The research team has already submitted several articles to leading journals in 2023.

By presenting our findings at international conferences, we not only showcased the Jackstädt Center's research achievements internationally but also established new contacts for potential future research projects. Furthermore, the research stay of our doctoral student Markus Thomanek with our Research Fellow Prof. Dr. Philip Steinberg at the University of Groningen underscores the increasing international cooperation at the Jackstädt Center.

The expansion of our Research Fellow network further reflects the importance of international cooperation. In 2023, we welcomed Prof. Dr. Pawan Tamvada, Dr. Iris Kunadt and Prof. Dr. Matthias Schulz as new Research Fellows, each of whom has long-standing ties to the Jackstädt Center. Dr. Iris Kunadt and Prof. Dr. Pawan Tamvada are introduced in more detail on pages 31 and 33 of this report.

While international research remained a priority in 2023, enhancing the regional visibility of Jackstädt Center's activities was also a key focus. Our Start-up Center, a transfer unit of the Jackstädt Center, continues to play a central role in the economic development of the "Bergische city-

triangle" (Wuppertal, Solingen, and Remscheid), having supported numerous successful start-up foundings in recent years. Through seminars, workshops, and our highly attended Start-up Days, we provide an energetic platform for regional networking and inspiration.

We are also proud of the achievements of the Women Entrepreneurs in Science (WES) team, which is based at Freiraum, the University of Wuppertal's Start-up Center. WES, funded by the Ministry of Economic Affairs, Industry, Climate Action and Energy as part of the Excellence Start-up Center NRW initiative, has risen to the challenge of Germany's male-dominated start-up ecosystem. By building a strong network of female founders within and beyond the state of North Rhine-Westphalia, WES inspires numerous women at universities to pursue entrepreneurship.

None of these successes – whether at the Jackstädt Center or the Start-up Center – would have been possible without the long-term support of the Jackstädt Foundation and the Dorothee Hanneschläger Foundation Fund. We extend our deepest gratitude for their continued support.

We hope you enjoy reading this annual report and find it both informative and inspiring.

Yours sincerely,



Prof. Dr. Christine K. Volkmann

Chairwoman of the Board of the Jackstädt Center of Entrepreneurship and Innovation Research

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TEAM

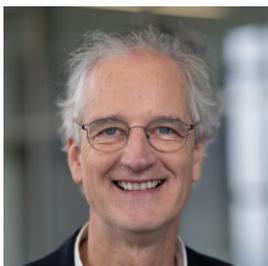
The Jackstädt Center is led by an executive committee who, together with a team of assistant professors, research associates, doctoral students, and student assistants, is engaged in numerous research and transfer projects. With their individual fields of research and experience, each team member contributes to the center's interdisciplinary research character. In particular, the combination of different approaches, theories, and methods enables us to explore new perspectives when addressing open questions in entrepreneurship and innovation research. An advisory board complements the Jackstädt Center.

ADVISORY BOARD



Prof. Dr. h.c. mult. David B. Audretsch

Distinguished Professor, Ameritech Chair of Economic Development at the School of Public and Environmental Affairs and Director of the Institute for Development Strategies at Indiana University, Bloomington, USA



Markus von Blomberg

Managing Partner of the Mello GmbH
Member of several advisory boards
Founder and fund manager



Dr. Marc Kanzler

Board member of the Dr. Werner Jackstädt Center Foundation



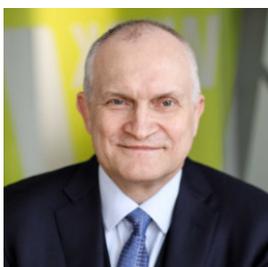
Prof. Dr. Dr. Holger Patzelt

Chair of Entrepreneurship at the Technical University of Munich



Prof. Dr. Andreas Pinkwart

Professor of Innovation and Technology Management and Director of the Center of Excellence for Innovation, Transfer and Entrepreneurship at the Technical University of Dresden (TUD | excite)



Prof. Dr. Dr. h.c. Christoph M. Schmidt

President of RWI Essen and Holder of the Chair of Economic Policy and Applied Econometrics at Ruhr University Bochum.

Former Chairman of the German Council of Economic Experts

EXECUTIVE COMMITTEE



Prof. Dr. Christine Volkmann

Chairwoman of the Jackstädt Center
University of Wuppertal
Schumpeter School of Business and Economics
UNESCO Chair for Entrepreneurship and
Intercultural Management



Prof. Dr. Werner Bönte

Deputy Chairman of the Jackstädt Center
University of Wuppertal
Schumpeter School of Business and Economics
Chair of Industrial Organization and Innovation



Prof. Dr. Michael Fallgatter

Director of the Jackstädt Center
University of Wuppertal
Schumpeter School of Business and Economics
Chair of Human Resource Management and
Organization



Prof. Dr. Peter Witt

Director of the Jackstädt Center
University of Wuppertal
Schumpeter School of Business and Economics
Chair of Technology and Innovation Management

RESEARCH ASSOCIATES AND STIPENDIARIES



Jana Coenen, M.Sc.

Research topics:

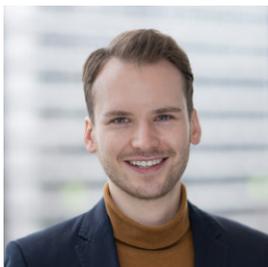
- Social Innovations
- Organizational Learning



Markus Thomanek, M.Sc.

Research topics:

- Sustainability in Supply Chains
- Artificial Intelligence
- Platforms



Julian Lauten-Weiss, M.Sc.

Research topics:

- Circular Economy
- Sustainable Business Models



Philipp Pasing, M.Sc.

Research topics:

- Social Entrepreneurship
- Sustainable Entrepreneurship

RESEARCH

Our interdisciplinary work in the areas of entrepreneurship and innovation includes theoretical as well as empirical research questions and spans across the fields of management, business, economics, and psychology. In our research we investigate current phenomena, examine established concepts from new perspectives and develop innovative solutions.

ENTREPRENEURS' PSYCHOLOGY AND DECISION MAKING

We investigate whether entrepreneurs differ from other people – either because people with specific personality traits follow such careers or because they develop this mindset through their experiences. We analyze personality traits, patterns of perception and decision-making, as well as the learning, group, and social behavior of entrepreneurs, self-employed, and innovative people, traditionally oriented business people, as well as managers, social activists, and founders with a strong profit orientation or those with a substantial social motivation. An important question is which of these characteristics makes it more difficult or seemingly easier for a person to become a successful entrepreneur.

SELECTED PUBLICATIONS AND WORK IN PROGRESS

- Urbig, D., Bönte, W., Schmutzler, J., Curcio, A. F. Z., & Andonova, V. (2021). Diverging associations of dimensions of competitiveness with gender and personality. *Personality and Individual Differences*, 176, Art. 110775. <https://doi.org/10.1016/j.paid.2021.110775>
- Bönte, W., Procher, V. D., Urbig, D., & Voracek, M. (2017). Digit Ratio (2D:4D) Predicts Self-Reported Measures of General Competitiveness, but Not Behavior in Economic Experiments. *Frontiers in Behavioral Neuroscience*, 11. <https://doi.org/10.3389/fnbeh.2017.00238>
- Urbig, D., Bönte, W., Procher, V. D., & Lombardo, S. (2020). Entrepreneurs embrace competition: Evidence from a lab-in-the-field study. *Small Business Economics*, 55(1), 193–214. <https://doi.org/10.1007/s11187-019-00141-0>
- Huber, C., Dreber, A., Huber, J., Johannesson, M., Kirchler, M., Weitzel, U., Abellán, M., Adayeva, X., Ay, F. C., Barron, K., Berry, Z., Bönte, W., Brütt, K., Bulutay, M., Campos-Mercade, P., Cardella, E., Claassen, M. A., Cornelissen, G., Dason, J. G. J., Delnoij, J., ... Holzmeister, F. (2023). Competition and moral behavior: A meta-analysis of forty-five crowd-sourced experimental designs. *Proceedings of the National Academy of Sciences of the United States of America*, 120(23). <https://doi.org/10.1073/pnas.221557212>

INTERNATIONALIZATION OF COMPANIES AND BUSINESS PROCESSES

In a global world, the internationalization of companies and business processes is of central importance. However, this often involves not only the expansion, but also the shifting and relocation of business processes. A current study therefore examines the relationship between companies' investments and divestments.

In another project, members of the Jackstädt Center work on the effects of terrorist attacks on the export performances of companies in developing countries. In 2018, we conducted three surveys in Germany and Pakistan, providing further insights into how companies deal with the threat of terrorism. Building on previous publications, we are currently developing new scientific papers using these data sources. These papers have already been presented at prestigious international conferences, including the annual meetings of the Academy of International Business, the Academy of Management, and the European International Business Academy.

SELECTED PUBLICATIONS AND WORK IN PROGRESS

- Malik, F. S. (2021). *Terrorism, Corporate Performance and Business Strategies: Presence, Impact, and Future* (Dissertation, University of Wuppertal).
- Procher, V. D., & Engel, D. (2018). The investment-divestment relationship: Resource shifts and intersubsidiary competition within MNEs. *International Business Review*, 27(3), 528–542. <https://doi.org/10.1016/j.ibusrev.2017.10.004>
- Gargalianou, V., Urbig, D., & Van Witteloostuijn, A. (2017). Cooperating or competing in three languages: Cultural accommodation or alienation? *Cross Cultural & Strategic Management*, 24(1), 167-191. <https://doi.org/10.1108/CCSM-01-2016-0008>
- Malik, F. S. (2019). Exploring the Effects of Terrorism on Business Operations Firms in Pakistan and Firms' Response. *Academy of Management Proceedings*, 2019(1), 19620. <https://doi.org/10.5465/AMBPP.2019.19620abstract>

VOCATIONAL EDUCATION AND INNOVATION

The impact of vocational education on firms' innovation capability is a controversial topic in the scientific literature. Various studies describe vocational education as firm-specific and strongly focused on established technologies. Thus, researchers typically do not expect vocational education to positively impact innovation. These studies see vocational education as an obstacle to developing new and improved products and processes. However, certain kinds of vocational education, for example, vocational education and training (VET) in Germany and Switzerland, cover general knowledge and regularly include new technologies. This type of vocational education supports the generation of innovation in firms.

The focal points of this research include the analysis of vocational education systems in general, and the analysis of firms as providers of vocational education, in particular. Thereby the focus is on the inclusion of vocational education in the innovation processes of firms.

SELECTED PUBLICATIONS AND WORK IN PROGRESS

- Rupietta, C., & Backes-Gellner, U. (2019). Combining knowledge stock and knowledge flow to generate superior incremental innovation performance— Evidence from Swiss manufacturing. *Journal of Business Research*, 94, 209–222. <https://doi.org/10.1016/j.jbusres.2017.04.003>
- Rupietta, C., & Backes-Gellner, U. (2019). How firms' participation in apprenticeship training fosters knowledge diffusion and innovation. *Journal of Business Economics*, 89(5), 569–597. <https://doi.org/10.1007/s11573-018-0924-6>
- Rupietta, C., Meuer, J., & Backes-Gellner, U. (2021). How do apprentices moderate the influence of organizational innovation on the technological innovation process? *Empirical Research in Vocational Education and Training*, 13(1). <https://doi.org/10.1186/s40461-020-00107-7>

INNOVATION STRATEGIES AND INNOVATION PRACTICES

This research area includes projects that deal with the influence of innovation management practices on the innovative behavior of employees and the company's ability to innovate. One example of such a practice, commonly used by companies, is an innovation contest. In these contests, employees carry out an innovation project for a short period of time. This research project analyzes which types of motivation are conducive to employees' participation in innovation competitions and thus contributes to explaining the persistent, innovative behavior of employees. Researchers presented the initial results at several international conferences. A manuscript for submission to a renowned international journal is currently under preparation.

Additional early-stage projects are currently underway, including one that examines innovation management practices in Colombia with financial support from the German Academic Exchange Service (DAAD). During a research stay in Colombia, Prof. Dr. Bönnte and Prof. Dr. Rupietta worked closely with their colleagues from the Universidad del Norte to design interview guides and questionnaires for data collection.

This project involves partners from both academia and industry. We are collaborating with the University of Zurich and the Universidad del Norte in Colombia to advance this research.

SELECTED PUBLICATIONS AND WORK IN PROGRESS

Schulze, A., & Rupietta, C. (2021). What motivates employees to engage in entrepreneurial behavior? A set theoretic approach. (Working Paper, Universität Zürich).

SOCIAL INNOVATION

Since 2020, the research on Social Innovation complements the other research areas of the Jackstädt Center and is currently under development. Social innovations intend to solve fundamental social and ecological problems. Different partners with strong local or regional roots often develop and share social innovations. The subject of this research project is how such ideas and their effects can be successfully disseminated and thus benefit many people.

The research project is part of a joint international project involving the University of Groningen (Netherlands), Queen's University (Canada), University of Wuppertal and Oxfam (UK). The funding was obtained within the framework of the call for proposals on Social Innovation of the Trans-Atlantic Platform. The project team at the Jackstädt Center receives funding from the German Federal Ministry of Education and Research (BMBF) for this research project for three years.

After the successful start in September 2020, the project's researchers have presented their findings at international conferences throughout the last three years, and have submitted them to academic journals. For more details on the content of the project, please refer to pages 37 and 65.

SELECTED PUBLICATIONS AND WORK IN PROGRESS

Mitzinneck, B., Coenen, J., Noseleit, F., & Rupietta, C. (n.d.). Impact creation through community-based enterprise: A configurational analysis of enabling conditions [Manuscript submitted for publication].

Coenen, J. (2023). Effectively partnering for systemic change: A capabilities framework [Manuscript submitted for publication]. Schumpeter School of Business and Economics, University of Wuppertal, Germany.

Thomanek, M. (2023). The role of platforms in multi-tier sustainable supply chain management and its effect on visibility [Unpublished manuscript].

SCIENTIFIC CONTRIBUTIONS AND ACHIEVEMENTS

PUBLICATIONS

- Fallgatter, M. J., & Henftling, E. (2024). Zur Zukunft des Home-Office: Hat Elon Musk mit seiner Ablehnung Recht? ZFO, 2(2024).
- Fallgatter, M. J., & Strunk, N. (2024). Management, Wertschöpfung und die Instanz des Erfolges – Was Führungskräfte wissen sollten. Springer (voraussichtlich 2024).
- Bafera, J., & Kleinert, S. (2023). Signaling theory in entrepreneurship research: A systematic review and research agenda. *Entrepreneurship Theory and Practice*, 47(6), 2419-2464.
- Breit, L. A., & Volkmann, C. K. (2023). Recent developments in entrepreneurial marketing: Systematic literature review, thematic analysis and research agenda. *Journal of Research in Marketing and Entrepreneurship*, (ahead-of-print).
- Huber, C., Dreber, A., Huber, J., Johannesson, M., Kirchler, M., Weitzel, U., Abellán, M., Adayeva, X., Ay, F. C., Barron, K., Berry, Z., Bönte, W., & Holzmeister, F. (2023). Competition and moral behavior: A meta-analysis of forty-five crowd-sourced experimental designs. *Proceedings of the National Academy of Sciences of the United States of America*, 120(23). <https://doi.org/10.1073/pnas.221557212>
- Krebs, K., Volkmann, C., & Grünhagen, M. (2023). Cultivating the impact of sustainable entrepreneurship: A discussion of upscaling approaches in entrepreneurial ecosystems. In R. Adams et al. (Eds.), *Artificiality and sustainability in entrepreneurship – Exploring the unforeseen, and paving the way to a sustainable future* (pp. 241-264). Cham: Springer.
- Witt, P. (2023). *Beziehungskompetenz: Soziale Bindung in Zeiten von Digitalisierung und gesellschaftlichen Krisen*. Stuttgart: Verlag W. Kohlhammer.

DISSERTATIONS

- Otto, F. (2024). *Leader-Member Exchange in der kurzen Frist – Eine episodensbasierte Perspektive auf affektive Mikrodynamiken in Führungsbeziehungen*.
- Langer, D. (2023). *The Structuration of Moral Capital and Unethical Behavior: When the Organization Hits an Ethical Meltdown*.
- Peters, A. (2023). *Open Innovation in kleinen und mittleren Unternehmen*.

PRESENTATIONS

- Coenen, J., & Rupiëtta, C. (2023, March 6). The effect of institutional conditions on nascent social entrepreneurship: A configurational study [Paper presentation]. University of Edinburgh Business School Tenth Annual Writing Workshop, Edinburgh, United Kingdom.
- Mochkabadi, K., & Ivanova, R. (2023, September 28-29). Female founder initiatives: Safe spaces or brave spaces? [Paper presentation]. G-Forum Conference 2023, Darmstadt, Germany.
- Mochkabadi, K., Kleinert, S., Urbig, D., & Volkmann, C. (2023, September 28-29). From distinctiveness to optimal distinctiveness: External endorsements, innovativeness and new venture funding [Paper presentation]. G-Forum Conference 2023, Darmstadt, Germany.
- Lauten-Weiss, J., & Rupiëtta, C. (2023, October 7). Venture capital investment decisions in circular business models – A qualitative comparative analysis of data from a discrete choice experiment [Paper presentation]. Personnel, Innovation, and Education Economists Network Meeting, Bielefeld, Germany.
- Pasing, P. (2023, November 6-8). Enhancing paradox theory's contribution to corporate sustainability by integrating a strong sustainability worldview [Paper presentation]. Paradox Research Education Practice (PREP) Conference, Amsterdam, The Netherlands.
- Coenen, J., & Rupiëtta, C. (2023, June 12-13). Enabling conditions for social innovation - A summary of my compilation dissertation [Presentation of the dissertation]. European Academy of Management (EURAM) 2023 Doctoral Colloquium, Dublin, Ireland.
- Thomanek, M. (2023, June 14). The role of platforms in multi-tier sustainable supply chain management and its effect on visibility [Paper presentation]. NOFOMA NordLOG Doctoral Day 2023, Helsinki, Finland.
- Lauten-Weiss, J., & Harima, J. (2023, June 14-16). Logic hybridization in emerging circular economy entrepreneurial ecosystems [Conference presentation]. European Academy of Management (EURAM) 2023 Annual Conference, Dublin, Ireland.
- Coenen, J., & Rupiëtta, C. (2023, June 14-16). The effect of institutional conditions on nascent social entrepreneurship: A neoconfigurational institutional approach [Paper presentation]. European Academy of Management (EURAM) 2023 Annual Conference, Dublin, Ireland.

Thomanek, M. (2023, June 15-16). The role of platforms in multi-tier sustainable supply chain management and its effect on visibility [Paper presentation]. NOFOMA Research Conference 2023, Helsinki, Finland.

Lauten-Weiss, J. (2023, June 21). Examining the applicability of stakeholder theory and resource-based view for circular business model research [Doctoral colloquium presentation]. New Business Model (NBM) Conference, Maastricht, The Netherlands.

AWARDS

Best PhD Abstract

Pasing, P. (2023, November 6-8). Enhancing paradox theory's contribution to corporate sustainability by integrating a strong sustainability worldview [Paper presentation]. Paradox Research Education Practice (PREP) Conference, Amsterdam, The Netherlands.

ECONLAB RESEARCH PROJECTS

The Schumpeter School of Business and Economics of the University of Wuppertal operates the EconLab to study human behavior in a controlled environment. Over the course of the years, Prof. Dr. Bönte and his team conducted experiments, particularly on the effects of competition on the behavior of participants. In 2023, they added to this research by studying the effect of different payment schemes on participants' behavior and performance.

The doctoral student Dmitrii Galkin designed and implemented the experiment titled *Relative Performance Contracts and Collusive behavior*. In this, he explored the impact of evaluating performance either relative to others or in absolute terms. Participants acted in competitive markets and were able to collude. As the simultaneous choices of the participants determined how they would compete in the markets, Dmitrii Galkin was able to observe how these different performance evaluations led the participants to distinct behaviors. By also varying the ability to communicate, his experiment further adds to the understanding of market efficiency, managerial decisions, and the likeliness of collusion. Mr Galkin's innovative research design thereby sheds light on the practical implications of different payment schemes in competitive markets.

Moreover, Prof. Dr. Bönte and his team also conducted a field experiment. Together with students of the seminar "*Exploring human behavior through play: A field experiment in practice*", they recruited visitors of a local shopping mall to participate in a computer-guided experiment led by Andrés Felipe Zambrano Curcio. From 16th to 18th November 2023, 220 people participated. The goal of the experiment was to learn more about the effects of competition on the participants' performance. As is the practice with economic experiments, participants receive a payout at the end. The height of this payment depends on their choices. You can find detailed information on this experiment under <https://osf.io/wdkys>.

To guarantee the smooth conduct of future experiments in our EconLab, the team currently rolls out a new software for recruiting participants. Therefore, the Castellum software of the Max-Planck-Institute offers more data security, more control for experimenters and a better user experience. Students can register under the following link: <https://econlab.wiwi.uni-wuppertal.de>



ENTREPRENEURIAL ORIENTATION AND INNOVATION BEHAVIOR

In October 2023, Prof. Dr. Bönnte and his doctoral student Adrian Eckstein presented the results of a study at the *5th ZEW Conference on the Dynamics of Entrepreneurship* in Mannheim. In their research, conducted together with Prof. Dr. Diemo Urbig, Prof. Dr. Vivien Procher, and Dr. Sandra Gottschalk, they shed light on the connections between Entrepreneurial Orientation and innovation, sustainability, and political framework conditions. The construct of Entrepreneurial Orientation encompasses various dimensions, ranging from risk-taking to proactivity, innovation orientation, competitive aggressiveness, and autonomy. The researchers are building on a dataset from the Leibniz-Center for European Economic Research (ZEW) in Mannheim. This dataset includes measurements of these dimensions of Entrepreneurial Orientation from more than 2,000 German companies. Thanks to the long-term survey, the data thus offers insights into possible causal relationships.

The results show that some dimensions of Entrepreneurial Orientation have a positive influence on the innovation behavior of companies. In particular, innovation orientation and proactivity have a significant influence on the development of new products. A focus on creating added value for customers through the development of new products, services, or processes sets these companies apart.

On the other hand, competitive aggressiveness has a positive effect on imitating existing products. These companies are, therefore, more likely to use existing technologies and thus contribute to their diffusion. In addition, innovative companies are more proactive and strive to stay ahead of the competition.

The study thus shows that innovations are not a product of chance, but are also the result of targeted efforts. Innovation strategies can, therefore, strive for a targeted adaptation of their entrepreneurial activities across management and corporate culture. In addition to these practical implications, the study also offers insights for policymakers. In addition to creating innovations, the promotion of young, newly founded

companies can also play a key role in their dissemination.

The team around Prof. Dr. Bönnte and Adrian Eckstein is grateful for the many years of excellent cooperation with the Leibniz Centre for European Economic Research. The exchange at the conference with other researchers in the field was very valuable and is now contributing to the further development of scientific publications.

STIPENDIARIES OF THE DOROTHEE-HANNESSCHLÄGER FOUNDATION

JULIAN LAUTEN-WEISS

Julian Lauten-Weiss was also able to successfully continue his dissertation project in 2023 under the supervision of Prof. Dr. Christine Volkmann and took it to the next phase. He is now bundling his research under the topic of Circular Entrepreneurship - Entrepreneurship in the Circular Economy. This establishes an even clearer link to the research areas of the Jackstädt Center. In three specific sub-projects of his cumulative dissertation, Julian Lauten-Weiss sheds light on the framework conditions, background, and financing of circular business models, especially of start-ups.



Julian Lauten-Weiss presented and discussed his research project on regional entrepreneurial ecosystems for circular start-ups, which began in 2022, to an expert audience at the annual conference of the European Academy of Management (EURAM) in Dublin, Ireland. The results of his empirical study shed light on, among other things, the communication between actors with opposing perspectives within an entrepreneurial ecosystem. The positive feedback, as well as the stimulating exchange with other researchers from the field, provided many good impulses, also for his further research projects. Julian Lauten-Weiss plans to submit the resulting article together with his co-authors Prof. Dr. Jan Harima and Prof. Dr. Christine Volkmann to an internationally recognized journal in 2024.

Mr Lauten-Weiss presented another research project at the Doctoral Colloquium (DC) of the New Business Models (NBM) conference in Maastricht, Netherlands. With this second project, he wants to increase the connectivity of circular entrepreneurship to current management theories and stimulate theory development for the management of

circular business models. The subsequent participation in the DC of the conference enabled Julian Lauten-Weiss to exchange ideas with a number of renowned researchers from the fields of sustainable and circular business models. He used the constructive exchange to further concretize his research project and work on it in preparation for another conference participation in 2024.

Together with Prof. Dr. Christian Rupiotta, Julian Lauten-Weiss furthermore attended a network meeting at Bielefeld University in October 2023. There, he presented the third joint project on the financing of circular business models. The collaboration with Prof. Dr. Rupiotta emerged from his doctoral seminar on Qualitative Comparative Analysis (QCA) in 2022. The two co-authors plan to use this method to investigate the investment behavior of impact-oriented business angels and venture capital firms. The feedback from the network meeting was used to develop the data collection strategy for the project. The project is to be implemented in 2024.

PHILIPP PASING

Throughout the second year of his Ph.D. studies, Philipp Pasing has made significant progress in his project, with a focus on deepening his theoretical foundation. Through intensive engagement with current literature, Mr. Pasing was able to establish a crucial theoretical direction for his research in the area of Sustainable Entrepreneurship. He now applies Paradox Theory to illuminate contrasting ecological, economic, and social sustainability demands within companies. Based on this theory, he is developing an approach that critically questions existing assumptions regarding various sustainability concerns and their weighting, proposing an alternative perspective to better understand the complexity of sustainability tensions. For this purpose, he integrates ontological assumptions from the concept of strong sustainability, which



is based on scientific principles and emphasizes the essential relationship between ecological integrity and economic activity, into the application of Paradox Theory in the field of corporate sustainability.

Mr. Pasing presented his research project at the "Paradox Research Education Practice Conference" (PREP), an important event for the Paradox Theory community, in November 2023. His approach to integrating a strong sustainability understanding into Paradox Theory received special recognition and was awarded as the best abstract among all participating Ph.D. candidates. In collaboration with a co-author, the awarded paper is now being further developed to be presented at future conferences in 2024 and prepared for final publication.

NATIONAL AND INTERNATIONAL SCIENTIFIC INVOLVEMENT

In the context of their scientific activities, the members of the Jackstädt Center are not only embedded in research collaborations, but they also hold positions of responsibility within national and international research networks.

FUNCTIONS AND MEMBERSHIPS

CHRISTINE VOLKMANN

- Co-speaker of the German UNESCO Chairs
- Jury-Chairwoman of the Gründerpreis NRW (Entrepreneurship award of the State of North Rhine-Westphalia)
- Jurymember of the EY (Ernst & Young) "Entrepreneur of the Year" Awards
- Member of the Advisory Board of the Swiss-African Science and Business Innovators' (SASBI) Steering Group (within SARECO)
- Member of the Advisory Board Next Step_Neue Wege for securing company succession of the IHK NRW
- Member of the Advisory Board for the Young Digital Economy NRW (Ministry of Economic Affairs, Industry, Climate Action and Energy of the state of North Rhine-Westphalia)

WERNER BÖNTE

- Research fellow at the School of Public and Environmental Affairs at the Indiana University Bloomington, USA

PETER WITT

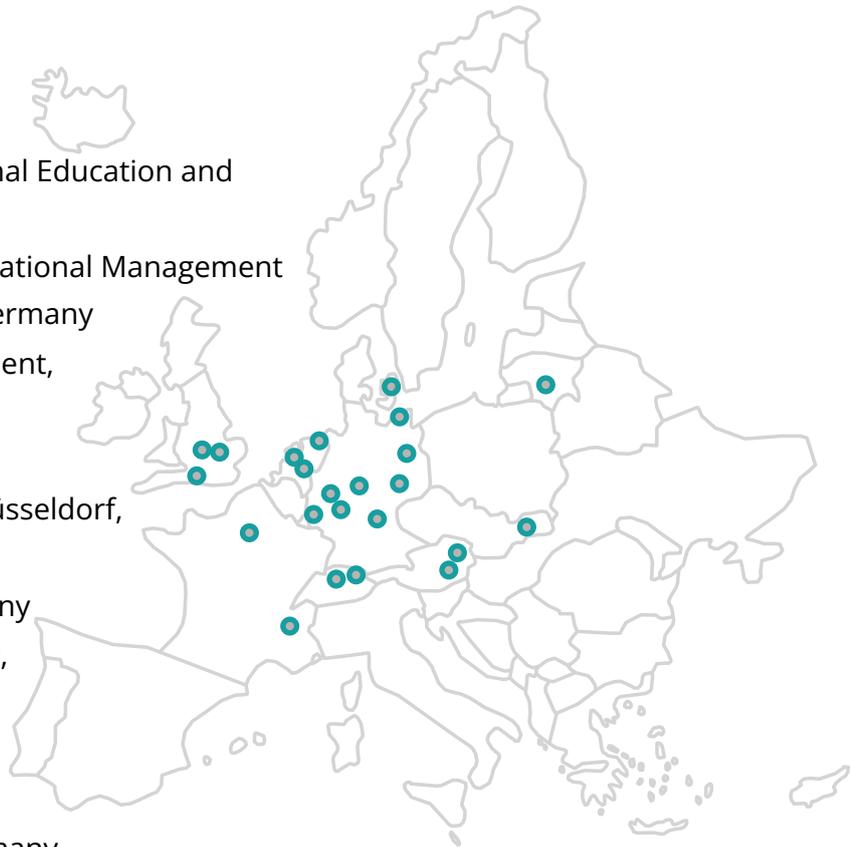
- Chairman of the scientific committee of the Erich Gutenberg Arbeitsgemeinschaft
- Department editor for the fields of entrepreneurship and innovation management of the Journal of Business Economics
- Adjunct professor at the WHU-Otto Beisheim School of Management
- Member of the Schumpeter School foundation's board of trustees

MICHAEL FALLGATTER

- Former Dean of the Schumpeter School of Business and Economics
- Member of the board of trustees of the Walbusch Science Foundation

NATIONAL AND EUROPEAN COOPERATION PARTNERS

- Bournemouth University, United Kingdom
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- DIW Berlin, Germany
- EAWAG, Switzerland
- EBS University for Business and Law, Germany
- ETH Zurich, Switzerland
- FH Dortmund, Germany
- FH Münster, Germany
- Federal Institute for Vocational Education and Training (BIBB), Germany
- Fraunhofer Center for International Management and Knowledge Economy, Germany
- Grenoble Ecole de Management, France
- HEC Paris, France
- Heinrich-Heine-University Düsseldorf, Germany
- Hochschule Bochum, Germany
- Hochschule Bonn-Rhein-Sieg, Germany
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- University of Illinois, USA
- University of Michigan, USA
- Queen's University, Kanada

JACKSTÄDT CENTER RESEARCH FELLOWS

DR. IRIS KUNADT

Since 2023, I am a Research Fellow at the Jackstädt Center of Entrepreneurship and Innovation Research. Since starting at the Max Planck Institute of Economics, I focus on entrepreneurship research. There, I did my PhD with Prof. David Audretsch as my supervisor. Currently, I am also a senior research fellow and member of the advisory board of the Institute of Developmental Strategy (IDS) at Indiana University, USA.



My research has its background in political science and economics and focuses on the emergence of innovation and entrepreneurial ecosystems, as well as entrepreneurial activities in civil society.

Applied research was always important to me. During my time at the Max Planck Institute, I was a member of the International Consortium on Entrepreneurship (ICE), a network of policymakers from ministries of economic affairs and the OECD. Its goal is the development of scientific standards for data collection and analysis of entrepreneurship policies. As a researcher at Fraunhofer Center for International Management and Knowledge Economy (IMW), I was responsible for the World Bank's Knowledge Economy Forum that took place in Berlin in 2009.

I gained my first hands-on founder experience with the start-up KARUU in Vienna. Together with two colleagues, we developed a platform focusing on career-related challenges for parents. KARUU offered Community Building, Coaching and Consulting for career-oriented parents and companies. With KARUU, we participated in the "Durchstarterinnen Lab", hosted by the Wirtschaftsagentur Vienna in Austria. I also published a paper on *parental entrepreneurship*, reflecting

on entrepreneurial activities triggered by the special individual circumstances that emerge in the context of families.

In 2022, David Audretsch and I edited the book „The Covid-19 Crisis and Entrepreneurship. Perspectives and Experiences of Researchers, Thought Leaders, and Policy Makers“. The contributors analyzed the impact of the Covid-19 crisis on entrepreneurship and entrepreneurship research from different angles.

Currently, my research interest lies in *civic entrepreneurship*. Democracies all over the world are under pressure because of massive social and transformational change. Entrepreneurial activities, however, can strengthen and transform democracies in the digital era. Examples are new forms of political participation like the platform „*Frag den Staat*“ or the *Co:Lab Digital*. As a member of this think tank, I look at how the digital transformation can benefit society.

I gain a lot of inspiration from practical experience. Thus, I have also started the initiative *Hallo Rathaus*, which experiments with new political participation on a local level. Since 2020, I am also an elected member of the community council in Nümbrecht.

As a child of the region *Bergisches Land*, where I was born and raised, I am very much delighted to be a Research Fellow at the Jackstädt Center, as one finds an enormous power to create and innovate in this region!

PROF. DR. JAGANNADHA PAWAN TAMVADA

Professor of Entrepreneurship at Kingston Business School, London

I am delighted to be a Research Fellow of the Jackstädt Center of Entrepreneurship and Innovation Research in Wuppertal, Germany, where I work with Professor Werner Bönte and other esteemed colleagues. Werner Bönte and I met during my doctoral studies at the Max Planck Institute of Economics, and our collaboration has since led to highly cited research papers.



I received a PhD in Economics (*summa cum laude*) from the University of Göttingen, Germany. My interdisciplinary research is at the intersection of entrepreneurship, strategy, innovation, AI/digitalization, and sustainable business. Leading journals have published my work, including the *Journal of Business Venturing*, *Regional Studies*, *Small Business Economics*, *Technological Forecasting and Social Change*, *The Journal of Technology Transfer*, *Technology in Society*, *IEEE Transactions on Engineering Management*, *Business & Society*, and others. I have authored books, including „*Microentrepreneurship in a developing country: Evidence for Public Policy*“ (Palgrave) and „*Sustaining entrepreneurship and economic growth: Lessons in Policy and industry innovations from Germany and India*“ (Springer).

For my research, I was awarded the Otto-Hahn Medal by the Max Planck Society (Germany), the Inaugural DRUID Best Dissertation Award (Denmark), and the Kauffman Foundation Best Paper Award at the Academy of Management (USA). Furthermore, research grants from the Max Planck Society, British Academy, EPSRC Impact Acceleration, Bracknell Forest Council, and others supported me on my journey.

Though research takes an important part in my life, I am eager to execute ideas in the private sector. Committed to making a positive impact, I have co-founded *iPowerz*, a digital social enterprise platform aimed at fast-tracking microentrepreneurship and small business growth. This venture reflects my passion for leveraging technology to drive positive change in communities and economies. For this, I was included as a Steward at the *Council for Inclusive Capitalism* with the Vatican.

Recently, I joined the Kingston Business School in London. There, I lead the Responsible Innovation and Sustainable Entrepreneurship (RISE) research excellence hub. The RISE hub's vision is to foster an inclusive and sustainable entrepreneurship ecosystem by advancing scholarship, integrating academic insight with business strategy, and inspiring ethical leadership in business and society.

I am delighted to be a Jackstädt Center Research Fellow and look forward to future collaborative projects with colleagues from the Center!

RESEARCH INTERNSHIPS AT THE JACKSTÄDT CENTER

In 2023, the Jackstädt Center once again welcomed international students for research internships. From June to August 2023, Simon Salaev, a student from the University of Michigan-Flint, USA, completed a research internship at the Jackstädt Center of Entrepreneurship and Innovation Research. Simon supported the research team of the Jackstädt Center in the evaluation of an extensive panel data set of German startups, which was provided for our research project by an external research cooperation partner. Thus, Mr. Salaev worked on the project „*Changes over time in the entrepreneurial orientation of startups*“. Through his internship, he gained insights into research on the topic of entrepreneurial orientation and expanded and deepened his knowledge in the field of data analysis.

Hernán Villanueva, a student at the Universidad del Norte in Barranquilla, Colombia, began his research internship at the Jackstädt Center in October 2023. He supported the joint research project by researchers from the University of Wuppertal and the Universidad del Norte entitled "*External knowledge sourcing and firm performance: The role of management practices*", which was funded in previous years by both the German Academic Exchange Service (DAAD) and the Colombian Ministry of Science, Technology and Innovation (Colciencias). As part of this project, qualitative and quantitative data on the innovation behavior of companies in Colombia was collected through surveys. During his internship, Mr. Villanueva studied management practices in the field of innovation and learned how to analyze data using factor analysis.

Simon Salaev and Hernán Villanueva supported the activities at our research center very well through their work in the team and, conversely, their feedback regarding their stay at the Jackstädt Center was extremely positive. This has led other students from our partner universities to also express interest in a research internship. Due to these positive experiences, students from our partner universities will continue to come to the Jackstädt Center to conduct future research internships.



Prof. Dr. Werner Bönte, Simon Salaev and Adrian Eckstein (f.l.t.r.)

SCALING SOCIAL INNOVATIONS

SUCCESSFUL COMPLETION OF THE THIRD-PARTY FUNDED PROJECT

The third-party funded project „*Collaboration for Social Innovation: Scaling for Impact*“, launched in September 2020, came to a successful conclusion in 2023. The researchers from the University of Wuppertal, the University of Groningen in the Netherlands, Queen's University in Canada and Oxfam UK as a practice partner can look back on three years of great collaboration.

The team at the University of Wuppertal was led by Prof. Dr. Christine Volkmann. Together with Prof. Dr. Christian Rupietta, they also supervised the two doctoral students, Jana Coenen and Markus Thomanek, who conducted research within the project. Following preparatory literature research with post-doc Dr. Diego Soares at the University of Groningen, they identified various research gaps and initiated corresponding projects by summer 2021.

In her dissertation, Jana Coenen focused in particular on non-profit companies that provide renewable energy in some German municipalities. To this end, she worked closely with Prof. Dr. Christian Rupietta and project partners Prof. Dr. Florian Noseleit and Prof. Dr. Björn Mitzinneck from the University of Groningen. In another research project with Prof. Dr. Christian Rupietta, Jana Coenen looked at country-specific factors that can contribute to or prevent entrepreneurial activity. In both projects, she applied qualitative comparative analysis and learned a lot from Prof. Dr. Christian Rupietta, who has been using this method successfully for many years.

In his dissertation, Markus Thomanek focused on researching information asymmetries regarding social and ecological sustainability in supply chains and companies' implementation of corresponding standards. In one of his projects, Mr. Thomanek dealt with the use of digital tools along international physical supply chains. In another project, Mr. Thomanek investigates the practices of start-ups and how

they establish sustainability in supply chains despite limited resources and market power. To this end, he is in contact with international researchers outside the externally funded project. In spring 2023, he also completed a research stay with colleagues at the University of Groningen. On page 40, Markus Thomanek reports about the stay and the exchange on site in detail.

The researchers from the three universities and Oxfam have a lot to look back on. Jana Coenen and Markus Thomanek have taken part in internationally renowned conferences of the Academy of Management (AOM), the European Academy of Management (EURAM), the European Group for Organizational Studies (EGOS), the International Social Innovation Research Conference (ISIRC), the German Association of University Professors of Business Administration (VHB), and the Nordics Logistics Research Network (NOFOMA) and presented the projects of the research project. In addition, other internal and external conferences, paper development workshops, summer schools and seminars were used for professional development and ongoing work on the research projects. The research team has already been able to submit several research projects to renowned scientific journals. Further journal articles are currently being prepared for submission.

We would like to thank all project partners for their excellent cooperation:

Rijksuniversiteit Groningen, Netherlands

- Prof. Dr. Florian Noseleit
- Prof. Dr. Pedro de Faria
- Prof. Dr. Philip Steinberg
- Prof. Dr. Björn Mitzinneck
- Dr. Diego Soares

Queen's University, Ontario, Canada

- Prof. Dr. Tina Dacin

Oxfam Great Britain, Oxford, United Kingdom

- Ruth Mayne
- Filippo Artuso

University of Wuppertal, Germany

- Prof. Dr. Christine Volkmann
- Prof. Dr. Christian Rupietta
- Jana Coenen
- Markus Thomanek

The project is supported by German's Federal Ministry of Education and Research.

RESEARCH VISIT AT THE UNIVERSITY OF GRONINGEN

As part of the externally funded project to research the scaling of social innovations, Wuppertal doctoral student Markus Thomanek spent a research stay at the University of Groningen in the Netherlands from April to June 2023. Mr. Thomanek used this stay to directly exchange with the local project partners and to work on his research projects. He discussed the group's research projects with Prof. Dr. Florian Noseleit, Prof. Dr. Pedro de Faria, Prof. Dr. Philip Steinberg and Prof. Dr. Björn Mitzinneck. Also, he gained insights into the excellent work at the renowned University of Groningen. For example, internationally renowned scientists were invited to present and discuss their research as part of research seminars. Markus Thomanek was also able to deepen his methodological knowledge and establish new contacts with other local researchers.

The now long-standing collaboration with the University of Groningen came about through Philip Steinberg. After successfully completing his PhD at the Jackstädt Center of the University of Wuppertal, Philip Steinberg has been a professor at the University of Groningen for several years. During Markus Thomanek's stay, Philip Steinberg also took on a mentoring role. For a detailed portrait of Philip Steinberg, take a look at our 2022 Annual Report.

The university city of Groningen is located in the north of the Netherlands and, with around 240,000 inhabitants, is slightly smaller than Wuppertal. It is home to the second-oldest university in the Netherlands. With over 400 years of history and top international research, it is repeatedly listed in several top 100 global university rankings. The Faculty of Economics and Business (FEB) at the University of Groningen performs particularly well here. In contrast to the chairs at most German universities, the FEB is organized into departments.

"I am pleased about the opportunity for a research stay. During my time at the University of Groningen, I was not only able to get to know our project colleagues and their research better, but also to make contact with other researchers. Due to the organization in departmental structures, there was always a good exchange between all people and thus also a lot of room for inspiration. I was able to learn a lot and take a lot with me from my stay in Groningen - and I can absolutely recommend a visit to the really beautiful city and the university! I would like to thank Philip, who was my mentor during my time there, as well as the entire department, who made me feel very welcome. It was enriching to get to know Diego, Florian, Pedro and Björn from our project and so many other great and exciting people!"



TEACHING

The Jackstädt Center actively supports the curriculum of the Schumpeter School of Business and Economics and regularly offers lectures and seminars within the Bachelor's and Master's programs.

LECTURES

LECTURES IN THE BACHELOR'S PROGRAM

Lectures at the Chair of Prof. Dr. Bönnte

- Industrial Organization

Lectures at the Chair of Prof. Dr. Fallgatter

- Organization
- Organization and Corporate Governance

Lectures at the Chair of Prof. Dr. Volkmann

- Entrepreneurship, Business Formation and Growth
- Case Study Start-Up Management (Tutorial)
- Start-Up Management Basics
- Specific Aspects of Start-Up Management
- Seminar on Start-Up Management (Tutorial)
- Corporate and Employment Laws for Start-Ups
- Legal Structuring of Company Takeovers and Company Participations
- Industrial Property Rights for Start-Ups

Lectures at the Chair of Prof. Dr. Witt

- Introduction to Economics and Business Administration

LECTURES IN THE MASTER'S PROGRAM

Lectures at the Chair of Prof. Dr. Bönte

- Economics of Innovation
- Experimental Economics

Lectures at the Chair of Prof. Dr. Fallgatter

- Management of Behavior

Lectures at the Chair of Prof. Dr. Volkmann

- Entrepreneurship and Market Development
- Globalization of Competition

Lectures at the Chair of Prof. Dr. Witt

- Energy Economy
- Project Management
- Innovation Management
- Technology Management

SEMINARS

SEMINARS IN THE BACHELOR'S PROGRAM

Seminars at the Chair of Prof. Dr. Fallgatter

- Rethinking Organizational Structures – Opportunities for Exploration and Exploitation
- Home Office – Possibilities and Limits
- Proseminar: Leadership: current problem areas

Seminars at the Chair of Prof. Dr. Volkmann

- Develop your Idea – Design Thinking
- Innovation Development

Seminars at the Chair of Prof. Dr. Witt

- Innovation Management
- Project Management in Energy Economy and Information Technology

SEMINARS IN THE MASTER'S PROGRAM

Seminars at the Chair of Prof. Dr. Bönte

- Applied Strategic Thinking: An Introduction to Game Theory
- Exploring Human Behavior through Games: A Field Experiment in Practice

Seminars at the Chair of Prof. Dr. Fallgatter

- Do your best! Goal Setting Theory in Management Research
- Conflicts in the Workplace – Triggers and Effects

Seminars at the Chair of Prof. Dr. Volkmann

- Business Ethics
- Relevance of the Circular Economy for Entrepreneurial Ecosystems
- Develop your Idea – Design Thinking
- Business Model Development for Innovative Start-up Projects
- Circular Business Innovation
- Living Lab: Transformation of Companies and Society

Seminars at the Chair of Prof. Dr. Witt

- Digital Transformation
- Innovation and Entrepreneurship

TRANSFER

The transfer between science and the regional industry in our region "Bergisches Land" is a major effort of the Jackstädt Center. Besides the cooperation with companies within the scope of research and public events, the Jackstädt Center's directors aim to actively connect students from the University of Wuppertal and regional companies. This is achieved by formats such as the Climathon or by collaborating with the local industry in the context of theses and seminars.

WOMEN ENTREPRENEURS IN SCIENCE

WHAT DOES WOMEN ENTREPRENEURS IN SCIENCE DO?

The Women Entrepreneurs in Science (WES) project aims to set up a statewide network that inspires female students, scientists and alumnae to start a business and supports them on this path. Over 30 universities in the state of North Rhine-Westphalia (NRW) have already joined the WES network. In cooperation with these universities, regular events and workshops are offered at the universities to raise awareness of start-ups. The aim is thus to increase the number of start-ups by women at universities in NRW in the long term.

The project of the Start-up Center and the UNESCO Chair of Entrepreneurship and Intercultural Management at the University of Wuppertal is funded with a total of 1.86 million euros as part of the "Excellence Start-up Center.NRW" initiative.

THE PERSONAL HIGHLIGHT OF THE WES TEAM: FOUNDERS SUMMIT 2023

Every year, the Founders SUMMIT marks a major milestone for the Women Entrepreneurs in Science (WES) project, putting both female founders and their start-ups in the spotlight. The numbers are striking: over 700,000 students, nearly half of them women, yet only 21 percent of start-up founders are female. This untapped potential must be utilized more effectively.

Over 30 universities from North Rhine-Westphalia have joined the WES network. Workshops tailored specifically for female students, employees, and graduates aim to raise awareness of entrepreneurship. Demand for such offers is high, with more than 1,100 participants attending our workshops alone.

The third Female Founders SUMMIT demonstrated this potential. Around 270 visitors came to the University of Wuppertal for workshops on topics like PR strategy, legal matters, pitch training, and design thinking, and to get to know start-ups and their founders in the exhibition area. Fourteen start-ups presented their products and services to the attendees.

The day ended with the inspiring Start-up Battle. Lea Lange, founder of Juniqe, shared insights from her career after seven selected teams presented their pitches to a top-tier jury. University President Prof. Dr. Birgitta Wolff and WES Project Manager Prof. Dr. Christine Volkmann addressed the teams and audience. The award from NRW.Bank and Haufe-Lexware, with €2,000 in prize money, highlighted the support for aspiring founders.

Minister Mona Neubaur (Ministry of Economic Affairs, Industry, Climate Action and Energy of the State of North Rhine-Westphalia) emphasized the great political importance of women's entrepreneurship in her closing speech, praising the commitment of the female founders:

"You are all role models! With your courage, you show that women can successfully launch tech start-ups and thus create incentives for future female founders. It is the task of politicians to provide you with the best possible support and the necessary ecosystems to help you create new, far-reaching value chains for the people of North Rhine-Westphalia."



The WES team with Minister Mona Neubaur (MWIKE)

f.l.t.r. Tim Schüring (WES), Carla Schäfers (former WES), Minister Mona Neubaur (MWIKE), Dr. Ileana Gavrilescu (WES), Rossitza Ivanova (WES), Lena Snykers (WES)

Outlook Founders SUMMIT 2024

The next Female Founders SUMMIT takes place on June 19th, 2024. Once again, there will be exciting workshops as well as an evening start-up pitch-event for female and mixed start-up teams.

The winning teams

First place was awarded to AllCup from the University of Münster. The founding team has developed a patented coating that makes (food) products heat-resistant up to 90°C and water-resistant. In their first use case, they transformed a waffle into an edible coffee cup. Second place went to FINDIQ from the University of Paderborn. FINDIQ enables intelligent integration of knowledge management and assistance systems for machine service. This technology enables users to perform machine servicing at a professional level, simplifying complex tasks typically handled by experts. Anymate Me took the third place. The technology from the founding duo at the University of Cologne produces videos with minimal effort using an AI-based web platform. They use photorealistic avatars and are cheaper than traditional video productions.

The high-profile jury consisted of Dr. Meike Rabanus (Ministry of Economic Affairs, Industry, Climate Action and Energy of the State of North Rhine-Westphalia), Judith Mertens (NRW.Bank), Dr. Ilka Luck (Investor), and Jana Schandua (Founder of Granny Angels).

START-UP CENTER

START-UP WEEK

The second Start-up Week took place from April 17th to April 20th, 2023. The event offered a program focused on start-ups, entrepreneurship, and innovation in Wuppertal, Solingen, and Remscheid. With this initiative, which takes place regularly, the organizers draw attention to the existing support network for founders in the region. There were many opportunities for regional stakeholders to participate in the program and help shaping it. The University of Wuppertal's Start-up Center offered two workshops right at the start of the program on 17th April:

The "Start-up Crash Course" provided participants with fundamental knowledge of the start-up world. Topics, such as creative methods for idea generation, validation of business models, and different legal forms of businesses were discussed along the start-up journey. Participants had the opportunity to ask individual questions and network with others.

The second workshop, "From Research to Entrepreneurship: These Funding Opportunities Exist" discussed topics ranging from the commercial exploitation of research ideas to the right timing for funding. Five different funding programs, VIP+, EXIST Gründungsstipendium, EXIST Forschungstransfer, Start-up Transfer NRW, and the Gründungsstipendium.NRW were presented. Afterward, one project team funded by the EXIST Research Transfer from the University of Wuppertal shared its experiences about the application process.

DESIGN THINKING SEMINAR

In the 2023 summer semester, the Start-up Center of the University of Wuppertal built upon previous years' success and offered students two seminars on Design Thinking. Based upon various real-life challenges, students had the opportunity to experience Design Thinking in theory and practice. In interdisciplinary small groups and guided by experienced coaches from the Start-up Center, students went through all stages of the Design Thinking process: Understanding, Observing, Defining Perspectives, Ideation, Prototyping, and Testing.

The first seminar group with 20 participants developed innovative, sustainable solutions for future mobility in Wuppertal. On the first day, students conducted interviews at places like the Wuppertal Zoo and in a vibrant Wuppertal neighborhood to better understand the behavior and problems.

In collaboration with the City of Wuppertal, the second group, with 22 participants, tackled the challenge of redesigning the counseling services for clients of the city's social welfare office and conducted interviews with its visitors and employees.

Subsequently, all students developed ideas in the Freiraum, the university's co-working space, and tested them again on-site with the respective target audiences. Finally, the students presented the results. The ideas of both teams sparked the interest of the city and the social welfare office intends to incorporate them into the design of its new office, which is currently under construction.

SUSTAINABLE START-UP DAYS 2023

From June 12th to August 10th, 2023, the Start-up Center placed sustainability once again at the forefront and hosted the Sustainable Start-up Days. In various events, people and organizations came together to focus on the social and sustainable start-up scene. The kickoff event "Mittelstand meets Start-up - Shaping the Future Together" in cooperation with Neue Effizienz gGmbH took place on June 12th, 2023, at the Stadtparkasse Wuppertal. Innovative, sustainable start-ups, small and medium enterprises (SMEs), researchers, and politicians united to jolt partnerships for social and ecological sustainability.

Various experts gave thought-stimulating addresses to around 90 participants: Mechanical engineering graduate Sercan Atesoglu, founder of the start-up KINEMO, supported by an EXIST start-up grant from the University of Wuppertal, discussed how cooperating with an established company helped him achieve a breakthrough. The start-up's X-ray and video analysis make it possible to detect and rectify faults in components at an early stage. Also, Jonas Geyer reported on the successful collaboration of his start-up with an industrial SME to optimize the collection and utilization of environmental data.

Thomas Sattelberger, former DAX board member and parliamentary state secretary, emphasized the necessity of innovation for societal and corporate shifts toward sustainability. He stressed the special role of universities and higher educational institutions in promoting innovation.

In a lively panel discussion, the discussants examined the challenges of collaborations between start-ups and SMEs. Apart from Thomas Sattelberger, Dr. Johannes Velling from the Ministry of Economic Affairs, Industry, Climate Action and Energy of the State of North Rhine-Westphalia, Dr. Dorothee Becker from Gebr. Becker GmbH, founder Lars Havighorst from BlueActivity, and University President Prof. Dr. Birgitta Wolff participated. The debate, bringing together SMEs, start-ups, politicians, and scientific researchers, provided valuable insights for

forming successful partnerships. The participants followed up on the impulses on collaborations in a workshop in August.

MEET, GREET + BEAT VOL. 3

As part of the Sustainable Start-up Days, the University of Wuppertal once again hosted the Meet, Greet + Beat roadshow organized by the Ministry of Economic Affairs, Industry, Climate Action and Energy of the State of North Rhine-Westphalia (MWIKE) in July 2023.

The third edition of Meet, Greet + Beat was dedicated to social entrepreneurship and climate protection at a total of seven locations. In addition to start-ups and people interested in founding a company, the region's organizations dedicated to start-up support were also represented. Prof. Dr. Christine Volkmann and Dr. Johannes Velling of MWIKE welcomed the participants.

Five promising start-ups presented their forward-looking ideas to a jury with the chance of making it to the grand roadshow final in Düsseldorf in autumn 2024. The team from CRCL GmbH from Krefeld won in Wuppertal. By developing and selling a recyclable compound made from previously non-recyclable used clothing and plastic waste, the start-up offers a solution for the furniture industry and other sectors. Second place went to the team from the Aachen-based start-up "keep it grün", whose business model revolves around the soil enhancer biochar, which is becoming increasingly important due to the climate crisis. The audience award went to "fairmisch" GmbH. The Wuppertal-based company has developed an oat drink concentrate that differs from conventional oat milk due to its significantly reduced water content.

The subsequent exchange between participants and spectators offered networking opportunities and rounded off the event.

CIRCULAR INSIGHTS

In November 2023 students and young professionals collaborated with committed companies to develop solutions for a circular economy at the Circular Insights event in Wuppertal. Over three days, several teams worked on real-world cases focusing on circular construction, the sharing economy, and eco-design. Neue Effizienz gGmbH organized the event, with Start-up Center advisors providing coaching support. Furthermore, the Start-up Center translated the results of Circular Insights into concrete business models through a teaching format with students.

START-UP DAYS 2023

As part of the Start-up Days from November 20th to 23rd, 2023, the topics of start-ups and innovation were prominently featured at the University of Wuppertal. Under the motto "Entrepreneurship is diverse", the Start-up Center invited students, staff, and other interested individuals to engage in discussions with exciting people from the start-up scene. The grand pitch final on November 23rd was the highlight of the Start-up Days. Successful start-up teams from the University of Wuppertal competed on a big stage for a 5,000 € prize.

That evening, the start-up "DataLabel" was awarded the first prize. By developing an innovative data pipeline solution, the start-up enables the complete and efficient processing of raw data into training data needed for training artificial intelligence. The start-up "Step into Motion" took the second place. The team developed an online platform that supports cancer aftercare patients returning to a healthy life. "Töpferstation" got the third place. Its founders Lea Schöning and Eva BöSSERT aim to create a space for creative experimentation, offering suitable options for every budget. Additionally, successful entrepreneur Franziska Scheel from "feelfood" delivered an inspiring keynote, sharing insights into the challenges of her entrepreneurial journey.

DESIGN-THINKING SEMINAR IN COLLABORATION WITH THE EUROPA- UNIVERSITÄT FLENSBURG

In November 2023, the Start-up Center offered another curriculum-based seminar on Design Thinking for students, this time in collaboration with the EXIST-funded Europa-Universität Flensburg. Students had the opportunity to experience Design Thinking in theory and practice through various challenges. Ten students from Flensburg came to Wuppertal, where they worked on challenges related to urban mobility together with 21 students from Wuppertal. In interdisciplinary small groups, guided by experienced coaches from the Start-up Center, students went through all stages of the Design Thinking process: Understanding, Observing, Defining Perspectives, Ideation, Prototyping, and Testing. Finally, all teams presented their solutions.



BERGISCH.SOZIAL

With the "bergisch.sozial" project funded by the BMBF in 2023, Prof. Dr. Christine Volkmann and her team strive to provide access to the topics of social innovation and social entrepreneurship to as many members of the University of Wuppertal as possible. The goal of the initiative is to comprehensively raise awareness, especially in courses that are less associated with social innovations and social entrepreneurship.

The team pays particular attention to (doctoral) students in the humanities, cultural, social, and natural sciences, and especially aspiring teachers. These areas hold significant, largely untapped potential. Prospective teachers in particular are important multipliers who can bring pupils in schools into contact with social entrepreneurship topics at an early stage.



INTERVIEW WITH PROF. DR. PETER WITT

ON HIS NEWLY PUBLISHED BOOK "RELATIONSHIP COMPETENCY"

Jackstädt Center: Dear Professor Dr. Witt, your work and your newly published book "Beziehungskompetenz – Soziale Bindung in Zeiten von Digitalisierung und gesellschaftlichen Krisen" (Relationship Competency – Social Bonds in Times of Digitalization and Societal Crises) have inspired us greatly and we look forward to learning more about your thoughts and experiences.

Let's start with the genesis of this book. Are there any particular experiences or encounters that had a particular influence on the themes and ideas in your book?

Peter Witt: The most important reason for writing this book was the pandemic. Our social relationships were severely restricted and everyone could see how serious that was. In contrast, people with more relationship competency got through the pandemic much better because they were able to maintain their social relationships.

JC: Can you give us an insight into the process of writing this book?

PW: I first wrote down the most important topics that I wanted to cover. Then, I did a lot of research and reading because I wanted to reflect on the current state of research. I then added examples to the scientific passages and made sure that there was a clear thread running through the whole book.

JC: Were there any particular challenges or surprises during the writing process?

PW: There were no surprises. I had written a popular science book before. However, there is always a big challenge: It's finding a good publisher. However, as an author, you can only start looking once you have a manuscript that is halfway ready for print.

JZ: Fortunately, you found a good publisher. You are writing about relationship competency. What is relationship competency and how does it affect our everyday lives?

PW: Relationship competency is characterized by the ability to enter into productive communication and cooperation relationships with different people and to mediate between different people and parties. Relationship competency is necessary in order to enter into partnerships for the benefit of all parties and the community.

JZ: Can relationship competency be learned?

PW: There are definitely innate personality traits that make people more competent in relationships. Among these are agreeableness and openness from the canon of the Big Five. The ability to empathize also seems to be largely innate. Still, there are also behaviors that can be learned. Everyone can learn to listen more attentively, break down prejudices, and communicate clearly themselves.

JZ: How important do you think social relationships are for entrepreneurs and why?

PW: They are extremely important. There are many examples of this. Lasting and trusting customer relationships increase revenue, lead to customer recommendations, and provide inspiration for innovation. Relationship competency in project management with external partners increases work efficiency and makes projects more successful. Entrepreneurs need leadership and relationship skills to achieve employee satisfaction, which also has a significant effect on productivity.

JZ: That makes sense. Let us talk about digitalization. How has it changed the way people, and in particular entrepreneurs, build and maintain relationships?

PW: In my opinion, this is an important and underestimated topic, especially in HR. As a result of digitalization, we meet less often in person and more often in video conferences. This may seem efficient, but it

noticeably reduces social cohesion in organizations. Digitalization and the pandemic have also given rise to a whole new culture of working from home. The social costs of this are often overlooked. They include a lack of a sense of connection and lead to feelings of loneliness. Unfortunately, team productivity also suffers because only a fraction of colleagues is on-site on office days. In the end, everyone works for themselves and there is less and less loyalty to the employer. And then there's dealing with customers. In the age of digitalization, we can only reach them with chatbots and very short videos on social media. Content-based marketing communication and building a social relationship with customers are hardly possible anymore.

JZ: That's right, the changes brought about by digitalization are multifaceted. Thank you very much for sharing your insights and experiences! This perspective on entrepreneurship and innovation research is definitely enriching and important and certainly inspiring for our readers. Your book also contains many other insights that are particularly important beyond everyday entrepreneurial life. We can therefore highly recommend reading it and look forward to your future research and work. All the best and continued success!

Peter Witt: "Beziehungskompetenz – Soziale Bindung in Zeiten von Digitalisierung und gesellschaftlichen Krisen." Stuttgart: W. Kohlhammer GmbH 2023, 230 pages, 32.00 Euro.

FINANCIAL SUSTAINABILITY

To ensure the Jackstädt Center's financial viability sustainably, raising external funding remains a continual concern. In the following section, we highlight fundraising activities that provide insights into the successful work of the past years.

EDUCATING FUTURE SUSTAINABILITY LEADERS AND INNOVATORS

The European Commission funds the project as part of the Horizon 2020 initiative.

Project duration: 09/2022 - 08/2023

Funding volume: 250.000 €

Project partners:

- Prof. Dr. Christine Volkmann: UNESCO Chair of Entrepreneurship and Intercultural Management
- Prof. Dr. Philipp Trotter: Chair of Sustainability Management

Project goals:

The project "Educating future sustainability leaders & innovators" aims to create a solution-oriented teaching and learning model for entrepreneurial education for sustainable development (ESD). To this end, the project pursues three subobjectives:

Students learn to think systematically as well as inter- and transdisciplinary and to analyze complex social change processes. To encourage interdisciplinarity, a specially designed Master's seminar is open not only to students from the Schumpeter School of Business and Economics but also to those from the Faculties of Design and Art, and Mechanical and Safety Engineering.

Interactive, experience-based teaching methods are used to enhance students' design competencies for sustainable development, with a particular focus on co-creative and action-oriented learning. Methods and content from education for sustainable development (ESD) play a central role in this approach.

Additionally, the transdisciplinary orientation allows students to collaborate with regional companies, NGOs, and civil society to develop practical solutions, such as those related to the circular economy. These collaborations provide students with the opportunity to implement their ideas, including through support for launching new ventures. As a result,

students gain both theoretical knowledge and hands-on experience in sustainable entrepreneurship within interdisciplinary contexts.

The team designed the teaching concept in the winter semester 2022/23 and implemented it in the summer semester of 2023. Students, faculty, and industry partners were involved from the beginning to ensure the concept was tailored to their needs, experiences, and goals.

After the course is completed, the concept will be evaluated and redesigned into a modular kit. This will provide lecturers from various disciplines with an innovative resource for integrating sustainability topics into their courses.

EXIST POTENTIALS

The German Federal Ministry for Economic Affairs and Climate Action (BMWK) funds the project.

Project duration: 06/2020 - 12/2024

Funding volume: 1.9 million €

The Start-up Center, developed from the Freiraum innovation lab through dedicated funding, aims to harness start-up potential and boost university spin-offs. As a transfer unit of the Jackstädt Center and the university's main hub for entrepreneurship, it serves as a direct point of contact for students, staff, and graduates of the University of Wuppertal interested in launching their own businesses.

WOMEN ENTREPRENEURS IN SCIENCE

The Ministry of Economic Affairs, Industry, Climate Action and Energy of the State of North Rhine-Westphalia (MWIKE) funds this project as part of the “Excellence Start-up Center.NRW” initiative.

Project duration: 07/2020 - 12/2024

Funding volume: 1.86 million €

Women Entrepreneurs in Science is a network for female students, employees and graduates of universities in North Rhine-Westphalia. The project aims to support (aspiring) female founders in their start-up plans and networking with relevant actors.

COLLABORATION FOR SOCIAL INNOVATION: SCALING FOR IMPACT

The Federal Ministry of Education and Research (BMBF) funds this project.

Project duration: 09/2020 - 08/2023

Funding volume: 300.000 €

The Jackstädt Center of Entrepreneurship and Innovation Research carries out the project on scaling social innovations in collaboration with researchers from the University of Groningen (Netherlands), Queen's University (Canada) and Oxfam (United Kingdom). The researchers investigate how the positive impact of social innovations can be successfully increased. These social innovations often take place in contexts that have a strong local or regional connection. Read more about the project on page 37.

OUTLOOK

With this 2023 annual report, we aim to provide insights into the successful work of the Jackstädt Center and the Start-up Center. In 2024, we plan to build on the successes in research and knowledge transfer. Once the appointment of the W2 professorship at the Jackstädt Center has been successfully completed, we expect to bring fresh momentum to both our research and the Center's ongoing development. A key priority is to continue advancing projects with our Research Fellows and to further expand international collaborations.

The Start-up Center and the Women Entrepreneurs in Science project will continue their outstanding work in 2024. Preparations are already underway for the popular Start-up Days and the Women Entrepreneur Summit.

As several major third-party funded projects come to an end in late 2024, the Jackstädt Center, involving the Start-up Center, is preparing applications for new funding opportunities from the EU, federal, and state governments. With the formation of the Impact Alliance in 2023, in partnership with the University of Hamburg, LMU Munich, and Eberswalde University of Applied Sciences, we will focus on impact entrepreneurship. We are also working closely with Circular Valley to strengthen initiatives related to the circular economy and circular start-ups.

Finally, we are pleased to announce that we will host the Jackstädt Fellow Meeting in collaboration with the Jackstädt Foundation on December 4, 2024.

We look forward to the exciting research and events in 2024 and invite you to engage with the Jackstädt Center and Start-up Center throughout the year. For collaboration inquiries, please contact us at jackstaedt@wiwi.uni-wuppertal.de or +49 (0)202 439-3178.

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