



Activity Report 01/09/2013 – 31/08/2014

Chair in Entrepreneurship and New Business Development

Professor Dr. Christoph Hienerth



From left to right, front row: Monika Hauck, Prof. Dr. Christoph Hienerth, Christopher Smolka
Back row: Frederik Riar, Ulrike Cappel, Dennis Wayer

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Preface

This is the second year of the Chair in Entrepreneurship and New Business Development at WHU. Since our first year we have grown substantially from four to eight people: The chair is now represented by Ulrike Cappel (chair management), Frederik Riar, Dennis Wayer, Christopher Smolka and Monika Hauck (internal doctoral candidates), David Tamoschus and Rebecca Stallbaumer (external doctoral candidates) and myself. This increase in team size has allowed us to further develop entrepreneurship teaching and projects on all levels of education at WHU in the second year of activity. We have also been able to develop research projects that were presented at major international conferences and published in leading scientific journals in the field of entrepreneurship and innovation.

The title of the chair reflects our fields of activities: We want to educate and inspire students and partners for individual entrepreneurial activities and also for corporate entrepreneurial activities in which innovations and novel business models are developed. The entrepreneurial setting provided by WHU is unique: students, professors, business partners and alumni all share the vision to co-create entrepreneurial opportunities and develop interesting business ideas. We are proud to have contributed to the entrepreneurial spirit in the following ways over the last year:

In research, we have developed a broad portfolio of entrepreneurship and innovation related topics. These include, for instance, the concept of psychological ownership and its relevance for entrepreneurs and their activities in incubators and accelerators, the concept of validity for the evaluation of novel business ideas, the emergence of the sharing economy and the implications for the development of innovative business models and organizational forms, and business ecosystems, their emergence and functioning. The topics are presented in more detail in the research section of the report. Over the last year, 3 major publications have been published in A-ranked peer reviewed international journals (two in Journal of Product Innovation Management, one in Research Policy). Together with the doctoral students of the chair, 6 working papers were presented at leading scientific conferences, including OUI (Open and User Innovation Conference), DRUID (Danish Research Unit on Innovation and Development), World Open Innovation Forum. In the latter, the paper named “The Architecture of Evaluation Processes in Open Innovation Settings” was selected as one of three best papers of the conference and will be presented in a special showcase session at Berkeley in December 2014. Last, several reviews were done for leading international journals such as Research Policy, Journal of Product Innovation Management, Long Range Planning, Entrepreneurship Theory & Practice, Business Research, Journal of Management Studies.

In teaching, we have expanded our course offerings to all educational levels at WHU. We are now teaching entrepreneurship topics in the BSc and MSc programs, in the MBA and EMBA programs and in executive education (General Management Plus). This course system represents a comprehensive teaching framework together with the courses of Professor Malte Brettel, head of the second Entrepreneurship Chair at WHU. This effort has led to a course system that provides full coverage of entrepreneurial activities and processes ranging from the first creative ideas to corporate entrepreneurship. Students at WHU can now select courses in any entrepreneurial phase or activity. We thus created one of the most complete teaching frameworks provided in Germany and Europe.

Another important topic in teaching that the chair is engaging in is sustainability. Having won one of only five fellowships for innovative teaching from the “Stifterverband der Deutschen Wissenschaft” (the business community's innovation agency for the German science system), we follow an innovative teaching-lab approach and lead Bachelor's and Master's students towards developing a better understanding and mastering of theories and applications in sustainable management for selected cases and partner companies. Within the framework of this lab, we have introduced design thinking techniques to WHU students and cooperated with local companies from the packaging cluster in a project that has

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been covered in press and TV media. We have also initiated a WHU Blog on Sustainability on which the final reports of 17 teams can be found.

Also in this second year of activities, we have followed a very open and practitioner-oriented strategy in order to provide the students with interesting presentations and to extend the network of WHU. We have invited leading managers from, e.g., Google, Allianz Digital Accelerator, Audibene, Deutsche Bahn, Tirendo, Osborne Clarke, Socialfunders, Deutsche Post to name just a few examples. In sum, we have organized 19 talks from external managers in our courses. We have also cooperated with WHU alumni who have successfully built up new ventures, incubators and business accelerators. We have furthermore cooperated with the local start-up institutions, incubators and tech centers. Yet another interesting and very fruitful activity of the chair is the ongoing involvement in student initiatives and activities: We have collaborated with student teams and organizers of IdeaLab, 3DS (Three Day Startup), Sensability, Startup Weekend Koblenz and SmartUp. We will further expand such activities and create close links between students, managers and partners to channel practical insights and experiences to our course system so that students can learn and apply important topics, tools and methods.

I am furthermore happy to report that there are first cases of students and partners from the chair starting up their own businesses: Over the last year, we have closely followed the development of several real business ideas such as BubbleApp, Holzgespür, Socialfunders and Goodnity.

Another important activity of the Chair in Entrepreneurship and New Business Development is the work on the topic of MOOCs (Massive Open Online Courses) and electronic teaching. While in the first year of activity of the chair we have mainly been observing the international development of electronic content and courses, we have started to develop first own prototypes last year. We have been doing this work in two different settings: One is WHU internal, in order to develop experiences and standards for all WHU colleagues who want to develop electronic content themselves. Another one is in an international setting: The Chair in Entrepreneurship and New Business Development has established close contacts to Harvard Business School and MIT and is working on a joint project for the exchange of electronic teaching material, including over twenty international chairs on the topic of innovation and entrepreneurship. Our work on electronic teaching and MOOCs has also enabled us to comment on the international and German development, leading to fruitful media coverage in press (Süddeutsche Zeitung of 22-23/02/2014, „Der Arbeitgeber fragt nach“; Die Welt of 01/03/2014, „MBA-Studium zum Nulltarif“; Handelsblatt/Karriere of 27/06/2014, „Keimzelle für Gründer“).

On a final note, I have taken over the role of the group speaker for the Entrepreneurship and Innovation group at WHU last year. The group represents 7 full professors and 3 assistant professors and provides an interesting portfolio of topics: We cover the full range of entrepreneurship-related topics, include innovation, technology and organizational relevant subjects, and furthermore include family business and aspects of finance within that topic as well as the newly founded center of sports management and society.

To summarize, WHU provides an extremely fascinating and fertile ground for our work and activities. We are happy to contribute to the entrepreneurial spirit at WHU and will work hard on further developing and continuing that spirit with students, colleagues and partners.

Vallendar, Oktober 2014



Prof. Dr. Christoph Hienerth

Team

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Doctoral Candidates

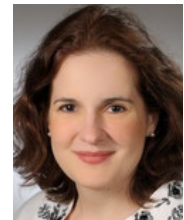
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Team

Chairholder

Professor Dr. Christoph Hienerth



Professor Christoph Hienerth was appointed to the Chair of Entrepreneurship and New Business Development at WHU – Otto Beisheim School of Management in June 2012. He holds a doctoral degree (equivalent to a PhD) from WU Vienna, where he also completed his post-doctoral degree (Habilitation) as an Assistant Professor at the Department for Entrepreneurship and Innovation. From 2006 to 2012 he held a tenured position as Associate Professor at Copenhagen Business School, Department for Innovation and Organizational Economics. Professor Hienerth had several research visits and fellowships at Massachusetts Institute of Technology (MIT), Harvard Business School (HBS), McGill University, and George Washington University.

His research has been published in leading international and national refereed journals such as Research Policy, IEEE Transactions on Engineering Management, Journal of Product Innovation Management, Long Range Planning, Journal of Organizational Design, Family Business Review, Zeitschrift für Betriebswirtschaft (ZfB). His work, both in research as well as in teaching has won several awards. Professor Hienerth has gained expertise in corporate entrepreneurship through several industry projects with international companies such as Schindler, Deutsche Telekom, Palfinger, Bayer, MAN, LEGO, Fujitsu, Siemens VDO, SAS, Grundfos and Coloplast. Voluntarily serving on the committee of two technology incubators, the Technology Center in Koblenz and the Build Incubator in Klagenfurt, Professor Hienerth has also gained detailed insights in numerous entrepreneurial careers and start-up projects. He has given keynotes and was scientific advisor for governmental institutions in several countries such as Sweden, Denmark, Finland, UK, Czech Republic. His research focus and interests lie in the field of the identification and development of opportunities, entrepreneurship in open and user innovation settings, entrepreneurial risk and uncertainty, corporate entrepreneurship, business ecosystems and new business models and social entrepreneurship.

Personal Assistant

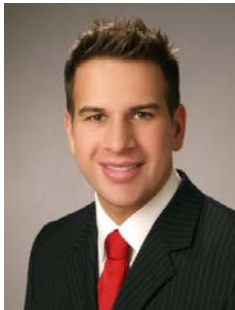
Ulrike Cappel



Ulrike Cappel, joined the Chair in Entrepreneurship and New Business Development in June 2012 as the Personal Assistant of Professor Hienerth. Having completed her apprenticeship as a language correspondent in Coblenz she worked as a secretary in several companies, e.g., Unitel in Paris, Siemens AG in Munich, Ortopedia GmbH in Kiel and ThyssenKrupp in Bendorf. Since 2005 she is with WHU and possesses profound skills as a Personal Assistant.

Team

Research Assistant Frederik Riar, M.Sc.



Frederik Riar joined our chair as Research Assistant and Doctoral Candidate in September 2012. Earlier in his professional career, Frederik worked as management consultant at the PricewaterhouseCoopers AG WPG in Frankfurt and Mannheim.

Frederik received his Master of Science degree from the University of Hohenheim majoring in Finance, Accounting, and International Innovation Management. As a part of a scholarship from the Landesstiftung Baden-Wuerttemberg for highly qualified students, Frederik spent several semesters at the University of Connecticut, Storrs and the California State University, Fullerton. In addition, to his academic education, Frederik gained practical experiences in the consulting, banking, and automotive industry at PricewaterhouseCoopers I.L. in Johannesburg (South Africa), PricewaterhouseCoopers AG WPG in Stuttgart, LBBW Equity Partners GmbH & Co. KG in Stuttgart, Daimler AG in Stuttgart, MassMutual Financial Group in Newport Beach (USA), and Daimler AG in Germersheim.

In his dissertation, Frederik concentrates on the architecture of evaluation processes in closed and open innovation settings as well as on the evaluation and due diligence processes of crowdinvestors in equity crowdfunding. Frederik supports the course Developing Novel Business Models (previously named Entrepreneurial Opportunities and Business Models).

Research Assistant Dennis Wayer, M.Sc.



In December 2012, Dennis Wayer joined our chair as a Research Assistant and Doctoral Candidate. He completed his Bachelor of Business in International Business at the University of Western Sydney (UWS), Australia and the Universidad del Salvador in Buenos Aires, Argentina. Additionally, he attained a Master of Science in International Management at ESADE Business School in Barcelona, Spain. After first startup-experience and practical trainings in the consulting and automotive industry, Dennis assisted a medium-sized engineering company in expanding its product portfolio. There he started working for the company's marketing and sales department where he gained additional experience in the dynamics of corporate development and business venturing. His research focus is on entrepreneurship and in particular on venture creation and corporate venturing through business enablers, such as incubators, venture capitalists, business angels, and accelerators. The prospective title of his dissertation is: „The Influence of Psychological Ownership on Entrepreneurial Activity.” Dennis supports the course Corporate Entrepreneurship and Open Innovation.

Team

Research Assistant

Christopher Smolka, M.Sc.



In July 2013, Christopher Smolka joined our chair as Research Assistant and Doctoral Candidate. Christopher holds a Bachelor's degree in Business Administration from the University of Mannheim. Additionally, he worked as student assistant at the Institute for Small Business Research. As part of his Bachelor's studies, he spent a semester abroad at the French Grande École ESSEC in Cergy-Pontoise. Furthermore, Christopher graduated with a Master's degree in Business Administration from Saarland University. Moreover, he worked as student assistant at the Institute for Taxation and Entrepreneurship. As part of his Master's studies, he spent a semester abroad at Copenhagen Business School. After first experiences in banking and consulting, Christopher completed internships in the fields of business development and strategy at Bertelsmann and at Project A Ventures.

His research focuses on sharing economy models operating along a range between open and closed innovation.

Christopher supports the courses Sustainability Lab as well as Creating Social Value (previously Social Entrepreneurship).

Research Assistant

Monika Hauck, M.Sc.



Monika Hauck joined the Chair in Entrepreneurship and New Business Development in September 2013 as a Research Assistant and a Doctoral Candidate. In April 2013 she received her Master of Science degree in Management from European Business School in Oestrich-Winkel, where she specialized in Strategy and Finance. During her master's studies she spent a semester abroad at EDHEC Business School Nice specializing in Corporate Finance. In Germany, Monika gathered practical experience at HSBC Trinkaus Alternative Investments Department and at Deloitte and PricewaterhouseCoopers Transaction Advisory Departments specializing in both financial and commercial due diligence processes. During her bachelor's studies in San Diego, California, she accomplished internships at Sony Electronics Treasury and Business Development Department and at Girard Securities Corporate Finance Department. Following her passion for alternative investments Monika has completed certificate courses in Art Valuation, Real Estate, Venture Capital, and Social Innovation.

Her research interests lie in business and entrepreneurship ecosystems, platform business models, and innovation management and diffusion. At the chair Monika supports the Creating Social Value course (previously Social Entrepreneurship) and undertakes analysis of the massive open online course (MOOC) market development.

Team

Doctoral Candidate

David Tamoschus, Dipl.-Geogr.



David joined the Chair in Entrepreneurship and New Business Development as a Doctoral Candidate in May 2013. He received his Diploma in Geography, specialized in Economic Geography, from the University of Bonn. In his studies, David focused on open innovation and knowledge management research in projects of the German Research Foundation (DFG) and the Italian Ministry of University and Education (MIUR), during which he spent several months at Bocconi University, Milan, and at Copenhagen Business School. David joined Bayer Healthcare in early 2009 as Manager for Organizational Structures and Business Processes in Seoul, South Korea, before he moved to Bayer's Business Consulting unit in Leverkusen in 2011, where he supported various projects in Bayer Healthcare's R&D, particularly in the field of innovation sourcing and alliance management. Since August 2013, David is responsible for the market access of Bayer's oncology products in Germany.

Doctoral Candidate

Rebecca Stallbaumer, Dipl.-Kffr.



Rebecca joined the Chair in Entrepreneurship and New Business Development as a Doctoral Candidate in January 2014. She received her Diploma in Business Administration from WHU Otto – Beisheim School of Management. During her studies, she focused on technology and innovation management as well as supply chain management and spent semesters abroad at ICADE in Madrid and the Tuck School of Management in Hanover, NH. Following her studies, Rebecca joined Siemens mobile phones where she served as Chief of Staff at Xelibri, an intrapreneurship venture that launched two collections of mobile phones targeted at the fashion phone market. In 2005, she moved to Houston, TX to work as a Project Manager for the consulting firm Katzenbach Partners, leading client projects in organizational development and change management. Before returning to WHU, Rebecca served as Executive Director of BRITE Inc., the nonprofit affiliate of BroadReach Healthcare, based in Washington, DC. Her work focused on the development and implementation of management and leadership programs targeted at healthcare professionals in developing countries, especially in Sub-Saharan Africa. While conducting the research for her PhD, Rebecca also supports the WHU Career Center, offering career counseling for MSc students and focusing on the internationalization of the center's activities.

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Together with the chair in Entrepreneurship II, led by Professor Malte Brettel, we have developed an overall entrepreneurship education framework. It includes courses in all important entrepreneurial phases. WHU can thus offer its students one of the most complete and practically relevant education programs in Entrepreneurship in Germany and Europe. The chair of Professor Hienert is focusing on the very early and creative phases of entrepreneurship (identification and development of entrepreneurial opportunities) as well as entrepreneurial activities of incumbent firms (Corporate Entrepreneurship). Furthermore, we have put emphasis on developing a rising and important topic for the students at WHU: Social Entrepreneurship. In Social Entrepreneurship, we are looking at novel business models and organizational forms that create shared value (a term coined by Michael Porter), value that benefits all participants of entrepreneurial activities, not only the producer or incumbent firms. Also, we have developed a novel teaching format called “Sustainability Lab” that has received a fellowship from the “Deutscher Stifterverband für die Wissenschaft” (the business community's innovation agency for the German science system), selected as one of the most innovative teaching projects in Germany in 2012.

The teaching is offered at all levels of education, including Bachelor's, Master's and Post Experience Programs. Our courses were evaluated exceptionally well, which is probably due to a combination of important theoretical components as well as a broad set of invited guest speakers and applicable tools and methods supplied.

Courses

Identifying Entrepreneurial Opportunities (Spring 2014; Module; BSc.)

Identifying Entrepreneurial Opportunities is a module, which comprises the courses Developing Novel Business Models and Creating Social Value. The courses represent the very starting point for the development of novel business models which can either be commercial or social.

In order to ideally convey the theoretical and practical features of both the commercial and the social perspective, this module consists of two different courses, “Developing Novel Business Models” and “Creating Social Value”.

In the module part “Developing Novel Business Models”, the students learn how to generate promising business ideas, to evaluate them and to design an innovative business model around this idea using the business model canvas and lean startup methodology.

By participating in the second module part “Creating Social Value”, the students are provided with specific insights on the social business dimension that help them create their own novel social business model effectively addressing respective social needs and involving supportive actors.

Please find more information on both module parts in the following two sections.

Entrepreneurial Opportunities and Business Models (Fall 2013; BSc.) / Developing Novel Business Models (Spring 2014; Module Part I; BSc.)

This course is based on literature dealing with the entrepreneurial process, opportunity identification and evaluation, business model generation, creativity, and rating systems.

This course emphasizes on gaining an understanding of theoretical and practical aspects of entrepreneurship and gives an introduction to the very early stage of the entrepreneurial process. During the course, the students deal with the generation and identification of promising entrepreneurial opportunities as well as the systematic evaluation of business concepts. Furthermore, the course provides content on lean startup and addresses the required skills to develop an initial business model. This course

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Courses

is a useful and often needed preparation for a business planning course, as it addresses the usual challenges for teams preparing for a business plan and startup, e.g., developing uniqueness of an idea, understanding and describing the value of an idea, developing and using creative skills, understanding and working with the different components of a business model to describe a business idea.

The course is based on literature dealing with the entrepreneurial process, opportunity identification and evaluation, creativity, evaluation of value, business model generation, and the lean startup method.

The guest speakers invited for this course format represent a mixture of entrepreneurs and also managers of incubators and accelerators. We are aiming to provide the students with a broad practical experience from different institutions involved in the entrepreneurial process:

Fall 2013

Guest Speaker	Position	Company	Company Webpage
Erik Heinelt	Founder	Tirendo	www.tirendo.de
Jan Leicht	Sales POS Systems	SumUp	www.sumup.de
Guido Hegener	Partner	XL Health	www.xlhealth.de

Spring 2014

Guest Speaker	Position	Company	Company Webpage
Dr. Sebastian Sieglerschmidt	Managing Director	Allianz Digital Accelerator	www.digital-accelerator.com
Tim Betzin	Founder/ Managing Director	Bubble App	www.bubbleapp.net
Dr. Marco Vietor	Founder/ Managing Director	Audibene	www.audibene.de

Social Entrepreneurship (Spring 2014; BSc.) / Creating Social Value (Spring 2014; Module Part II; BSc.)

In its traditional form, social entrepreneurship is mostly dealing with developing countries and health-, education- or income-related issues of the poor and socially neglected groups of people. As such, social entrepreneurship projects have often been followed and partly managed or organized by international non-profit organizations.

However, current trends and developments point towards an increased interest of entrepreneurs in starting social ventures that contribute to social development and to society while also generating profit. As such, social entrepreneurs face the challenge to balance social topics and ideas with business models targeted towards generating revenue and surplus.

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In this course, we look at traditional forms of social entrepreneurship and focus on entrepreneurial opportunities that deal with current social issues and challenges. While social entrepreneurship has emerged from projects in countries in, e.g., Africa or India, this course also looks at social topics in Europe, Germany and other developed countries. Jointly, we identify important social topics that, for instance, deal with unemployment, financial illiteracy, immigration, the homeless, sick or care for the elderly. We discuss the question: What is the future of the social enterprise? And, can profit orientation help to solve social issues or does it rather harm the original intentions of social projects?

The guest speakers invited for this course format come from non-profit and hybrid organizations. They have acquired valuable experiences in developing novel business models in the field of social entrepreneurship:

Guest Speaker	Position	Company	Company Webpage
Stefan Pandorf; Stefan Fink; Stephanie Henn	Co-Founders	Socialfunders	www.socialfunders.org
Dr. Benjamin Monheim; Jens Binding; Tim Maiorino	Lawyers	Osborne Clarke	www.osborneclarke.com
Alexander Schabel	Business Development & Social Entrepreneurship Manager	ISSO Institute	www.isso.de/en/

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Corporate Entrepreneurship and Open Innovation (Fall 2013; MSc.)

This course is positioned at the interface of corporate entrepreneurship and open innovation. More and more international companies face the challenge of ongoing innovation and openness to multiple stakeholders. Corporations often struggle with the identification of promising opportunities and the development of new business ideas. This is partly due to the rapidly changing environment and multiple challenges resulting in information overload. It is also due to organizational components, structures and motivation systems that are not always appropriate for the current dynamics and technological settings. We were able to attract prominent international companies as partners for this course, such as Google, Deutsches Zentrum für Luft- & Raumfahrt e.V., Deutsche Bahn AG and Deutsche Post AG. Students of this course were thus able to test the insights from the course in real projects and to discuss their work and insights with the managers of the respective companies.



Guest Speaker	Position	Company	Company Webpage
David Dommel	Account Manager Large Customer Sales at Google Adwords Corporate Sales	Google Inc.	www.google.com
Dr. Ute Gerhards	Market Development and Projects	Deutsches Zentrum für Luft- und Raumfahrt e.V.	www.dlr.de
Matthias Patz	Innovation Manager	Deutsche Bahn System GmbH	www.db.de
Johannes Naumann	Innovation BRIEF	Deutsche Post AG	www.post.de

Teaching

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Sustainability Lab (Fall 2013; BSc.)

This course emphasizes gaining an understanding of theoretical and practical aspects of sustainability. This includes aspects of environmental, social and economic sustainability, i.e. students get to know the complete range of sustainable activities that companies can aim for and implement. During the course, the students will work on real projects provided from partner companies and will develop thoughts and concepts for implementation. The course is partitioned into three segments.



In the first segment, the students attend lectures in different topics relating to sustainability. An on-site visit at the packaging company Meyer/Stemmler adds a practical view on sustainable packaging.

In the second segment, students search for and collect data dealing with the respective topic of the semester. This segment is mainly done over electronic tools (individual wikis and group wikis).

In the last segment, students develop their thoughts and concepts and present their results to the partner companies. The overall development of the course will be openly presented and discussed on a sustainability blog hosted by WHU. On this blog, the public (including external companies and experts, as well as students from other universities and business schools) is able to comment on the progress and work of the course.

Information about the course and current news about sustainability can be found at <http://www.whu.edu/praxis/kooperationen-projekte/sustainability-blog/>.

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The final results were discussed in class with a couple of representatives from the IPV packaging cluster:

Representative	Position	Company	Company Webpage
Bernhard Sprockamp	Managing Director	IPV - Industrieverband Papier- und Folienverpackung e.V.	www.ipv-verpackung.de
Anschy Engel	Managing Director	A.R. Engel	www.agentur-engel.de
Klaus Jahn	Managing Director	WEBER Verpackungen	www.die-tuetenmacher.de
Karl-Heinz Schilling	Managing Director	Meyer/Stemmle	www.meyerstemmle.de
Peter Schürholz	Managing Director	GSD Verpackungen Gerhard Schürholz GmbH	www.gsd-drolshagen.de
Harald Schäfer	Managing Director	Hettmannsperger & Löchner	www.sfv-hlb.de

Sustainability Lab I (Spring 2014; MSc.)

This course emphasizes gaining an understanding of theoretical and practical aspects of sustainability. This includes aspects of environmental, social and economic sustainability, i.e. students get to know the complete range of sustainable activities that companies can aim for and implement. During the course, the students will work on real projects provided from partner companies and will develop thoughts and concepts for implementation. The course is partitioned into two segments and a final presentation.

In the first segment, the students attend lectures in different topics relating to sustainability.

In the second segment, students are doing field research; i.e. they search and collect data by observations and qualitative interviews with the respective topic of the semester. This will be achieved with the help of Design Thinking Tools and Methods. Group work can be assisted over electronic tools (e.g., Spacedeck).

In the last class, teams present the results of their research.

The overall development of the course is openly presented and discussed on a sustainability blog hosted by WHU (Link: <http://www.whu.edu/praxis/kooperationen-projekte/sustainability-blog/>). On this blog, the public (including external companies and experts, as well as students from other universities and business schools) is able to comment on the progress and work of the course.

A guest lecture on the electronic tool Spacedeck further supported the students' work on their respective projects and introduced the Spacedeck software, which enables working with design thinking, as well as various applications and cases.

Teaching

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Guest Speaker	Position	Company	Company Webpage
Martin Güther	Managing Director & Co-Founder	Spacedeck	www.spacedeck.com

Sustainability Lab II (Spring 2014; MSc.)

This course builds on the results of the course Sustainability Lab I.

The main component of the Sustainability Lab II is a workshop day on which the public (including managers, students, and interested persons) can see and discuss the results of the students' work from the first part of the course.

Goal of this part of the course is to collect the opinions of the different groups of people attending the workshop and to develop a final document including the data and results of the course Sustainability Lab I and the reflections from the interactions and discussions from the workshop day.

The workshop took place on May 7 at the Florinsmarkt 15 in Koblenz.

In advance to the workshop day, the teams needed to prepare poster and information material to show their prior work from Sustainability Lab I. During the workshop, managers, students from other studies/lines and the general public were invited to discuss the results with the teams. To ensure a fruitful

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and structured discussion, the teams needed to prepare questions for the different groups of people attending, i.e. the teams had to decide upfront what they wanted to ask/discuss with the different groups. The workshop day was completed with a round table as part of the ISSO|talk that welcomed the following discussants:



Discussant	Position	Company	Company Webpage
Martin Görnitz	Founder	ISSO Institute	www.issode.de
Matthias Nester	CEO	Sparkasse Koblenz	www.sparkasse-koblenz.de
Bernhard Sprockamp	Managing Director	IPV - Industrieverband Papier- und Folienverpackung e.V.	www.ipv-verpackung.de
Klaus Jahn	Managing Director	WEBER Verpackungen	www.die-tuetenmacher.de
Thomas Hammann	Managing Director	Wirtschaftsförderungs-gesellschaft Koblenz	www.aufbau-koblenz.de
Prof. Dr. Christoph Hienerth	Chairholder	Chair in Entrepreneurship and New Business Development	www.whu.edu/en/faculty-research/entrepreneurship-and-innovation-group/chair-of-entrepreneurship-i

Teaching

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Part-Time MBA: Entrepreneurship: Tools and Methods

This course builds upon basic knowledge and understanding in entrepreneurship. It is targeted towards getting students onto the entrepreneurial journey of identifying and developing entrepreneurial opportunities. In the course, students learn and apply the tools needed to figure out 1) what an entrepreneurial opportunity is, 2) how to build a business model around it and 3) how to acquire the right kind of funding for your idea. In the first part of the course, “getting started”, Professor Christoph Hienerth focuses on creativity tools and tools that relate to the business model canvas. In the second part of the course, “getting financed”, Professor Malte Brettel focuses on tools for entrepreneurial finance and funding decisions.

Executive MBA: The Entrepreneurial Journey

This is a practical oriented course in which participants develop their own business ideas, supported by tools provided in the course. The course includes two parts: The first one is „Getting Started“ by Christoph Hienerth. Participants creatively develop and evaluate their own business ideas, using analogies, variations, idea portfolios, little bets and business model canvases. The second part of the course is „Getting Financed“ by Malte Brettel, Professor of Entrepreneurship. Participants develop various finance scenarios for their business ideas and solve entrepreneurial finance cases. During the course, business model evaluators and successful entrepreneurs from the WHU network (Berlin startup scene) provide valuable insights and suggestions for the further development and exploitation of participants’ business ideas.

General Management Plus: Developing Entrepreneurial Ideas and Business Models

Entrepreneurship is frequently referred to as the presence of entrepreneurial individuals and promising opportunities. Potential entrepreneurs make predictions about the availability and combination of future resources for the commercialization of the identified opportunities, i.e. they bet on a certain outcome of assumptions. Every company struggles with identifying potentially valuable new business and the right person to lead the effort. This course trains participants in identifying and developing novel business ideas and also helps to develop personal skills to take over responsibility and act entrepreneurial in social settings.

Teaching

Co-advisor for Dissertations

- Glöckner, Sebastian:
“Leveraging the Sales Force in New Product Developments – The Link between Sales Force Activities and New Product Performance”
Advisor: Prof. Ernst
- Guderian, Carsten:
“Intellectual Property Management – The Integration of Qualitative Components of Patent Data in Quantitative Technological Forecasting and Strategy Formation”
Advisor: Prof. Ernst
- Huang, Modan
“Drivers of Perceived Innovativeness/Newness from the Consumer’s Perspective at the Point-of-sale (POS)”
Advisor: Prof. Fassnacht
- Kahle, Hanna Nari
“Innovations in Base of the Pyramid (BoP) Markets – A Paper Series”
Advisor: Prof. Ernst
- Hirsch, Mareike Elisabeth*
“User Innovation Techniques – Empirical Studies in the Medical Devices Industry”
Advisor: Prof. Lüthje, TU Hamburg-Harburg

* External doctoral candidate

Advisor for Bachelor Theses

- Fischer, Jannes:
“Failure as an Opportunity: Experiencing Failure as an Entrepreneurial Skill”
- Hansen, Simon:
“Entrepreneurial motivation and commitment of founders at German Internet Incubators and its impact on sustained success”
- Hormann, Mareike:
“Equity Based Crowdfunding in Germany: The New Financial Investment Alternative for Startups in Comparison to Conventional Financial Investment Methods“
- Kerst, Johannes F.:
“Patterns of Hybrid Organizational Structures“
- Khoroshko, Oleksiy:
“Entrepreneurship Ecosystems at German Private and Public Universities: Case of WHU - Otto Beisheim School of Management and RWTH Aachen University”
- Sielski, Jan Lucca and Krueger, Leif:
“Types of company builders and their individual relevance for entrepreneurial endeavors”
- Von Buttlar, Till Klaus:
“Consumers’ Willingness to Pay for Ethical Products in the Gastronomy Industry”

Teaching

Advisor for Master Theses

- Bolz, Julius:
“Which Chances Does the Business Accelerator Concept Yield for Corporate Entrepreneurship?”
- Ceylan, Aylin and Zellmann, Robin Alexander:
“Determinants of Design Approval in User Communities: A Multi-Case Analysis of the User Community Steam Greenlight”
- Gießler, Julia Sophie:
“Business Success Between Profit and Social Orientation: How Do Spatial Factors Influence the Nature of Social Entrepreneurship in Emerging Markets?”
- Lehner, Oliver:
“Success Factors in an Online 3D Printing Community in the Case of Thingiverse.com”

Research

Entrepreneurship is a highly fragmented field of research.

It is dealing with diverse aspects such as creativity, cognitive psychology, networks, risks and uncertainty, finance, marketing, business planning, corporate entrepreneurship, venture capital, etc.

A common perspective in entrepreneurship that has emerged over the last couple of years is dynamic and process-oriented. It focuses on two main aspects along the development of new ventures: the presence of entrepreneurial opportunities and of entrepreneurial individuals. The process perspective further partitions that development process in three main phases: the identification, development, and commercialization of novel business opportunities. In our research we analyze and try to better understand how such entrepreneurial processes function in different settings. WHU offers a very intriguing setting for studying entrepreneurship: Several former WHU students have started up successful businesses and business incubators. They have not only become role models for current students at WHU but also have innovated processes and organizational forms that are worthwhile studying in entrepreneurship research. Also internationally, the startup scene that has emerged in Berlin around the activities of former WHU students has already gained recognition and reputation. WHU thus represents a lively and experimental setting for entrepreneurship research. We are aware of this opportunity and are truly engaged in analyzing new research avenues regarding this specific characteristic of the WHU network.

While we are interested and engaged in various aspects of entrepreneurship, we specifically focus on three fields of entrepreneurial research: entrepreneurship in open and user innovation settings, entrepreneurship and business ecosystems, and social entrepreneurship.

Entrepreneurship in open and user innovation settings:

Empirical studies show that individual users often have preferences or needs that cannot be satisfied by existing products or services. Established manufacturing firms might not be willing to invest in novel development or simply cannot supply the specific characteristics of solutions needed. They might also not be able to anticipate the market potential or risks involved in such development. Therefore, individual entrepreneurs are often the first to develop radical novel business opportunities. They can be the starting point for the emergence of novel industries. We investigate and analyze how such entrepreneurs identify novel opportunities and how they overcome risks and barriers not taken by established firms.

Entrepreneurship and business ecosystems:

In business ecosystems, established firms, (online) communities and individuals jointly develop novel business opportunities. Thus, many of the traditional roles of the manufacturer, the consumer and the entrepreneur are changing, due to joint activities, obligations and investments. Well-known companies, such as Apple, IBM or LEGO, have developed platforms on which different participating actors can contribute to commercializing business opportunities. However, so far little is known about entrepreneurial processes in such settings. Entrepreneurship might happen outside of the boundaries of the hosting firms, when external individuals identify and develop novel opportunities. Entrepreneurship might also happen inside of the hosting firms, when novel projects are proactively started and developed. We analyze the role and effect of entrepreneurial activities within such business ecosystems.

Social entrepreneurship:

Entrepreneurial opportunities are not always only driven by profit. Social entrepreneurs engage in activities that solve social and environmental problems and thus contribute to the development of opportunities that benefit a variety of stakeholders. Social entrepreneurs have developed completely novel business models in order to cope with limiting or extreme conditions that would probably not allow traditional start-up activities. For instance, novel ways of financing entrepreneurial activities like microfinance or crowdfunding enable entrepreneurship in often hostile or limiting settings. They also enable the startup of really creative or radical business ideas. We analyze entrepreneurial processes and business models within such settings.

Monika Hauck

Exploring the Multifaceted World of Ecosystems: Literature Streams and Recent Cases

With managers starting to acknowledge the paradigm shift to open innovation and paying more attention on the outside of the organizations, the recent two decades have seen an emergence of diverse literature streams on business ecosystems. In explaining the concept, some authors took a rather holistic approach and relied strongly on the ecological metaphor. Others have discussed and conceptualized the functioning and building parts of ecosystems more specifically and tried to bring first empirical insights. However, those authors mainly focused on ecosystems that function in the information and telecommunication technology industries - companies such as Apple, IBM, Intel and Microsoft - and primarily included actors which were driven by economic interests.

After reviewing diverse literature streams, we claim that so far there is no common understanding of business ecosystems in the management field, and that scholars have discussed theoretical and practical relevance of ecosystems restricted to specific types of ecosystems and individual cases. Therefore, in the light of the current technological and societal developments, the ecosystem concept and its supporting literature should be revised in a complex and counterintuitive manner and by giving consideration to more heterogeneous cases. With a goal to contribute to the extant literature and better understand the central factors that foster evolution, functioning and governance of ecosystems 2.0, we analyze recent ecosystem cases, namely the disruptive innovation and rapid diffusion of the massive open online course (MOOC), crowd engagement and widespread use of Tomnod website in the missing Malaysia Airlines plane search, and role of culture and creative industries in the emergence of Berlin startup scene.

Frederik Riar

Evaluation Validity and the Due Diligence of Crowdinvestors

Developing and commercializing novel business ideas is at the heart of innovation and entrepreneurial processes. As the outcome of such ideas usually cannot fully be planned or foreseen, the evaluation of them in different development phases is important. With the rise of the internet as well as information and communication technology (ICT), more and new kind of evaluation is (electronically) done by the crowd. This raises the question whether individuals in crowds possess the necessary expertise and capabilities to evaluate and whether their evaluation outcomes are valid. As knowledge on this is scarce, the first project of this dissertation conceptually deals with an overall framework of evaluation processes, factors that influence the validity of evaluation outcomes, and crowd evaluation. The second and third project of this dissertation empirically deals with a specific field of crowd evaluation, namely the evaluation (i.e. due diligence) of crowdinvestors in equity crowdfunding. The empirical part of the dissertation is based on unique survey data gathered from a major European crowdfunding platform.

Research

Abstracts of Dissertation Projects

Christopher Smolka

The Best of Both Worlds: Conceptualizing Trade-offs between Openness and Closedness for Sharing Economy Models

The sharing economy has gained researchers' and practitioners' attention over the past years. It centrally promotes the transformation from privately owned to publicly shared goods, services, and resources. The most significant elements of the sharing economy are access over ownership, digital disruption and information technology, peer-to-peer community and collaboration, social capital and trust among participants. Frequent links to open innovation can be established. Those links relate for instance to users sharing and diffusing resources to the community, to the actors' motives to participate, and to trust systems which encourage users' contributions for the public good. However, sharing economy models further expand these main features of open innovation approaches; they introduce elements of commercial organization and new types of business models that imply elements of closed manufacturing models. Thus, it seems that sharing economy models operate in between complete openness and closedness. But little is known about how such sharing economy models function and what characteristics from open or closed paradigms apply. Hence, the main research interest in this paper is to better understand the trade-offs between openness and closedness under which sharing economy models operate and to investigate the effects of such trade-offs for different types of sharing economy models. Therefore, the identified trade-offs are applied to five representative cases, namely Zipcar, Airbnb, Zilok, the Freecycle Network and Couchsurfing. Consequently, the Sharing Economy Spectrum is developed in order to depict and conceptually compare these cases. As a result, the findings reveal important aspects for further research and for companies in the sharing economy.

Dennis Wayer

The Influence of Psychological Ownership on Entrepreneurial Activity

In research, as well as in real life, we have experienced that some individuals can be called entrepreneurs while other individuals think and act like entrepreneurs without even fulfilling entrepreneurial characteristics. Since entrepreneurial activity is crucial for venture performance and in particular during the startup phase, as it leads to superior job performance, we aim to investigate what gives rise to this phenomenon. We hypothesize that entrepreneurial activity is not only limited to individuals who are true entrepreneurs as defined by extant literature, but also spans on individuals who experience the feeling of formal- as well as psychological ownership within a venture, no matter whether they are in salaried employment or not.

Further, we try to investigate answers to the questions why some people see opportunity while others, encountering the same experience and information, do not? Why do some people act and turn their ideas into business opportunities while others are satisfied to say that they had thought of that too? Why are some people content to stop after creating an invention while others cannot be content until their invention dominates the marketplace? These questions address compelling issues that have long been central to scholars in investigating the entrepreneurial phenomena.

Research

Abstracts of Dissertation Projects

Rebecca Stallbaumer

Transformative Entrepreneurship in Developing Countries

Social entrepreneurship implies creating and sustaining both economic and social value. By alleviating poverty, it has the potential to catalyze not just prosperity but also social stability and development in the communities where it occurs. The persistent socioeconomic constraints prevailing in developing countries represent both a particular challenge to entrepreneurial activities and create a particular need for the economic and social value creation that can be achieved through transformative entrepreneurship. On the ground, such entrepreneurial activity is often carried out by large numbers of “ordinary” entrepreneurs, often micro-entrepreneurs, rather than single, prominent individuals or ventures.

Rebecca focuses her research on the antecedents of successful entrepreneurship in developing countries, mechanisms by which such entrepreneurship activities transform the lives of entrepreneurs as well as the impact they generate in their communities.

David Tamoschus

The Effects of Open Innovation Strategies on Organizational Capabilities and Design: The Case of Healthcare

The innovation landscape of the biopharmaceutical industry has significantly changed over the past two decades. Making use of firm-external knowledge sources gained stronger relevance and open innovation approaches became increasingly popular as firms expected to overcome severe R&D productivity challenges while at the same time meeting new patient-centric demands. Three core areas that have undergone major changes in recent years are identified: New partners join the system or change their role within the innovation process; advanced open innovation tools are becoming available; and finally new virtual ways of co-working are now prevalent. This observation raises the question how pharmaceutical firms react to operating in a new innovation ecosystem, particularly with regard to their organizational capabilities and –design. The first project of the thesis investigates patterns of innovation partnerships through an explorative interview approach with four identified key types of partners in biopharmaceuticals: Biotech companies, academic institutes, contract research organizations, and venture capitalists. The second project explores an in-depth case at Bayer Healthcare Pharmaceuticals, focusing on the management of various open innovation tools within R&D. Finally, the third project follows an explanatory approach and aims to test which factors determine successful collaboration among patients and among researchers in virtual healthcare communities. The three projects will map out the evolution towards a biopharmaceutical innovation ecosystem and identify the organizational capabilities to successfully exploit the provided opportunities.

Research

Conference Participations

12th International Open and User Innovation Workshop – July 28-30, 2014 – Boston (Massachusetts), USA

The International Open and User Innovation Workshop is the leading academic conference on Open and User Innovation. Researchers from different disciplines (e.g. innovation management, strategic management, organization design, intellectual property rights management, entrepreneurship, and public policy) meet annually to exchange and discuss recent research findings in the area of Open and User Innovation. The conference is for academics, researchers (including PhD students and Postdoctoral researchers) as well as for practitioners involved in the conference topics. This year's International Open and User Innovation Workshop took place at the Harvard Business School in Boston (MA), USA.

Our chair was actively involved in the organization of the Conference. Professor Hienert contributed to the design of the conference program and served as track chair holder for the research area “User Entrepreneurship and Ecosystems”. He evaluated numerous conference papers and doctoral research proposals.

Professor Hienert held also one of the key plenary talks of the Conference on eLearning and Massive Open Online Courses (MOOCs). In his speech, Professor Hienert provided first-hand insights from his experience with eLearning and the latest developments regarding MOOCs. In a special showcase session, he illustrated how professors can develop and share teaching material online. He furthermore presented a strategy for the OUI community on how to develop teaching cooperations amongst universities worldwide. More detailed information on the MOOC project is further presented in a separate part of this activity report (Appendix).

Conference papers & presentations of our chair:

Guenther, C., Hienert, C. and Riar, F. 2014: *The Due Diligence of Crowdinvestors: Thorough Evaluation or Gut Feeling Only?* presented at the 12th International Open and User Innovation Workshop, Harvard Business School, Harvard University, USA, July 28-30, 2014.

Hienert, C. and Hauck, M. 2014: *Exploring the Multifaceted World of Ecosystems: Literature Streams and Recent Cases* presented at the 12th International Open and User Innovation Workshop, Harvard Business School, Harvard University, USA, July 28-30, 2014.

Hienert, C. and Riar, F. 2014: *Using Crowds for Evaluation Tasks: Validity by Numbers vs. Validity by Expertise* presented at the 12th International Open and User Innovation Workshop, Harvard Business School, Harvard University, USA, July 28-30, 2014.

Hienert, C. and Smolka, C. 2014: *The Best of Both Worlds: Conceptualizing Trade-offs between Openness and Closedness for Sharing Economy Models* presented at the 12th International Open and User Innovation Workshop, Harvard Business School, Harvard University, USA, July 28-30, 2014.

Hienert, C. and Wayer, D. 2014: *The Influence of Psychological Ownership on Entrepreneurial Activity of Users* presented at the 12th International Open and User Innovation Workshop, Harvard Business School, Harvard University, USA, July 28-30, 2014.

Research

Conference Participations

The 74th Annual Meeting of the Academy of Management – August 1-5, 2014 – Philadelphia (Pennsylvania), USA

The Academy of Management (AOM, the Academy) is a professional association for scholars of management and organizations that was established in 1936. It publishes several academic journals, organizes conferences, and provides others forums for management professors and managers to communicate research and ideas.

The annual meeting of the Academy of Management is held each year in August. It provides a forum for sharing research and expertise in all management disciplines through invited and competitive paper sessions, panels, symposia, workshops, speakers, and special programs for doctoral students.

The 2014 AOM Annual Meeting was the premier conference for more than 10,000 academics, scholars, students, and professionals in the scholarly management and organization space.

Presentation of the dissertation project by Frederik Riar:

Evaluation Validity and the Due Diligence Processes of Crowdfunders presented at the Technology and Innovation Management (TIM) Doctoral Consortium at the 75th Academy of Management Meeting, Philadelphia, Pennsylvania, USA, August 1-5, 2014.

World Open Innovation Conference – December 4-5, 2014 – Napa (California), USA

The World Open Innovation Conference (WOIC) is for academic scholars and industry professions from the public and private sectors in the area of Open Innovation. The goal of the Conference is to foster stronger connections between academia and business practice. Conference participants come from leading organizations and universities to share their Open Innovation challenges and newest research on the topic and focus on how their findings might improve the performance of real organizations. The World Open Innovation Conference is unique in its outreach and prospective value to both business managers and academic scholars and aims to address and bridge the gaps between academic research and the practical execution of Open Innovation.

This year, the World Open Innovation Conference was organized by The Garwood Center for Corporate Innovation, Haas School of Business, University of California, Berkeley.

Conference paper & presentation of our chair:

Hienert, Christoph and Riar, Frederik J. 2014: *The Architecture of Evaluation Processes in Open Innovation Settings* presented at the World Open Innovation Conference, Napa (CA), December 4-5, 2014.

The research project by Professor Hienert and Frederik Riar was one of only three papers that received the top reviewers' scores and will be featured in a special showcase session.

Research

Conference Participations

35th DRUID Conference 2014 – June 16-18, 2014 – Copenhagen, Denmark

DRUID is a leading European conference for research and doctoral education in industrial dynamics, based on theories of innovation, economic organization, competitive advantage, organizational competencies, economic evolution and growth. The objective of DRUID is to contribute to a better understanding of the dynamics of technical, structural and institutional change at the level of the single firm as well as at the inter-firm level and the level of the economy as a whole. Special attention is given to fundamental trends such as the growing importance of knowledge for competitiveness, the information technology revolution, and the internationalization of the economy. The topic of this year's conference was on Innovation, Organization, and Entrepreneurship and was organized in cooperation with and hosted by the Copenhagen Business School.

Conference paper & presentation of our chair:

Tamoschus, David. 2014: *Towards Healthcare Innovation in Online Patient- and Researcher Communities: Social Organization and Knowledge Organization* presented at the DRUID Society Conference 2014, Copenhagen Business School, Copenhagen, June 16-18.

Research

Publications – Title and Abstracts

Together with colleagues from MIT Sloan School of Management, WU Vienna and Aarhus University, several research projects were developed over the last years in the field of entrepreneurship, corporate entrepreneurship and innovation. Four of these projects were published and accepted during the 2013 and 2014 reporting period. The respective journals (Journal of Product Innovation Management and Research Policy) rank among the highest within their field worldwide.

- **Hienerth, C., von Hippel, E., Berg-Jensen, M. 2014. User community vs. producer innovation development efficiency: A first empirical study. Research Policy, 43(1): 190-201.**

Abstract

In this paper we report upon a first empirical exploration of the relative efficiency of innovation development by product users vs. product producers. In a study of over 50 years of product innovation in the whitewater kayaking field, we find users in aggregate were approximately 3X more efficient at developing important kayaking product innovations than were producers in aggregate. We speculate that this result is driven by what we term “efficiencies of scope” in problem-solving. These can favor an aggregation of many user innovators, each spending a little, over fewer producer innovators benefitting from higher economies of scale in product development. We also note that the present study explores only one initial point on what is likely to be a complex efficiency landscape.

- **Hienerth, C., Koss Hartmann, R. 2013. Opening innovation in regulation inside government: The contribution of innovative users. ACAD MANAGE PROC 2013, Article no. 15171: 1028-1033.**

Abstract

This short paper intersects the concept of Innovation in Regulation with the extant research on user innovation, posing the questions of which groups make up the users of this type of innovation, and what they might contribute to its development. To this end, we explicate the concept of Innovation in Regulation and the innovation process behind it. As will be elaborated, we propose to understand users of IRGs as regulatees, i.e. those organizations that use an IRG both to monitor their own activities internally and to allow regulators to scrutinize their activities externally (e.g. a public hospital using a nationally standardized quality reporting format to both monitor their own quality and performance while making that information available to government ministries and agencies). Building on this definition, we explain why and how users might be an alternative and potentially highly valuable source of innovations in regulation. We outline a research agenda to open up the study of this phenomenon.

Research

Publications – Title and Abstracts

- **Hienerth, C., Lettl, C., Berg-Jensen, M. 2014. Forecasting the commercial attractiveness of user-generated designs using online data. An empirical study within the LEGO user community. Journal of Product Innovation Management, Volume 31, Issue Supplement S1, pages 75–93, December 2014**

Abstract

Web 2.0 technologies and the rapid emergence of virtual user communities have created new challenges and opportunities for producer firms. The challenges concern the problem of idea overload when a large number of users are empowered to develop their own design creations. At the same time, opportunities arise because firm-hosted user communities offer a promising source of creativity outside firm boundaries. In this paper, we study the extent to which readily available Web 2.0-based data on user-generated designs and user-designers can be used to predict the commercial attractiveness of user-generated designs from the perspective of a focal producer firm. Applying multilevel generalized linear modeling, we analyze 1,799 designs from 116 user-designers in the LEGO user community. We find an inverted U-shaped relationship between the complexity of a user-generated design and its perceived commercial attractiveness. Furthermore, we find a positive relationship between the positive feedback received by a given user-generated design within the peer community and its perceived commercial attractiveness, as well as a U-shaped relationship between the intensity of a certain user-designer's activities and the likelihood that a specific design of this user will be perceived as commercially attractive. On the basis of these findings, we discuss the implications for theory and management at the interface between marketing and innovation.

- **Hienerth, C., Lettl, C., Keinz, P. 2014. Synergies among producer firms, lead users, and user communities: The case of the LEGO producer-user ecosystem. Journal of Product Innovation Management, 31(4): 864-866.**

Abstract

While many firms today proactively involve users in their new product development efforts using a wide variety of methods such as the lead user method, firm-hosted user communities or mass customization toolkits, some pioneering firms are experimenting with the creation of sustainable producer-user ecosystems designed for the continuous exploration and exploitation of business opportunities. In this paper, we study the functioning of such ecosystems with particular emphasis on the synergies they can yield. Based on an explorative and longitudinal multiple case study design, we study the producer-user ecosystem of the firm LEGO and identify three main actors in the ecosystem: entrepreneurial lead users who aim to start their own businesses, a vibrant user community, and the LEGO company as the focal producer firm and facilitator for multiple user-to-user and user-to-producer interactions. Our study reveals three kinds of synergies: (1) reduced risk for entrepreneurial lead users and the focal producer firm, (2) the extension of the design space of the focal producer firm's products, and (3) the creation of buzz within the user community. Finally, we discuss the theoretical and managerial implications of our findings for innovation researchers and practitioners.

Research

Memberships

- VHB, Verband der Hochschullehrer für Betriebswirtschaft (German Association of Business Professors)
 - AOM (Academy of Management)
 - Open and User Innovation Conference 2014
 - Member of “senior” decision/advisory group
 - Member of PhD development group
 - MOOC/electronic teaching project
 - Key note summer 2014
 - World Open Innovation Conference membership and best paper award 2014
 - Camp Beckenbauer
 - Penalist, September 2014
 - Member of strategy group
 - Beiratsmitglied im Build Gründerzentrum Kärnten GmbH (Incubator)
 - Beirat / Kommissionsmitglied im TZK (Technologiezentrum Koblenz)
-

Referee Activities

Professor Hienert regularly acts as a referee for the following journals:

- Journal of Small Business Management
- IEEE Transactions on Engineering Management
- Research Policy
- Journal of Product Innovation Management
- Long Range Planning
- R&D Management
- International Journal of Technology Management
- Industry and Innovation
- European Management Review
- Journal für Betriebswirtschaft
- Entrepreneurship Theory & Practice
- Business Research
- Journal of Management Studies

Services in the Area of Executive Education & Corporate Connections

The Chair in Entrepreneurship and New Business Development was involved in three different activities related to Corporate Connections for WHU: 1) Development of a joint project with METRO AG in the area of New Business Development, 2) practitioner talks and industry projects in courses and 3) involvement in student initiatives related to the WHU network of entrepreneurs and alumni.

1) New Business Development project with METRO AG:

We have started a joint project together with METRO AG in order to explore novel approaches in entrepreneurship and new business development. The project is at the moment being developed and starting from 2015 on, a doctoral candidate will be working specifically on this cooperation at the chair.

2) Practitioner talks and industry projects in courses:

One of the major goals of the Chair in Entrepreneurship and New Business Development is to provide students with a range of experiences and skills in entrepreneurship. One tool to do so is to invite prominent entrepreneurs of the WHU network and successful managers of international companies for presentations in the courses provided by the chair.

In the report period we invited 19 entrepreneurs and managers in total to present their innovation and entrepreneurship projects. We truly believe that this effort not only contributes to a better education of WHU students but also helps to diffuse information about WHU to prominent companies such as, for instance, Google, Deutsche Bahn, Post DHL and Bayer.

3) Involvement in student activities that are important for the WHU network of entrepreneurs and alumni:

Student initiatives are an integral part of the WHU spirit and network. Regarding entrepreneurship and new business development, there are three initiatives which are of central importance: Idea Lab, Three Day Startup (3DS) and Sensability. The Chair in Entrepreneurship and New Business Development linked up to all three initiatives and provided different services for the students and the WHU network. For all three initiatives, we were happy to take over patronage and also provided opening words, when needed. Furthermore, we co-developed important content together with the students (for 3DS) and were also leading workshops in the area of business model development (Sensability). We plan to further engage in the respective initiatives and to increase the link between the courses provided by the chair, the WHU network and the individual initiatives.

Activities for WHU (Services provided to the School)

The Chair in Entrepreneurship and New Business Development was engaged in several activities for WHU. Some of them represent work in WHU activities and strategy groups, some concern the development of electronic teaching formats, and yet another set of activities is linked to the topic of sustainability:

WHU activities and work in strategy groups:

- **Group Speaker**
Since 2013, Professor Christoph Hienert is serving as the group speaker of the Entrepreneurship and Innovation group.
- **Co-Director of Center for Sports and Management (Director: Sascha Schmidt)**
Since 2014, Professor Christoph Hienert has taken over the role of Co-Director for the Center of Sports and Management. In this role he has also actively participated in the “Camp Beckenbauer”.
- **Member of the group “Sustainability and Teaching” (lead by Markus Rudolf)**
Professor Christoph Hienert is contributing his experience in developing novel teaching formats in Sustainability to this strategy group of WHU.
- **Strategygroup 2020**
Professor Christoph Hienert is part of a small group of members, developing the strategy agenda for WHU for 2020.

Development of electronic teaching formats and content:

- **Strategy group ‘MOOCs and Online Programs’**
Professor Christoph Hienert is leading this strategy group, working on exploring and developing opportunities for electronic teaching. This includes:
 - WHU internal development and international project (together with MIT and HBS)
 - Development of first prototypes
 - Coaching function for professors at WHU
 - Development of manuals
 - Application in the field of “Digitalization” (handed in at the end of September: Nixdorf Stiftung, 150k EUR)
 - Development of a MOOC News Page (current articles and information over WHU web page)

Work on the topic of sustainability:

- Fellowship ‘Stifterverband der Deutschen Wissenschaft’ ongoing
- Development of courses related to the topic of Sustainability in BSc and MSc (Capstone format, will be further developed with Professor Sascha Schmidt and Professor Christina Guenther in 2015): Sustainability Lab
- Development of electronic modules and teaching videos for core topics in sustainability
- Development of the Sustainability Blog

Other Services (“Community Outreach”)

We are happy to announce that this has been the first year in which first startups related to the Chair in Entrepreneurship and New Business Development have been active/founded:

Socialfunders

Since January 2014, the Koblenz-based startup Socialfunders has been part of the course Creating Social Value (previously named Social Entrepreneurship).

Socialfunders was founded in 2010 by three students from the University of Koblenz, Stephanie Henn, Stefan Pandorf and Stefan Fink. It represents an innovative marketing tool for companies and a new source of funding for social causes introducing a novel currency, the SocialCoins. In effect, the regular customer receives SocialCoins as reward for his loyalty to a respective company and is in this way empowered to freely allocate them to social projects depicted on the Socialfunders website. Clearly, Socialfunders represents a proper example of a social business and a hybrid organization, respectively, following both a profit and social orientation.

With regard to the course, not only does Socialfunders’ guest lecture convey practical insights on social entrepreneurship. Equally, the course participants are encouraged to directly apply their learnings from the course to Socialfunders: They have the possibility to (a) analyze and reflect on the business model and hybrid form of Socialfunders or (b) develop a social project for Socialfunders. When choosing either option, Socialfunders is open to support and advise the groups on their respective projects. This offer includes for instance a visit in the Socialfunders office in Koblenz.

Goodnity

Over the course of the academic year 2013/2014, we regularly supported and provided advice to student teams in further developing their novel business ideas with regard to business case competitions. In this context, the achievement of a WHU team of Bachelor students is highlighted: The team successfully pitched its business idea named “Goodnity” at the international competition “European Business Plan of the Year 2014” at the Imperial College in London. The idea and business model for Goodnity was originally developed in our module Identifying Entrepreneurial Opportunities (i.e. “Developing Novel Business Models” and “Creating Social Value”). At the case competition, the Goodnity team managed to attract the interest of professional Venture Capital investors. The team is planning to keep in touch with investors and to further elaborate on their business idea until their graduation.

Holzgespür

Moreover, a WHU startup has emerged from our course Developing Novel Business Models. The startup is named Holzgespür GmbH (<http://www.holzgespuer.de/>) and was founded by Julia Kasper (B.Sc., 2014). Holzgespür sells individually configurable design furniture directly from the manufacturer which allows offering high quality wooden and custom-made home furnishing at affordable prices. We supported Julia during the overall founding process and provided advice for several activities (e.g., helped with the preparation for a Venture Capital meeting and supported Julia at the Koblenzer Sparkassen Pitch and Matching Day organized by the Business Angels Rhineland-Palatinate).

Voluntary Application Training

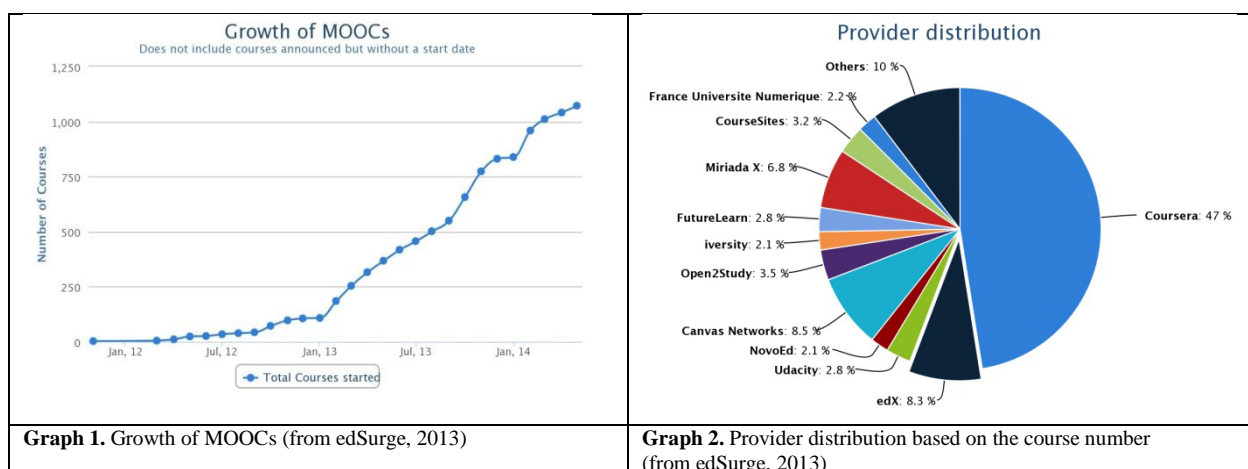
In addition, our chair actively engaged in voluntary application training for a local school community in Vallendar. At this training, doctoral students and other staff from WHU lectured on how to successfully apply for jobs and prepared school graduates for upcoming application phases and job interviews.

Appendix

The MOOC project

Here is a small update on what happened in the “MOOC World” over the last year.

With the *The New York Times* article naming 2012 the year of the MOOC and renowned academic institutions such as Harvard, MIT and Stanford deploying capital and intellectual resources to create MOOC content and sophisticated online platforms, the MOOC phenomenon has received a lot of attention from governments, universities, students, corporates and philanthropists all around the world. Many institutions have reacted to this emerging trend and especially the year 2013 has seen an acceleration of the number of courses offered (see graph 1) and a fast diffusion of a MOOC.



Access to MOOC creation is broadening due to the offerings from OpenLearning and open-source initiative MOOC.org, which is a partnership between open edX and Google.¹ And with nearly two new MOOCs starting every day², an emergence of a wide range of MOOC platforms can be observed: MiriadaX in the Spanish speaking countries, Universite Numerique in France, FutureLearn in U.K., iversity, openSAP, openHPI and OpenCourseWorld in Germany, Edraak and Rwaq for the Arabic world, and XuetangX for course in Mandarin language (also see graph 2.). About three-quarters of MOOCs are in English language. But with governments in the developing countries starting to recognize the potential of the online learning, non-English MOOCs are growing, with most popular languages being Spanish and French.³

Although MOOC numbers are increasing, their production costs are not getting cheaper. The intense rivalry among universities offering similar courses on the leading platforms drives MOOC quality up – some courses can even be compared to high quality movies - which come at a cost. Therefore, corporation involvement in the MOOC financing and production can be increasingly seen today. In addition to using MOOCs for internal training, corporates are also starting to offer MOOCs to provide training for current or potential customers – with openSAP being a perfect example. Moreover, Yahoo Inc. began reimbursing employees who take MOOCs on Coursera and AT&T and Google are helping to design and fund the latest low-cost online courses.⁴

MOOCs have a potential to train employees quickly and at a low cost, and are thus especially well-suited for niche or constantly evolving science fields like computer science, which is also one of the most popular MOOC field. No surprise, that the potential of a digital education has also attracted professional investors’ attention.⁵ In 2012 alone, education technology companies received \$1.1 billion from venture

¹ www.edsurge.com/n/2013-12-22-moocs-in-2013-breaking-down-the-numbers

² www.edsurge.com/n/2013-12-22-moocs-in-2013-breaking-down-the-numbers

³ www.edsurge.com/n/2013-12-22-moocs-in-2013-breaking-down-the-numbers

⁴ <http://online.wsj.com/news/articles/SB10001424127887324807704579087840126695698>

⁵ <https://www.cbinsights.com/blog/ed-tech-most-active-venture-capital-investors-2009/>

Appendix

capitalists, angel investors, corporations and private equity firms.⁶ This clearly indicates that despite not clear avenues of monetization, the market for MOOCs as well as their platform business models is maturing. Although having different business models, both leading MOOC providers Coursera (for profit) and edX (non-profit) are hiring top-level executives and increasing their staff. For instance, Coursera has recently hired Richard C. Levin, Former Yale President, to serve as its Chief Executive Officer.⁷

In Germany the first “MOOC like” courses started in 2009, when Jörn Loviscach, a professor of mathematics and computer science at Bielefeld University of Applied Science, started placing his video lectures on YouTube.⁸ However, the real MOOC enthusiasm only took off in the late 2013, which was primarily driven by the launch of the German MOOC platform iversity, LMU Munich and TU Munich starting to offer their courses on Coursera platform, and increased popularity of courses offered by Hasso Plattner Institut and SAP.

A sign that MOOC has good chances to establish itself not only in Germany but also in the whole of Europe is a friendlier regulatory framework, which makes it easier for students to obtain a transferable credit for their online course work. Compared to the leading MOOC market US, Europe is different because of the Bologna Accords, which facilitate a common market for university credits within the European higher education and requires European universities to accept transfer credit by default.⁹ Moreover, an emergence of the online learning ecosystem is evident through the growing number of technology and service providers such as IMC in Saarbrücken and Patience in Berlin, and the interest in MOOC from the leading corporation such as Deutsche Telekom and SAP.¹⁰

Yet, MOOCs do not come without criticism and challenges. One of them being the issue of frequently discussed low MOOC completion rates, which often are as low as 5-10 percent. Although, some name MOOC as a major social innovation, MOOC power to lower educational disparities is also being questioned. Studies show that the majority of the MOOC students are young males who are already highly educated and career-oriented.¹¹ Other points of criticism come from the fact that powerful corporations are helping to design and fund the latest round of courses, which allows them to gain control of curricula and twist what is being learned to benefit their short-term goals.¹² Moreover, with venture capitalists having backed many of the leading MOOC providers, some question if these companies will be primarily concerned with providing benefits to the society as a whole or maximizing their shareholder value.

Once we consider course content, questions such as intellectual property rights, credit granting and course quality arise. Educational institutions are still not familiar how to incentivize academics’ participation, evaluate online course design, manage large amounts of data, and assign course ownership rights. Not to mention that appropriate laws are still being made. The arrival of MOOC is causing confusion in the higher education and the question if MOOC is a thread or an opportunity is still to be answered. Having said that, it is obvious that the MOOC phenomenon is an issue worth vigilant investigation and consideration for large and small academic institutions who want to stay competitive in the technology driven today’s economy.

At WHU, the Chair of Professor Christoph Hienerth is responsible for following the latest MOOC market developments and serves the function of informing the academic community. For that purpose, a selection of news articles is updated regularly and is accessible on the “MOOC” site on the WHU homepage (<http://www.whu.edu/fakultaet-forschung/entrepreneurship-and-innovation-group/unternehmertum-und-existenzgruendung-i/mooc/>).

⁶ <http://www.cbinsights.com/blog/ed-tech-deals-bubble/>

⁷ <http://chronicle.com/article/Coursera-Hires-Former-Yale/145531/>

⁸ http://www.nytimes.com/2013/09/23/world/europe/european-universities-catch-the-online-wave.html?pagewanted=1&_r=0

⁹ http://www.huffingtonpost.com/john-m-eger/moocs-are-fast-becoming-a_b_3991957.html

¹⁰ <http://www.zeit.de/studium/uni-leben/2013-06/mooc-deutschland-iversity-vorlesungen-internet/seite-2>

¹¹ www.thedp.com/article/2013/11/new-penn-study-moocs-far-from-revolutionizing-higher-education

¹² <http://online.wsj.com/news/articles/SB10001424127887324807704579087840126695698>