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ARTEMOCC

**Artem organizational creativity and sustainability
international conference**

BOOK OF ABSTRACTS

2022 Edition

Edited by

Klaus-Peter Schultz & Kamel Mnisri



The general intention of the conference was to provide inter- and transdisciplinary encounters among participants. In addition to traditional paper presentations, contributions were welcome on discussion forums, case studies, artistic and playful interventions or practical demonstrations.

WHAT IS ARTEM OCC?

ARTEM OCC is ARTEM International Organizational Creativity and Sustainability Conference. It was founded at ICN Business School in 2015 as part of the mission to continuously develop impactful research, enhance its societal responsibility, consolidate its close relationship with the business world and reinforce its international stand. ARTEM OCC is a unique academic conference of its kind, inspired by the philosophy of the ARTEM alliance, which is part of a transversal and transdisciplinary reflection on scientific research and learning. It aims at creating a discursive space among academics and practitioners in areas such as engineering, arts, sociology, education and management to address from inter-transdisciplinary views the relation between creativity and sustainability.

4th Edition of ARTEM OCC - Nancy, France - March 31st, - 2nd April 2022

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From distribution to development: Moving forward with the relation between creativity and sustainability

Creativity, innovation and sustainability are nowadays considered vital indicators of societal and professional life, yet their advances are typically considered separately. In the Anthropocene era, we face a fundamental imbalance between social and economic activities as well as earth systems. This has spawned various challenges in the fabric of human civilization in multiple subsystems of society such as transitions in energy, monetary and transport systems, deglobalization, and digitalization as well as environmental degradation, and social, financial and economic instability. Organizations need creative approaches to identifying innovative solutions for realizing the UN sustainable development goals. To navigate through an uncertain era of ferment in many industries and radically innovate, it is of paramount importance to dissolve disciplinary and functional boundaries, connect formerly unconnected knowledge and applications fields, foster systemic thinking, overcome thought barriers, and break existing paradigms. New combinations frequently emerge when crossing cultural and geographic borders that enable further learning on various levels of society and offer improvements in sustainable local development. The appetite for fresh alternatives to overcome the apparently dysfunctional legacy subsystems of society seems more pressing in the global zeitgeist than decades before. This growing uncertainty also produces resistance, anxiety and turmoil in and between societies. Potentially disruptive innovations and business models and new institutional technologies such as decentralized blockchain-based sharing and crowd controlled economic platforms emerge, but it seems that there is a lack of a common orientation and visionary leadership connecting all these trends towards sustainable development. The artisans of our civilization such as managers, engineers or artists, provided with a global awareness of the diverse regional and context specific complexities and equipped with trans1 and interdisciplinary approaches towards creative and sustainable development might be able to develop a joint vision to address these global challenges.

In the 4th ARTEM OCC conference 2022 at ICN Business School in Nancy, France we aimed to bring various scholars and stakeholders together to discuss and explore research that offers new insights into creative and systemic approaches and innovation processes that cross cultural and disciplinary borders - especially between art, management and technology - for a sustainable impact on society.

Klaus-Peter SCHULZ, Deputy Director of Research and Professor of Strategy and Innovation at ICN Business School & **Kamel MNISRI**, Associate Professor at ICN Business School and Director of the Msc in International Management (MIEX).

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Thematic challenge: The Utilization of Sustainable Development Goals (SDGs) for Academic Resilience Post-Covid

Prashanti Maharaj ^{1*}, Anisha Ramsaroop ^{2✉}

1 University of KwaZulu-Natal, college of law and management, school of management, IT and governance, Westville campus, Durban. – South Africa

2 University of KwaZulu-Natal, college of law and management, school of management, IT and governance, Westville campus, Durban. – South Africa

Abstract

The onslaught of Covid-19 for academia has been the first but definitely not the last with the pandemic adding to existing challenges and also creating new challenges, consisting of managing work-life balance, risk of ill-health, extended workloads, reshaping of work, and adjusting to the Fourth Industrial Revolution (4IR) and beyond (Parkin, 2020). Due to the lockdown, South African tertiary institutions were obliged to reassess their approaches to teaching and learning in relation to social distancing by implementing remote and online teaching methods in a frantic attempt to complete various curricula to save the academic year (Dipa, 2020; Adotey, 2020). Research confirms that when coping mechanisms fail, people may experience stress, anxiety, and a variety of distressing emotion that have an impact on their emotional health (MacIntyre, Gregersen & Mercer, 2020). These challenges have serious implications for accomplishing the SDGs' goal of creating a better and more sustainable future for all.

Walker and Salt (2012) contend that after the SDGs are accomplished, people and societies will be more resilient to crises when they occur. This then exposes the gap of how can the world utilise the SDGs when Covid-19 is impeding its progress? The worldwide recession triggered by the Covid-19 response is concerning, prompting researchers to debate whether the SDGs are appropriate for the post-pandemic era (Heggen, Sandset, and Engebretsen, 2020). However, the research argues that this disruption of Covid-19 on the SDGs has prompted development for the need of emotional intelligence awareness. The research further reiterates that emotional intelligence must be incorporated into the SDGs recovery plan for fostering resilience, because studies indicate that emotional intelligence is the determinant for

resilience levels (Ge, Wan, Zheng & Zhang, 2020; Magnano, Craparo & Paolillo, 2016). Therefore, this study, being exploratory in nature, aims to investigate emotional intelligence as a salient skill for building resilience within academia to cope with the ramifications of the pandemic. The following SDGs pertain to the study:

- Goal 3: Good health and well-being
- Goal 4: Quality education

The research methodology that will be employed in the study is a mixed methods approach. This comprises 2 phases namely, quantitative and qualitative. In the quantitative phase, a sample size of 370 academics will be drawn from 5 campus sites in the University of KwaZulu-Natal precinct using a stratified random sampling technique. Whereas in the qualitative phase human resource managers will be drawn from 5 campus sites in the University of KwaZulu-Natal precinct using a judgment sampling technique.

Dr. Abdel-Fattah (2020) indicates that the Covid-19 disruption is testing everyone's emotional intelligence and stability, because those who survive are not the strongest or the most intelligent, but the most adaptable to change, implying high levels of resilience. Therefore, achieving the SDGs implies focusing on emotional aspects for building resilience. As a result, the research advocates potential recommendations such as: human resource initiatives, virtual therapy awareness and Employee Assistance Programs (EAPs).

Keywords: academics, Covid-19, emotional health, emotional intelligence, Fourth Industrial Revolution, resilience, SDGs, work-life balance

References

- Abdel-Fattah, H.M. (2020). Emotional intelligence and emotional stability in crisis. *Journal of Psychiatry & Psychiatric Disorders*, 4(2), 56-62.
- Adotey, S. (2020, June 08). What will higher education in Africa look like after Covid-19?. Retrieved from: <https://www.weforum.org/agenda/2020/06/higher-education-africa-covid19-coronavirus-digital-online/>

- Dipa, K. (2020, April 27). Covid-19 presents curricula crunch for SA's universities. *Independent Online*. Retrieved from: <https://www.iol.co.za/saturday-star/news/covid-19-presents-curricula-crunch-for-sas-universities-47191206>
- Ge, F., Wan, M., Zheng, A., & Zhang (2020). How to deal with the negative psychological impact of Covid-19 for people who pay attention to anxiety and depression. *Precision Clinical Medicine*, 3(3), 161–168,
- Heggen, K., Sandset, T. & Engebretsen, E (2020). Covid-19 and sustainable development goals. *Bull World Health Organ*, 98, 646.
- MacIntyre, P. D., Gregersen, T., & Mercer, S. (2020). Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions. *System*, 94, 1-8.
- Magnano, P., Craparo, G., & Paolillo, A. (2016). Resilience and emotional intelligence: Which role in achievement motivation. *International Journal of Psychology Research*, 9(1), 9-20.
- Parkin, D. (2020, August 21). Developing sustainable resilience in higher education. *Advance Higher Education*. Retrieved from: <https://www.advance-he.ac.uk/news-and-views/developing-sustainable-resilience-higher-education>
- Walker, B., & Salt, D. (2012). *Resilience Practice: Building Capacity to Absorb Disturbance and Maintain Function*. Island Press: Washington.

*Speaker

✉: Ramsaroopas@ukzn.ac.za

Mindsets and Skills to Address Sustainability Challenges: A Review of Social Entrepreneurship Competences

Anne-Karen Hueske ^{1*}✉, Kai Hockerts¹

1 Copenhagen Business School, department of management, society and communication. – Denmark

Abstract

The increasing interest in social entrepreneurship fosters the need to understand the therefore required competences. Systematically reviewing research on social, sustainable and corporate entrepreneurship or intrapreneurship, we synthesize three groups of competences: impact competence (analytical competence to understand wicked problems, future thinking competence, impact assessment competence, normative competence, commitment competence), entrepreneurship competences (problem solving competence, opportunity identification competence, action competence under uncertainty, opportunity exploitation competence, innovation diffusion competence) and engagement competence (perspective-taking competence, interpersonal communication competence, stakeholder commitment competence, participatory competence, tensions management competence). Our findings provide several avenues for future research. Comprehensive measurement scales are needed to explore the following questions: How do the competences influence each other? How do they impact the economic, environmental, and social performance of the firm? How do the competences impact the governance of the organization and the entrepreneurial ecosystem? Which competence is needed by whom in which quality and when?

Keywords: Social entrepreneurship, sustainable entrepreneurship, sustainability entrepreneurship, competence, competences, skills, knowledge, attitude, attitudes

*Speaker

✉: ahu.msc@cbs.dk

Impact of Climate Change on Business Operations: A Case Study of the Tourism Sector in an Emerging Economy

Simangaliso Bayabonga Zulu^{1*}✉, Maxwell A. Phiri¹

1 University of KwaZulu-Natal, College of law and management, School of management, IT and governance, Pietermaritzburg campus, Pietermaritzburg. – South Africa.

Abstract

Tourism can be considered as an economic sector that is highly sensitive to climate change. This is the industry that also contributes to the emission of greenhouse gases (GHG), one of the causes of global warming. To mitigate the negative effects, the concept of sustainable tourism development emerges, which should include the externalities derived from climate change. Given this reality, the purpose of the current research aims to examine the impacts from climate change on business operations in the tourism sector. The study also aims to explore challenges and opportunities for sustainable tourism development under global climate change scenarios. The context of the study is an emerging economy nation which is South Africa. The methodology has a descriptive and analytical, interdisciplinary, and systemic approach, based on documentary analysis research. The methodology is qualitative in nature and data will be collected from reviewing documents. The results include the construction of scenarios that reveal the possible impacts and consequences of climate change on business activities in the tourism sector, providing information for mitigation purposes, planning for adaptation actions, and minimizing impacts and vulnerability.

Keywords: Climate change, Tourism, Green theory, Adaptation, Mitigation, Sustainable development.

*Speaker

✉: bayabongazulu@gmail.com

The issues of digital accessibility at the heart of social innovation. The obstacles encountered by professionals in the digital sector

Ceccarelli A. ^{1*}✉, Chouki M. ², Persson S. ³

1 ICN Business School, CEREFIGE, Université de Lorraine

2 CERIIM, EXCELIA BUSINESS SCHOOL

3 ICN Business School, CEREFIGE, Université de Lorraine

Abstract

In October 2017, the French State launched its "Action Publique 2022" project. The aim is to transform digitally public administrations and the quality of public services. Ahead of most European countries in terms of its digital competitiveness, France is beginning this digital transformation initiated by the Government. However, despite the laws and regulations, digital accessibility still seems far from being applied. According to the report by the "Défenseur des Droits" (2022), a large proportion of the population does not use online procedures. There are still many barriers to accessibility, which are multi-factorial and occur at several levels.

Existing work on digital accessibility is consistent with a vision, even an ideal, of equality between humans, transcending the variety (and inequality) - physical, cognitive, geographical, environmental, etc. - of their situations. Thus, digital accessibility has a social dimension. Moreover, beyond the social perspective, the issue of digital accessibility meets the field of innovation because it includes technical or functional aspects related to human-machine interactions. In this social and technological register, it seems appropriate to consider accessibility in the theoretical field of social innovation in order to analyze the implementation of digital accessibility within organizations.

So, the question arises as to digital accessibility at the heart of social innovation. Addressing this issue leads us to analyze digital accessibility in terms of social innovation, to study the practices of digital professionals in the development of accessibility of websites and digital tools, particularly in terms of personal involvement and the limits encountered. The first step will be to understand the notion of digital accessibility through its characteristics as a social

innovation. Then, in a second part, the methodology used and the results are presented. Finally, a third part introduces both the theoretical and practical implications and contributions related to digital accessibility.

Overall, the definitions of social innovation remain extremely broad, not very stable and are subject to diverse interpretations in the scientific community (Richez-Battisti et al., 2012). However, certain dimensions seem to be shared or at least to serve as markers for drawing the contours of the practices that are supposed to fall under this dynamic (Pel et al., 2020). Thus, social innovation can be defined through its target, form, structure, process, stakeholders and then its purpose (Djellal, Gallouj, 2012). In this study, digital accessibility is explored with regard to these different registers but also from its dimension of service innovation and innovation in services.

The methodology used is a qualitative study carried out in private companies in the digital sector. The goal is to collect the discourse of actors involved in this sector. The latter are project managers, product owners (Po), designers in charge of graphics and making the application/site more attractive, user interface designers (UI), those responsible for the functionalities and architecture of the site/application, user experience designers (UX), designers who are both UI and UX (UI/UX). The analysis of the verbatims reveals two registers of field experience, both in tension. On the one hand, the results highlight the involvement and willingness of professionals to implement accessibility. On the other hand, the results emphasize the obstacles encountered by professionals linked to a limit of time and means made available by organizations in the implementation of digital accessibility.

The theoretical and practical implications and contributions are spread over several themes: digital inclusion or e-inclusion, and the role to be played by the organizations to reinforce the action of professionals in the implementation of digital accessibility.

Keywords: Social innovation, digital accessibility, e-inclusion, service innovation, innovation in services

References

DJELLAL, F., & GALLOUJ, F. (2012). Innovation sociale et innovation de service: première ébauche d'un dialogue nécessaire. *Innovations*, (2), 37-66

- PEL, B., WITTMAYER, J., DORLAND, J., & SØGAARD JØRGENSEN, M. (2020). Unpacking the social innovation ecosystem: an empirically grounded typology of empowering network constellations. *Innovation: The European Journal of Social Science Research*, 33(3), 311-336
- RICHEZ-BATTESTI, N., PETRELLA, F., & VALLADE, D. (2012). L'innovation sociale, une notion aux usages pluriels: Quels enjeux et défis pour l'analyse? *Innovations*, (2), 15-36

*Speaker

✉: agnes.ceccarelli@icn-artem.com

Collective Green Creativity and Eco-Innovation Framework to Drive Collaborative Problem-Solving Processes among University Students

Ziska Fields^{1*}

1 University of Johannesburg, College of Management and Economics, School of Management, Department of Business Management, Auckland Park campus, Johannesburg – South Africa

Abstract

Collaborative actions focusing on saving the planet with new, novel, and disruptive ideas and innovation might be humankind's only chance to prevent the sixth extinction due to the biodiversity crisis caused by humans. Creativity is valuable if people work together; share their diverse knowledge, experiences, imagination, and ideas; collaborate freely; and debate their collective outputs. Collaborative creative problem-solving might help to develop eco-innovations that can delay this mass extinction event. The purpose of this study was to start developing a theoretical framework that can be used by universities to educate students to generate collective green creative ideas and eco-innovation. Collaborative problem-solving was needed to achieve the purpose of the study, which was quantitative in nature. The focus of this article is the first phase of a four-phase process in the development of the framework. University students from two universities on two continents were used. A total of 120 students per university were divided into groups with 5 members each. Data was collected virtually during a lecture period. Two questionnaires (one to test the individual preferred creative thinking style of participants and another to assess the teamwork and collaboration of the participants to achieve a goal) were used. QuestionPro was used to analyze data, and Miro boards were used for collaboration and feedback among the students, as well as for assessment. The main findings were that the students were not interested in creativity, yet creativity is one of the top five skills needed in the workplace now and by 2025. The students had a stronger preference for front-brain thinking processes and tended to enjoy more conceptual thinking. This implies that they were somewhat lost in their brains' working on new

ways of seeing or dealing with the world, which supports their views about not being interested in creativity. The teamwork activities highlighted their commitment to complete the task and that most students enjoyed working in a team.

Keywords: Creative problem-solving, German students, Prototyping, South African students.

*Speaker

✉: ziskaf@uj.ac.za

Time for the Planet, new influencers and business angels for the planet

Carine Sonntag^{1*}✉, Gabriela Torres Ramos²✉

1 Professor ICN Business School, PhD Economics

2 Gabriela Torres Ramos, PhD Anthropology, Ecole Pratique des Hautes Etudes-Université PSL

Abstract

Global warming is one of the highest, at least urgent (GIEC report 2022), priority in sustainable development goals (Goal 13 *Take urgent action to combat climate change and its impacts*, United Nations). Most people observe that the change in individual, companies or government decisions is not fast enough or at the level needed to significantly impact the global phenomenon. People feel disempowered and that their individual action is too small to make an impact. In addition, money is perceived as the corollary of a capitalist system, which development since the 70s is at the origin of the acceleration of CO2 emissions and the Anthropocene (Futureearth, 2020; Malm, 2018).

Have you ever thought innovation and new entrepreneurship could save our planet from global warming? Have you ever imagined the capitalist system, which ended up in tremendous green gas emissions, could be used as the one switching the situation? Impossible? Imagination is about seeing the impossible. Maybe you did but could not embrace all challenges it would imply. Time for The Planet (TFTP) is currently solving the question and closing the gap.

TFTP is a “*citizen community dedicated to global action*”, which mission is “*to fight against climate change at large scale by creating 100 companies*”. Their organization builds upon the characteristics of investment funds, social entrepreneurship (De Ruysser and al., 2017), high impact entrepreneurs dealing with global challenge (Markman and al., 2019) and community entrepreneurship (Selzky and Smith, 1994). We address the question how people perceive the credibility of the proposal of the movement. The paper crosses references and perspectives from economics, entrepreneurship and anthropology, and we build our observations and analysis on the 4 phases of a netnography (Kosinetz 2015, 2018). Depending of people in the sample, our findings show the perception of the proposal either

as a real utopia or as a credible innovative and creative proposal. It also highlights the difficulty to communicate on climate change so that people take action.

Keywords: real utopia, high impact entrepreneurship, social entrepreneurship, communities, global warming, global challenge, collective intelligence, netnography, TFTP, Time for the Planet

*Speaker

✉: carine.sonntag@icn-artem.com

✉: torres.ramos.gabriela1@gmail.com

Ecological Transition: How Can Creativity Curb Soils Sealing

Marie-Pierre Dussine^{*✉}

University of Lorraine, CEREFIGE, France

Abstract

Land use is a major aspect of sustainable development, as it conditions the development of ecosystem services. However, among the various land uses, one raises questions, due to its growth and the irreversible modification of ecosystems that it implies : soil sealing. Defined as the total or partial covering of an agricultural, forest or natural area by impermeable materials, soil sealing not only weakens biodiversity and our food autonomy, but it also increases our vulnerability by affecting the ecological functions of the soils as water absorption and filtration or carbon storage (Intergovernmental Panel on Climate Change, 2020). For these reasons, it is currently considered as the most dangerous land degradation process.

But despite many public policies aiming to mitigate this soil threat, soil sealing continues to increase annually at global (United Nations World Urbanization Prospects, 2019), European (European Environment Agency, 2021) and national scales (Agreste, 2021). Also, if Europe has set a "no net land take" target for 2050, we wonder about the conditions of effectiveness of the recent measures that have been taken, because many depend on local public choices and soil sealing represents an undeniable source of revenue for local authorities. While public action seems naturally indispensable, will it be sufficient to create the necessary incentives for a rapid modification of behaviors? More generally, how can the diversity of local stakeholders be effectively mobilized to limit soil sealing ?

In order to answer this question, we wish, in the first part, to understand what can limit the effectiveness of public intervention when it aims to control land use. This does not mean condemning public action, which remains essential, but rather considering how it can be supplemented by mobilizing several levels of public and private actors around a cooperative, polycentric equilibrium (Ostrom (2014). Then, because this equilibrium requires a real collective and social commitment (Leal, 2021), to make social norms evolve in favour of recycling old buildings rather than new developments, we mobilize, in a second part, the

recent developments of Behavioral Microeconomics (Charness, 2019, Attanasi et al., 2021), to outline the conditions of the stakeholder engagement in such a social innovation.

Keywords: Behavioral Economics, Creativity, Ecological Transition, Information, Land Use, Polycentric Equilibrium, Soils Sealing, Social Innovation, Stakeholder Engagement, Sustainable Development

References

Agreste, (2021), “L'occupation du sol en France entre 1982 et 2018”, *Dossiers de l'Agreste*, n° 3, avril.

Attanasi G., Chessa M., Gil-Gallen S., Llerena P., (2021), « A survey on experimental elicitation of creativity in economics », *Revue d'économie industrielle*, vol.174 | 2021, pp.273-324.

Charness G., Grieco D., (2019), “Creativity and incentives”, *Journal of the European Economic Association*, vol.17, n°2, pp. 454-496.

European Environment Agency, (2021), *The European environment : State and outlook 2020*, Office for Official Publications of the European Communities

Leal W.,Fritzen B., Ruiz Vargas V., Paço A., Zhang Q., Doni F., Azul A.M., Vasconcelos C.R.P, Nikolaou I., Skouloudis A., Weresa M.A, Marczevska M., Price E., Anholon R., Rampasso I., Quelhas O., Lange Salvia A., Gokcin Ozuyar P., Moggi S.,Wu Y.J, (2021), « Social innovation for sustainable development:assessing current trends », *International Journal of Sustainable Development & World Ecology*, DOI:10.1080/13504509.2021.201397

Ostrom E., (2014), “A Polycentric Approach for Coping Climate Change”, *Annals of Economics and Finance*, vol.15, n°1, pp.97–134.

United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Urbanization Prospects: The 2018 Revision* (ST/ESA/SER.A/420). New York : United Nations.

*Speaker

✉: marie-pierre.dussine@univ-lorraine.fr

Distributed Creativity and Expansive Learning in a Teacher Training School's Change Laboratory

Sakari Hyrkkö^{1*✉}, Anu Kajamaa²

1 University of Helsinki, Faculty of Educational Sciences

2 University of Helsinki, Faculty of Educational Sciences

Abstract

Our chapter presents a case study of distributed creativity and expansive learning in the context of a teacher training school in Finland facing transformational needs due to a curriculum reform. We report on an analysis of a Change Laboratory (CL) process of six meetings involving a group of teachers, their headmaster and researchers. Drawing from sociocultural theories on creativity and the theory of expansive learning, we set out to explore how creative acts emerged during the CL and how the interactive creative process contributed to expansive learning. Our findings illustrate that the creative learning process was socio-materially mediated through the participants' discourse and tool use. The multiple consecutive creative acts, taken by the participants, generated "creative leaps", which contributed to expansive learning actions and the materialization of the process into creative products. Consequently, the creative process resulted in a new tangible artefact: a shared pedagogical leadership model and a new collective conceptualization of the leadership activity for the school community. Our findings point to the need to analyse creativity not purely as independent actions but also as collective activity. Our study offers a novel analytical method for analysing and conceptualizing processes of distributed creativity as a learning activity in organizations. Our study also contributes to the understanding of creativity as a distributed process intertwined with expansive learning.

Keywords: Distributed creativity, Expansive learning, Change Laboratory, Teacher training, Cultural-historical activity-theory

*Speaker

✉: sakari.hyrkko@helsinki.fi

Ambivalences and paradoxes of social and environmental sustainability in digital teaching contexts during pandemics

Marlen Gabriele Arnold^{1*✉}, Martin Ulber²

1 TU Chemnitz, Faculty of Economics and Business Administration, Corporate Environmental Management and Sustainability,

2 TU Chemnitz, Faculty of Economics and Business Administration, Corporate Environmental Management and Sustainability

Abstract

In the global COVID-19 pandemic within shortest time, the university life was reduced to a minimum. Simultaneously, the courses were transferred into digital formats. Digital teaching faces several challenges, e.g. concerning the design of examinations due to legal uncertainties and technical problems (Goertz & Hense, 2021). There are also a variety of opportunities and advantages, like different digital teaching formats (Seyfarth et al., 2021) that can offer students and teachers a great deal of flexibility.

In terms of sustainability the use of different search engines, platforms and digital services is linked to seriously different greenhouse gas emissions and even the use of video cameras in meetings has an impact (Andrae & Edler, 2015). Due to the enormous electricity demand of digital services, the purchase of green electricity is also highly relevant and can cause rebound effects. The social dimension of sustainability considers aspects such as quality of life, basic needs, social resources, equal opportunities, and participation (Cook et al., 2017). In 'lock-down' living situations (thin walls, children not allowed to leave the house, etc.), concentrated and productive work can be severely impaired.

The following questions were examined twice by a questionnaire at the Chemnitz University of Technology at two different survey periods: How was this transformation done, by which advantages and disadvantages was it accompanied, how sustainable is this transformation, and how can the future of higher education look like?

A quasi-longitudinal design based on non-experimental research methods was chosen as part of the quantitative research methods and supplemented by qualitative content analysis. Between mid-July and the end of September 2020 as well as between February and March

2021 the survey addressed both university staff and students. Within the first survey, 369 complete responses were received, in the second run 252. Both surveys were analysed with the help of descriptive statistics and qualitatively by content analysis.

The results show a high degree of diversity in terms of behaviours and responses to pandemic digital teaching and learning. Digital teaching and working as well as learning from home offer multiple benefits and at the same time challenges - as does learning and working at the university campus. On the one hand, working and learning from home is perceived as enriching and overwhelming on the other - and this does not only differ from person to person, but also simultaneously within an individual. The flexibility associated with digital teaching is appreciated - at the same time, digital teaching is linked with a great deal of self-organization and few social contacts, which is perceived by some students as excessive demands. Blended learning designs are promising sustainable learning formats. Furthermore, the university can provide support in the form of targeted courses on self-management, strengthening and developing digital skills, or providing suitable digital services and technologies. There are striking gaps in knowledge and action when it comes to linking sustainability and digital transformation; re-bound effects can occur.

Keywords: Academia, COVID-19 pandemic; digital behaviour; digital transformation; rebound effects

References

- Andrae, A. S. G., & Edler, T. (2015). On Global Electricity Usage of Communication Technology: Trends to 2030. *Challenges*, Vol. 6, S. 117-157.
- Cook, G., Lee, J., Tsai, T., Kong, A., Deans, J., Johnson, B., & Jardim, E. (2017). Clicking clean: Who is winning the race to build a green internet? Greenpeace Inc., 5, Washington, DC.
- Goertz, L., & Hense, J. (2021). Studie zu Veränderungsprozessen in Unterstützungsstrukturen für Lehre an deutschen Hochschulen in der Corona-Krise. *Hochschulforum Digitalisierung*, AP 56, Berlin, S. 1-51.
- Seyfarth, F.C. et al. (2021). Formatentwicklung, Betreuungsmodell und Organisationsstrukturen: Ebenen und Erfolgsfaktoren für Nachhaltigkeit in digitalen

Lernarrangements. In Leal Filho, W. (Ed.) Digitalisierung und Nachhaltigkeit. Theorie und Praxis der Nachhaltigkeit. Springer, S. 99-128.

*Speaker

✉: marlen.arnold@wiwi.tu-chemnitz.de

Developing a Framework for the Employment of the Centrality of Information Technology (IT) as a Strategic Driver in a 21st Century Ethical, Innovative and Compliant Corporate Organisational culture

Karunagaran Naidoo¹, Henry Wissink^{*2}

1 Discipline of Information Systems and Technology, School of MIG, University of KwaZulu- Natal, South Africa

2 Discipline of Governance, School of MIG, University of KwaZulu-Natal, South Africa

Abstract

Background to the Problem/Challenge

Corporate governance may be considered as the system of rules or practices and processes that contributes to the strategic direction and control of a company. Good corporate governance requires an acknowledgement that an organization does not operate in a vacuum, but rather is an integral part of society, legal and agreed on procedural frameworks, and therefore has accountability towards current and future stakeholders. With the introduction of an 'apply and explain' regime, King IV suggests that organizations should be transparent in the application of their corporate governance practices (King IV, 2016). It essentially involves the balancing of interests of a company's many stakeholders, such as management, customers, suppliers, financiers, government and the community (De Haes, Joshi, Huygh, & Jansen, 2017).

A subset of corporate governance that is concerned with enterprise IT assets, is IT governance; this subset is also referred to as governance of enterprise IT (GEIT) or corporate governance of IT (De Haes et al., 2017). IT governance has been recognized since the advent of IT itself. Although methods and frameworks to support IT governance have existed for decades, these methods and frameworks did not really attract a global following or major interest from organizations. The massive failure in the governance systems leading to major controversies such as ENRON, WorldCom, amongst others, led to the situation changing in the late 1990s and the early years of the twenty-first century. Most of this change was driven by legislation stemming from political situations and decisions.

Why is it important?

The Sarbanes-Oxley Act of 2002 (SOX) that was approved on 30 July 2002, set a new and enhanced standard for all public company boards, management and accounting firms in the United States. This standard of SOX increased the independence of external auditors and the role of the boards of directors. The perception of stricter formal governance law was accepted in major countries including South Africa. Other countries that had companies with a listing in the US stock exchanges (NYSE, NASDAQ) had to comply with this legislation. This resulted in a world standard for major (listed) companies. Although this was not specifically directed at IT, the implications for IT were immense as it related to understanding the flow of transactions, including IT aspects in sufficient detail to identify points at which a misstatement could arise in the financial statements (King III, 2009). The shift of information technology from a support function to one of strategic importance was seen by the change that has occurred in organizations. This change of focus moved from the administrative capabilities of information technology to that of a strategic dimension. Information technology was previously used for back office functions like payrolls, leave analysis and fuel costs, whilst currently information technology is used in strategic decisions.

Purpose of Study/ What do I want to do?

To develop a framework that may be tested on companies that have been placed under curatorship, in order to determine whether the issues experienced by the company would have been predicted earlier, as this may lead to the company being rescued. An example of this would be the VBS mutual bank, and the recent case of South African Airways (SAA) which has been an ongoing debate during the past few years.

Design/Methodology/Approach:

Exploratory research to identify companies that had a web presence and had published either King III and or King IV evaluations on the web site. The exploratory research aided the researcher in choosing a quantitative study to supplement the initial exploratory qualitative study. The survey was posted using www.questionpro.com. The URL of the survey was sent to ISACA members and their associates. 36 completed questionnaires from private South African companies were analyzed.

Results/Findings

As indicated that effective governance was used in the prioritization of processes, inter/intra organizational learning, business strategic planning and IT Strategic planning. The companies had a steering committee and decisions were generally taken by management which indicated that upper level management was involved in the responsibility of the decisions. Decision taking was not just passed on to the IT personnel. The issues that were of concern was that standards were not always adhered to and generally there was a lack of trust amongst employees of the companies.

Recommendations:

A proposed IT Governance Framework was developed, consisting of elements of an as Structure, Processes and Relational Mechanisms. The Elements Structure (ES) is further clarified by considering: Roles and responsibilities, IT organizational structure, CIO on Board, IT strategy committee, and IT steering committee. The Element Processes (EP) is further clarified by considering the following: Strategic information systems planning, Information Technology balanced scorecard (IT BSC), COBIT & ITIL, Information economics, Service level agreements, IT alignment / governance maturity models. The Element Relational Mechanisms (ERM) was further clarified by considering active participation and collaboration between principle stakeholders, participation rewards and incentives, Business/IT co-location, cross-functional business/IT training and education could be used for the development and future testing of a more elaborate general and representative theory. This theory could become a benchmark for the importance and implementation of the compliance towards the use of certain prescribed structures and processes within a proposed IT Governance Framework.

Managerial Implications, and ongoing discussions about the issue:

IT Governance is the manner in which IT is considered in the supervision, monitoring, control and direction of the entity that is being governed. The application of IT within the entity will have an enormous impact on whether the entity attains its vision, mission or strategic goals. IT governance focuses on specific IT decisions that may be aided by principles from King IV and frameworks such as COBIT and ITIL.

Closer home, a case study known as the VBS Mutual Bank case, is a South African mutual bank. It was formed as a regional (Venda) Building Society in 1982, and became a mutual bank in 1992. By 2016 the bank reportedly had around 30,000 depositors with all deposits in the bank totaling R800 million. The report in 2018 by investigators that were appointed by the Reserve Bank to investigate the failure of VBS also found that criminal charges must be brought against those responsible (Timeslive, 2018). This indicates a need for this proposed framework to be used in the South African context.

References

- Brink, D. (2010). *Essentials of Statistics*. Ventus Publishing APS, Chicago.
- Creswell, J. W. (2015). *Revisiting Mixed Methods and Advancing Scientific Practices*. In TheOxford Handbook of Multimethod and Mixed Methods Research Inquiry. Sage, Thousand Oaks.
- De Haes, S., Joshi, A., Huygh, T. & Jansen,S. (2017). Exploring How Corporate GovernanceCodes Address IT Governance. *ISACA Journal*, 4: 1-7.
- De Haes, S., & Van Grembergen, W. (2005). IT Governance Structures, Processes andRelational Mechanisms: Achieving IT/business Alignment in a Major Belgian Financial Group. In Proceedings of the 38th Annual Hawaii International Conference on System Sciences, (pp. 237b-237b).
- Earl, M.J. (1989). *Management Strategies for InformationTechnology*. Prentice Hall: NewYork
- Galliers, R.D. (1994). 'Coping with information technology? How British executives perceivethe key information management issues in the mid 1990s'. *Journal of Information Technology*, 9(3): 223 - 238.
- Faryabi, M., Fazlzadeh, A., Zahedi, B. & Darabi, H.A. (2012). 'Alignment of Business and ITand Its Association with Business Performance: The Case of Iranian Firms'. *Journal of Business & Management*, 1 (1): 15-28
- Henderson, J. C., Venkatraman, N. (1991). 'Understanding strategic alignment'. *BusinessQuarterly*, 55 (3): 72- 78
- Henderson, J. C. and Venkatraman, N. (1993). 'Strategic alignment: Leveraging informationtechnology for transforming organizations'. *IBM Systems Journal*, 32 (1): 472 - 484
- King II. (2002). *King_Report_on_Corporate_Governance*. Institute of Directors in SouthernAfrica (IoDSA): Johannesburg.
- King III. (2009). *King Report on Governance for South Africa*. Institute of Directors in Southern Africa (IoDSA): Johannesburg.

- King IV. (2016). *Report on Corporate Governance for South Africa*. Institute of Directors in Southern Africa (IoDSA): Johannesburg.
- Luftman, J. (2000). 'Assessing Business-IT alignment Maturity'. *Communications of AIS*, 4:14
- McGuirk, P. M. & O'Neill, P. (2005). *Using Questionnaires in Qualitative Human Geography*. In I. Hay (Eds.), *Qualitative Research Methods in Human Geography* (pp. 147-162). South Melbourne, Australia: Oxford University Press.
- McFarlan, F.W. (1984). 'Information technology changes the way you compete'. *Harvard Business Review*, 62 (3): 98 - 104.
- Peterson, R. (2003). *Information strategies and tactics for information technology governance, in Strategies for information technology governance*. Idea Group Publishing, Hershey.
- Porter, M. E. (2001). 'Strategy and the Internet'. *Harvard Business Review*, 79(3): 63-78.
- Porter, M.E. & Millar, V.E. (1985). 'How information gives you competitive advantage'. *Harvard Business Reviews*, 63(4): 149 - 160.
- McDonald, M.P. (2014). 'Strategic Pairings, how business and technology trends seem to come in pairs'. Retrieved 2 March 2015, 06h00 from: <http://www.accenture.com/us-en/blogs/digital-business/archive/2014/01/23/strategic-pairings-trends-come-pairs.aspx>.
- Timeslive. 2018. 'The great bank heist: The damning report on VBS Mutual Bank'. Retrieved 10 October 2018. <https://www.timeslive.co.za/sunday-times/business/2018-10-10-in-full-the-great-bank-heist-the-damning-report-on-vbs-mutual-bank/>.
- Van Grembergen W., Saull R. & De Haes S. (2003). 'Linking the IT balanced scorecard to the business objectives at a major Canadian financial group'. *Journal of Information Technology Cases and Applications*, 5 (1): 23-50
- Weill, P. (2004). 'Don't just lead, govern: How top performing firms govern IT'. *MIS Quarterly Executive*, 3(1): 1-17.

*Speaker

✉: naidook82@ukzn.ac.za; wissinkh@ukzn.ac.za

Influence of Product Convergence on the Disruptive Susceptibility of Value Networks and the Disruptive Potential: A Replication Case Study of the German Digital Camera Market

Eva Fritsch ¹, Govinda Ahuja ^{2*}✉, Stefan Hüsigg ³

1 Kalrock Capital Management, London – United Kingdom

2 Independent Researcher, Nieder-Olm – Germany

3 Innovation Research and Technology Management, University of Chemnitz – Germany

Abstract

Convergence and disruption are often observed in digitalized markets and products. Although the theory behind both these phenomena is improving individually, the relationship between convergence and disruption is rarely understood. Therefore, in this paper, an attempt is made to examine the influence that converging products have on disruption. The goal of this paper is to analyse whether a new-market disruptive innovation (DI) caused by a convergence product has any influence on the concepts of disruptive susceptibility (DS) and the disruptive potential (DP) to anticipate disruptive innovation (Christensen et al. 2004; Klenner et al., 2013). To achieve this, the initial study by Klenner et al. (2013) on DS is replicated and expanded through the application of the framework to analyse the DP of an innovation (Keller and Hüsigg 2009). The results of this study indicate that the DS of the examined value network of the digital cameras in Germany was low but at the same time, the innovation showed a high DP. The DP framework exhibited consistent results with case study and was validated ex post.

Keywords: Convergence, Disruptive innovation, Disruptive susceptibility, Mobile phone camera, Replication, Technology forecasting, Digital disruption

References

- Christensen, C.; Anthony, S.; Roth, E. (2004). 'Seeing what's next? Using the theories of innovation to predict industry change'. Harvard Business School Press, Boston, Mass.
- Keller, A. & Hüsig, S. (2009). 'Ex ante identification of disruptive innovations in the software industry applied to web applications: The case of Microsoft's vs. Google's office applications.' *Technological Forecasting and Social Change*, 76(8), 1044-1054.
- Klenner, P.; Hüsig, S.; Dowling, M. (2013). 'Ex-ante evaluation of disruptive susceptibility in established value networks-When are markets ready for disruptive innovations?' *Research Policy* 42(4), 914-927.

*Speaker

✉: govindaahuja@gmail.com

Blockchains, sci-fi and cyberpunk at the intersection of imagined and manifest futures

Jan-Peter Schmitten^{1*✉}, Julien Bucher²

1, 2 Chair of Innovation Research and Management of Technology, Chemnitz University of Technology, Thüringer Weg 7, 09126 Chemnitz, Germany

Abstract

Drawing on previous research we argue that innovation research is ignoring one major element that is influencing innovation processes and the diffusion of innovations: socio-cultural narratives and imaginations (Verworn & Herstatt, 2000).

Introduced in the wake of the international banking crisis in 2009, the founding narrative of blockchain technologies and their community is one of the failures of the banking system and the failed promises of the freedom and equality of information and knowledge of the early internet (Berners-Lee, 2018). Blockchain technologies are supposed to rectify the lost trust, to mitigate the risks within the system and enable the exchange of assets and information among equal peers. They deny the need for intermediaries that resemble the corporate behemoths imagined in the cyberpunk genre in the 1980s.

By conducting a series of single-case studies (Yin, 2003) we trace the role of cyberpunk narratives in different blockchain projects and what this role teaches us about their reflexivity towards established institutions and organizations.

We highlight possible opportunities to utilize fictional narratives to reflect on and influence the development trajectories of innovations for sustainable management, like scouting potential innovations and aid in their diffusion, identifying desirable and undesirable futures whose depictions can in turn be used to inform and inspire the development and application of technologies or how fiction and narratives can work to foster responsible innovation, by reflexively extrapolating different possible trajectories of the societal impacts of innovations.

Keywords: Blockchain Technologies, Innovation, Narrative, Cyberpunk, Science-Fiction, Reflexivity

References

- Berners-Lee, T. (2018). *One Small Step for the Web....* <https://inrupt.com/blog/one-small-step-for-the-web>
- Verworn, B., & Herstatt, C. (2000). *Modelle des Innovationsprozesses* [Working Paper]. Technologie- und Innovationsmanagement, Technische Universität Hamburg-Harburg. <https://doi.org/10.15480/882.102>
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Sage Publications.

*Speaker

✉: jan-peter-schmitt@wiwi.tu-chemnitz.de

University Incubator and Entrepreneurial University: Case Study of the Process of Setting Up a University Incubator in a Developing Country

Ulvick Houssou ^{1*}, Klaus-Peter Schulz ^{2✉}, Mahamadou Biga-mahamadou ³, Serge Abihona ⁴

1 ICN ARTEM Business School, Nancy, CEREFIGE, University of Lorraine – France

2 ICN ARTEM Business School, Nancy. CEREFIGE – France

3 ICN ARTEM Business School, Nancy. CEREFIGE – France

4 University of Abomey- Calavi Foundation. – Benin

Abstract

Universities can play a role in promoting innovation by encouraging it and its transfer to the socio-economic world. They can equally contribute to this by promoting the acquisition of skills to improve the employability of students. Specifically, the entrepreneurial university can encourage innovations that will benefit vulnerable communities and act in response to their challenges through the practices it promotes. In a context of weak financial support from public authorities, the University of Abomey-Calavi set up a project to promote entrepreneurship that advances frugal innovation. The present study bases its approach on identifying the actors and factors that favored the development of its incubation program, 5 years after its implementation. The results show, among other things, that the university created a specific organizational framework, with a relatively long incubation period and mobilization of resources from local stakeholders.

Keywords: entrepreneurial university, University of Abomey-Calavi, university incubator, frugal innovation, developing country

*Speaker

✉: ulvick.houssou@icn-artem.com

A Conceptual Analysis of Social Entrepreneurship (SE) in Emerging and Developing Economies

Sajida Muhammad Tayyeb ^{1*}✉, Elisabeth Paulet²

1 ICN Business School, Nancy – France

2 ICN Business School, Department Finance Audit Accounting and Control, Nancy – France

Abstract

Social Entrepreneurship (SE) has allured tremendous attention from both academics and practitioners around the world (Bacq & Janssen, 2011; Cagarman, et al., 2020; Garcia-Jurado, Perez-Barea & Nova, 2021; Short, Moss & Lumpkin, 2009). However, SE still remains less research-focused in emerging and developing economies. This paper analyzes existing literature on Social Entrepreneurship in developed and emerging countries. Pertaining a thematic review, this paper explores patterns and trends existing in the literature. This paper utilizes thematic analysis because it mainly interprets unstructured data such as literature review (i.e. SE models) through a qualitative and inductive methodology.

Consequently, the paper discusses existing literature and theoretical contributions in the field of SE in emerging and developing country-context. Because mainly, existing literature lacks generalizability due to contextual distinctions among countries. North (1990) claims that institutions are the key players in a society in a manner that restrict and shape human communications. It is evident that distinct institutional reforms exist in different countries, hence, this study will conceptually analyze those differences. This study explains how SE is different in the context of developing and emerging countries.

Keywords: Social Entrepreneurship, Emerging Countries, Developed Countries

References

- Bacq, S., & Janssen, F. (2011). The Multiple Faces of Social Entrepreneurship: A Review of Definitional Issues Based on Geographical and Thematic Criteria. *Entrepreneurship and Regional Development*, 23(5), 373-403.
- Cagarman, K., Kratzer, J., & Osbelt, K. (2020). Social Entrepreneurship: Dissection of a Phenomenon through a German Lens. *Sustainability*, 12(18), 7764.
- Garcia-Jurado, A., Perez-Barea, J. J., & Nova, R. J. (2021). A New Approach to Social Entrepreneurship: A Systematic Review and Meta-Analysis. *Sustainability*, 13(5), 1-16.
- North, D. C. (2012). *Institutions, Institutional Change and Economic Performance*. Washington: Cambridge University Press.
- Short, J. C., Moss, T. W., & Lumpkin, G. T. (2009). Research in Social Entrepreneurship: Past Contributions and Future Opportunities. *Strategic Entrepreneurship Journal*, 3(2), 161-194.

*Speaker

✉: sajida.muhammad-tayyeb@icn-artem.com

From Imagination to Innovation - Insights from Entrepreneurship, Sustainability, Creativity, and Problem Solving Research

Julien Bucher^{1*✉}, Stefan Hüsiger^{1*}

¹Chemnitz University of Technology, Chair for Innovation Research and Technology Management, Germany

Abstract

The idea of something to be realized, the imagination of a certain product, technology, service or even concept of living and social organization has often been formulated, picked-up, reiterated and discussed over time, influencing the general social imagination in general, influencing contemporary innovation processes and preparing for future innovation before the actual problem-solution cycle kicks in and starts the known innovation process. Hawlina et al (2020) condensed the general concept quite well: “the products of imagining can be objectified in artefacts, which enable the dissemination of transformative visions.” Imaginations are understood as multimodal mental images, representations of fictional things, such as artifacts, scenarios, and events, rather complex and persistent individual as well as socially shared ideas (Bucher 2019). This contribution focuses on imaginations of fictional technologies, or utopic technologies (Michaud 2017) and how these imaginations historically sediment in media creating a path from imagination to innovation. The consideration and utilization of imaginations grounded in science-fiction are already taking place: There are dedicated consulting ventures such as „SciFutures“ or the think tank „Sigma“. Qualcomm undertook an open competition for the development of the handheld medical scanner “Tricoder” from Star Trek and the European Space Agency held the “Clarke-Bradbury International Science-Fiction Competition”. In this context, our research questions are, whether and why the process of an imagination manifesting as an innovation can be reconstructed, how imagination is manifesting as innovation and what influences this process of manifestation.

Keywords: Imagination, Imaginator, Innovation, Creativity, Entrepreneurship, Science Fiction, Technological Innovation, Space Travel

References:

- Bucher, J. (2019). The overlooked roots of innovations. Exploring the relevance of imagination on innovation using Science Fiction. In Z. Fields, S. Hüsig (Eds.) Responsible, Sustainable, and Global Aware Management in the Fourth Industrial Revolution. Hershey, PA: IGI Global
- Hawlina, H., Pedersen, O. C., Zittoun, T. (2020). Imagination and social movements. Current Opinion in Psychology, 35, <https://doi.org/10.1016/j.copsyc.2020.02.009>
- Michaud, T. (2017). Innovation, Between Science and Science Fiction. London, UK: ISTE Ltd.

*Speaker

✉: julien.bucher@wirtschaft.tu-chemnitz.de

Covid-19 as a Chance for Ideation? How Online Workshops Compare to Traditional Face-to-Face Idea Generation Workshops

Rebecca Frenz ^{1*}, Anja Herrmann-Fankhänel ²

1 Mercedes-Benz AG, Research & Development, Böblingen, Germany

2 University of Technology Chemnitz, Chair of Innovation Research and Technology Management, Germany

Abstract


The Covid-19 pandemic forced corporations and employees to reevaluate and change processes all across the board. It thereby accelerated already existing digitalization trends for example in ideation. However, it remains an open question whether the use of online workshop settings are beneficial or detrimental to the outcome of idea generation workshops. This study contributes to this question with special regards to the influence that the workshop setting, face-to-face or online, has on idea quality and workshop experience. In a quantitative study setting five workshops with $N = 65$ participants, $N = 94$ ideas were evaluated and show that idea quality is significantly better in an online setting, while workshop experience is significantly better in a face-to-face setting.

Keywords: Ideation, Covid-19 Pandemic, Idea Generation Workshops, Online Workshops, Face-to-Face Workshops

*Speaker

: Rebecca.frenz@mercedes-benz.com

Moving beyond rhetoric: e-HRM and Strategic HR lead to innovation

Nyikiwa Mavunda^{1*}, Isabelle Martins²

1, 2 University of KwaZulu-Natal, College of Law and Management, School of Management, IT and Governance, Westville campus, Durban South Africa


Abstract

Innovation of digital transformation is important for the survival and prosperity of the organisation. Many organisations try to win the struggle of changing nature in the workplace by changing continuously. Extant literature indicates that digital innovation usually makes the entire organisation stronger and better equipped with more opportunities for the future. Therefore, this paper seeks to investigate whether technological enhancement at a Higher Education Institution adds value to strategic HR processes. Due to increasing improvements in the innovation of digital transformation, technological enhancement has become more important, which helps with the need to simplify organisation processes for easier management. However, the failure to see improvement in service delivery and efficiency as having a strategic value to HR processes is one of the gaps identified in the literature.

A mixed-method was used to collect primary data. Whereby, a quantitative approach, which includes a questionnaire encompassing closed and open-ended questions, was used, as well as interviews for the qualitative section. Of the 370 targeted responses, a total number of 275 responses were received. Whereby, three of the duplicated responses were discarded. The remaining 272 represent a 73.5% rate of responses. The questionnaire was made available via Google forms and the Zoom platform was used to conduct interviews with the participants. The findings showed that technological enhancement improved a platform for work processes between UKZN employees and managers through system automation, as the system allowed a good flow between the managers and the subordinates.

Keywords: Organisational transformation, technology enhancement, digital HR innovation, eHRM.

*Speaker

: 204000630@stu.ukzn.ac.za

Fostering Growth Mindset and Resilience to Support Talents and Leaders: “ What’s Going on in Messi’s Brain”

Nikos Lambridis*✉

Associate Professor, York University- Greece

Abstract

Particular cognitive abilities might be important for excelling in football. Football players are required to anticipate and react continuously in a changing, relatively unpredictable situation in the field, and thus those with better visuospatial attention abilities for instance may have a more successful career. Research in the field of neuroscience has identified specific brain areas responsible for better cognitive skills, and so by studying elite football players we may be able to identify what brain and cognitive differences are associated with better performance in the field.

Science has proved that the brain’s emotional response to external change, and respectively to new ideas and innovation, is most likely fear. The underlying brain’s mechanisms perceive the external change as a threat and lead to behaviour that makes people move away from it to the certainty and security of the known status quo. Transformation of individuals or even organizations require the help of Neuro-plasticity and a Growth Mindset.

Structural equation modeling revealed that Elite Talent Management is influenced by the player’s “scanning” capability, Growth Mindset, and the Coach’s leadership style and Emotional Intelligence, for predicting individual outcomes and collective efficacy. Partial results are discussed relative to the viability of using transformational leadership theory to understand coach and athlete leadership in Elite Talent development.

Keywords: Leadership, Growth Mindset, Resilience, Talent management, Emotional Intelligence, Visual spatial skills, Coaching, Transformation

References

- Bass, B.M., & Avolio, B.J. (2004). Manual for the Multifactor Leadership Questionnaire (Form 5X). Palo Alto, CA: Mind Garden, Inc.
- Bass, B. M., & Riggio, R. E. (2006). Transformational leadership (2nd ed.). Mahwah, NJ: Erlbaum.
- Callow, N., Smith, M. J., Hardy, L., Arthur, C.A., & Hardy, J. (2009). Measurement of transformational leadership and its relationship with team cohesion and performance level. *Journal of Applied Sport Psychology*, 21, 395–412.
- Carron, A.V., Brawley, L.R., & Widmeyer, W.N. (1998). The measurement of cohesiveness in sport groups. In J.L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 213–226). Morgantown, WV: Fitness Information Technology.
- Charbonneau, D., Barling, J., & Kelloway, E.K. (2001). Transformational leadership and sports performance: The mediating role of intrinsic motivation. *Journal of Applied Social Psychology*, 31, 1521–1534.
- Eys, M. A., Loughhead, T.M., & Hardy, J. (2007). Athlete leadership dispersion and satisfaction in interactive sport teams. *Psychology of Sport and Exercise*, 8, 281–296.
- Glenn, S.D. (2003). Filling the leadership void: The impact of peer and coach leaders on team dynamics and performance. Unpublished doctoral dissertation, University of Idaho, Moscow.
- Little, T.D., Cunningham, W.A., Shahar, G., & Widaman, K.F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, 9, 151–173.
- Loughhead, T.M., & Hardy, J. (2005). An examination of coach and peer leader behaviors in sport. *Psychology of Sport and Exercise*, 6, 303–312.
- Northouse, P.G. (2004). *Leadership: Theory and practice*. Thousand Oaks, CA: Sage.
- Price, M.S., & Weiss, M.R. (2000). Relationships among coach burnout, coach behaviors, and athletes' psychological responses. *The Sport Psychologist*, 14, 391–409.

*Speaker

✉:nikos.lambridis@myicn.fr

Pascale Baaklini*✉

Université de Lorraine , Laboratoire CEREFIGE, Nancy – France

Abstract

The twenty-first century is a century marked by the opening of cultural and historical boundaries all over the world. The promises of equal opportunities and the continuous struggles against all types of discrimination are currently the most demanding topics on a global level and on a European level specifically (Barth & Falcoz, 2007). Ensuring an inclusive management characterized by anti-discrimination is now recommended not only to target the defined percentage set by law in some countries, but to also benefit from a range of positive advantages.

If gender has been until now highly scrutinized through management literature and within the overall finance and accounting fields, little has yet been done in favor of the auditing field. To fill this void, this paper aims to give a comprehensive understanding and critical review of the existing literature on gender differences over the ‘triangle of control’ composed of audit committees, internal audit, and external audit which were considered for a long period as masculine jobs. Our article covers the articles from period of 1978 - 2021. We searched the existing literature, appraised their contributions and built critical summaries of all the findings in order to address current gaps in the literature and in the methodologies previously.

This article is meant to be an original contribution to the theme of gender management in the audit field and proposes a clarity that is both complementary and new in relation to previous research carried out within the same framework of our theme. It is meant to be a major source for researchers seeking to understand gender differences in the audit field and to use it as a starting point to elaborate on more scientific research and fields.

Keywords: Gender diversity, Audit, Internal audit, External Audit, Audit Committees

References

Barth, I., & Falcoz, C. (2007). *Le management de ladiversite. Enjeux fondamentaux et pratiques*. L'harmattan.

*Speaker

✉:pascale583@hotmail.com

Recruitment methods used by companies in the Saint-Louis agglomeration due to their proximity to Switzerland

Axelle Lutz^{1*}✉

1 ICN Business School, Nancy/Paris

Abstract

Companies in the Saint-Louis agglomeration must also face significant competition from Switzerland, but also struggle to recruit due to the lack of profiles and skills present in the territory. Therefore, in this research, we ask the following question: What are the recruitment mechanisms put in place within the companies of the agglomeration of Saint-Louis in the face of the proximity of Switzerland? Using the prospecting and recruitment methods proposed by Bessy and Marchal (2009), this study aims to understand the recruitment strategy implemented by companies in the Saint-Louis agglomeration. The objective is to understand whether a lack of effective mechanisms put in place by these companies was not also the source of the recruitment problem in this territory. To do this, a qualitative study was conducted with 20 participants from 16 different organizations. The 20 participants (13 women and 7 men) in this study all work in French companies (16 different organizations, including 14 companies and two territorial institutions) located in the St. Louis agglomeration. This varied sample (pharmaceutical, plastics, chemical, metallurgy, textile, laundry, biotechnology, electronics, motorization, and service sectors) made it possible not to limit the research to a single employment sector.

This research allowed us to highlight certain recruitment mechanisms implemented and used by organizations. It emerged from the interviews that a good balance between skills and interpersonal skills is essential to meet the needs of the organization. Thus, the question of managing recruitment through skills management or through the skills of human resources may be a possibility to consider for companies. The latter are turning to often local recruitment to ensure that newly recruited individuals remain within their organization and do not suffer from an ailment of their home region. The attractiveness of the territory would play a preponderant role in recruitment, thus, the employer brand could be a recruitment opportunity to be seized by the organizations encountered. We were also able to highlight the difference

in perception that may exist on certain points between companies and territorial institutions. Finally, this study has shown that Switzerland is not the main problem, since French workers do not necessarily turn to this country to find a job. Especially since young Alsatians no longer speak German or Alsatian, which almost resembles Swiss German, which makes their job search in the neighboring country more complex (EURES-T, 2019). The real problem is that the recruitment and training strategy is not sufficiently adapted to the needs of the organizations in the region.

Keywords: prospecting, internal recruitment, external recruitment, recruitment strategy, recruitment devices

References

Agglomération de Saint-Louis (2021), www.agglo-saint-louis.fr.

Bessy C. et Marchal E. (2009), « Le rôle des réseaux et du marché dans les recrutements – Enquête auprès des entreprises », *Revue Française de Socio-Economie*, n°3, p. 121-146.

EURES-T (2019), « Zone économique du Rhin supérieur – une région dynamique où il faut bon vivre. Aperçu du marché du travail dans la région frontalière germano-franco-suisse le long du Rhin », *Espaces économique du Rhin Supérieur*, <https://www.eures-t-rhinsuperieur.eu>.

Fondeur Y. (2014), « La « professionnalisation du recrutement » au prisme des dispositifs de sélection », *Revue Française de Socio-Economie*, n°14, p. 135-153.

Fondeur Y. et Minni C. (2004), « L'emploi des jeunes au cœur des dynamiques du marché du travail », *Economie et statistique*, n°378-379, p. 85-104.

Gabriel-Roset L. (2016), « Analyser les difficultés de recrutement dans un contexte de chômage important », *Sociologies pratiques*, N°33, p. 107-108.

Jaussaud J. et Mayrhofer U. (2014), « Les tension global-local : l'organisation et la coordination des activités internationales », *Management international*, vol.18, p. 18-25.

Marchesnay M. (2004), « Hypermodernité, hypofirme et singularité », *Management et Avenir*, n° 2, octobre, p. 7-26.

MEF Mulhouse Sud Alsace, mef-mulhouse.fr.

Paradas A. (2007), « Mutualiser la formation et le recrutement dans les PME », *Revue des Sciences de Gestion*, n°226-227, p. 147-155.

Saint-Louis (2021), www.saint-louis.fr.

Saint-Louis Agglomération Alsace Trois Frontières (2017), « Saint-Louis Agglomération Alsace Trois Frontières - Portrait d'agglomération », grandest.fr

Taverne D. (2018), « Les évolutions récentes de l'emploi salarié », ARUM (Agence d'Urbanisme de la Région Mulhousienne).

*Speaker

✉: axelle.lutz@icn-artem.com

Nirjhar Nigam ^{1*}, Sondes Mbarek ^{2✉}

1 Associate Professor, ICN Artem Business School, CEREFIGE

2 Associate Professor, Institut Mines Télécom Business School, LITEM, FRANCE

Abstract

To achieve the 2030 sustainable development goals target, countries would require a mammoth amount of financing. Financial institutions have a crucial role to play by mitigating the funding gap. Proactive innovative steps by financial institutions can operationalize sustainable and inclusive development and help them to achieve sustainable development goals. In this paper, we draw attention to the largest Indian public sector bank, and innovative measures it has taken for responsible finance and sustainable banking towards climate and societal action. We manually evaluate the sustainability and annual reports for the past 5 years, present the findings, and develop a framework that can help the other banks to emulate its steps especially the ones who perceive it as a benchmark bank. Our study contributes to the stakeholder theory especially from the perspective of leadership roles.

Keywords: Responsible finance; Eco-innovation; Social innovation; digital innovation; Sustainability reporting; sustainable banking

*Speaker

✉:sondes.mbarek@imt-bs.eu

Smart Contracts in Corporate Finance - Framework Conditions for a more sustainable Lending by Banks to Small and Medium-sized Enterprises

Jörg Müller^{1*}✉

1 University of Technology Chemnitz, Faculty of Economics and Business Administration – Germany

Abstract

In the course of efforts to act sustainably, the design of business processes between companies is widely discussed, also in the German economy. Replacing human activity with computer-assisted activities can lead to considerable efficiency gains for those involved and thus promote economic sustainability. Particularly relevant are the transaction costs along the value chain of companies, which can be reduced through digitalisation (cf. Proff/Ahrens/Neuroth/Proff/Knobbe/Szybisty/Sommer, 2021, pp. 10-26). Insofar as it is possible to conduct business transactions between companies digitally and without face-to-face meetings, there could also be positive effects for environmental sustainability. Transport costs would be reduced, which could limit greenhouse gas emissions. According to a study by the business association Bitkom e.V., up to 152 MT CO₂e could be saved in Germany by 2030 through the use of digital technologies (cf. Bitkom e.V., 2021, p. 8). However, companies will only tend towards greater digitalisation if the achievement of efficiency gains is predominantly likely. So-called 'smart contracts' could play a central role in this context. These make automated execution of contracts between the parties possible (cf. Scherk/Pöchlacher-Tröscher, 2017, p. 27 and Wilkens/Falk, 2019, p. 4). The term 'smart contract' was first used by Nick Szabo in 1994 (cf. Jakob/Schulte/Sparer/Koller/Henke, 2018, p. 4). He defined it as '[...] a computerised transaction protocol that executes the terms of a contract.' (Szabo, 1994). The smart contract technology could also play a valuable role in the corporate lending business of banks. After all, a large number of contracts are regularly concluded there, the preparation and implementation of which entails a number of work tasks (see for instance

Wahrenburg/König/Beimborn/Franke/Gellrich/Hackethal/Holzhäuser/Schwarze/Weitzel, 2005, p. 24, where the individual tasks of a bank in granting loans to SMEs are presented). So far, however, the smart contract technology does not seem to have found its way into banking practice to any significant extent. In the academic literature, the focus has so far been on the technical and legal aspects of smart contracts, while a microeconomic analysis of the incentives of the participants does not seem to have been carried out yet. The present research project addresses this gap. It first shows what a smart contract solution for SME loans from German banks could look like from a technical point of view. The subsequent investigation uses a microeconomic incentive scheme to show which conditions must be fulfilled for the parties involved in the financing process to consider using smart contracts. Based on this scheme, it is worked out which obstacles exist within the current institutional (mainly legal) framework for the use of smart contracts in SME financing by banks in Germany. Proposals are then developed on how these obstacles can be overcome. The data processing mechanism of the envisaged smart contract solution is to be based on blockchain technology.

Keywords: Smart Contract, Corporate Finance, SME, Blockchain, Bank Loan

References

Bitkom e.V. (2021), Klimateffekte der Digitalisierung -Studie zur Abschätzung des Beitrags digitaler Technologien zum Klimaschutz

Jakob, S./Schulte, A. T./Sparer, D./Koller, R./Henke, M. (2018), Blockchain und Smart Contracts: Effiziente und sichere Wertschöpfungsnetzwerke

Proff, H./Ahrens, C./Neuroth, W./Proff, H./Knobbe, F./Szybisty, G./Sommer, S. (2021), Accelerating digitalization: Chancen der Digitalisierung erkennen und nutzen, Wiesbaden

Scherk, J./Pöchhacker-Tröscher, G. (2017), Die Blockchain – Technologiefeld und wirtschaftliche Anwendungsbereiche, Linz

Szabo, N. (1994), Smart Contracts

Wahrenburg, M./König, W./Beimborn, D./Franke, J./Gellrich, T./Hackethal, A./Holzhäuser, M./Schwarze, F./Weitzel, T. (2005), Kreditprozess-Management: Status Quo und Zukunft des Kreditprozesses bei Deutschlands 500 grössten Kreditinstituten, Norderstedt

Wilkens, R./Falk, R. (2019), Smart Contracts – Grundlagen, Anwendungsfelder und rechtliche Aspekte, Wiesbaden

*Speaker

✉: joerg.mueller@wiwi.tu-chemnitz.de

Creativity, Adaptability, Transition: Advancing Sustainable Development in the Built Environment through Transdisciplinary Architectural Design

Rana Geith ^{1*}, Sherif Goubran ^{2✉}

1 Graduate Researcher, Department of Architecture, School of Sciences and Engineering. The American University in Cairo, New Cairo campus, Cairo. – Egypt.

2 Assistant Professor, Department of Architecture, School of Sciences and Engineering. The American University in Cairo, New Cairo campus, Cairo. – Egypt.

Abstract

With global population growth and urbanization trends rising (Department of Economic and Social Affairs (Population Division), 2017; United Nations - Department of Economic and Social Affairs Population Division, 2018), it is now imperative that we move towards a state of creative sustainability in the built environment. The publication of the 2030 Agenda and the sustainable development goals, the (SDGs), have reframed the sustainable built environment challenge as a complex design problem, open for interpretation, judgment, and theorization and leading to multiple solutions and innovations that require synthesis of knowledge between a multitude of disciplines. In this paper, we argue that architecture, as a field of research and practice, is both inductive and inclusive of the creative transdisciplinary approaches needed to tackle sustainable development challenges in the built environment. The paper theoretically postulates that architectural design, as a field of design research and practice, is fit for accelerating sustainable development in the built environment through its application of transdisciplinary approaches throughout its process. Accordingly, the paper's method analyses a series of published cases available through the International Union of Architects (UIA) publications that highlight how creative transdisciplinarity through architecture can contribute to the SDGs, and present creative transdisciplinary sustainable solutions developed for the 17 goals within nine architectural domains. The relationship matrix, presented in Figure 1, connects architectural domains with the SDGs based on evidence found in various cases. Accordingly, the paper concludes that the value of architecture as a transdisciplinary field of study and practice is manifested to be one that gives attention to the

network of interrelations in a given context, is in harmony with the context of ecological, social, historical, biological, and economic forces, preserves and restores the damages within a society, capitalizes on the resources and capacities of the context, and establishes possibilities of co-existence.



Figure 1. The relationship matrix between the architectural domains and the SDGs extracted from the cases studied

Keywords: Sustainable development, built-environment, SDGs, building assessment, design values, creative sustainability, architectural practices.

References

- Department of Economic and Social Affairs (Population Division). (2017). World Population Prospects - The 2017 Revision Key Findings and Advance Tables. In *World Population Prospects*. United Nations. <https://doi.org/10.1017/CBO9781107415324.004>
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations. sustainabledevelopment.un.org
- United Nations - Department of Economic and Social Affairs Population Division. (2018). *World Urbanization Prospects: The 2018 Revision (ST/ESA/SER.A/420)*. United Nations.

*Speaker

✉:sherifg@aucegypt.edu

Investigating the Concept of Web Atmospherics in the Luxury Industry

Mariam Kaskas ^{1*}✉ , Philip Kitchen ²

1 PhD Student, ICN Business School- France

2 Affiliate Professor, ICN Business School- France

Abstract

In the online shopping experience, web atmospherics represent a stimulus that activates emotional states in buyers and affects their overall experience (Kawaf & Tagg, 2017). Kim *et al.* (2015) defined web atmospherics as cues that include all the information needed to create an online store atmosphere. This includes prices, product descriptions, terms of sale, colors, icons, and music (Kim *et al.*, 2015). An organized and well- developed webpage helps in creating an ultimate shopping experience for customers, thus gaining their satisfaction and increasing the brand's overall sales (Shankar *et al.*, 2011). Luxury shoppers are not typical shoppers; they have distinctive purchasing motives and intentions (Liu *et al.*, 2013). This is why, luxury retailers usually tend to affect the senses of their consumers by having unique lighting, soft music, distinctive layout, dark or neutral colors, and a welcoming staff in order to ensure that customers feel and perceive the brand as luxurious. However, it is a major challenge for luxury brands, in particular, to fully convey the luxurious aspect from physical stores into virtual ones (Okonkwo, 2005). There is a lack of current research on the role and importance of web atmospheric cues that consumers value most that help preserve the luxurious aspect for them. In addition, most researchers have not so delved into learning the effect of the studied elements in the online experiential context and on buyer behavior specifically. To achieve the aim of this research, which is investigating the impact of web atmospherics on the online customer experience, including buying behaviors, and on customers' perceptions in the luxury industry, a mixed method will be used. Therefore, there will not only be a testing of hypotheses using a quantitative method, but also a qualitative exploration and explanation as to how web atmospherics affect the overall online customer experience in a chosen luxury sector.

Keywords: Online shopping experience, Web atmospherics, Luxury shoppers, Buying behavior, perceptions

References

- Kawaf, F., & Tagg, S. (2017). The construction of online shopping experience: A repertory grid approach. *Computers in Human Behavior*, 72 (Complete), 222–232. <https://doi.org/10.1016/j.chb.2017.02.055>
- Kim, H., Choi, Y.J. & Lee, Y. (2015). Web atmospheric qualities in luxury fashion brandwebsites. *Journal of Fashion Marketing and Management*, 19 (4), 384-401, <https://doi.org/10.1108/JFMM-09-2013-0103>
- Shankar, V., Inman, J. J., Mantrala, M., Kelley, E., & Rizley, R. (2011). Innovations in Shopper Marketing: Current Insights and Future Research Issues. *Journal of Retailing*, 87 (1), 29–42
- Okonkwo, U. (2005). Can the luxury fashion brand store atmosphere be transferred to the internet? Retrieved March 6, 2022, from <https://wenku.baidu.com/view/31e9e41aff00bed5b9f31d37.html>
- Liu, X., Burns, A. C., Hou, Y. (2013). Comparing online and in-store shopping behavior towards luxury goods. *International Journal of Retail, Distribution Management*, 41(11/12), 885-900. doi:10.1108/ijrdm-01-2013-0018

*Speaker

✉:Mariam.kaskas1997@gmail.com

Digital Transformation and Entrepreneurship

Antonino Ardilio¹, Klaus-Peter Schulz², Kamel Mnisri²,
Hannes Rothe³

1 Fraunhofer Institute for Industrial Engineering IAO- Stuttgart, Germany

2 ICN Business School- Nancy, France

3 ICN Business School- Berlin, Germany

Abstract

Digital transformation is a global megatrend that is having revolutionary effects on markets. Entrepreneurship, entrepreneurial skills, creativity and innovativeness are being redefined by this megatrend and must be constantly developed for companies and entrepreneurs to succeed in the market in the digital age.

At the same time, entrepreneurial innovative strength is the key to employment and economic development. The promotion of innovation capacity and the strengthening of the entrepreneurial ecosystem are therefore increasingly in the focus of policymakers.

In this workshop we would like to discuss ways and topics of digital transformation. We particularly refer to the newly founded Centre for Digital Transformation and Entrepreneurship at ICN Business School. It aims to support and promote digital transformation in the Grand Est region through responsible and creative entrepreneurship, using models and methods of creativity and innovation taking into account disruptive technologies.

We therefore see three fields of discussion for the workshop:

First to teaching entrepreneurial skills. Entrepreneurship education will be based on creativity and innovation in the era of digital change, increasingly using an online learning platform that will be developed.

Second a "Hub for co-creation", a place of exchange for entrepreneurs, researchers, students and local decision makers to support the development of businesses, recognize and develop opportunities to create value and connect. This allows participants to develop shared understandings and develop ideas and actions for implementation.

Third supporting start-ups, SMEs, SMIs and entrepreneurs. The center provides companies and industries with cutting-edge expertise tailored to their specific needs and provides advice and coaching to entrepreneurs seeking to exploit the opportunities associated with the digital transformation process.

Keywords: digitalization, entrepreneurship, transformation

✉: kamel.mnisri@icn-artem.com

Which Factors Determine the Adoption of Smart Farming Technologies? A Literature Review and Directions for Future Research

Lea Daniel ^{1✉}, Lars Groeger ^{*2}, Katharina Hoelzle³

1 University of Potsdam, Hasso-Plattner Institute, Chair of IT–Entrepreneurship – Germany

2 ICN Business School, Associate Professor of Innovation Management and Entrepreneurship, Department of Strategy and Entrepreneurship – Germany

3 University of Stuttgart, Professor for Technology Management & Human Factors, Institute for Human Factors and Technology Management – Germany

Abstract

A growing body of literature recognizes the importance of the digitalization of agriculture for more sustainable food systems (Rohleder & Krüsken, 2016; Reichel et al., 2021). Expected benefits of so-called smart farming technologies (SFTs) are increased production output, quality improvement of the produce as well as cost reduction by lowering inputs and labour efforts (Moysiadis et al., 2021). The term smart farming technologies sums up new technologies that digitally obtain, store and analyse data along the agricultural value chain. Consequently, the digitization of agriculture is expected to significantly contribute to achieving the second Sustainable Development Goal "Zero Hunger". Although smart farming technologies are steadily gaining market maturity (Osinga et al., 2022), little is known about their diffusion and even less about the circumstances that lead to their adoption. Attempts thus far to analyse how technological change in agriculture occurs mainly rely on the well-established theory of innovation diffusion (Rogers, 2003) but omit explanatory power.

We conducted an umbrella review to synthesize existing literature reviews on technology adoption in agriculture across different technologies and agricultural contexts (e.g. region, crops). As a result of the synthesis, we received a long list of determinants that are basically consistent across the six literature reviews. Across all studies, we were able to assign these determinants to the following categories (established by Pignatti et al., 2015): innovations' technology features, farm traits,

farmers' traits, external factors. Nevertheless, findings of our umbrella review indicate that technological change in agriculture is not yet adequately understood and described by these determinants. Thus, we argue that understanding the process of technological change in agriculture better is a necessary condition to successfully anticipate, govern and manage sustainable development in agriculture. We would therefore like to draw attention to the fact that we need to challenge established theories in innovation management, creatively and exploratively, with different perspectives on technological change to be able to manage innovation for sustainable development. Therefore, our research aims to shed light on promising new perspectives that can challenge and inform our current understanding of innovation.

Keywords: smart farming, digital agriculture, technology adoption, technological change

References

- Moysiadis, V., Sarigiannidis, P., Vitsas, V., & Khelifi, A. (2021). Smart farming in Europe. *Computer Science Review*, 39, 100345. <https://doi.org/10.1016/j.cosrev.2020.100345>
- Osinga, S. A., Paudel, D., Mouzakitīs, S. A., & Athanasiadis, I. N. (2022). Big Data in agriculture: Between opportunity and solution. *Agricultural Systems*, 195, 103298. <https://doi.org/10.1016/j.agsy.2021.103298>
- Pignatti, E., Carli, G., & Canavari, M. (2015). What really matters? A qualitative analysis on the adoption of innovations in agriculture. *Journal of Agricultural Informatics*, 6. doi:10.17700/jai.2015.6.4.212
- Reichel, C., Pascher, P., Scholz, R. W., Berger, G., Brunch, R., Strobel-Unbehaun, T., Tölle-Nolting, C., Rogga, S., & Zscheischler, J. (2021). 4.1 Agrarökologische Auswirkungen. *Supplementarische Informationen Zum DiDaT Weißbuch*, 156–163. <https://doi.org/10.5771/9783748912125-si4-1>
- Rogers, E. M. (2003) *Diffusion of Innovations*, 5th ed. New York: Free Press.

Rohleder, B., & Krüsken, B. (2016). (rep.). *Digitalisierung in der Landwirtschaft* (Ser. Bitcom Research). Bitcom Research. Retrieved October 28, 2021 from <https://www.bitkom.org/sites/default/files/file/import/Bitkom-Presskonferenz-Digitalisierung-in-der-Landwirtschaft-02-11-2016-Praesentation.pdf>

*Speaker

✉:lea.daniel@hotmail.de

Virtual Demonstrator patchCROP: Using Computer Games to Foster Understanding and Acceptance of Novel Approaches for Sustainable Agricultural Systems

Kathrin Grahmann^{1*}, Helge Wanta^{2*✉}, Sonoko Dorothea Bellingrath-Kimura¹, Jens Krzywinski²

1 Leibniz Centre for Agricultural Landscape Research (ZALF), Research Area 2 "Land Use and Governance", Müncheberg. – Germany

2 Technische Universität Dresden, Faculty of Mechanical Science and Engineering, Chair of Industrial Design Engineering, Dresden. – Germany

Abstract

Intensive agricultural production in sole cropped, large fields to achieve high yields was frequently reported to cause detrimental environmental impacts. Moving towards sustainable agricultural landscapes requires the development of diversified, site-specific cropping methods that are climate-resilient, resource-efficient and combine crop production with biodiversity protection and ecosystem service maintenance. This hypothesis is being studied under practical conditions in the new patchCROP landscape laboratory implemented by the Leibniz Centre for Agricultural Landscape Research (ZALF) in Brandenburg, Germany. Manifold questions arise about the effects of smaller field sizes and adjacent crops like maize, lupine and sunflower on crop production, the profitability of such systems for farmers and the role of new technologies such as robots and artificial intelligence. The landscape laboratory patchCROP serves as a platform for the investigation of abiotic and biotic effects and interactions of newly created, small-structured field units and, in particular, of crop rotations and cultivation tailored to the heterogeneity of the area. These effects can be examined in an interdisciplinary team, with the help of innovative technologies and methods for data processing and in close cooperation with agricultural practice. However, the need for research and development must be summarized and demonstrated in a comprehensible way for a broad range of stakeholders from science, industry, practice, politics and society with the current and upcoming results. For this purpose, we are developing a virtual demonstrator as

a tool for knowledge transfer by using the computer game "Farming Simulator". Our research questions are a) Which aspects of small-scale and site-adapted agriculture can be implemented in the game environment? b) How can a beneficial transfer of knowledge between the various actors be achieved? c) Is the game suitable as a test and demonstration environment for novel sustainable agricultural systems? The landscape laboratory patchCROP will be realistically mapped and managed virtually so that differences between small-scale and conventional cropping are visible and perspicuous. The demonstrator points out the specific requirements, advantages and disadvantages in combination with innovative technology and autonomous field robotics. At the same time, it shows what the future of agricultural systems and the landscape could look like. It acts as a communication tool for public appearances, project meetings, etc. Participatory, playful, and modelling approaches could be used to reduce barriers of understanding and acceptance, but also to ensure easy access with a comprehensible relevance classification in order to be able to understand and evaluate both complex socio-technical and networked cyber-physical systems. In the future, the demonstrator will be expanded into an important information and research hub for related research topics (focus on location-adapted, diversified farming and new agricultural systems).

Keywords: sustainable agricultural systems, simulation, serious gaming, knowledge transfer, demonstrator

*Speaker

✉:helge.wanta@tu-dresden.de

Ideate Right – The Influence of Idea Generation Techniques on Idea Quality

Rebecca Frenz ^{1*}✉

1 Mercedes-Benz AG, Research & Development, Böblingen Stuttgart

Abstract

Idea generation workshops aim at finding new ideas for previously defined problems and questions in order to fill a corporations' innovation funnel (Brem & Brem 2013). Their goal is to create new and innovative ideas that can be triggered through creative stimuli (Brem & Brem 2013, Vahs & Brem 2013). To trigger such creativity the use of idea generation techniques is a commonly used tool (Burroughs et al. 2011; Hermann & Felfe 2014). A preliminary analysis of 39 workshops with regards to the influence that the choice of idea generation workshops have on an ideas' patent potential showed that to apply a use case technique leads to higher patent potential than expected. Further to use large groups to create ideas are not beneficial for patent potential.

Keywords: Ideation, idea generation workshops, idea generation techniques, creativity techniques

References

- Brem, A., & Brem, S. (2013). Kreativität und Innovation im Unternehmen. *Schaeffer-Poeschel-Verlag, Stuttgart*.
- Burroughs, J. E., Dahl, D. W., Moreau, C. P., Chattopadhyay, A., & Gorn, G. J. (2011). Facilitating and rewarding creativity during new product development. *Journal of Marketing*, 75(4), 53-67.
- Herrmann, D., & Felfe, J. (2014). Effects of leadership style, creativity technique and personal initiative on employee creativity. *British Journal of Management*, 25(2), 209-227.
- Vahs, D., & Brem, A. (2013). Innovationsmanagement: Von der Idee zur erfolgreichen Vermarktung (4. Ausg.). *Stuttgart: Schäffer-Poeschel Verlag*.

*Speaker

✉:Rebecca.frenz@mercedes-benz.com

Co-Creating by being t/here apart, but together in bodily-digital places

Wendelin Küpers^{1*✉} Stephan Sonnenburg^{2*✉}

1 Karlshochschule International University, Karlsruhe

2 ICN Business School, Nancy, Paris, Berlin

Abstract

Our contribution approaches the concept and practice of co-creation in the context of spheres that are bodily and digitally placed. We lay the conceptual foundations of an extended interpretation of situated co-creation. Specifically the role of an embodied and relational understanding of place for sustainability-oriented co-creating is explored. Based on this understanding we investigate within the hybrid nexus of bodily and digital spheres and technologies used in organizations how humans are *being part and apart together* in co-creative interaction. We describe this connection as a paradoxical form of interaction that creates a 'bi-localized' realm which causes specific changes in individual and social experiences, as well as organizational practices with ambivalent effects. Manifesting a modified 'we-relationship', processes like 'we-meaning', 'we-intentions', as well as convergences and divergences, and further aspects of co-creation are described. We discuss various critical and open questions, related to limits of cognitivism and computationalism in the digital enframement and more enactivist understandings of co-creation and role of sensorimotor and implicit knowing and processing of an extended body. Accordingly, co-creation also in relation to virtual spheres is embodied at a number of levels, simultaneously: as a biological organism (the body in the world as flesh), as an ecological body (environmental context of the body in the world), as a phenomenological body (our body as we live and experience it, the tactile-kinesthetic body), as a social body (subjective relations); and a cultural body (cultural artifacts, institutions, practices that constitute 'culture'). Finally, some theoretical and practical implications are offered and future research and perspectives are discussed.

Keywords: Co-creation, embodiment, body, place, digital, hybrid

*Speaker

✉:stephan.sonnenburg@icn-artem.com; wkuepers@karlshochschule.de

Emerging Team Creativity: The Effect of Specific Knowledge Sharing on Shared Mental Models and Team Creativity

Diana Heinbucher ^{1*}✉

1University of Technology, Chair of Innovation Research and Technology Management, Chemnitz. – Germany

Abstract

When people working together in teams they build up shared knowledge bases about different subjects, these are called shared mental models (SMM) (Cannon-Bowers et. al. 1993). The better these SMM are built, the better the team processes and the better and more innovative the jointly developed solutions (Heinbucher & Bucher 2022). An important prerequisite for SMM is that knowledge need to be shared within the team, which consists of knowledge known to all as well as the specific knowledge of the individuals. If there is no willingness among team members to contribute their own specific knowledge, SMM will only be built up to an unsatisfactory extent (Heinbucher & Bucher 2022). This study examines the question: *What influences the willingness to bring in one's own specific knowledge into the team process?*

The willingness to contribute specific knowledge within the team process is influenced by individual, organizational and collective factors (Moser & Schaffner 2003). This study assumes that the collective self-worth of each team member, the identification with the team and one's own creative self-efficacy have an effect on the willingness to contribute specific knowledge into the team process. The willingness to share knowledge influences the development of a shared mental model and thus the team processes, including team creativity processes, which in turn influence the effectiveness and innovativeness of the team. The decision to bring specific knowledge into the team process is made unconsciously to a large extent. For this reason, a multi-level survey with different research methods is required, carried out in a case study design (Yin 2018).

The results contribute to describe and understand the preconditions for shared mental models and team creativity and in this turn to train teams more effectively.

Keywords: Shared Mental Models, Team Creativity, Knowledge Sharing, Case Study

References

- Cannon-Bowers, J. A., Salas, E. and Converse, S. A. (1993). Shared mental models in expert team decision making, in Castellan. J.N.J (Ed.), *Current Issues in Individual and Group Decision Making*, Lawrence Erlbaum, Hillsdale, NJ, pp.221–246.
- Heinbucher, D. and Bucher, J. (2022). Team creativity: the interplay of shared mental models and the ideation process. *International Journal of Technology Management* 88(2/3/4), pp.175-204.
- Moser, K. S. and Schaffner, D. (2003). Voraussetzungen des Wissensmanagements aus psychologischer Sicht. Professionelles Wissensmanagement – Erfahrungen und Visionen. Beiträge der 2. Konferenz Professionelles Wissensmanagement. 2.-4. April 2003, Luzern (CH). <https://subs.emis.de/LNI/Proceedings/Proceedings28/GI-Proceedings.28-112.pdf> [Retrieved 29/10/2021].
- Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods*. SAGE, Los Angeles.

*Speaker

✉:diana.heinbucher@wiwi.tu-chemnitz.de

The role of facilitators in idea development workshops: case study of innovation workshops at an automotive producer

Jonas Worede Tarekegne^{1*✉}, Marco Anselmann²

1 University of Lorraine, Department of Legal, Political, Economic & Management Sciences (SPJEG), Nancy. – FRANCE

2 Hochschule Bonn-Rhein-Sieg, Department Management Sciences, Campus Rheinbach, Rheinbach. – GERMANY

Abstract

Since creativity workshops have a finite time frame, the mobilization and stimulation of the participant to think and act creatively through the guidance of workshop facilitators is a crucial and challenging point to master (Lee, 2008; Amabile & Fischer, 2009).

In this context, the workshop facilitator needs to be capable to applying creativity methods for group collaborations and have a considerable repertoire of enablement and meditation skills (Rothouse, 2020). This skill and the overall need of facilitation by facilitators is naturally necessary for creativity workshops of short-termed interactions at the early phase of initial idea generations between participants that have no or small experience with ideation techniques particularly with playful creativity methods. Successful workshop facilitation should understand the various innovation process requirements for optimal conduction in the innovation process framework embedded in a creativity workshop.

What is interesting in this context is not only to understand how the skill set of the facilitators meet the innovation process requirements, but also to examine how the individual persona of each facilitator has an influence on the creativity workshop. The facilitator persona and his or her nature of presenting, communicating, behaving, and interacting are unique and can directly link to the success of workshop facilitation (Unger and Nunnally, 2013). To assess facilitator personas, the Big Five Personality Model, NEO-Five Factor Inventory, is an acknowledged model in psychology that captures the personality's crucial characteristics and makes them feasible for research (Borkenau and Ossendorf, 2008).

Based on their opposing and different personality traits according to their results from the NEO-five factor inventory we will notably examine which influence three different facilitator

personas will have on the outcome of creativity workshops in terms of the creative outcome – which means the quantity and quality of the ideas developed in the workshop - as well as on the participants' experience during the workshop. To compare workshop outcomes in terms of participants' experience, both an expert rating for the quality of the ideas as well as a questionnaire to operationalize the workshop experience of the participants have been applied. The goal of this research is to close the knowledge gap between the design and facilitation of creativity workshops and the possible effects of different facilitator personas on creativity workshops.

Keywords: Creativity workshops, Facilitator, Facilitation, Persona, Personality, Innovation

References

- Amabile, T.M. & Fisher, C.M. (2009). Stimulate creativity by fueling passion. In E. Locke (Eds.), *Handbook of Principles of Organizational Behavior* (pp. 481-497). West Sussex: John Wiley & Sons.
- Borkenau, P., & Ostendorf, F. (2008). *NEO-Fünf-Faktoren-Inventar*. Göttingen: Hogrefe, Verl. für Psychologie.
- Lee, Y. (2008) Design Participation Tactics: The Challenges and New Roles for Designers in the CoDesign Process. *CoDesign*, 4, 31–50
- Rothouse, M. J. (2020). *A Mindful Approach to Team Creativity and Collaboration in Organizations: Creating a Culture of Innovation*. Springer Nature.
- Unger, R., & Nunnally, B. (2013). *Designing the Conversation: Techniques for Successful Facilitation*. New Riders.

*Speaker

✉: jonas.tarekegne@univ-lorraine.fr

The Interplay between Moral and Creativity: Examples from R&D Institutions

Stéphane Gangloff^{1*}, Klaus Peter Schulz², Kamel Mnisri³

1 PhD student, ICN Business School Nancy, Université de Lorraine, Phd Programme, CEREFIGE – France

2 ICN Business School Nancy, CEREFIGE – France

3 ICN Business School Nancy, CEREFIGE – France

Abstract

Given the growing importance for organizations to engage in innovative strategies, certain behaviors, actions and decisions have illustrated profound lack of moral concerns. This phenomenon occurs particularly at the very beginning of the innovative project, i.e. the ideation phase. The duality of the creative act capable of generating unprecedented positive outcomes for the society (augmented reality, robotics and imaging, artificial intelligence, optical fibers) as well as more ambiguous and far less desirable ones (surveillance technologies, blood-testing technology frauds, pesticides) brings about that we should question the relationship between collective creativity and moral engagement. As moral is a valid starting point for the discussion in business ethics and organizations, researchers acknowledge that the innovative and the ethical climate of organizations are essential factors for sustainable innovative practices (Schumacher & Wasieleski, 2013; Chen & Hou, 2016). We explored the concept of moral imagination revealed by P. Werhane (1998) in business ethics to prevent immoral behaviors. We discussed and analyzed how moral imagination enables one to disengage from a situation to generate new alternatives and evaluate these new options from a moral perspective. However, recent academic contributions have revealed the inconsistencies of the results and attempts to better frame and understand why certain employees engage in immoral routes and how can we prevent it in the future for a more sustainable creativity (Keem, Shalley, Kim, & Jeong, 2018)? This research paper aims at answering the call by reviewing the literature on the question and exploring the perspectives of researchers on the question.

In order to reach the objectives of this research paper, a quasi-experiment was run using the qualitative approach. We explored the perspectives of researchers as primary sources of data to provide meaningful and contextualized data that impact the literature (Vanoni, 2015). We ran this quasi-experiment in four world class research institutions based in France and Germany that are confronted with moral issues during the creative process. 13 interviews with researchers from Institute Pasteur, IGBMC, Daimler Innovation Studio and Fraunhofer Institute were conducted. As they represent both the private and the public sectors, this combination is well suited for a more objective overview of the conditions researchers face today.

In investigating the relationship between creativity and moral during the ideation process, the results have revealed that the association of “other-focus” and “perspective taking” moderate the creative and moral behaviour of teams of scientists. This extends previous works on moral imagination (Bevan, D. J., Wolfe, R. W., Werhane, P., 2019) highlighting that creativity and moral behaviour belong to different frameworks that sometimes collide and generate immoral behaviours that can be prevented when team members focus on other team members’ moral concerns and engage intellectually to perceive the situation from other perspectives.

Thanks to this quasi-experiment, we confirm the positive impact of moral imagination set forward by P. Werhane and highlight “other-focus” and “perspective taking” as essential factors to innovative sustainable development.

Keywords: Team/Collective Creativity, Creative Process, Moral Behavior, Moral Imagination, Research and Development Institutions.

References

- Bevan, D. J., Wolfe, R. W., & Werhane, P. H. (Eds.). (2019). *Systems thinking and moral imagination: rethinking business ethics with Patricia Werhane* (Vol. 48). Springer.
- Chen, A. S. Y., & Hou, Y. H. (2016). The effects of ethical leadership, voice behavior and climates for innovation on creativity: A moderated mediation examination. *The leadership quarterly*, 27(1), 1-13.
- Keem, S., Shalley, C. E., Kim, E., & Jeong, I. (2018). Are creative individuals bad apples? A dual pathway model of unethical behavior. *Journal of Applied Psychology*, 103(4), 416.
- Schumacher, E. G., & Wasieleski, D. M. (2013). Institutionalizing ethical innovation in organizations: An integrated causal model of moral innovation decision processes. *Journal of Business Ethics*, 113(1), 15-37.
- Vannoni, M. (2015). What are case studies good for? Nesting comparative case study research into the lakatosian research program. *Cross-Cultural Research*, 49(4), 331-357.
- Werhane, P. (1998). Moral Imagination and the Search for Ethical decision-making in Management. *Business Ethics Quarterly*, 8(S1), 75-98.

*Speaker

✉: stephane.gangloff@icn-groupe.com

Looking at the smart cities through the sustainability lens for women: Zero tolerance for Violence against women

Nirjhar Nigam ^{1*}, Cristiane Benetti ^{2✉}, Sondes Mbarek ³

1 2 Associate Professor, ICN Artem Business School, CEREFIGE

3 Associate Professor, Institut Mines Télécom Business School, LITEM, FRANCE

Abstract

The concept of a smart city has gained popularity in the last ten years due to rapid urbanization, posing a threat to sustainability. In the ongoing debate on smart cities, a specific “safety and security of women” dimension is not fully taken into consideration, even when an inclusion or equality issue is being raised. The paper is aimed at filling this gap by addressing this issue. Through this paper, we have attempted to make recommendations for Governments and policymakers developing smart city policies and frameworks, to incorporate, concrete indicators to stop violence against women. Women constitute half of the population of the world, yet today they are the most vulnerable of the population. To assess whether the problem of violence against women is discussed in the academic debate on smart cities a systemic review of literature is carried with the help of clustered content analysis. With the help of the detailed theoretical survey, academic research survey, online questionnaires, and employing framework for strategic sustainable development, we derive sustainability principles from the perspective of women and propose recommendations and possible areas of intervention where policy tools can be developed and applied to stop this long-lasting pandemic. Ending gender-based is a requisite if we need to achieve Sustainable development goals (number 5) and Governments are accountable for their commitments and must make sure goals are met.

Keywords: Smart cities, Violence against women, Sustainability, Indicators, Religion

*Speaker

✉: nirjhar.nigam@icn-artem.com

Perspectives on Humanistic Management within a Logic of Sustainability

David Wasieleski^{1*✉}, Nuno Guimarães da Costa^{2*}

¹ *Duquesne University, Palumbo-Donahue School of Business, Pittsburgh, USA*

² *ICN Business School, Nancy, France*

Abstract

Global warming and its consequences in the lives of millions of individuals, are manifestations commonly associated with the prevailing dominance of some institutional orders, including capitalism, its markets, and neo-conservative political arrangements (Guimaraes-Costa et al., 2021). Indeed, despite its prominence in the political and business discourses, a logic of sustainability is not yet dominant in the practices of the different societal actors.

In this logic, sustainability-related issues would be embedded in the prevailing cognitive systems, values and beliefs (Thornton & Ocasio, 1999) of all societal actors. This new logic of sustainability would be characterised by a shared awareness by individuals and organisations of the inter-generational compromise imposing ways of obtaining material subsistence, and organise time and space that preserve the hearth systems and continuously assures the balance of the flows between the natural and the economic systems.

In order to achieve resonance and to manage transformational change towards this new logic of sustainability, humans and the environment must reconnect (Wasieleski, Waddock, & Shrivastava, 2021). As such, we promote a humanistic management (Pirson, 2017) perspective for the new logic of sustainability.

Humanistic management emphasizes a new way of conceiving of a business organization around the principles of promoting dignity and the preservation of well-being. It involves refocusing the firm's purpose away from economistic assumptions around short-term profit, growth and asset and capitalistic acquisition. Rather, humanistic assumptions around relationships and human bonds as well as a natural drive for finding meaning in work are emphasized (Pirson & Lawrence, 2010). The organizing practices associated with humanistic management clearly address human flourishing but within the planetary boundaries

(Dierksmeier, 2015). And this can only be strengthened if humanistic values are placed at the forefront of a new prevailing logic of sustainability.

Keywords: sustainability, institutional logic, humanistic management

References

- Dierksmeier, C. (2015). Human dignity and the business of business. *Human Systems Management*, 34(1), 33-42.
- Guimaraes-Costa, N., Farias, G., Wasieleski, D., Annette, A. (2021) Seven Principles for Seven Generations: Moral Boundaries for Transformational Change. *Humanistic Management Journal*, 6(3), 313-328.
- Pirson, M. (2017). *Humanistic management: Protecting dignity and promoting well-being*. Cambridge: Cambridge University Press.
- Pirson, M. A., & Lawrence, P. R. (2010). Humanism in business—towards a paradigm shift?. *Journal of business ethics*, 93(4), 553-565.
- Thornton, P. H., & Ocasio, W. (1999). Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958–1990. *American journal of Sociology*, 105(3), 801-843.
- Wasieleski, D. M., Waddock, S., & Shrivastava, P. (2021). *Management and the sustainability paradox: Reconnecting the human chain*. New York: Routledge.

*Speaker

✉: wasieleski@duq.edu

What Does Business Ethics Education Do? Setting Pragmatic Goals

G. Venkat Raman^{1*}✉, Sneha Thapliyal, Swapnil Garg

1 Indian Institute of Management Indore, Madhya Pradesh, India

Abstract

The effectiveness and learning outcomes of business ethics education have frequently been contested in the ethics literature. Despite increasing emphasis on ethics education in business schools, reports of ethical misconduct continue. To explain this paradox, we look to recent developments in moral psychology underpinning ethical decision-making. We argue that ethics pedagogy has failed to take account of changing narratives about moral judgment. We compare and contrast predictions of changes brought about by business ethics education rooted in the rationalist and intuitionist traditions of moral psychology.

We tested the impact of business ethics education on the attribution of responsibility to the firm (i.e., moral judgment) and recognition of a firm's obligations (i.e., moral reasoning), using a matched-pair pre-post study. Our sample consists of 106 participants undertaking a business ethics workshop with one of three pedagogies. Ethics education did not change attribution of responsibility; however, we found numerous significant changes in recognizing the firm's obligations, the effects varying with pedagogical choices, and the intensity of attribution of responsibility. Our study provides preliminary empirical evidence of the changes brought about by ethics education and facilitates investigation into how ethics pedagogy requires an integration of intuitionistic and rationalistic approaches.

Keywords: Business ethics education; Business ethics pedagogy; Ethical decision-making; Intuition; Rational thinking

*Speaker

✉: gvenkat@iimidr.ac.in

On the Way to Organizational Democracy? The Role of Employee Shareholder Associations in German Listed Companies

Thomas Steger^{1*}✉

*1 University of Regensburg, Faculty of Business Administration and Economics,
Regensburg. – Germany*

Abstract

Employee share ownership, in terms of total amount of capital, ranks first among the different forms of employee ownership in Germany in terms of capital accumulated and is particularly widespread among listed corporations (Steger et al. 2017). Nevertheless, voice and influence of employee shareholders through ownership have mostly remained limited in those companies, both in Germany and beyond, and other issues, such as remuneration equality and risk limitations have prevailed (Pendleton 2019).

In order to increase the participatory power and, thus, the attractiveness of employee share ownership, it was regularly suggested to collect and pool the shares and their affiliated voting power – particularly in the form of employee shareholder associations (ESA) (Wheeler 2008). On the one hand, ESAs could help fostering and further promoting employee share ownership. Additionally, and remarkably, they may also develop, besides works councils on the firm level and worker directors on the corporate level, as a third pillar of German co-determination. On the other hand, however, ESAs can also provoke some distinctive conflicts among employee shareholders (e.g., due to different interests of different actors) or in the workforce in general (e.g., due to various forms of role-overload such as employee–works council member–shareholder–association representative – Kranz & Steger 2016).

Notwithstanding the interesting prospects and challenges of ESAs in Germany and beyond, they have only received limited attention both by academics as well as by practitioners and further research, therefore, is warranted. This marks the starting point of our study. Based on detailed case studies (Eisenhardt 1989) of all employee ownership associations known in Germany (Grasl 2015, Meier 2017), we aim to draw a fine-grained picture of these particular organizations, namely (a) their origins, (b) their developments (c) their structures and (d) their

influence potentials. In conclusion, some tentative patterns derived as well as some first hypotheses about their role(s) and their impact will be formulated.

Keywords: Organizational Democracy, Case studies, Employee ownership, Employee shareholder associations, Germany

References

- Eisenhardt, K. (1989). Building theories from case study research. *Academy of Management Review*, 14, 532–550.
- Grasl, P. (2015). *Belegschaftsaktionärsvereinigungen in Deutschland*. Unpublished Bachelor Thesis, University of Regensburg.
- Kranz, O. & Steger, T. (2016). Resurrected, recovered, but still didn't survive? A case study on the viability of employee-owned companies. *Management revue*, 27, 234-260.
- Meier, P.F. (2017). *Belegschaftsaktionärs-Vereine in Deutschland. Entstehung - Verbreitung – Bedeutung*. Unpublished Master Thesis, University of Regensburg.
- Pendleton, A. (2019). *Financial participation in Europe: opportunities and risks for employees*. ETUI Policy Brief N° 1. Brussels.
- Steger, T. Sieg, R., & Kluge, N. (2017). *Belegschaftsaktionäre in deutschen Großunternehmen - Herausforderungen und Chancen für die Mitbestimmung*. Mitbestimmungs-Report, no. 38. Dusseldorf: Hans-Böckler-Foundation.
- Wheeler, H.N. (2008). A New Frontier for Labor - Collective Action by Worker Owners. *Labor Studies Journal*, 33, 163-178.

*Speaker

✉: thomas.steger@ur.de

Impact of Philanthropic CSR on Business Performance : Case of Port Beirut Explosion

Wassim Hamieh *✉, Klaus-Peter Schulz

ICN Business School, CEREFIGE, University of Lorraine – Nancy, France

Abstract

The massive explosion of Beirut Port in Lebanon's capital city have left around 200 people dead, and a wake of devastation in its tracks with 70,000 homes damaged or destroyed – affecting more than 300,000 people. The shelter response remains focused on providing temporary shelter to displaced families, cleaning and sorting rubble from the streets, and repairing houses ahead of the forthcoming winter season. After the explosion, the concept CSR (Corporate Social Responsibility) in Lebanon was treated more seriously than ever by the Lebanese firms.

This paper aims to test the impact of two CSR activities (Volunteering and Donation) on the two business performance variables (Sales Revenue and Reputation). For the volunteer work attributes, we considered (1) removing rubble, sorting rubble, and cleaning waste created by the blast and (2) participating in Beirut re-construction efforts. Hence, for the donation part, we assumed all kinds of donations done to help the victims of the Beirut port explosion.

On the other hand, the willingness to buy reflected the firm's sales revenue, and the social media likes and follow represented the firm's social reputation.

A conceptual model is proposed to test the hypotheses cause-effects relationships in between the mentioned variables empirically using a sample composed of 18 Lebanese firms specialized in the engineering fields (364 respondents).

The data obtained through questionnaires were analyzed and evaluated by statistical test correlation to test the various hypotheses using SPSS. The results indicate that CSR was positively correlated with organizational performance. It has been demonstrated that the development of CSR practices promote the strengthening of linkages that SMEs have with their stakeholders and that this improvement, in turn, clearly impacts on their performance financially and non-financially. Simultaneously, the strengths of CSR variables applied and the significance of taking into account the effect of the relationship improvements confirm the

stakeholder theory as a suitable approach to analyze and validate the connection between CSR and performance. This study has some limitations, and recommendations are discussed.

Keywords: CSR, Customer Loyalty, Port Beirut Explosion, Trust, Satisfaction, Corporate Image, Corporate Volunteer, Corporate Donation

*Speaker:

✉: Wassim_hamieh@hotmail.com

Collective Creativity toward Sustainable Development Goals Awareness

Krista Finstad-Milion^{1*}✉ Laetitia Lhermite²

1 ICN Business School, Human Resources and Organisational Behaviour Department, Nancy campus – France

2 ICN Business School, Human Resources and Organisational Behaviour Department, Nancy campus – France

Abstract

The challenge raised in this workshop is to develop collective creativity toward building awareness for the Sustainable Development Goals (SDGs). As Haski-Leventhal et al. (2022) remark, Higher Education Institutes committed to Responsible Management Education play an important role in developing Corporate Social Responsibility (CSR) values and positive attitudes of students towards CSR. This workshop is based on the experience of one of the sessions of the ARTEM Design Thinking for Sustainable Change (DTSC) Workshop that encourages students to share their photographic interpretations of SDGs between themselves as a way of expressing their CSR values. It builds on the knowledge that visualizing ideas increases the impact of the intended message on others, including in multicultural contexts (Plouffe, 2016). Students working in groups then create an impactful visual that best fits their shared idea of one SDG's meaning. By sharing their thoughts about what would be an appropriate way to show a SDG, students are forced to deeply question the stakes behind each SDG, not only for today, but for the future. Each student in the group is encouraged to express boldly, without judgement, his/her ideas in a multi-cultural and multi-disciplinary team. A creativity-enhancing method, notably the 6 Thinking Hats (De Bono, 1985; Kivunja, 2015) is also introduced as it offers a structured approach to generating new ideas that come from the student discussions, and allows each member of the group to speak.

Keywords: collective creativity, responsible management education, sustainable development goals, visualization, values, De Bono's six thinking hats

References

De Bono, E. (1985). *Six Thinking Hats*. London: Penguin Books.

Haski-Leventhal, D., Pournader, M., Leigh, J. S. (2022). "Responsible Management Education as Socialization: Business Students' Values, Attitudes and Intentions", *Journal of Business Ethics*, 176: 17–35.

Kivunja, C. (2015). Using De Bono's Six Thinking Hats Model to Teach Critical Thinking and Problem Skills Essential for Success in the 21st Century Economy, *Creative Education*, 6 (3): 380-391.

Plouffe, T. (2016). "Picture this", *Talent Development*, 70 (12); 26-29.

*Speaker

✉: krista.finstad-milion@icn-artem.com

Using Gamification Approaches to Encourage Cyclists to Follow Traffic Rules

Juliane Anke^{1✉}, Felix Schmitt², Christian Wölfel^{2*✉}

*1 Technische Universität Dresden, Chair of Traffic and Transport Psychology,
Dresden, Germany*

*2 Technische Universität Dresden, Chair of Industrial Design Engineering,
Dresden, Germany*

Abstract

There is an ever growing number of bicycle commuters in densely populated cities. This trend is further promoted by the recent developments in e-bikes sales and the growth of related sharing economy offerings. This is an important element of a shift to a more sustainable mobility in terms of energy consumption, air and noise pollution and also in terms of health and wellbeing. But despite the fact that most cyclists have formal or informal training in traffic rules (school education, driving license), there are many occasions where they do not obey these rules. This results not only in avoidable traffic accidents but also in low acceptance of cyclists among other traffic (possibly hindering more sustainable, cyclist-friendly traffic policies). In this paper, we present the approach and core findings of an interdisciplinary project among traffic psychologists and industrial designers. The project aimed at using cognitive gamification principles to encourage cyclists to follow the traffic rules. Qualitative and quantitative user research data of 12k cyclists as well as hotspots of traffic rules violation have been analysed in order to align these with gamification principles from play theory. Based on a survey conducted in the project, cyclists rated the game principles level, story, challenge, points and teams the highest. Consequently, the potential of infrastructure-based gamification solutions that rely in these principles is expected to be high. Based on that, design proposals have been developed and evaluated in expert panels (psychologists, traffic planners, designers etc.). One preferred proposal has then been developed in detail in order to be evaluated on the street. Due to formal regulations, the prototype had to be evaluated on a non-public street. Functionality was successfully demonstrated on a shortened route section and in a short usage phase. The developed prototype, but above all the analysis and

development steps up to the finished prototype can serve as a blueprint for the use of gamification in cycling. For this purpose, the findings were prepared in a clear form as a handout for municipalities and traffic planners.

The methodological approach to evaluation using semi-structured interviews has proven to be suitable for assessing the potential of the prototype. However, the validity and transferability of the results is limited due to the small number of case of ten cyclists, especially with regard to the quantitative measures such as the User Experience Questionnaire UEQ. However, the alternative qualitative approach of the interviews had the advantage of collecting detailed feedback from the cyclists on intention to use, as well as advantages and disadvantages, which is of particular value in such early stages of developments. One important finding of the evaluation must be addressed in further research. The repeated concern of cyclists that the gamification measure could wear out suggests that this point should be kept in mind when developing measures. Here, in particular, possibilities for varying the course of the game or game elements of a gamification should be examined.

Keywords: Urban traffic, traffic transition, serious games, gamification, transportation psychology

*Speaker

✉: juliane.anke@tu-dresden.de ; christian.woelfel@tu-dresden.de

The Innovation Spirit of Karlsruhe Technology Region

Petra Jung-Erceg ^{1*}✉, Lukas Kurzmann ^{1*}

1 Technologie Region Karlsruhe GmbH, Karlsruhe, Germany

Abstract

The Karlsruhe Technology Region (TRK) is an open innovation environment with strong players from industry, science and local government. TechnologieRegion Karlsruhe GmbH (TRK GmbH) as a company bundles the competences and resources of these players and manages a high-performing regional network in the fields of mobility, energy and digitalisation. As the innovation platform, the TRK GmbH triggers and coordinates the new collaborative projects for development, testing and launching of market-ready products and services. The trusted collaboration and the management of the regional innovation system lead to the high economic and innovation performance of the Region.

The TRK is one of the four pilot regions involved into the EU funded project tetRRIS (“**T**erritorial **R**esponsible **R**esearch and **I**nnovation (RRI) and **S**mart Specialization”). TetRRIS is aiming to bring RRI in alignment with the Smart Specialization paradigm and governance within four pilot experiment regions from the European Union. TRK has a rich culture of research, innovation, and technology and the integration of RRI concepts and practices have a deep history in the region. The TRK has already created and launched a Practitioner Network for Public and Stakeholder Engagement to improve public engagement processes in the region in order to strengthen the economic development of the region.

Keywords: Regional Innovation System and Development, Responsible Research and Innovation, Smart Specialization

References: <https://tetrris.eu>, <https://technologieregion-karlsruhe.de>

*Speaker

✉: petra.jung-erceg@technologieregion-karlsruhe.de

Anxiety as Antecedent of Organizational Legitimacy

Alicia Blanco-González ^{1*}✉, Gabriel Cachón-Rodríguez ²,
Francisco Díez-Martín ³, Giorgia Miotto ⁴

1 Rey Juan Carlos University, Spain

2 Rey Juan Carlos University, Spain

3 Rey Juan Carlos University, Spain

4 Blanquerna, Ramón Llull University, Spain

Abstract

Anxiety represents a major public health issue worldwide (World Health Organization, 2020). The Covid-19 pandemic has shown changes in consumer behavior and has increased the number of patients with mental health related problems. Organizations that want to be sustainable, responsible and ethical, and ultimately legitimate, must adhere to SDG3 to achieve people's mental health through their own actions. In this line, an organization that wants to be legitimate must adapt its strategies to acquire a competitive advantage through socially accepted actions in a way that favors the loyalty of its clients in a profitable way. In the “new normality” (May 2021), 1,200 random surveys were carried out with supermarket users. The treatment of the data was carried out through the PLS-SEM method. The results show: 1) how at a higher level of anxiety less legitimacy and: 2) legitimacy is the direct determinant of the purchase intention. This study has important implications since it introduces a new variable into the agenda of responsible companies: anxiety

Keywords: Anxiety, Legitimacy, Consumer Behavior, Covid, Purchase Intention

*Speaker

✉: alicia.blanco@urjc.es

Exploring the Dialectical Effect of Well-Being on Creativity and their Impact on Sustainability

Fahad Hussain Saeed^{1*✉}, Kamel Mnisri²

1 PhD Student, ICN Business School- France

2 Associate Professor, ICN Business School- France

Abstract

Aim – The aim of this study was to explore the dialectical effect between psychological wellbeing and individual creativity of telecommunication IT and education sector employees and to inquire additionally how this relationship is impacted by organizational justice.

Design/methodology/approach – This study was intended to empirically test the relationship of psychological wellbeing with individual creativity and organizational justice. Data is collected from 267 employees of telecom IT and education sector by means of an online survey facility by using google forms. Request made to the quality and regional managers to facilitate the data collection from 2 February 2022 – 25 March 2022 to respective employees. This research utilized quantitative analysis using descriptive, correlational and regression analysis.

Practical implications – This study provides novel understandings of individual creativity and psychological wellbeing by focusing on organizational justice aspects. In this way, it gives new insights and a guide that would be useful in accomplishing the goals of individual creativity.

Originality/value – This study adds valuable findings to the literature by adding updated knowledge about the positive effect of PWB on IC. Besides, with the examination of the mediating effect of OJ in this relationship, this study will add significant addition to the existing literature on individual creativity.

Findings The. results highlight the correlation between psychological wellbeing and individual creativity while overall justice is fully mediating the relationship. Moreover, the study also provides practical guidance for practitioners and managers with future explorable areas.

Conclusion Psychological wellbeing and individual creativity are positively related with one another and organizational justice has indirect positive effect with full mediation.

Keywords: Individual Creativity, Psychological well-being, Organizational justice

References

- Amabile, T. M. (1983). The social psychology of creativity. New York: Springer-Verlag.
- Amabile T.M. (1988). —A model of creativity and innovation in organizations. In Stew BM, Cummings LL (Eds.), *Research in Organizational Behavior*; 10, 123-167.
- Asadullah, M.A., Akram, A., Imran, H. and Arain, G.A. (2017). —When and which employees feel obliged: a personality perspective of how organizational identification develops, *Rev. Psicol. del Trabajo y de las Organ*, 33, 125–135.
- Ambrose and Marshall Schminke The Role of Overall Justice Judgments in Organizational Justice Research: A Test of Mediation *Journal of Applied Psychology* © 2009 American Psychological Association 2009, Vol. 94, No. 2, 491–500
- Thomas A. Wright and André P. Walton (2003) Affect, Psychological Well-Being and Creativity: Results of a Field Study. *Journal of business and Management* Winter 2003 volume 9 no 1
- Diener, E. and Lucas, R.E. (2000). Explaining differences in societal levels of happiness: Relative standards, need fulfillment, culture, and evaluation theory. *Journal of Happiness Studies*, 1(1), 41-78.
- Lind, E.A., Kray, L. and Thompson, L. (1998). —The social construction of injustice : Fairness judgements in response to own and others' unfair.

*Speaker

✉: saeed.fahad-hussain@myicn.fr

The health effect of theatre games on male adolescents who are institutionalized

Boitumelo Mokolopeng^{1*}✉

1 University of KwaZulu-Natal, College of Humanities, school of education, Edgewood Campus, Durban. – South Africa; University of Witwatersrand, College of Humanities, school of arts

Abstract

Background: In this study, I attempt to describe a group of six male adolescents who are institutionalized to gain insight into and a better understanding of how theatre games can positively contribute to their mental wellbeing.

Purpose: This empirical study aims to demonstrate the health effect of 'theatre games' on male adolescents who are institutionalized. It endeavors to illustrate the relationship between creativity and health effect through theory and the praxis of dramatherapy. In doing so, it examined ways in which collective playing of theatre games can aid mental resilience by disrupting the psychological barriers that are interfering with their rehabilitation process.

Methods: This qualitative study used theatre games as an assessment tool, and intervention strategy to generate the data. It employed a range of theatre games to examine the attitude, emotions and behavior of the participants. The therapeutic impact of the process was measured in parallel with the dramatherapy core process relating to active witnessing, embodiment and projection. This was done to make sense of the data analysis. Furthermore, I sought to investigate and record the creative aesthetics, which can maintain and sustain a group of institutionalized individuals who are faced with daily crises.

Results: Through the practice of embodiment, I have managed to stimulate individuals

physically, mentally and emotionally. This interactive process activated parts of the brain that process emotional capacity. It influenced emotional harmony and improved participants' moods. Through active participation, participants were able to project their unwanted energies held in their bodies and become more conscious. Also, through the process of active witnessing participants seemed to have felt seen, heard, understood and valued. Moreover, this process presented an opportunity for them to recognize the value of making mistakes and learning from them without being judged.

Conclusion: What has been concluded from this study was that theatre game has the potential to enable the institutionalized male adolescents to connect as human. This strategy also serves as a 'caring modality' that can potentially strengthen individuals' personal resources to sustain them during the period of their incarceration.

Keywords: Dramatherapy, theatre games, adolescent

*Speaker

✉: mokolopengb@ukzn.ac.za

Sustainable Finance: Opportunities and Challenges for Development Banks

Nirjhar Nigam ^{1*}, Cristiane Benetti ^{2✉}

1 Associate Professor, ICN Artem Business School, CEREFIGE

2 Associate Professor, ICN Artem Business School, CEREFIGE

Abstract

This study investigate how national development banks are contributing to bridge the financing gap for climate adaptation and for attaining sustainable development goals through innovation. To this end, we focus on the case of Brazilian Development Bank (BNDES). We analyse the importance given to green economy and innovation in the last decade of the 21st century. With a documentary research we present the green innovation projects that has been supported by BNDES to reach sustainable development goals. As a result, we can observe the great capacity of BNDES to act as the main government promoter of innovation and the Brazilian tendencies for innovative projects and innovative tools to generate investment resources.

Keywords: development bank, sustainable finance, transport, renewable energy, emerging country.

*Speaker

✉: Cristiane.benetti@icn-artem.com

Missing Dominant Business Model Emergence at Two-Sided Markets: The Case of Online Lending Platforms in Germany

Sabine Pur ^{1✉}, Stefan Huesig ^{2*}, Christoph Schmidhammer ³

1 University of Regensburg – Germany

2 Chemnitz University of Technology – Germany

3 Deutsche Bundesbank University of Applied Sciences – Germany

Abstract

The development of the banking industry, ongoing digitalization and cross-industry business model innovation with disruptive innovations enables new business models such as online lending platforms (Borgmeier 2009, Pur et al. 2022, Floegel and Beckamp 2020). We assume that a dominant business model is clearly emerging or has already established in the German peer-to-peer online lending market. We analyze the development of the business models of Germany's three major online lending platforms in 2016 Smava, Auxmoney and Lendico using a multiple case study (Yin 2009) and formulate a proposition, that will be empirically tested afterwards. To do so, we apply the nine business model components from Osterwalder and Pigneur (2010) as theoretical framework for our business model analysis. Afterwards, the proposition was tested with a quantitative test of their total asset annual growth rates (Entrop et al. 2015). From the results of the analysis, it can be concluded that all three case study companies pursue a different business model variant and no dominant business model exists at Germany's online lending industry, even if the companies originally started with a similar business model. Our analysis allowed us to advance the nascent discussion on the emergence of dominant business models on multi-sided platforms.

Keywords: Dominant Design, Business Model, Standard Business Model, Two-Sided Markets, p2p, Online Lending

References

- Borgmeier, E. (2009): Dem Social Banking Paroli bieten, *Die Bank*, Vol. 7, pp. 52–56.
- Entrop, O., Memmel, C., Ruprecht, B. and Wilkens, M. (2015): Determinants of bank interest margins: Impact of maturity transformation, *Journal of Banking & Finance*, Vol. 54, pp. 1–19.
- Floegel, F. and Beckamp, M. (2020): Digitalisation and (De)Centralisation in Germany – a Comparative Study of Retail Banking and the Energy Sector, *IAT Discussion Paper*, 20/04.
- Osterwalder, A. and Pigneur, Y. (2010): *Business Model Generation. A handbook for visionaries, game changers, and challengers*, (1st ed.), John Wiley & Sons, Hoboken.
- Pur, S., Hüsigg, S. and Schmidhammer, C. (2022): Application and Validation of a Disruptive Potential Methodology for Digital Two-Sided Platforms – The Case of Marketplace Lending in Germany, *International Journal of Technology Management*, Vol. 88, No. 2–4, pp. 205–246.
- Yin, R. K. (2009): *Case study research: design and methods*, (4th ed.), SAGE, Thousand Oaks.

*Speaker

✉: sabine.pur@ur.de

Renewable Energy Development and Adoption in Emerging Markets: A Review and Identification of Alternative Investor Class

Prince Baah-Peprah^{1*}✉

1 University of Agder, department of strategy and management, school of business and law, Kristiansand Campus, Kristiansand. – Norway

Abstract

Practically, renewable energy development and adoption (REDA) in emerging and developing markets (EDMs) faces several challenges. Academically, studies focusing on such challenges are scattered and consider limited factors that characterize the phenomenon. Moreover, such studies often yield mixed results, hence limiting the prospects for identifying lasting solutions. The present study seeks to contribute to REDA in EDMs by reflecting on earlier studies and taking stock of accumulated factors characterizing REDA in EDMs. Accordingly, this study used a systematic literature review (SLR) method and analyzed 105 peer-reviewed papers on REDA in EDMs published between 2003 and 2020 in 44 journals. Overall, the review presents an analysis of 201 associations between 15 aggregated characterizing independent variables with three main aggregated indicators (i.e., investment environment factors, impact factors and public intervention factors). We found that investment environment factor demands a swift and urgent attention where marriage between a crowdfunding investment model and ‘stakeholder investors’ has the potential to boost REDA in EDMs relative to other traditional investment vehicles. The review addresses issues related to theory, methods, contexts, findings, and gaps. Based on aggregated summaries of effects, we further discuss and propose a new investor class – ‘crowdfunding-based stakeholder investor’– that leans on stakeholder theory and the crowdfunding phenomenon and a new payment system – ‘pay as you save (PAYS)’– that leans on pay-as-you-earn concept.

Keywords: Systematic literature review, renewable energy, emerging market, developing market, crowdfunding, stakeholder investor

*Speaker

✉: prince.baah-peprah@uia.no

The change of a production system and its impact on economic and environmental performance: The report on the transformation of a cost-unit into a business-unit in a French Abbey

Laurent Lavigne*✉

Maître de conférences, University of Lorraine- France

Abstract

This article is part of the field of environmental management accounting. It aims to shed light on the evolution of the actors and non-actors following the implementation of a green production system. In other words, how a tool in "green sustainability" modifies the profession of men and management instruments. This research is firstly based on an analysis of the mutation of management accounting towards eco-efficiency; then, a qualitative empirical study focuses on the ecological improvement of a production and management system in a cheese-producing French Abbey. The conceptual framework built around the network actor theory (Callon and Latour, 1991, Callon, 1999) offers us the possibility of creating and disseminating environmental management dashboards, by demonstrating that the ecological production dimension is a source of profitability with the modification of a cost centre into a business centre. This article highlights, moreover, that the integration of a production mode determines the green intensity of an organization in the sense of Antheaume (2013).

Keywords: dashboards, green production tool, environmental management accounting, network actor theory.

References

- Antheaume, N. (2013). Le contrôle de gestion environnemental. État des lieux, état de l'art. *Comptabilité Contrôle Audit*, 19, 9-34.
- Callon, M., Latour, B. (dir.) (1991). *La Science telle qu'elle se fait. Anthologie de la sociologie des sciences de langue anglaise*. Paris : La Découverte.
- Callon, M. (1999). Actor-Network Theory: the Market Test. In J. Law and J. Hassard (Eds.) *ActorNetwork and After*. Oxford and Keele, Blackwell and the Sociological Review: 181-195.

*Speaker

✉: laurent.lavigne@univ-lorraine.fr

Connecting Creativity Through Life Spans: A Systematic Literature Review of how Creative Competencies can be Sustained Through Adolescence and Into Adulthood

Diana Heinbucher ^{1*}✉

¹*University of Technology, Chair of Innovation Research and Technology Management, Chemnitz. – Germany*

Abstract

In 1968, Land and Jarman found in a NASA study that we are born with high creative abilities, but that the western school system contributes to the decline of these abilities with age (Land & Jarman 1992). It is therefore not a new finding that we do not make sustainable use of the creative abilities we are given. Nevertheless, creativity training is seen as an important task in the field of skills training (Kupers 2019; Alves-Oliveira 2021), yet this skills training faces the challenge of being affiliated with the Western school system, which diminishes creativity (Shaheen 2010, Hall & Thomson 2005, Robinson 2011). Creativity is seen as a potential that lies predominantly in the person, which cannot be learned from scratch but can be trained (Knieß, 2011, p. 112), further it is described as a dynamic construct (van der Zanden et al. 2020), which means that the expression can also vary from phase to phase (Barbot 2022), and can also be unlearned (Land & Jarman 1992). Creativity as an individual construct has been intensively researched in recent years for the individual phases of life, with a special focus on early childhood and adulthood (Mullineaux & Dilalla 2009). Studies examining creativity in the transitions between these life stages are scarce. Under the premise that with the onset of puberty the brain, and thus built structures for creative thinking, are completely rebuilt (Kleibeuker et al. 2016), the question arises: *Under which conditions can these creative abilities persist through adolescence?* Adolescence is the transitional phase between childhood and early adulthood, and is considered a critical phase in the development of creativity (Barbot & Heuer 2017; Beghetto & Dilley 2016). In addition, during

this phase our brain is completely rebuilt (Stevenson et al. 2014), existing connections are interrupted and have to be rebuilt.

The systematic literature review (Xiao & Watson 2017) aims to provide information on how acquired creative competences can be preserved across the different stages of life. Only when it is understood how creative competences can be maintained across the life stages can interventions emerge that maintain these competences and thus promote the creative competences of future adults.

Keywords: Creativity, Adolescence, Adulthood, Creativity Development, Creative Competencies, Systematic Literature Review

References

- Alves-Oliveira, P; Arriaga, P.; Xavier, C.; Hoffman, G. & Paiva, A. (2021). Creativity Landscapes: Systematic Review Spanning 70 Years of Creativity Interventions for Children. *The Journal of Creative Behavior*, 0(0), 1–25. DOI 10.1002/jocb.514.
- Barbot, B. (2022). Intra-Individual Variability in Creativity. *European Psychologist*. 10.1027/1016- 9040/a000470.
- Barbot, B., & Heuser, B. (2017). Creativity and identity formation in adolescence: A developmental perspective. In M. Karwowski, & J. C. Kaufman (Eds.). *The creative self: Effect of beliefs, self- efficacy, mindset, and identity* (pp. 87–98). London, United Kingdom: Elsevier.
- Beghetto, R. A., & Dilley, A. E. (2016). Creative aspirations or pipe dreams? Toward understanding creative mortification in children and adolescents. *Perspectives on creativity development. New directions for child and adolescent development*. 151, 85–95.
- Hall, C., & Thomson, P. (2005). Creative tensions? Creativity and basic skills in recent educational policy. *English in Education*, 39(3), 5–18. doi:10.1111/j.1754-8845.2005.tb00621.x.
- Knieß, M. (2011). Kreativität. In: V. Lewinski-Reuter & S. Lüddemann (Eds.) *Glossar Kulturmanagement*. pp. 112-130. Wiesbaden: Springer Fachmedien.

- Kupers, E.; Lehmann-Wermser, A; McPherson, G. & van Geert, P. (2019). Children's Creativity: A Theoretical Framework and Systematic Literatur Review. *Review of Educational Research*, 89(1), 93-124. DOI: 10.3102/0034654318815707.
- Land, G. & Jarman, B. (1992). *Breakpoint and Beyond: Mastering the Future Today*. Harpercollins Publisher.
- Kleibeuker, S. W.; De Dreu, C. K. W. & Crone, E. A. (2016). Creativity development in adolescence: Insight from behavior, brain, and training studies. *New Directions for Child and Adolescent Development*, 151, 73–84. <https://doi.org/10.1002/cad.20148>.
- Mullineaux, P. Y. & Dilalla, L. F. (2009). Prescool pretend Play Behaviors and Early Adolescent Creativity. *Journal of Creative Behavior*, 43(1), 41-57.
- Robinson, K. (2011). *Out of our minds*. Chichester England: Capstone.
- Shaheen, R. (2010). Creativity and education. *Creative Education*, 1, 462–485. doi:10.1111/j.1468- 2273.1967.tb00255.x.
- Stevenson, C. E.; Kleibeuker, S. W.; de Dreu, C. K. W. & Crone, E. A. (2014). Training creative cognition: adolescence as a flexible period for improving creativity. *Frontiers in Human Neuroscience*, 8(827), 1-16.
- Van der Zanden, P. J. A. C.; Meijer, P. C. & Beghetto, R. A: (2020). A review study about creativity inadolescence: Where is the social context? *Thinking Skills and Creativity*, 38, 1-18.
- Xiao, Y., Watson, M. (2017). Guidance on Conducting a Systematic Literature Review. *Journal of Planning Education and Research* (2019), 39(1), S. 93-112.

*Speaker

✉: diana.heinbucher@zlb.tu-chemnitz.de

Towards a plurality of supply chain relational models impacting sustainable logistics innovations

Thierry Houé *✉

ICN Business School, CEREFIGE-University of Lorraine, Supply Chain and Information Systems Management Department, Nancy – France

Abstract

The importance of sustainable innovation within the supply chain cannot be underestimated and the literature emphasizes that is a requirement for achieving corporate sustainability goals (Kusi-Sarpong et al., 2019). In this article, we choose to focus on the supply chain as a place dedicated to innovation (Deif and Mohib, 2019). We try to define the collective nature of sustainable logistics innovations (SLI) through the analysis of ties between actors from different supply chains. Our work attempts to answer the following research question. How does the plurality of relationships affect the nature of sustainable logistics innovations within the supply chain? The polymorphic concept of proximity (Boschma, 2005) is used as a theoretical framework. This conceptual choice is justified by referring to many academic works that support the relevance of a proximity-based approach in the study of relationships between organizations (Huber, 2012). This research is founded on a qualitative study. Twenty-four companies of several supply chains from various sectors were selected. The analysis of qualitative data shows the emergence of three distinctive sustainable supply chains which seems to influence the sustainable logistics innovations (SLI) in various ways: the “transactional sustainable supply chain”, the “strategic sustainable supply chain” and the “knowledge sustainable supply chain”. The paper confirms the interest for a transdisciplinary approach in supply chain management research (Sanders et al., 2013). It allows a more detailed analysis of the relationships mechanisms between actors and helps to understand how this plurality and this diversity of ties affect the nature of SLI in the supply chain (Björklund and Forslund, 2018a; 2018b).

Keywords: proximity, relationships, sustainable logistics innovation, sustainable supply chain

References

- Björklund, M. and Forslund, H. (2018a). Exploring the sustainable logistics innovation process. *Industrial Management & Data Systems*, 118(1): 204-217.
- Björklund, M. and Forslund, H. (2018b). A framework for classifying sustainable logistics innovations. *Logistics Research*, 11(1): 1-12.
- Boschma, R. (2005). Proximity and innovation: a critical assessment. *Regional Studies*, 39(1): 61-74.
- Deif, A. and Mohib, A. (2019). Typology to understand some dynamics of supply chain innovation location. *Journal of Supply Chain and Operations Management*, 17(1): 47-55.
- Huber, F. (2012). On the role and interrelationship of spatial, social and cognitive proximity: Personal knowledge relationships of R&D workers in the Cambridge Information Technology Cluster. *Regional Studies*, 46(9): 1169-1182.
- Kusi-Sarpong, S., Gupta H., and Sarkis, J. (2019). A supply chain sustainability innovation framework and evaluation methodology. *International Journal of Production Research*, 57:7, 1990-2008.
- Sanders, N., Zacharia, Z. and Fugate, B. (2013). The interdisciplinary future of supply chain management research. *Decision Sciences*, 44(3): 2-17.

*Speaker

✉: thierry.houe@icn-artem.com

Innovations, creativity, and sustainability relationships: The future of resilient supply chains after disruptions

Benson Ruzive^{1*✉}, Prof Maxwell Phiri^{2✉}, Hesham Magd^{3✉}

1. *University of KwaZulu-Natal, School of Management, Information Technology & Governance, College of Law & Management Studies, Pietermaritzburg Campus, Durban, South Africa*

2. *University of KwaZulu-Natal, School of Management, Information Technology & Governance, College of Law & Management Studies, Pietermaritzburg Campus, Durban, South Africa*

3. *Modern College of Business and Science, Department of Business Management and Economics, Sultanate of Oman, Middle East*

Abstract

Introduction: The aftermath of Covid-19 pandemic has been felt globally and by every sector. Extensive research has been carried out to understand and appreciate what constitutes creativity, innovation, and sustainability in supply chains after facing disruptive experiences. However, the current study offers a diagnosis to the problem and proffer a framework model that capacitates stakeholders in the adaptation and implementation of the elements of creativity, innovation, and sustainability. The main objective of the study is to investigate how organizations may be creative, innovative, and think sustainably after facing disruptive experiences on an individual, sectoral, nationally, or global level, e.g., like the current wave of Covid-19 pandemic. Research questions that emerge from this objective are (a) what critical success factors (CSF) should supply chains adopt to recover from disruptive environments? (b) what resilient and sustainable strategies should supply chains embrace after experiencing some form of disruptions? (c) How can firms build more smarter and resilient supply chains that are sustainable?

Methodology: To shed light on what constitutes creativity, innovation, and sustainability in supply chains, it is imperative to deliberately dissect these elements to establish what literature says about each variable (element). The study takes a cross-sectional approach of

literature review spanning a ten-year period (2011-2021) to find out what is known about creativity, innovation, and sustainability in supply chains after they have experienced some form of disruptions. The adaptation of such an approach is expected to yield better results since current literature shows that there has not been any direct link between creativity, innovation, and sustainability in supply chains for resilience. This cross-sectional interactive literature review is expected to captivate and illuminate creativity, innovation, and sustainability in the wake of resilience as part of global supply chains with an acceptable, feasible and suitable framework aimed at providing both short-term and long-term survival and competitive strategies.

Findings: Preliminary results show that supply chain risks have been classified into three categories namely supply risks, demand risks and control risks. In addition, critical success factors in supply chains include but not limited to effective communication, social distancing, adopting new technology, modifying roles and regulations at workplaces, sealing territorial borders, having strong collaborative relationships and government control.

Research limitations: The study is limited to literature review and is explorative in nature for the formulation of a conceptual framework. This forms one of the possible perspectives of research findings which are limited to supply chains in nature. However, empirical studies can be conducted to enhance the generalization of the research findings.

Originality: This paper's originality lies in dissecting creativity, innovation, and sustainability in addition to comprehensively mapping them to establish the relationship and interactions between them. The researchers, as such, provides a basis for testing these connections in future empirical research studies.

Keywords: Creativity, Sustainability, Resilience, Innovation, Supply Chains, Disruption, Covid-19 Pandemic.

*Speaker

✉:bruzive40@gmail.com; phirim@ukzn.ac.za; Hesham.Magd@mcbs.edu.om

Analyzing the relationship between supply chain sustainability, integration, and resilience by considering the behavioral characteristics of managers

Mir Danial Mousavi*✉

Ph.D. Student, ICN Bussines School Nancy-France

Abstract

Given the importance of supply chain management strategies in achieving better performance, various studies have examined the effect of different supply chain management strategies including supply chain integration, sustainability, and resilience on the performance of manufacturing and service companies. The researchers believe that supply chain resilience helps companies respond quickly to any unforeseen changes and resume operations by combining and reconfiguring their existing resources and capabilities. In another way, supply chain integration can be a process integration between manufacturers, suppliers, distributors, and customers to benefit supply chain participation, and at any level of integration, this process can improve business performance. However, previous studies have been based on traditional theories that ignore the human role in relationships, while in the real world, human behavior and characteristics are an effective factor in advancing organizational goals. Therefore, to fill the existing research gap, in the present study, based on behavioral theories, the relationship between supply chain management strategies, the effect of supply chain management strategies on performance, and the role of managers' behavioral characteristics in this regard were discussed.

To achieve the objectives of the research, in an applied and correlational research, Tehran auto parts manufacturing companies were considered as a statistical population and 206 CEOs and technical managers of these companies were selected as a sample. The standard questionnaire was designed based on previous studies and after measuring its reliability and validity was provided to the sample. The Structural equation modeling and PLS software was

used to investigate the relationships between the variables.

In investigating the effect of supply chain integration on supply chain resilience, the results showed a positive correlation between supply chain integration and supply chain resilience. Also, the results showed that supply chain integration, supply chain sustainability, and supply chain resilience can improve the performance of the under reviewed organizations, and supply chain sustainability has a greater effect on performance improvement than supply chain resilience and integration. In addition, in examining the effect of managers' behavioral characteristics including management overconfidence, herd behavior, and over-optimism in the relationship between supply chain management strategies and performance, the results showed that unwise management behaviors can reduce the effect of implementing supply chain management strategies. So, when managers behave irrationally and emotionally, the development of supply chain management strategies cannot improve performance as it should, and investing in the development of supply chain strategies does not bring enough profit to the organization.

The results of the research are consistent this resources with who confirmed the importance of supply chain management strategies in achieving better performance.

Keywords: Supply Chain Resilience, Supply Chain Integration, Supply Chain Sustainability, Business Performance, Behavioral Theory.

*Speaker

✉: mirdanial.mousavi@myicn.fr

Resource efficiency measures in manufacturing companies in Baden-Württemberg – Insights on motivation, opportunities and abilities

Marlene Preiss ^{1*}✉

1 Pforzheim University, Institute for Industrial Ecology (INEC), Tiefenbronner Straße 65, 75175 Pforzheim – Germany

Abstract

The publication of “The Limits of Growth” 50 years ago made it clear that growth and resource consumption urgently need to be decoupled. One possible strategy for this is the increase of resource efficiency.

Increasing resource efficiency offers manufacturing companies the opportunity to realize economic benefits. For the German federal state of Baden-Württemberg, the manufacturing industry is of great economic importance, and it is not uncommon for the sector's companies to have a material cost share of 40 % and more, underlining the economic potential of efficiency improvements. However, it is known from different studies on energy efficiency (e.g. Sorrell et al. 2000, Cagno and Trianni 2014, Brunke et al. 2014) and to a fewer extent on material efficiency (e.g. Allwood et al. 2011, Shahbazi et al. 2016, Tura et al. 2019), that different barriers slow down and hinder the adoption of resource efficient technologies and practices, while different driving factors facilitate the adoption.

Against that background, drivers and barriers for resource efficiency measures in manufacturing companies in Baden-Württemberg were examined using a qualitative content analysis of descriptions of successfully implemented measures. The identified drivers and barriers were matched to the constructs of motivation, opportunity, and ability.

In the area of motivation, the analysis showed that measures were driven by cost reduction, the potential to improve operational efficiency, process and product quality but also the reduction of environmental impacts and a long-term energy or sustainability strategy. These

drivers were counteracted by the fear of hidden costs, lacking market acceptance, high investment costs and uncertainties on the measure's profitability. With regard to opportunity, modernization or replacement investments were driving forces, as well as the chance to cooperate across the value chain. Barriers in that area were strict guidelines on payback periods, the availability of suitable technologies, lack of awareness, time, and acceptance of measures. Related to ability, the identification of inefficiencies and starting points posed difficulties as well as lacking transparency and data availability. Shortcomings regarding the application of different analysis methods were bridged via the cooperation with universities, research institutions and consultants.

Based on the gained insights, it can be noted that different types of cooperation should be intensified as they seem to be a promising strategy to overcome different types of barriers. This includes cooperation between companies along the value chain, cooperation within the companies in the form of interdepartmental teams and the cooperation with universities.

Keywords: resource efficiency, manufacturing, drivers, barriers

References

- Allwood, Julian M.; Ashby, Michael F.; Gutowski, Timothy G.; Worrell, Ernst (2011): Material efficiency. A white paper. In: *Resources, Conservation and Recycling* 55 (3), S. 362-381. DOI: 10.1016/j.resconrec.2010.11.002.
- Brunke, Jean-Christian; Johansson, Maria; Thollander, Patrik (2014): Empirical investigation of barriers and drivers to the adoption of energy conservation measures, energy management practices and energy services in the Swedish iron and steel industry. In: *Journal of Cleaner Production* 84, S. 509-525. DOI: 10.1016/j.jclepro.2014.04.078.
- Cagno, Enrico; Trianni, Andrea (2014): Evaluating the barriers to specific industrial energy efficiency measures. An exploratory study in small and medium-sized enterprises. In: *Journal of Cleaner Production* 82, S. 70-83. DOI: 10.1016/j.jclepro.2014.06.057.
- Shahbazi, Sasha; Wiktorsson, Magnus; Kurdve, Martin; Jönsson, Christina; Bjelkemyr, Marcus (2016): Material efficiency in manufacturing. Swedish evidence on potential, barriers

and strategies. In: Journal of Cleaner Production 127, S. 438-450. DOI: 10.1016/j.jclepro.2016.03.143.

Sorrell, Steve; Schleich, Joachim; Scott, Sue; O'Malley, Eoin; Trace, Fergal; Boede, Ulla et al. (2000): Reducing barriers to energy efficiency in public and private organisations. Hg. v. Energy research centre - science and technology policy research (SPRU). University of Sussex. Brighton.

Tura, Nina; Hanski, Jyri; Ahola, Tuomas; Ståhle, Matias; Piiparinen, Sini; Valkokari, Pasi (2019): Unlocking circular business. A framework of barriers and drivers. In: Journal of Cleaner Production 212, S. 90-98. DOI: 10.1016/j.jclepro.2018.11.202.

*Speaker

✉: marlene.preiss@hs-pforzheim.de

Interactive Digital Art as Didactic Agents in Space: The art of eco-nudging

Carmela Cucuzzella^{1✉}, Sherif Goubran^{2*}, Firdous Nizar³

¹ Professor, Department of Design and Computation Arts, Faculty of Fine Arts, Concordia University, Concordia University Research Chair in Integrated Design, Ecology, and Sustainability for the Built Environment (IDEAS-Be), and Founding Co-director of Next Generation Cities Institute, Montreal, Canada

² Assistant Professor, Department of Architecture, School of Sciences and Engineering, the American University in Cairo, Egypt

³ PhD student, Individualized Program, Concordia University, and Research Associate, Integrated Design, Ecology, and Sustainability for the Built Environment (IDEAS-Be), Concordia University, Montreal, Canada

Abstract

In the age of the Anthropocene, information about the earth's degradation is omnipresent, yet significantly less is available on what the individual can do to change unsustainable habits (Demos, 2017). Even though humans are aware of the damage they cause, they also know that much of it is beyond their personal control, rooted in the prevailing socio-economic mode of operation (Ellis, 2018). Visual imagery has been central to the process of conceptualizing and confronting environmental degradation caused by human activity. The problem is that much of this imagery rarely contributes to educating the audience for which it is intended. Many of these images have held to the visual language of the techno-scientific. Furthermore, while eco-art's public enlightenment strategy may be a promising way for raising climate awareness, concrete improvements can only occur through changes in the way things are done.

This study explores how art can be used to bridge the gap between simple eco-awareness and the more complex notion of eco-action. It proposes a form of interactive eco-art that aims to empower users to modify their behaviour and make changes in their environment by providing specific feedback that overrides other contextual, physiological, and comfort triggers (O'Brien and Gunay, 2014). In this study, we use digital art and design to nudge participants to change and optimize a space's environmental settings (heating, ventilation and lighting levels) within a range where they are already comfortable.

We draw on the fieldwork from an experiment conducted within an exhibition space in Montreal during the Fall of 2019. We designed, built, and deployed a system that produced a series of complex experiences informed by people's energy use and (inter)actions. Our participants were aware of the experimental nature of the scenario. In this experiment, we explored how interactive digital art can become a means of what we term, 'eco-nudging', described as a method that uses slight sensory interventions to help people make changes in their environments, as a direct result of users' reactions to the 'nudge' request. The premise is that sensorial experience produced by technological interfaces is a promising venue for enabling choices. This type of design moves beyond informing and overtly asking participants to make a change even if one is not necessarily needed. The spatial setting of this interactive installation was elaborated in Goubran et al. (2021), where it was observed that ambient, abstract, and artistic real-time goal-driven feedback effectively influences immediate actions.

In this paper, we ask: *Is this mode of digital interaction with interior controls empowering for users? Does this experiment show that a teaching companion through a digital object can influence specific action and choices for interior environmental settings?* We adopt the theoretical approach of design as means for raising awareness and engaging action. Cucuzzella developed the term, eco-didacticism for the design of spatial experiences that convey eco-lessons (2019). We proposed that the integration of digital technology enhance the teaching and action as a result of such interfaces.

The experiment explored the potential of new types of interfaces, which solicit action with no reward systems. We observed that users were inclined to interact with the visual interface and reach the suggested targets, even if they disagreed with the settings. Participants aimed to understand and 'satisfy' the interactive digital artwork – a new abstract 'being' in their makeshift living room (the exhibit space). We found that the results intersected with recently emerging theories of eco-didacticism. Specifically, the experiment and human-digital-art interactions could be clearly mapped against the three axes proposed by (Cucuzzella, 2019, Cucuzzella et al., 2020): where the *cognitive experience*, tended towards the *desire to inform*, the *formal qualities*, leaned towards the 'invisible' side by avoiding green clichés and the *communicative approach* depended on agreement as a method. The experiment responds to calls for alternative futures in human-building interactions (Day et al., 2020), but also on how such interactive-visual experiences can add an important layer of influence to the other factors that contribute to behaviour in interior spaces. The experiment also highlighted the

significance of companionship as a future research axis for informing human behaviour in spaces.

Keywords: Environmental Art; eco-didacticism; companionship; human-building interaction; energy-Actions.

References

- CUCUZZELLA, C. 2019. Eco-didactic design in the public realm. *In*: MAMBRETTI, S. & I GARCIA, J. L. M. (eds.) *The Sustainable City XIII*. Valencia, Spain: Sustainable City.
- CUCUZZELLA, C., CHUPIN, J.-P. & HAMMOND, C. 2020. Eco-Didacticism in Art and Architecture: Raising Awareness by Design. *Cities Journal*, 102.
- DAY, J. K., MCILVENNIE, C., BRACKLEY, C., TARANTINI, M., PISELLI, C., HAHN, J., O'BRIEN, W., RAJUS, V. S., DE SIMONE, M., KJÆRGAARD, M. B., PRITONI, M., SCHLÜTER, A., PENG, Y., SCHWEIKER, M., FAJILLA, G., BECCHIO, C., FABI, V., SPIGLIANTINI, G., DERBAS, G. & PISELLO, A. L. 2020. A review of select human-building interfaces and their relationship to human behavior, energy use and occupant comfort. *Building and Environment*, 178, 106920.
- DEMOS, T. J. 2017. *Against the Anthropocene: Visual Culture and the Environment Today*, Berlin, Sternberg Press.
- ELLIS, E. C. 2018. *Anthropocene* New York, Oxford University Press.
- GOUBRAN, S., CUCUZZELLA, C. & OUF, M. M. 2021. Eyes on the Goal! Exploring Interactive Artistic Real-Time Energy Interfaces for Target-Specific Actions in the Built Environment. *Sustainability*, 13.
- O'BRIEN, W. & GUNAY, H. B. 2014. The contextual factors contributing to occupants' adaptive comfort behaviors in offices - A review and proposed modeling framework. *Building and Environment*, 77, 77-87.

*Speaker

✉carmela.cucuzzella@concordia.ca

Cultural and Creative Industries under Corona Circumstance in Chemnitz

Anja Herrmann-Fankhänel ^{1✉}, Diana Heinbucher ^{1*}

¹Chemnitz University of Technology, Chair for Innovation Research and Technology Management, Thüringer Weg 7, 09126 Chemnitz, Germany

Abstract

13th March 2020: Rien ne va plus! The cultural and creative industries (CCI) (Cunningham, 2002; Hesmondhalgh, 2008) suffer particularly from the circumstances of the pandemic conditions. Many actors perceive the pandemic conditions as an occupational ban and see a disregard for their work by politics and society. This includes artists, cultural managers, venues, catering, security, and other creative, organizational and technical service providers (Sakschewski & Paul, 2017). In Chemnitz, this is particularly explosive due to the upcoming Capital of Culture 2025.

After one year under pandemic conditions, 30 interviews (Helfferrich, 2014) were conducted with representatives of the Chemnitz CCI. The respective participants belong to either the private, civil society, or public sector of the CCI and are thus for profit, non-profit, and municipal organisations in which the participants are self-employed, employed, as managing directors, and/or work on a voluntary basis. MaxQDA was used to support the qualitative content analysis, which was carried out by two raters (Mayring, 2014).

The interviews covered individual and structural topics such as emotions, actions, and further planning, social issues as well as the development of the industry and the financial support. To name three major results: The actors see themselves as responsible for finding solutions, so they have used up their own retirement savings or taken out private loans, due to the financial instruments that did not cover the spectrum of the actors in the CCI. *Second*, the actors describe the full range of emotional moods. Especially creatively active ones tackled new projects and processed the time artistically. Other ones reported suicide among friends. *Third*, for Chemnitz, it can be shown that the representatives have been active in the CCI for an average of more than 20 years. In most cases, they represent more than one area of

expertise. The industry is characterized by people who consider it as a life choice to be active in the CCI. Likewise, it is clear that the industry lacks young talents, as 75% of the actors were older than 35 years. This is exacerbated by the fact that participants reported the permanent departure of acquaintances from the CCI due to Corona.

Keywords: Cultural and Creative Industry, Corona, Impacts of Corona, Chemnitz, European Capital of Culture 2025, Qualitative Research, Interviews, Qualitative Content Analysis

References

- Cunningham, S. (2002). From Cultural to Creative Industries: Theory, Industry and Policy Implications. *Media International Australia*, 102(1), 54–65.
<https://doi.org/10.1177/1329878X0210200107>
- Helfferrich, C. (2014). *Leitfaden-und Experteninterviews*. In. N. Baur, J. Blasius (Hg.): *Handbuch Methoden der empirischen Sozialforschung*.
- Hesmondhalgh, D. (2008). Cultural and Creative Industries. In T. Bennett & J. Frow (Eds.), *The SAGE handbook of cultural analysis* (p. ?? (732)). Sage Publications Ltd.
<http://www.uk.sagepub.com/books/Book225654#tabview=title>
- Mayring, P. (2014). *Qualitative content analysis: Theoretical foundation, basic procedures and software solution*.
- Sakschewski, T., & Paul, S. (2017). Management der Veranstaltungsbranche. In *Veranstaltungsmanagement* (pp. 115–156). Springer.

*Speaker

✉: heranj@hrz.tu-chemnitz.de

Temp-plates for Creative Imagination in Organizations: From Gothic Construction to Experimental Composition

Clare Hindley ^{1✉*}, Stephan Sonnenburg ^{2*}

1 IU International University of Applied Sciences, Bad Honnef, Germany

2 ICN Business School, Berlin, Germany

Abstract

A problem in fostering organizational creativity, especially collaborative creativity, is that we (mainly Western societies) still follow the mantra of controlled modelled feasibility and systematic processes from plan to implementation. Thereby, creativity is too often regarded as a one hit 'wonder' with no sustainable effect for idea development and innovation. The message that 21st century organizations need more creativity, especially as innovative endeavors are more complex and must resonate with sustainable requirements, is not new and has been echoed by many researchers (Adler, 2006; Berthoin Antal, Debucquet, and Frémeaux, 2019; Buhl et al., 2019). Till now, many creative methods have been developed (e.g. the Innovator's Dictionary by Buchholz and van Aerssen (2020) mentions 555 methods) to foster creativity in organizations. Some are used on a regular basis, but too often the results are mediocre to disappointing for the participants. We need to ask ourselves why people in organizations (and even beyond) do not use creativity methods more often and have the feeling that the results are often neither convincing nor sustainable? We believe that creative imagination as the driver to go beyond 'normal creativity' is lacking. This research endeavors to answer the crucial question of how to explore creative imagination to foster creativity, in particular concerning creative methods (processes, tools and techniques). We argue a conceptual framework, we refer to as a 'creative temp-plate', which highlights creative imagination as necessary to foster creativity and to generate disruptive ideas. We need to avoid a dull and uncritical application of creative methods, in other words pure creative replication (Tung, 2006). The 'creative temp-plates' conceptual framework proposed is developed from an analysis of Gothic cathedral construction (Turnbull, 1993) and music composition and performance (Cage, 2010) to re-think and re-shape creative methods with particular focus on experimentation and improvisation. Turnbull sees the medieval

stonemasons' use of templates as the critical milestone to Gothic cathedral building. We try to develop his template thinking further by focusing more on creative experimentation to foster imagination. For this, we go deeper into the field of the arts as historically creativity has been the primary competence of artists, not managers. (Adler, 2006). We regard experimental composer John Cage and his deconstruction of the term 'improvisation' as the missing puzzle piece in fostering creativity. This re-thinking and re-shaping is meaningful in times when we need complex creative solutions, especially sustainable-oriented innovations.

Keywords: Organizational creativity, improvisation, experimentation, performance, replication, creative solutions, creative methods, creative imagination

References

- Adler, N.J. (2006). The arts & leadership: Now that we can do anything, what will we do?. *Academy of Management Learning & Education*, 5(4), 486-499.
- Buchholz, C. and van Aerssen (2020) (eds). *The innovator's dictionary: 555 methods and instruments for more creativity and innovation in your company*. Berlin: De Gruyter.
- Buhl, A., Schmidt-Keilich, M., Muster, V., Blazejewski, S., Schrader, U., Harrach, C., Schäfer, M., and Süßbauer, E. (2019). Design thinking for sustainability: Why and how design thinking can foster sustainability-oriented innovation development. *Journal of Cleaner Production*, 231, 1248-1257.
- Berthoin Antal, A., Debucquet, G., and Frémeaux, S. (2019). When top management leadership matters: Insights from artistic interventions. *Journal of Management Inquiry*, 28(4), 441-457.
- Cage, J. (2010). *How to get started*: Edited by Laura Kuhn, Aaron Levy, Arthur Sabatini. Philadelphia: Slought and the John Cage Trust.
- Tung, R.L. (2006). Of arts, leadership, management education, and management research: A commentary on Nancy Adler's "The arts & leadership: Now that we can do anything, what will we do?". *Academy of Management Learning & Education*, 5(4), 505-511.
- Turnbull, D. (1993). The ad hoc collective work of building Gothic cathedrals with templates, string and geometry. *Science, Technology & Human Values*, 18(3), 315-340.

*Speaker

✉: clare.hindley@iu.org

Can Employee Share Ownership Protect Employment in the Age of Robots? Evidence of ESOPs in China

Huifen Pan*✉

University of Lorraine- Nancy, France

Abstract

Can ESOPs Protect Employment in The Robots' Age? Evidence in China By Huifen PAN
Abstract Facing robot challenges, we search for solutions to protect employment for firms' sustainable development. We analyze the robot advancement and the original advantages of human force, especially the in-depth learning and creativity, and propose to develop employees' potential and create new jobs for defending the working people's dignity instead of the refusal of technological innovation. With big-data mining skills, we analyze 61522 firm announcements and discover a specific targeted-broad-based ESOP model in China, called "Core-staff-based ESOPs." We conduct empirical studies based on 27088 firm annual panel data during 2006-2018. Our findings support these ESOPs' positive effects in protecting employment and employee interests. Furthermore, we reveal their contributions to the circular cumulated cycle effects between employment protection and firm performance. Finally, with heterogeneity control tests, we confirm that employee-owners' participation changes family-controlled firms' routines in most Chinese regions and industries, and the CSR system enhances this employment protection.

Keywords: Challenges in the robots' age, Employment protection, Specific targeted-broad-based ESOPs in China, Circular cumulative cycle effects of sustainability, CSR influence

*Speaker

✉: huifen.pan@univ-lorraine.fr

Digital Decentralized Blockchain Governance. The Case of “The DAO” Revisited

Jan-Peter Schmitt^{1*✉}, Gustav Augart², Stefan Hüsigg³

1, 2, 3 Chair of Innovation Research and Management of Technology, Chemnitz University of Technology, Thüringer Weg 7, 09126 Chemnitz, Germany

Abstract

Blockchain technologies enable the unique identification of the holders of transferred assets, and a tamperproof record of the transactions within the network without the need for intermediary organizations like banks or clearing houses (Nakamoto, 2009). Decentralized Autonomous Organizations (DAOs) implement a company entirely on top of a blockchain. They represent a new form of enterprise based on smart contracts, that manage capital autonomously. This allows for the removal some of the human actors involved and thus reducing risks of maladaptation and opportunistic behavior.

The aim of this study is to examine the efficiency of decentralized autonomous organizations (DAOs) derived from differences in corporate governance structures of DAOs compared to traditional organizations. Core assumptions on these differences are integrated into a model of the governance of a conceptual DAO (Hawlitshchek et al., 2018; Hileman & Rauchs, 2017; Rauchs et al., 2018) to derive assumptions on possible impacts of DAOs on corporate governance.

We analyze this conceptual model against the case of “The DAO”, (Eisenhardt, 1989; Yin, 2003) an early experiment in decentralized autonomous organizations, which was forced to be dismantled after a hacker stole millions of ether, the cryptocurrency of the blockchain network. The case study is built from research and grey literature on “The DAO” as well as two interviews with Christoph Jentzsch, the principal author of “The DAOs” source-code and founder and CEO of Slock.it GmbH and with Tim Bansemer an advisor and expert in the field of decentralized governance and founder and CEO of inblock.io GmbH & Co. KG (Titscher et al., 2007).

The case history and its effects on actors in and outside “The DAO” highlights important aspects to be considered in judging the efficiency of governance structures of DAOs.

Effectiveness in the case of “The DAO” was hampered by the attempt to combine the digitalization of a company with experiments in a new form of governance. Experiments like this prove useful if used to test out the limits and possibilities technologies have to offer. To bear fruits, these experiments must consider the benefits as well as the drawbacks of blockchain technologies for their use-case, and they need to have a clear understanding of how agency should be distributed among its human and non-human parts, to be effective towards their stated goals.

Keywords: Corporate Governance, Blockchain Technologies, Decentralized Autonomous Organization (DAO), Agency Theory

References

- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.2307/258557>
- Hawlicsek, F., Notheisen, B., & Teubner, T. (2018). The limits of trust-free systems: A literature review on blockchain technology and trust in the sharing economy. *Electronic Commerce Research and Applications*, 29, 50–63. <https://doi.org/10.1016/j.elerap.2018.03.005>
- Hileman, G., & Rauchs, M. (2017). 2017 Global Blockchain Benchmarking Study. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3040224>
- Nakamoto, S. (2009). *Bitcoin: A Peer-to-Peer Electronic Cash System*.
- Rauchs, M., Glidden, A., Gordon, B., Pieters, G. C., Recanatini, M., Rostand, F., Vagneur, K., & Zhang, B. Z. (2018). Distributed Ledger Technology Systems: A Conceptual Framework. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3230013>
- Titscher, S., Meyer, M., & Mayrhofer, W. (2007). *Organisationsanalyse: Konzepte und Methoden* (1st ed.). UTB GmbH.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Sage Publications.

*Speaker

✉: jan-peter-schmitten@wiwi.tu-chemnitz.de

Disruptive Technologies and Sustainable Performance of SMEs in Botswana

Tadios Munodawafa*¹✉

1 University of KwaZulu-Natal, college of law and management, school of management, IT and governance, Pietermaritzburg campus, Durban. – South Africa

Abstract

The government of Botswana has committed significant financial and technical resources towards the growth and development of SMEs in Botswana. Despite these efforts, SMEs in Botswana have a low survival rate with the majority of start-ups not surviving beyond 5 years. Disruptive technologies have brought both opportunities and challenges to SMEs across the globe, including those Botswana. These technologies have also helped SMEs to lower transaction costs of conducting business and access local and global markets at the same rate as established and larger firms. Despite these apparent advantages derived from disruptive technologies, SMEs in Botswana are still affected by challenges like employee brain drain to better paying companies, low quality of infrastructure to host disruptive technologies, high cost of information and technology equipment, and lack of clear policies and guidelines to adopt disruptive technologies across the SME sector in Botswana. An exploratory descriptive study was conducted with qualitative data gathered from SME owners/managers from 8 conveniently sampled enterprises in Gaborone City in Botswana. Semi-structured interviews were used and thematic analysis was used to analyse the gathered data. Some key findings were made from the study. Firstly, the adoption of disruptive technologies is still at its infancy in Botswana SMEs and this impacted on sustainability and competitiveness of SMEs in the country. Secondly, SMEs in Botswana face financial challenges and experience high staff turnover as a result of low adoption of disruptive technologies and this impacted on SME technology innovation and retention. Thirdly, Internet infrastructure is generally poor across the whole of Botswana and speed is very slow which impacts on the use of disruptive technologies.

Keywords: disruptive technologies, sustainable performance, Small-to-Medium Enterprises

*Speaker

✉: 221068848@ukzn.ac.za

List of Participants

ARDILIO Antonino	Fraunhofer Institute for Industrial Engineering and Organization IAO
ARNOLD Marlen	University of Chemnitz
BAAH-PEPRAH Prince	University of Cambridge
BAAKLINI Pascale	University of Lorraine
BEHARRY Andrisha	University of KwaZulu-Natal
BEN OTHMAN Hakim	ICN Business School
BENETTI Cristiane	ICN Business School
BLANCO-GONZÁLEZ Alicia	Rey Juan Carlos University
BUCHER Julien	University of Chemnitz
CECCARELLI Agnès	ICN Business School
CUCUZZELLA Carmela	Concordia University
DENNEHY Denis	School of Management, Swansea University
DUSSINE Marie-Pierre	University of Lorraine
FIELDS Ziska	ICN Business School
FINSTAD MILION Krista	ICN Business School
FIORI-KHAYAT Coralie	ICN Business School
FRENZ Rebecca	University of Chemnitz
FRIED Andrea	Linköping University
GANGLOFF Stéphane	University of Lorraine
GEITH Rana	The American University in Cairo
GOUBRAN Sherif	The American University in Cairo
GOVINDA Ahuja	Independent

GRAHMANN Kathrin	ZALF
GROEGER Lars	ICN Business School
GUIMARAES DA COSTA Nuno	ICN Business School
HAMIEH Wassim	ICN Business School
HEINBUCHER Diana	University of Chemnitz
HENRY Jean-Pierre	ICN Business School
HERRMANN-FANKHAENEL Anja	University of Chemnitz
HINDLEY Clare	IU International University of Applied Sciences, Bad Honnef
HOLZERLAND Richard	University of Chemnitz
HÖLZLE Katarina	University of Postdam
HOUE Thierry	ICN Business School
HOUSSOU Ulvick	University of Senghor
HUESIG Stefan	University of Chemnitz
HUESKE Anne-Karen	Copenhagen Business School
HYRKKÖ Sakari	University of Helsinki
IVANAJ Silvester	ICN Business School
JUNG-ERCEG Petra	Technology Region Karlsruhe
KASKAS Mariam	ICN Business School
KITCHEN Philip	ICN Business School
KOSURU Ravi	Fraunhofer IAO
KUEPERS Wendelin	ICN Business School
LAMBRIDIS Nikos	ICN Business School
LAVIGNE Laurent	University of Lorraine
LHERMITE Laetitia	Independent
LIEBOLD Gert Sebastian	University of Chemnitz

LUTZ Axelle	ICN Business School
MAHARAJ Prashanti	University of KwaZulu-Natal
MAIRESSE Philippe	ICN Business School
MAVUNDA Nyikiwa	University of KwaZulu-Natal
MKHIZE Thembinkosi Gelvas	University of KwaZulu-Natal
MNISRI Kamel	ICN Business School
MOKOLOPENG Boitumelo	University of KwaZulu-Natal
MOUSAVI Mir Danial	ICN Business School
MUHAMMAD TAYYEB Sajida	ICN Business School
MÜLLER Jörg	University of Chemnitz
MUNODAWAFA Tadios	University of KwaZulu-Natal
MUREŞANU Florin	University of Architecture and Urbanism, Bucharest
MURESANU Monica	University of Architecture and Urbanism, Bucharest
MUTULA Stephen	University of KwaZulu-Natal
NAIDOO Karunagaran	University of KwaZulu-Natal
NIGAM Nirjhar	ICN Business School
NOCKER Manuela	University of Essex
OPHOVEN Martin	Théâtre Carbonique
PAN Huifen	University of Lorraine
PÄSSILA Anne	Lappeenranta-Lahti University of Technology
PAULET Elisabeth	ICN Business School
PERSSON Sybille	ICN Business School
PILLAY Devika	University of KwaZulu-Natal

PREISS Marlene	Pforzheim University of Applied Sciences
PUR Sabine	University of Regensburg
RAMAN Venkat	Indian Institute of Management Indore
RAMSAROOP Anisha	University of KwaZulu-Natal
RELANO Francesc	ICN Business School
ROTHE Hannes	ICN Business School
RUZIVE Benson	University of Kwazulu- Natal
SAEED Fahad Hussain	ICN Business School
SCHMITTEN Jan-Peter	University of Chemnitz
SCHULZ Klaus Peter	ICN Business School
SHRIVASTAVA Paul	Pennstate University
SINGHAL Arvind	University of Texas El Paso
SONNENBURG Stephan	ICN Business School
SONNTAG Carine	ICN Business School
STEGER Thomas	University of Regensburg
TAREKEGNE Jonas	University of Lorraine
TAVARES ASSIS Michel	University of Évora
WANTA Helge	Dresden University of Technology
WARD Jenna	AoMO
WASIELESKI David	Duquesne University
WEE Desmond	CBS International Business School
WISSINK Henry	University of KwaZulu-Natal
WOELFEL Christian	Dresden University of Technology
ZULU Bayabonga	University of KwaZulu-Natal

ICN Business School – Nancy, France
Main building – 86 rue du sergent Blandan
Station A – 2 place Padoue

Contact

artemocc@icn-artem.com
valorisation@icn-artem.com
+33 (0)3 54 50 25 78

