

# **Entrepreneurship Research: Questions and challenges for the future**

**A content analysis to foster a discussion on society 5.0 and industry 4.0 and its implications towards future research on entrepreneurship**

**Paper to be presented at the ICSB Meeting Paris 2019**

**Presented by:**

**Dr. Hartmut–Heinrich Meyer**

Fachhochschule für Ökonomie und Management (FOM) Hamburg and Bremen

Linzer Strasse, Linzer Str. 7 - 28359 Bremen - Schäferkampsallee 16a, 20357 Hamburg

Email: hartmut.heinrich.meyer@fom-net.de

## **Abstract**

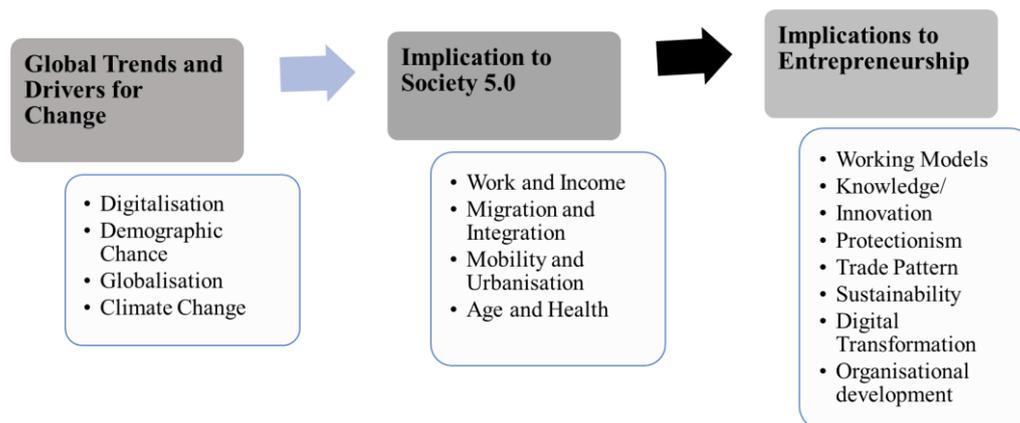
### **1. Introduction: Research objectives/question**

The objective of the paper is to outline future directions of research questions on entrepreneurship in the light of industry 4.0 and its consequences to the society 5.0. The development of cyber-physical systems seek to integrate the information technology, virtual space and the human being in a real and virtual world on the basis of a resulting in a collaborative network (Ferreira/Serpa 2018). This network in particular changes the value creation process and social behaviour abruptly. On the foundation of technical integration and networks, this mega social and economic trend will affect the character of life, social responsibility and sustainability (Prognos 2018). Moreover, humans become the essence of innovation and need to raise up to a level above these trends for future action. In regard to entrepreneurship research, this means to examine the implications of industry 4.0 and society 5.0 towards innovation policy, entrepreneurial spirit and skills in order to furnish the required information towards a sustainable entrepreneurship policy. The idea of this paper is a stock-taking exercise in order to gather and structure recent discussions on future issues. The contemporary knowledge on entrepreneurship in the context of entrepreneurial personality, eco-systems or the outcome of entrepreneurship towards economic and social development has been primarily tested in factor driven and efficiency driven economies. Current contributions on entrepreneurship in innovation driven economies challenge largely contemporary knowledge as economies in this development stage are primarily affected by the drivers of global change. Hence, the paper aims to make an effort to identify areas and questions which should dominate future research in order to present the answers to support a sustainable entrepreneurship.

## 2. Conceptual development of the paper

The conceptual approach of this paper is based on the discussions of economic and social drivers for fundamental change as demographic change, digitalisation, globalisation and climate change and its implications to entrepreneurship. Thereby entrepreneurship is understood as the actions of individuals to execute business activities in the pursuit to perform innovations for income generations. Hence, entrepreneurial activities are especially a result of the relationship between economic space or surroundings and individual economic behaviour. This relationship tends to be newly defined by the new structures due to a networking society as the fifth development stage of mankind due to the consequences of the fourth industrial revolution. The conceptual approach is consequently to examine the implications of drivers for variety and its implications for society 5.0 towards innovations and entrepreneurship as outlined in the next pattern (see also Prognos 2018).

Figure: Overview of the conceptual approach



## 3. Approach and methodology

The methods used to be a content analysis of the literature research by applying different clusters of digitalisation, demographic change, globalisation and its implication towards innovation and entrepreneurship. In a first step a content analysis approach has been used to analyse the links between the key words in the context of entrepreneurship. Here more than 50 articles have been reviewed which have been generated through digital based literature reviews, research gate and web-sides like the icsb.org, gem.org and further sides of entrepreneurship. In a second step a structural biographical analysis will be employed in order to verify the first identified mega-topics in a web-based text analysis.

## 4. Primary Results and Areas for future research

Although the research is still in progress, the following issues have been identified in the context of the entrepreneurship. This first listing of questions does not claim to be complete.

- Financing Seed-Cost and Innovation: Grants and financial support were given to finance production units but not innovations in itself. The question how to finance seed costs and to apply new financial instruments to finance knowledge based innovations appears to be a challenge to entrepreneurship as well as financial institutions.
- Attitude towards entrepreneurship by the generation Y and Z: entrepreneurship appears to be not any longer a long-term program in order to get an income or employment position. In particular the younger generation appears to a different view about entrepreneurial risk and engagement.
- The role of entrepreneurship in the society: The employment factor of entrepreneurship gets increasingly questioned due to the service and knowledge based orientation. Moreover, there seems to be a novel relationship between large cooperation's and entrepreneurship. The future task of entrepreneurship appears to be to provide additional resources and knowledge in a project based economy in order to raise the global competitiveness of larger cooperation's as well as to close distribution and service gaps. Furthermore, employee entrepreneurship becomes of increasing importance in order to perform innovations.
- Social and human entrepreneurship allows a number of new business opportunities in order to centre back the importance of humans. Beside all technology, the maintenance of networks and social contacts become success factors. The ethical relationship in the conduct of business and aspects of sustainability determines entrepreneurial behaviour.
- Migration and diaspora entrepreneurship is an important field of entrepreneurship including aspects of diversity and cultural conduct of businesses and behaviour.
- Information Technology and the operation of big data sets new demands towards entrepreneurial skills.
- The role of an entrepreneur becomes more of a Networker in order to organize innovations rather than develop innovation on their own.

## **5. Contributions to research and knowledge development**

The first findings show that the answers for these questions require to define the relationship between entrepreneurship and its environment in a new light. Besides the measurement of entrepreneurship and its variables needs to be adapted to the characteristics of a globalized knowledge based economic system. Future policies require information how to encourage entrepreneurial behaviour in conjunction with networking and service orientation and to reduce complexity for a sustainable policy. Thereby it appears that the existing measures to promote entrepreneurship by public media, grants and advisory services need to be replaced by a new infrastructure in order to allow a networking for finance, knowledge transfer and market access through collaboration.