

Startup motivation of university scientists

This article gives an insight into the motivation of university scientists who found their own startup company based on research results. Research in entrepreneurial motivation of university scientists is often determined by quantitative methods.¹ To understand the real motivation of entrepreneurial life scientist it is important to get a deep insight into the behavior, norms and values of university life scientists. Star scientists like a MPI director or a well know HIV researcher were asked for their motivation for commercializing research results in a startup company. The author spoke with 35 life scientists and developed a typology of entrepreneurial scientists in the academic environment. Finally, entrepreneurial motivation of university life scientists is explained by the existence of six types: “Existenzsicherer” (spin off motivation as a result of a missing job perspective), “Systemherausbrecher” (spin off motivation as a result of the unsatisfied academic reward system), “Unabhängigkeitsstreber” (spin off motivation as a result of the a high self-determination of entrepreneurial scientists), “Expertisennutzer” (spin off motivation as a possibility to make profit), “Fähigkeitserweiterer” (spin off motivation as possibility to find out how it feels to play the game “business”), and “Herausforderungssucher” (spin off motivation as a sporting event: jumping one centimeter higher than the scientific competitor).

To understand academic norms and values you have to take a look into the scientific motivation and reward system of university scientists. The scientist is a curious man or woman who wants to solve a difficult riddle or puzzle. This riddle is a complex research question that allows to explore nature and to understand reasons of elemental phenomena. To solve a riddle is one main motivation but not the whole explanation of doing science. The second part of scientific motivation is a sportive drive. Doing science is like winning a race. The scientist wants to be the first one who solves a particular riddle. He wants to be the first one who publishes new research results in a well-known journal. He doesn't want to be the second or third one in solving a scientific problem. In other words: the scientist has to jump one centimeter higher than his scientific competitor. Only the first one gets the recognition of the scientific community. What are the main motives for starting a business? It might appear that that doing entrepreneurship at the university is also a possibility to earn recognition and to solve a specific research question, especially the riddle “startup”. To understand the main motivation for starting a business it is important to get to know the special entrepreneurial types of university scientists.

The first type – the “Existenzsicherer” – found a company because he is confronted by negative situations like imminence unemployment. The startup company is a livelihood for earning money. The second – the “Systemherausbrecher” – wants to break out of the academic system. He is very dissatisfied with the academic reward system. He looks for more financial recognition and wants to break out of the “publish or perish”-norm. This type doesn't understand that scientific work performance depends on publishing. He also wants to

¹ See Kulicke (2009), S. 5; see Isfan et al. (2004), S. 347; see Hemer et al. (2007), S. 7 f.

see applications of his research results. The third type – the “Unabhängigkeitsstreber” – looks for independence in his job environment. Scientists of this type want to make decisions on their own without the influence of other people and teammates at work. The own company is the only thing that makes it possible to live the life to the full. The fourth type – the “Expertisennutzer” – wants to transform his knowledge and his business ideas into money. Scientists of this type look for financial gain for their research results. The startup company is one possibility to make money in addition to the salary. Especially, research assistants found a company. In contrast to full time professors research assistants don't have the possibility to make money outside of the academic system. Full time professors can use an existing reputation marked for consulting other companies or for giving a speech. The fifth type – the “Fähigkeitserweiterer” – wants to try if he is also able to found a company in addition to scientific research work. He transfers his scientific curiosity to the economic field. He wants to see how it feels to found a company and to play the game “business”. Scientists of this type don't leave the university after the company founding process. The “Fähigkeitserweiterer” is a person who plays different roles. He found a company; he offers teachings, and he makes contract research. But he will never give up his role as university scientist. The last type – the “Herausforderungssucher” – looks for challenges. The founding of a company is a sporty incentive. This type wants to jump one centimeter higher than his scientific competitor. Scientists of this type are star scientists. They are very well-known; publish a lot of A-journal articles and transfer their research results into the market. The “Herausforderungssucher” is serial entrepreneur and founds more than two companies. Scientists of this type use their reputation and skills to develop business ideas and to get money from external investors. Their reputation acts as signal for their credibility and for the success of their business ideas.

There is another interesting result of this research study. On the one hand interviews reveal that entrepreneurial behavior can be the result of an entrepreneurial socialization in the past. It can be the entrepreneurial father who influences the son. It can be the scientific trainer or group leader who conveys entrepreneurial spirit by doing technology transfer in the research institution in which the scientist was trained. On the other hand entrepreneurial behavior can also be a behavior without a specific socialization in the past. There is the life scientist who wasn't influenced by entrepreneurial friends and teammates. These scientists found a company because they want to try entrepreneurship; they want to try if they are also able to found a company in addition to publishing articles. In this way entrepreneurship is an expression of the original scientific motivation: entrepreneurship is a possibility to solve the riddle “start up a company”; a possibility to live out the scientific curiosity and to explore new things and mechanism of elemental phenomena in the field of business.

Literature

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