

Development of a heuristic rating procedure for categorizing knowhow-intensive and technology-oriented start-ups (KITS) in Austria by identifying KPI's

Written by: Sabine Jung-Waclik (2014) Abstract (E)

In this thesis first, an explanatory model of the success of KITS was developed, describing success factors as a cause for subsequent company success (effect). Success factors, relevance systems and interactions were identified in expert interviews, providing empirical cause-effect relationships based on experience. Second, a descriptive decision model (rating model) was derived which enables the categorization of a single case (specific KITS) through the application of the "general rules" identified in the success factors analysis.

Success factors research (strategic management theory), behavioral finance theory, rating theory as well as model theory (heuristics) provide the theoretical framework for this work. The study is based on the assumption, that the assessment of KITS' potential for success is necessary for some stakeholder groups (startup-coaches, investors, funding agencies, incubators) in spite of limited information (lack of company history and key figures). Behavioral finance theory is based on the assumption that individuals (including professional investors) tend to use heuristics in their investment decision processes. Heuristic models methodologically try to gain new insights based on experience values, which have their origins in subjective practical experience and observations, presumed economic relationships and economic theories.

A qualitative research design allows generating a deeper understanding of the complex problem area. Furthermore, the lack of studies focusing on KITS in Austria, providing an up to date variable pool requires a qualitative-explorative approach. In the course of a multiple step research approach, 42 qualitative, problem-centered interviews with stakeholders with different perspectives were conducted.

Factors for success and failure of KITS were identified in the domains of "team", "finance" and "market-technology-fit". They were illustrated in a table together with the factor-specific relevance (relevance of factors varies according to distinguishing features) and interdependencies between different factors. In the rating model, success factors are viewed as the "rating criteria". The weight of each rating criteria relates to the respective relevance identified in the success factors model and varies in dependence of the distinguishing features applicable to the specific KITS. The assignment (rating result) of one specific KITS to a category of the rating scale depends on additional rules derived from the interviews.