

6-9-2012

DYNAMICS OF EFFECTUATION AND CAUSATION IN TECHNOLOGY-BASED NEW VENTURES (INTERACTIVE PAPER)

Isabelle Reymen

Eindhoven University of Technology, i.m.m.j.reymen@tue.nl

Petra Andries

Katholieke Universiteit Leuven

Rene Mauer

RWTH Aachen University

Ute Stephan

University of Sheffield

Elco van Burg

Free University Amsterdam

Recommended Citation

Reymen, Isabelle; Andries, Petra; Mauer, Rene; Stephan, Ute; and van Burg, Elco (2012) "DYNAMICS OF EFFECTUATION AND CAUSATION IN TECHNOLOGY-BASED NEW VENTURES (INTERACTIVE PAPER)," *Frontiers of Entrepreneurship Research*: Vol. 32: Iss. 6, Article 25.

Available at: <http://digitalknowledge.babson.edu/fer/vol32/iss6/25>

This Interactive Paper is brought to you for free and open access by the Entrepreneurship at Babson at Digital Knowledge at Babson. It has been accepted for inclusion in Frontiers of Entrepreneurship Research by an authorized administrator of Digital Knowledge at Babson. For more information, please contact digitalknowledge@babson.edu.

≈ INTERACTIVE PAPER ≈

**DYNAMICS OF EFFECTUATION AND CAUSATION
IN TECHNOLOGY-BASED NEW VENTURES**

Isabelle Reymen, Eindhoven University of Technology, the Netherlands

Petra Andries, Katholieke Universiteit Leuven, Belgium

Rene Mauer, RWTH Aachen University, Germany

Ute Stephan, University of Sheffield, UK

Elco van Burg, Free University Amsterdam, the Netherlands

Principal Topic

The creation of new ventures is a process characterized by the need to decide and take action in the face of uncertainty, and this is particularly so in the case of technology-based ventures. Effectuation theory (Sarasvathy, 2001) has advanced two possible approaches for making decisions while facing uncertainty in the entrepreneurial process. Causation logic is based on prediction and aims at lowering uncertainty, whereas effectuation logic is based on non-predictive action and aims at working with uncertainty. This study aims to generate more fine-grained insight in the dynamics of effectuation and causation over time. We address the following questions: (1) What patterns can be found in effectual and causal behaviour of technology-based new ventures over time? And (2) How may patterns in the dynamics of effectuation and causation be explained?

Method

A process research approach (Langley, 1999) is used for investigating nine in-depth start-up processes of technology ventures. Based upon interviews with important stakeholders inside and outside the start-up firms and archival documents, event lists were constructed documenting the history of each venture. The event lists were then coded for causation and effectuation. In-depth process analyses were conducted to explore patterns in the development processes and to determine the prevalence of effectual or causal behavior. Finally, patterns in the dynamics of effectuation and causation were explained by focusing on the turning points where shifts occurred in the prevalence of effectual and causal behaviors.

Results and Implications

Inspection of the timelines, supported by several quantitative cross-case analyses, reveals that most cases apply dominantly effectuation-logics early on in their development, then turn to causation, and some cases return to effectuation after a while. Within the timelines of the different cases, we identified specific turning points in effectuation and causation behavior. We develop a dynamic model of “venture scoping” which incorporates uncertainty about the environment, resource position and stakeholder pressures as key determinates of dynamic changes in effectual versus causal modes of decision-making.

CONTACT: Isabelle Reymen; i.m.m.j.reymen@tue.nl; (T): +31402474283; (F): +31402468054; Eindhoven University of Technology, IE&IS, ITEM, CNT 0.06, P.O. Box 513, 5600 MB Eindhoven, the Netherlands.