

G-Forum 2020

The Importance of Marketing Mix Planning and Customer Orientation for Venture Capital Financed **Startups**: Impacts on Valuation, Performance, and Survival

M.Sc. Julia Wöhler & Dipl.-Kffr. Cornelia Ernst

Technische Universität Dresden
Lehrstuhl für Entrepreneurship und Innovation

02.10.2020

Background

Operative **marketing mix** to communicate with customers

- according to a survey, venture capitalists rate marketing as the most important success factor of new ventures (Hills, 1985)
- literature shows positive relations between the marketing planning of new ventures and their performance (Gruber, 2007)
- authors show positive relations between the marketing development of startups and their long-term survival (Pinkwart et al., 2015).

Customer orientation as underlying value culture of startups

- customer orientation of a startup is for venture capitalists a crucial reason for or against an investment (Kaplan & Strömberg, 2004)
- existing studies reveal contradictory viewpoints and opposed findings about the effects of customer orientation on the performance of established firms (e.g., Frambach et al., 2016).

Hypotheses

- The intensity of **planning the marketing mix** in business planning documents has ...
 - **H1a:** ... a **positive** effect on the **startup valuation** by venture capitalists.
 - **H1b:** ... an **inverted u-shaped** effect on the **performance** of a new venture.
 - **H1c:** ... a **positive** effect on the likelihood of new venture **survival**.
- The intensity of **customer orientation** in business planning documents has ...
 - **H2a:** ... a **positive** effect on the **startup valuation** by venture capitalists.
 - **H2b:** ... an **inverted u-shaped** effect on the **performance** of a new venture.
 - **H2c:** ... a **positive** effect on the likelihood of new venture **survival**.

Data

- **107 Business planning documents** that new ventures sent to VCs and received an investment
 - access to resulting startup valuation
- Total data set from 8 German venture capital companies during the years 2003-2017
 - allows to evaluate performance and survival
- German documents, between 1302 and 28,880 words, (mean=10,436 words)
- Sample Details:

Characteristics	% or Average
Age at Investment Decision	28 Months
Patents	57 %
Survival	69 %
Team Economist	70 %
Team Complete	59 %
Number of Founders	2,85
Ready to Market	40 %
Various Industries, e.g. 48 % ICT, 26 % Biotech/Health, 8 % Energy/Environment, ...	

Method and Analysis

- Computer-aided text analysis (**CATA**) to reveal intensity of Marketing Mix planning & Customer Orientation
 - usage of relative word frequencies
 - translation of existing dictionary for customer orientation (Zachary et al., 2011)
 - development and assessment of a dictionary for Marketing Mix (Short et al., 2010)
- Effects on pre-money valuation: **multiple linear regression** analysis
- Effects on performance: multiple linear regression analysis with quadratic term,
 - performance measured as: **net surplus/deficit; return on assets (ROA)**
 - averaged on two years, year of planning document + following year
- Effects on survival: **cox proportional hazard regression**

Effects on Startup Performance

Regression Analysis to Test Effects on Performance

	Dependent variable: Net surplus/deficit 2 nd year			Dependent variable: Return on assets 2 nd year		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Team Economist	-.115	-.056	-.105	-.098	-.092	-.091
Market Ready	-.033	-.015	-.024	.113	.085	.117
Age ^a	.043	.024	.021	.148	.164	.133
Patents (Dummy) ^a	-.166	-.171	-.192	.069	.106	.055
Number of Founders	.167	.094	.169	.080	.063	.076
Customer Orient.		.324			.391	
Customer Orient.²		-.612**			-.328	
Marketing Mix			-.275			-.296
Marketing Mix ²			.210			.285
n	89	89	89	89	89	89
F-value	.987	2.286**	.814	.920	.949	.766
R ²	.056	.165	.066	.053	.076	.062
Adj. R ²	-.001	.093	-0.015	-.005	-.004	-.019
max. VIF ^b	1.170	6.734	9.318	1.170	6.734	9.318

*p ≤ .1; **p ≤ .05; ***p ≤ .01; ^a by the end of 2nd year balance sheet

Conclusion: H2b (✓)

H1b (✗)

- Customer orientation of a new venture has a positive effect on performance to a certain point, though the positive effect then diminishes and becomes negative
 - Non-linear relationship between customer orientation and performance might explain the mixed results in this field
 - No replication of positive effects of marketing capabilities on company performance that are shown for established firms (Morgan et al., 2009) and SMEs (Sok et al., 2013)
 - Startups might put marketing intentions aside in favor of more urgent topics
- Measuring Performance vs. “hockey stick curve”

Effects on Startup Survival

Odds Ratios of the Cox Proportional Hazards Model

Dependent variable: Hazard Rate	Model 1	Model 2	Model 3
Team Economist	1.080	1.169	1.313
Patents Total	.913	.900*	.895*
Market Ready	.760	.781	.762
Number of Founders	.621**	.587**	.610**
Customer Orientation		.542	
Marketing Mix			.664**
n	107	107	107
-2 Log-likelihood	284.095	282.545	279.289
Chi-square	7.245	9.032	11.934**
Significance	.124	.108	.036

*p ≤ .1; **p ≤ .05; ***p ≤ .01

Conclusion: H2c



H1c



- We add to the demand to understand very long-term effects from early indicators (Gimmon & Levie, 2020) and to investigate new venture survival (Patel et al., 2019)
- Validation of previous studies that rely on retrospective answers from respondents who were involved in the ventures (Hall, 1992; Pinkwart et al., 2015) and show positive relationships between marketing capabilities and survival
- a recent study shows similar effects for marketing capabilities of university spin-offs on survival (Skute et al., 2020)

Effects on Startup Valuation

Regression Analysis to Test Effects on Pre-Money-Valuation

Dependent variable: Pre-Money Valuation	Model 1 (controls)	Model 2	Model 3
Team Economist	-.147	-.111	-.108
Market Ready	-.127	-.086	-.107
Age ^a	.406***	.377***	.378***
Patents (Dummy) ^a	-.088	-.126	-.109
First Round	-.176	-.212*	-.209*
Number of Founders	.168	.157	.184*
Customer Orientation		-.216**	
Marketing Mix			-.234**
n	84	84	84
F-value	4.298***	4.456***	4.674***
Adj. R ²	.193	.226	.237
max. VIF	1.401	1.421	1.417

*p ≤ .1; **p ≤ .05; ***p ≤ .01; ^a at the time of valuation

Conclusion:

H2a  H1a 

- Based on literature, we hypothesized positive relationships between marketing mix planning or customer orientation and startup valuation, but we revealed **significant negative relationships instead**
- There seems to be a **negative signaling of marketing efforts to Venture Capital investors**
- The lack of a significant effect of marketing mix planning on performance might explain why venture capitalists do not positively evaluate descriptions of the 4Ps
 - Is a lower valuation “bad” or just “good negotiation”?
 - Data source are only the business plans, there might be additional exchange of relevant information between the startup and the venture capitalist

Practical Implications

- The positive effect of customer orientation on performance diminishes and becomes negative, when startups focus too much on customer orientation
- New ventures need to translate the strategic customer orientation into an operative marketing mix planning for long-term survival
- A business economist is not enough for an intense marketing planning, new ventures need a dedicated marketing specialist instead
- A **dilemma arises** when a startup seeks Venture Capital:
Although customer orientation can boost performance and operative marketing mix planning increases the likelihood of survival and business planning handbooks advise on planning the marketing mix, detailed descriptions of marketing mix and customer orientation decrease the valuation by venture capitalists.

Limitations and Future Research

- Data (only) from German startups and German investors
→ an expert said that the valuation phenomenon might be very “German”
- Accepted business plans and financed cases only
- The measurement of the ‘marketing mix’ construct does not allow to conclude whether the planned marketing mix is appropriate and suitable for a certain new venture
- Measuring the intended behavior of new ventures instead of measuring performed actions
 - + reflects very early strategies
 - + understanding the importance of marketing
- Investigation of different countries and cultural settings
- Use other performance measurements, such as sales data
- Where is this negative signaling coming from?
 - Do investors think that something must be wrong when the marketing mix planning is too detailed?
 - Do they interpret the signals correctly and startups really try to distract from other issues or set wrong priorities?