Key Drivers of University-Industry Relationships and the Impact of Organisational Culture Difference; A Dyadic Study

by

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Abstract

This research examines the characteristics of successful university-industry relationships. By integrating the research areas of relationship marketing and technology transfer, it attempts to provide a unique contribution to both streams and the emerging literature on university-industry relationships. This thesis argues that conceptualising relationships beyond those between private sector organisations, the current central focus of relationship marketing theory development, is needed in order to mature the discipline. In particular, university-industry relationships offer research opportunities due to their incorporation of fundamentally different organisational cultures. The aim of this research is to identify key drivers of university-industry relationships by taking into account the impact of organisational culture difference and other relevant antecedents, such as individuals engaged in the relationship process.

Based on a literature review and initial qualitative research, two conceptual models were developed and subsequently tested using Structural Equation Modelling methods. The first generic model identified the key drivers of satisfaction and intention to renew and examined the influence of organisational compatibility and personal experience on university-industry relationships. The second dyadic model focused on identifying the impact of individual dimensions of organisational culture difference on relationship characteristics and success. Comprising the perspectives of both relationship parties, the dyadic data enabled an advanced reflection of cultural differences and relationship dynamics. Four dimensions were analysed, namely differences in time orientation, market orientation, employee empowerment and corporate flexibility. Both models were analysed in three steps, including path analysis and hypotheses testing, model re-specification and multi-group analysis.

Consistent with the literature, trust, commitment and integration were found to positively influence the primary outcome variable, satisfaction, and were thus confirmed as key drivers of successful university-industry relationships. While trust was identified as the strongest driver for satisfaction, commitment emerged as the strongest predictor of intention to renew. Also confirming relationship marketing theory, the results showed interrelationships between these relationship factors:
Trust positively affected commitment and integration and commitment strongly and positively influenced integration. The findings further demonstrated that organisational compatibility positively influenced all relationship characteristics. However, only two significant paths were confirmed between the individual dimensions of organisational culture difference and relationship characteristics: Differences in time orientation and corporate flexibility both impacted commitment negatively. Furthermore, market orientation difference directly and negatively affected the relationship outcome measure intention to renew. The results only showed a weak influence of personal experience, the variable measuring the relevance of individuals for university-industry relationships, on commitment.
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List of Abbreviations

α  Cronbach’s coefficient alpha
p_h  Composite reliability
p_{AVE}  Average Variance Extracted (AVE)
χ^2  Chi-Square
χ^2/df  Normed Chi-Square
Δχ^2  Chi-Square Difference
AGFI  Adjusted Goodness-of-Fit
ARC  Australian Research Council
CAIC  Consistent Akaike Information Criterion
CFI  Comparative Fit Index
CRC  Cooperative Research Centre
CRM  Customer Relationship Management
GFI  Goodness-of-Fit
IMP  Industrial Marketing and Purchasing
NFI  Normed Fit Index
OECD  Organisation for Economic Co-operation and Development
OCD  Organisational Culture Difference
R&D  Research and Development
RMSEA  Root Mean-Square Error of Approximation
SEM  Structural Equation Modelling
TLI  Tucker-Lewis Index
UIR  University-Industry Relationship
Statement of Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person, except when due reference is made in the text of the thesis.

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Name of Candidate
Publications from this Thesis since Enrolment

1. Journal Articles - Refereed


2. Book Section


3. Conference Proceedings - Refereed


3. Conference Proceedings and Workshops - Non-Refereed


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*The value of an idea lies in using it – Edison*

“Ich habe fertig”. I can’t believe that I did it; three years of hard work have resulted in a thesis of which I am very proud. More importantly, however, the last three years have showed me that an endless number of questions and ideas are waiting to be explored. Edison’s quote on my office wall reminds me of the centre of this thesis: using ideas wisely and valuably. I am sure it will guide me in the future and I can’t wait to see where life takes me from here.

*Example is not the main thing in influencing others; it's the only thing - Schweitzer*

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*If you can give your son or daughter only one gift, let it be enthusiasm - Barton*

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*No road is long with good company – Turkish Proverb*

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