

# Table of Contents

Abstract (English) .....	ii
Abstract (Deutsch) .....	iii
Submission Record .....	v
Acknowledgements to my crowd..	vi
Table of Contents .....	viii
List of Tables .....	xi
List of Figures .....	xii
1. Introduction .....	1
1.1    Proudly found elsewhere .....	1
1.2    Open innovation .....	2
1.3    Internal open innovation as a complementary strategy.....	4
1.4    Not all that glitters is gold .....	6
1.5    Problem formulation and thesis overview .....	6
1.5.1    Leveraging Crowdsourcing: The Moderating Role of External Search Breadth .....	10
1.5.2    Triggers of collaborative innovation in online user communities: A netnographic study .....	10
1.5.3    Internal Open Innovation – Lessons Learned from Internal Crowdsourcing at SAP.....	11
References .....	11
2. Leveraging Crowdsourcing: The Moderating Role of External Search Breadth.....	17
2.1    Introduction .....	18
2.2    Conceptual background .....	19
2.2.1    Innovation search and external sources of knowledge.....	19
2.2.2    Crowdsourcing for innovation .....	20
2.3    Hypothesis .....	21
2.3.1    Crowdsourcing and innovation performance.....	21
2.3.2    Crowdsourcing and search breadth .....	23
2.4    Methodology.....	26
2.4.1    Dataset .....	26
2.4.2    Variables .....	26
2.4.3    Econometric model.....	28
2.5    Results .....	29
2.5.1    Descriptive results.....	29
2.5.2    Model estimation results.....	32
2.5.3    Robustness checks .....	34
2.6    Discussion and conclusion.....	38
2.6.1    Contribution.....	38
2.6.2    Limitations.....	39
2.6.3    Conclusion .....	40
References .....	40
3. Triggers of Collaborative Innovation in Online User Communities: A Netnographic Study.....	47

3.1	Introduction .....	48
3.2	Theoretical background.....	49
3.2.1	Individual user activities .....	49
3.2.2	Collaborative innovation.....	50
3.3	Materials and methods.....	51
3.3.1	Setting: OpenEnergyMonitor.....	51
3.3.2	Data collection and cleansing .....	53
3.3.3	Content analysis.....	53
3.3.4	Variables .....	53
3.3.5	Regression analysis.....	57
3.4	Results .....	57
3.4.1	Descriptive statistics .....	57
3.4.2	Regression results .....	58
3.4.3	Robustness checks .....	61
3.5	Discussion .....	61
3.5.1	Effects of individual user activities on collaborative innovation.....	61
3.5.2	Explaining collaborative innovation in user communities.....	62
3.5.3	The importance of the written format and user characteristics .....	63
3.6	Conclusions .....	64
3.6.1	Limitations and future research .....	65
	References .....	66
	Appendix A .....	71
4.	Internal Open Innovation - Lessons Learned from Internal Crowdsourcing at SAP.....	72
4.1	Introduction .....	73
4.2	Theoretical background.....	75
4.2.1	Internal crowdsourcing .....	75
4.2.2	Internal open innovation with crowdsourcing.....	76
4.3	Managing the crowd .....	76
4.3.1	Corporate culture and change management .....	78
4.3.2	Incentive design .....	78
4.3.3	Task definition and decomposition .....	78
4.3.4	Quality assurance.....	79
4.3.5	Crowd selection .....	79
4.3.6	Regulations management.....	79
4.4	Methodology and case description .....	80
4.4.1	Company description .....	81
4.5	SAP's internal crowdsourcing initiatives .....	81
4.5.1	Initiative 1: The InnOvaTor challenge.....	82
4.5.2	Initiative 2: One Billion Lives (1BL).....	83
4.5.3	Initiative 3: Intrapreneurship with SAP.iO .....	85
4.5.4	Initiative 4: Internal crowdsourcing of human resources (HR).....	86
4.5.5	Initiative 5: SAP Blue .....	87

4.6	Lessons learned .....	91
4.6.1	Lesson 1: Provide dedicated time continuously.....	91
4.6.2	Lesson 2: Selection of solutions should be made by experts .....	91
4.6.3	Lesson 3: Promote bottom-up development, demand top-down support.....	92
4.6.4	Lesson 4: Better integration of internal crowdsourcing into the overall company-wide innovation process .....	93
4.6.5	Lesson 5: Encourage ownership of ideas.....	94
4.6.6	Lesson 6: Openness and transparency of the internal crowdsourcing process is key .....	94
4.7	Conclusion and limitations .....	95
4.7.1	Limitations .....	96
	References .....	97
5.	Final Conclusions .....	103
5.1	Results and contributions.....	103
5.2	Implications for practice .....	106
5.3	Suggestions for future research and final outlook .....	108
	References .....	113