

**Impacting the B2B-Business Development Process:
Social Media Usage within a Global Software Environment**

HENLEY BUSINESS SCHOOL
THE UNIVERSITY OF READING

Doctoral Thesis – Appendices

by Werner Krings

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Appendix A

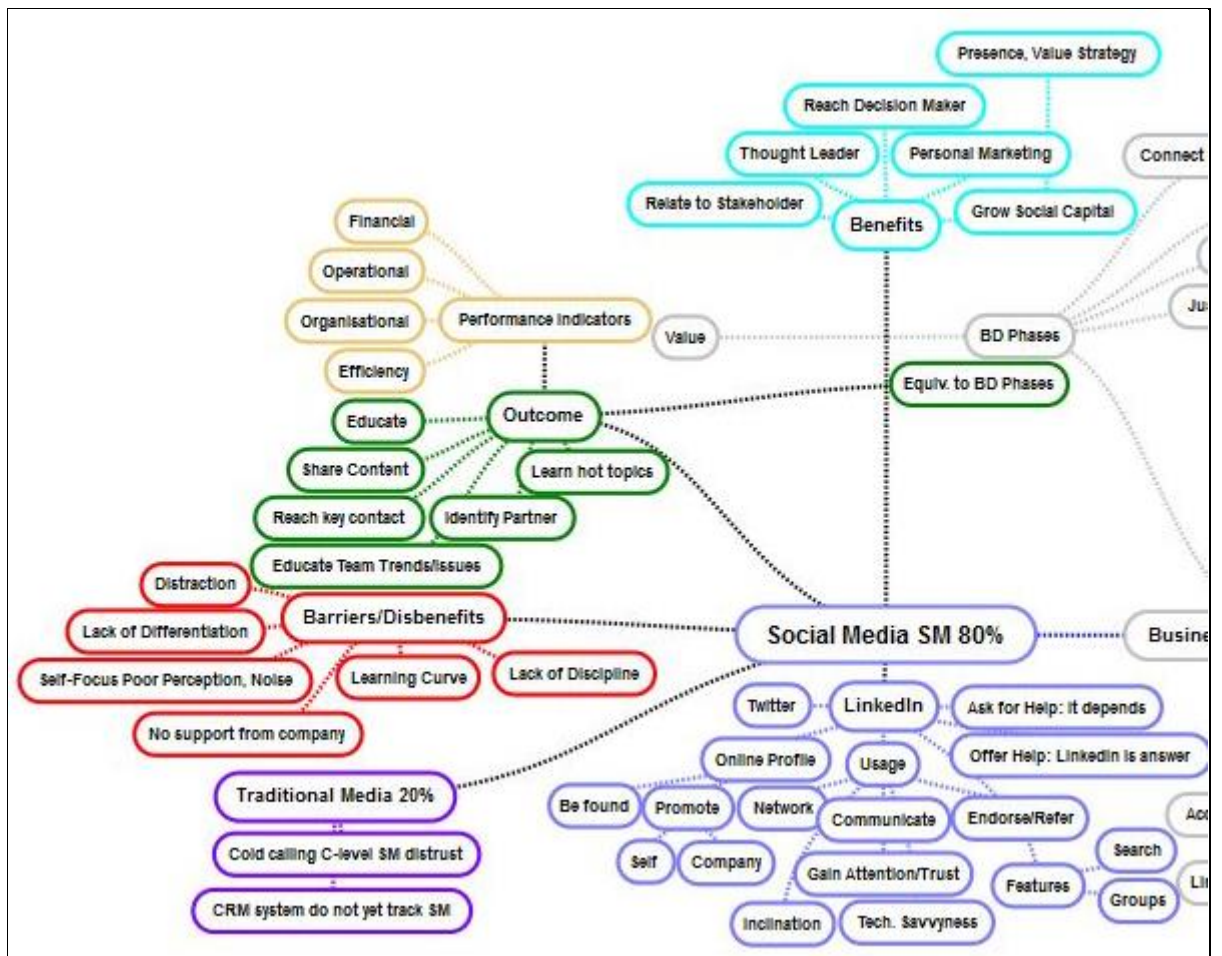
Extract of the Pilot Study (Qualitative Phase)

Appendix A1

Development of the Questionnaire Components (Semi-structured Interviews)

Stage	Activity	Methodological Objective	Period
1	Reviewed the relevant literature.	Conceptual	MSc-Phase – Present
2	Conducted 12 semi-structured interviews with executives in Business Development, Marketing & Sales, primarily within the DACH, and NA region and performed Thematic Analysis (Pilot Study).	Exploratory, Conceptual and Qualitative	Final MSc-Phase
3	Identified and selected the original scales being pertinent to the doctoral research.	Instrumental	Oct. 2016 – Dec. 2016
4	Prepared the provisional questionnaire.	Instrumental	Dec. 2016 – Jan. 2017
5	Conducted a pretest in the form of semi-structured interviews and completed the provisional questionnaire with ten executives within the DACH, Northern European, Western European, and NA region (Recorded Skype sessions).	Instrumental	Jan. 2017
6	Streamlined and designed the final questionnaire by focussing on research relevant constructs and obtaining feedback from his doctoral supervisors.	Instrumental and Technical	Jan. 2017 – Feb. 2017
7	Performed a large-scale online survey (Qualtrics) by targeting about 7,500 LinkedIn and 900 Xing contacts directly by email and spreading a survey link via multiple online groups, Henley Business School, Social Media Updates, and Blogs.	Quantitative	Apr. 2017 – May 2017

Extract of Mindmap for individual interviewee in the Pilot Study



Krings (2014b)

Appendix A2

Extract of Semi-structured Interview in the Pilot Study

4. When you think on the *four most important phases/activities* of the Business Development process, which phases come to mind?

4.1. _____

4.2. _____

4.3. _____

4.4. _____

Classifications of B2B-Business Development Phases in the Pilot Study

I = Interviewee Q = Questions (I _n ; Q _m)	Phase 1 Identify and prospect potential buyers	Phase 2 Share information and maintain knowledge	Phase 3 Build social networks and manage existing relations	Phase 4 Increase the number of leads and generate opportunities
	Some practitioners arranged the process phases in a different sequence than the literature suggested.			
(I ₁ ; Q ₄)	Make <i>right connection</i> to targets	Establish brand	<i>Establish trusted relationships</i>	Justify <i>business value</i>
(I ₂ ; Q ₄)	<i>Understand</i> decision-makers	<i>Network</i>	Set appointments (RFI/RFP)	<i>Close</i> , i.e. ask for Business
(I ₃ ; Q ₄)	Create <i>awareness</i>	Build <i>rapport</i>	Close	Network
(I ₄ ; Q ₄)	<i>Identify</i> (Research)	<i>Pursue/Be persistent</i>	<i>Discuss/Authenticate</i>	<i>Close</i>
(I ₅ ; Q ₄)	<i>Listen</i> to customer	<i>Listen</i> to customer	<i>Listen</i> to customer	Execute any other activity
(I ₆ ; Q ₄)	Have <i>targeting</i> strategy	Develop right strategy	<i>Communicate</i>	Cooperate/collaborate
(I ₇ ; Q ₄)	<i>Understand</i> market+ industry requirements + pains	<i>Challenge</i> prospects and customers	<i>Build trusted relationship</i>	Improve/Innovate
(I ₈ ; Q ₄)	<i>Identify</i> targets	Create contacts	<i>Educate</i> and <i>get interested</i>	Tailor solution and <i>close</i>
(I ₉ ; Q ₄)	<i>Know</i> target criteria	Develop target list	Research the company	Develop message
(I ₁₀ ; Q ₄)	Build <i>awareness</i>	<i>Build</i> trusted cooperation	<i>Engage</i> in discussion	<i>Close for opportunities</i>
(I ₁₁ ; Q ₄)	<i>Research</i> current events	Identify	Conduct Cold Calls	Nurture
(I ₁₂ ; Q ₄)	<i>Identify</i> potential customers	Identify <i>relevant contacts</i>	<i>Develop relationship</i> and proof of concept	<i>Close the deal</i> and develop customer referrals
<i>Key Theme</i>	<i>Identify</i>	<i>Connect</i>	<i>Manage Relationship</i>	<i>Close business/opportunity</i>

Krings (2014b)

Appendix A3

Extract of the Thematic Coding Table in the Pilot Study

Codes/Themes	Explanation
Job role/responsibility/routines	The major/sole focus of the interviewee's daily activities/routines
B2B-Business Development/Sales	How do interviewees define, estimate and accelerate the process
Marketing	The function related to B2B-Business Development
Branding	Building the personal brand (Social Media Profile)
Prospects/Targets	Potential customers/clients
Customers/Clients	Current customers/clients
Social Media	The media the interviewee utilises primarily in his role
LinkedIn	Professional Social Media (Xing in Germany)
Twitter	Professional Social Media
Traditional Media	The media that the interviewee uses primarily or secondarily
Outcome/Result/Business Value	Business results of Social Media (Effectiveness/ROI)
Benefits	The benefits/motivators to apply Social Media
Barriers/Disbenefits	The barriers/disbenefits of using Social Media personally/corporately
Online Presence/Profile	The personal or company (re)presentation on Social Media
Resources/Strategy	Does company provide resources and have a strategy for Social Media
Performance Measures/KPI	How the Social Media impact can be measured (Performance Indicators)
Closing/Generating Leads/Opportunities	The final phase of B2B-Business Development/Sales
LinkedIn Usage/Features	What are the important usage/features of LinkedIn for the interviewee?
Communication/Conversation	Expressed or selected social media activity
Collaboration	
Information Gathering	
Online Groups/Forums	
Endorsement/Recommendations	
Networking/Connections	Expressed or selected activity to build up Social Capital
Share content/ideas/knowledge	Expressed social media activity
Stakeholder	Complex buying group, e.g. partners, (potential) customers, etc.
Privacy, Confidentiality	Behaviour concerning publishing/releasing personal information
Credibility, Trust	A major component of networking/building profitable relationships
Mutual Support	How do the interviewees ask for/provide help if approached?
Comments	The interviewee mentions things of potential value for the research.

Extract of the Frequency of the Themes mentioned in the Pilot Study

Themes identified in Literature Review mentioned in Interviews	Total Score	Frequency of Theoretical Themes being mentioned by all Interviewees
Job Description	160	12
B2B-Business Development	132	12
Social Media/LinkedIn	122	12
Networking (Social Capital)	93	12
Online Presence	66	12
Communication/Information Gathering	87	10
Prospects/Customers	105	11
Benefits	34	12
Barriers/Disbenefits	31	11
Business Opportunity	38	12
Performance Measures	53	11
Resources/Strategy	33	11
Privacy/Trust	34	9
Comments	23	7

Krings (2014b)

Appendix A4

Narrative/Interpretation of the Findings in the Pilot Study

Theme	The typical Profile of <i>Mr Business</i> a B2B Business Development Executive
Job Description	<i>Mr Business</i> tends to be technology savvy in a senior position including Business Development as a major part of the daily job in a small-sized company.
B2B-Business Development	The B2B-Business Development cycle involves 4 phases (Identify, Connect, Manage Relationships, and Close Business Opportunity). Thereby, Social Media becomes increasingly important besides traditional ones such as database research, cold calling and face-to-face contacts.
Social Media/LinkedIn	From the plethora of Social Media, the use of LinkedIn and Blogs is encouraged, but Microblogs like Twitter are usually blocked by the company. Although he is open towards the idea to write blogs, Social Media usage can become overwhelming depending on the learning curve. LinkedIn is definitely contributing to building the pipeline more credibly than 'outdated' databases like Hoovers and Jigsaw.
Networking/Social Capital	<i>Mr Business</i> has discovered LinkedIn primarily for networking and to grow Social Capital in the understanding that a strong qualitative network will enhance the research process and empowers in finding key contacts.
Online Presence	The Online Presence helps to position and promote himself and his company primarily to be perceived as 'trustworthy, competent and professional'.
Communication/Information Gathering	LinkedIn more than Twitter supports in gathering information about key contacts and to communicate smoother than with cold calls as the profile contains job role, title and other valuable information.
Prospects/Customers	To establish and nurture relationships with prospective decision-makers and existing customers, Social media, in particular, LinkedIn and Blogs seems to become more important, but it can never replace face-to-face contacts or phone conversations.
Benefits	<i>Mr Business</i> has recognised that Social Media contains various benefits to build relationships with key stakeholders, position his brand and growing his network by inviting others.
Business Opportunity	For generating business opportunities, Social Media seems to be helpful as they help him to accelerate the Business Development cycle by gaining rapid access to business-relevant contacts and information. It helps him also to generate 'warm leads' instead of approaching prospects with mere traditional cold calling.
Barriers/Disbenefits	Yet, <i>Mr Business</i> realises soon that Social Media is also very time consuming, all the tweeting and daily updates and are very distractive, especially if he returns to his business report one hour and a half later.
Performance Measures	Although <i>Mr Business</i> knows that he could copy blogs, provide software updates and company announcements in his LinkedIn profile to accelerate the Business Development Process, he just has not put effort into it. This might be since performance measures are often still basic like the number of website or blog visitors. KPI for Social Media are not yet in place, and although Social Media is included in the database or CRM system it is not connected or tracked yet and because of the fact that . . . (see: Corporate Strategy/Support)
Corporate Strategy/Support	His company often lacks a strategy or a formal policy for social media usage. Although his employer encourages professional social media usage, some of the media, e.g. Twitter is blocked, and financial support for a Premium LinkedIn account is often not provided unless he works as a recruiter.
Privacy/Trust	If he displays information (background, skills and education) about himself, he gains trust, builds his brand and network by coming across as technologically savvy and cutting edge being part of the on-demand real-time world. The downside is that anyone can find his data and the thought of identity theft is threatening. Therefore mitigating the risk to safeguard his privacy and confidential work data is critical.
Comments	Overall <i>Mr Business</i> finds this research valuable, yet desires to include other social media like YouTube. Major critique is that he misses hardcore business key performance indicators.

Krings (2014b)

Appendix B

Participants of the Pre-Test

Appendix B

Extract of Skype Recorded Expert Interviews (Pre-Test 01/17)

#	Gender	YoB	Position	Industry	City, Country	Skype Record	Duration in Hours	Critique / Changes of the Expert Interviews	Participate Again?
1	F	1960	Executive Team Coordinator/ Communications	Software	Munich, Germany	02. Jan	3.0 H	Conducted major changes including the rewording, simplifying of the questions and items. Enhanced design, numbered questions by adding variable names. 'Very exhaustive and intense'.	No (only if necessary)
2	M	1980	Operations Manager	Education	Munich, Germany	04. Jan	2.0 H	Made minor changes. Perceived as well designed, dynamic, complex, sort of 'Myers-Briggs'. 'A bit exhaustive'.	Yes
3	M	1974	Customer & Market Development Manager	Software	Frankfurt, Germany	04. Jan	2.5 H	Made minor changes, eliminated redundant items. Perceived as well designed. Thank you email the next day: 'A great learning experience'.	Yes
4	F	1966	Financial Consultant	Financial Services	Boston, United States	04. Jan	2.0 H	Conducted two sessions, reworded various items, rephrased and simplified the questions. Critique: 'Improve the clarity of the items.'	No (only if necessary)
5	M	1966	Managing Director	Education	Munich, Germany	05. Jan	1.5 H	Eliminated redundancy in the second block of the survey, renamed some of the scales and fixed some wording bugs.	Yes
6	F	1969	Senior Principal	Consulting	Cologne, Germany	05. Jan	3.0 H	Made minor changes, reworded various items, fixed spelling errors. Critique: 'well designed'.	Yes
7	M	1986	Director IT	Technology	Munich, Germany	06. Jan	3.0 H	Made minor changes, Reworded items, Included an explanation for the term 'Rolodex'. Critique: 'Interesting design'. Limitation of the Methodology: 'Time-related' versus 'Tendency' scale.	Yes, ≤ 30 min
8	M	1974	Senior Sales Account Manager	Technology	Frankfurt, Germany	07. Jan	3.0 H	Made further changes. 'Questions were enlightened; Expert recognised the potential of Social Media even more after this survey. 'This research is a gold mine'. Secured strong support, Offered corporate distribution.	Yes
9	M	1977	Sales Director	Education	Helsinki, Finland	09. Jan	2.0 H	Made minor changes. Split 2 questions. 'It was too long, I got tired and lost concentration'. Length jeopardizes truthful results. 'Fine Design'.	Yes, ≤ 30 min
10	F	1977	Dynamics Solution Specialist	Software	Dublin, Ireland	09. Jan	1.2 H	Liked the survey also the length. Understood the questions clearly. Took the survey. 'This research is highly relevant to our Social Selling approach'. Secured strong support, Offered corporate distribution.	Yes

Appendix C

Questionnaire

Appendix C1

Final Questionnaire: Title and Instructions

Title: Impacting the B2B-Business Development Process: Social Media Usage within a global Software Environment
Faculty: Prof Roger Palmer, Dr Anne Dibley, and Doctoral Candidate: Werner Krings, Henley Business School at the University of Reading, UK

Dear Participant:

You are invited to participate in the research project described below.

What is the project about?

The doctoral project investigates the influence of Social Media Usage in B2B-Business Development/Sales and Procurement. This research may help us better understand the influence of Social Media within various process phases. It is hoped that the findings contribute to developing practitioner guidelines on which kind of Social Media platforms to engage to accelerate the overall process phases involved and to considerably impact the final business outcome.

Who is undertaking the project?

This project is being conducted by Werner Krings under the supervision of Prof Roger Palmer and Dr Anne Dibley.

Are there any risks associated with participating in this project?

It is not anticipated that you will experience any discomfort while completing the questionnaire. This questionnaire has undergone a thorough pretest with executives from various industries. Your information is kept strictly confidential. Neither names of individuals or organizations are reported. The academic management of this research complies with the rigid ethics guidelines of the University of Reading and Henley Business School. Only aggregated information is provided in this doctoral study.

What will I be asked to do?

You are asked to complete an online questionnaire about yourself from a business perspective. Some questions request personal information such as your gender and job experiences. The questionnaires can be completed on any computer/mobile device at a time convenient for you.

How much time will the project take?

The time taken to complete these questions should be about 20 to 25 minutes. If you or the system wants to take a break, the data will be saved, and you can continue where you left before.

What are the benefits of the research project for you and your business?

You will benefit from this project by having the opportunity to contribute to research that may influence Social Media Usage within your particular business setting. In addition, following participation in the study, and as a token of appreciation for your time invested, we will give you the option to enter a raffle. If you are interested in the raffle, your details for the raffle prize will be stored separately and cannot be used to identify your responses in the study. Should you participate in the raffle, your name and contact details will be kept confidential.

Can I withdraw from this study?

If you agree to participate, you can withdraw from the study at any time without adverse consequences. However, as identifying information will not be collected, it will not be possible to withdraw your responses once they have been submitted. It is emphasized that your participation in this study is for research purposes only and thus we will not attempt to provide you with any feedback on your responses.

Will anyone else know the results of the project?

The results will be used for the doctoral thesis project and may be submitted to an academic journal for publication or presented at an academic conference at a later time. Only group data will be used, and no individual participants or their results will be identified in any publication or presentation.

Will I be able to find out the results of the project?

If you wish to receive an executive summary, please contact Werner Krings by email.

Whom do I contact if I have questions about the project?

If you would like to contact the researcher about any aspect of this study, please contact Werner Krings
Phone: +49 (0) 151 151 61934. If you are completing this questionnaire overseas, please choose email: werner.krings@henley businessschool.de or Skype: Contact search: Werner Krings Doctorate only.

I want to participate! How do I proceed?

If you like to participate in the study, please click on the arrow at the bottom of the screen.

Your support for this study is greatly appreciated. Best, *Werner Krings*

Appendix C2

Final Questionnaire 1st Block

1 st Block	Introduction (Company/Career Information and Topic Social Media)		
Critique	<i>Well Designed. Suitable to create rapport.</i>		
Question	Variable	Statement(s)	Final Answers
Q1a	REG	In which region is your company headquarters located? Only one answer!	1
Q1b	SIZE	What is the approximate size of your company? Only one answer!	1
Q1c	ASR	What is the annual sales revenue of your company approximately? Only one answer!	1
Q1d	IND	Which industries is your company primarily engaged in? Choose up to the three most important ones!	3
Q1e	CCL	What is your current or last recent career level? Only one answer!	1
Q1f	FORG	What is your primary function in the organization ? Only one answer!	1
Q1g	ISMBU	Inclination towards Social Media Business Usage How often do you use Social Media Usage (from the point of your business/job role) Seven point Likert-Scale: (1) Never – (2) Less than monthly – (3) Once a month – (4) A couple of times per month – (5) Weekly – (6) A couple of times per week – (7) Daily	6
Q1h	HSMBU	Hesitation towards Social Media Business Usage (from the point of your business/job role) Do you agree/disagree with the following circumstances or statements? Seven point Likert-Scale: (7) Strongly Agree – (6) Agree – (5) Somewhat Agree – (4) Neither Agree Nor Disagree – (3) Somewhat Disagree – (2) Disagree – (1) Strongly Disagree	4
Σ of Items			18

Final Questionnaire 2nd Block

2 nd Block	Independent Variable: B2B-Business Development Process Phases		
Critique	<i>Too complex and exhaustive. The number of items was reduced.</i>		
Question	Variable	Statement(s)	Final Answers
Q2a	SMB1	Social Media Usage in the 1 st Business Development Phase “Identify and prospect potential buyers/vendors” 7 point Likert-Scale: (1) Strongly Disagree – (2) Disagree – (3) Somewhat Disagree – (4) Neither Disagree/Nor Agree – (5) Somewhat Agree – (6) Agree – (7) Strongly Agree	7
Q2b	SMB2	Social Media Usage in the 2 nd Business Development Phase “Share information and Maintain Knowledge” 7 point Likert-Scale: (7) Strongly Agree – (6) Agree – (5) Somewhat Agree – (4) Neither Agree/Nor Disagree – (3) Somewhat Disagree – (2) Disagree – (1) Strongly Disagree	7
Q2c	SMB3	Social Media Usage in the 3 rd Business Development Phase “Build Networks and Manage existing Relationships” 7 point Likert-Scale: (1) Strongly Disagree – (2) Disagree – (3) Somewhat Disagree – (4) Neither Disagree/Nor Agree – (5) Somewhat Agree – (6) Agree – (7) Strongly Agree	7
Q2d	SMB4	Social Media Usage in the 4 th Business Development Phase “Increase the number of leads and opportunities” 7 point Likert-Scale: (7) Strongly Agree – (6) Agree – (5) Somewhat Agree – (4) Neither Agree/Nor Disagree – (3) Somewhat Disagree – (2) Disagree – (1) Strongly Disagree	7
Q2e	SMP	What specific Social Media Platform do you consider the best in each of the four B2B-Business Development/Purchasing Process Phases? (Please choose the Social Media Platform (SMP1, SMP2, SMP3, or SMP4) which you consider the most appropriate for each process phase! Option (SMP9) for no Social Media usage.	4
Q2f	INFO	Which three sources of information is most critical supporting you in your decision-making process? (B2B-Business Development, Sales, Procurement etc.) (Please choose the three most important ones which must add up to 100%!) Leave zeros in all other choices.	3
Q2g	DEM	Our final B2B decision-making (Sales or Purchasing/Procurement Process) is based on ... (All three must add up to 100%)	3
Σ of Items			38

Appendix C3

Final Questionnaire 3rd Block

3 rd Block	Moderator Variables: Social Capital and Usage Criteria | Dependent Variable: Business Performance Underlying Constructs: Trust, Relationship Commitment and Cooperation		
Critique	<i>The number of statements in the concepts of Social Capital was reduced.</i>		
Question Number	Variable	Statement(s)	Final Answers
Q3a	SCAP	The concept of Social Capital is about building a network of Social Media contacts. SocMed = Social Media SocCap = Social Capital, 7 Likert-Scale: (1) Strongly Disagree – (2) Disagree – (3) Somewhat Disagree – (4) Neither Disagree/Nor Agree – (5) Somewhat Agree – (6) Agree – (7) Strongly Agree	6
Q3b	UCRIT	The following is about Usage Criteria , 7 Likert-Scale: (7) Strongly Agree – (6) Agree – (5) Somewhat Agree – (4) Neither Agree/Nor Disagree (3) Somewhat Disagree – (2) Disagree – (1) Strongly Disagree	6
Q3c	PERF	The following is about Business Performance , 7 Likert-Scale: (1) Strongly Disagree – (2) Disagree – (3) Somewhat Disagree – (4) Neither Disagree/Nor Agree – (5) Somewhat Agree – (6) Agree – (7) Strongly Agree	6
Q3d	RELC TRU COO	The underlying constructs of B2B-Business Development are Relationship Commitment, Trust, and Cooperation . 7 Likert-Scale: (7) Strongly Agree – (6) Agree – (5) Somewhat Agree – (4) Neither Agree/Nor Disagree – (3) Somewhat Disagree – (2) Disagree – (1) Strongly Disagree	6
Σ of Items			24

Final Questionnaire 4th Block (Part 1)

4 th Block	The entire Question 4 branches out into a Vendor (V), a Third Party (T) and a Buyer (B) section after this introductory question.		
Critique	<i>This part was streamlined.</i>		
Question Number	Variable	Statement(s)	Final Answers
Q4aV;T;B	EMP	For whom do/did you currently/recently work (Employment)? If you currently have a duplicate function, i.e. services/solutions (Software) Vendor and Buyer, please choose the most intensive one.	1
Q4bV;T;B	SMJU	How do you justify Social Media Usage in your <u>business</u> in terms of potential outcome? Please rate the options (1) Of great importance – (2) Of importance – (3) Of little importance – (4) Of least importance – (4) Of no importance. This was recoded to a 7 Likert-Scale: (1) = 1.0; (2) = 2.5; (3) = 4.0; (4) = 5.5 and (5) = 7.0.	3
Q4cV;T;B	STMU	What is the importance of Social Media Usage versus Traditional Media Usage in your <u>business</u> ? Only one answer!	1
Q4dV;T;B	AMOT	How do you assess the motivation to use Social Media in your organization? Please rate the options (1) Highest motivation – (2) High motivation – (3) Normal motivation – (4) Little motivation – (5) No motivation.	3
Q4eV;T;B	EFF	How are Social Media efforts handled in your organization? Only one answer!	1
Q4fV;T;B	BENE	Have you been aware of or noticed any benefits of Social Media Business Usage, for example, the impact on the B2B-(Services/Solutions, e.g. Software) B2B-Business Development/Sales/Buying/Purchasing Processes in terms of acceleration, or the increase of leads and opportunities/the improvement of pricing negotiations? Only one answer!	1
Q4gV;T;B	ESTP	How do you estimate the ultimate impact of Social Media Business Usage on the Business Performance in a given period? Only one answer!	1

Appendix C4

Final Questionnaire 4th Block (Part 2)

Q4hV;T;B	DURPROC (initially, DPD/DPP)	What is the typical duration of your B2B-(Services/Solutions, e.g. Software) B2B-Business Development process/Procurement/Purchasing /Buying Process (from the initial contact to a finalist on the shortlist)? Please estimate! Only one answer!	1
Q4iV;T;B	DURB/ DURP	What is the estimated minimum duration of the B2B-(Services/Solutions, e.g. Software) B2B-Business Development/Sales/Procurement/Purchasing process in months and the estimated maximum duration in months?	2
Q4jV;T;B	ACT	How do you use the different media in % in your daily activities? All estimates must add up to 100%!	1 – 4
Q4kV;T;B	DEAL	What was the estimated total value of the B2B-(Services/Solutions, e.g. Software Deal) Sales/Buy during the last year (2016)? Only one answer!	1
Σ of Items			16 – 19

Final Questionnaire 5th Block

5 th Block	This part contains sociodemographics and the attitude towards technology.		
Critique	<i>Fine.</i>		
Question Number	Variable	Statement(s)	Final Answer
Q5a	GEND	What is your gender ?	1
Q5b	YOB	What is your year of birth ? Please enter four digits!	1
Q5c	EXP	What is your job experience approximately in total years independent of your current role? Only one answer!	1
Q5d	PRO	How would you describe your professional background ? Only one answer!	1
Q5e	RAR	What is your role and responsibility ? Only one answer!	1
Q5f	EDU	What is your highest level of education ? Only one answer!	1
Q5g	AFFN	How would you describe your Social Media Affinity ? [Not disclosed: 'tech-savvy attitude' versus 'old-school attitude'?]	6
Σ of Items			12

Final Questionnaire 6th Block

6 th Block	This part contains the critique of the participants to assess the practitioner relevance of this research.		
Question Number	Variable	Statement(s)	Final Answer
Q6a	CRIT1	How valuable was this research for your business/organisation ? (1) Extremely valuable – (2) Very valuable – (3) Moderately valuable – (4) Slightly valuable – (5) Not valuable at all	1
Q6b	CRIT2	Would you participate in a similar research project in the future ? (1) Definitely yes – (2) Yes – (3) Indifferent – (4) No – (5) Definitely no	1
Q6c	CRIT3	Would you like to receive an executive summary and participate in a raffle for a seminar? If Yes ⇒ Q7a – If No ⇒ Q7b	1
Σ of Items			3

Final Questionnaire 7th Block

7 th Block	In this final part participants could apply for the incentives consisting of the research outcome in form of an executive summary and the raffle for 1 reflection seminar and 20 Amazon gift cards.		
Question Number	Variable	Statement(s)	Final Answer
Q7a	THYY	Thank You (Q6c = Yes) First Name, Last Name, Email Address)	1
Q7b	THYN	Thank You (Q6c = No)	1
Σ of Items			2
Σ of Items for the entire Questionnaire			113 – 116

Appendix D

Scales

Appendix D1

Scales in Final Questionnaire (Question 1g)

Q1g Items	Original Scale Label ISMBU Inclination to Social Media Business Usage	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
ISMBU1	<i>ISMBU</i> Keinänen et al. (2015)	Attend webinars.	Replication	I attend or hold webinars.
ISMBU2		Follow or participate in discussions in business online forums.		I follow or participate in business online forums (Facebook, LinkedIn/XING and Twitter).
ISMBU3	<i>Information Generation</i> Trainor et al. (2014) <i>ISMBU</i> Keinänen et al. (2015)	In this business, we use SocMed to conduct market research.	Replication	I conduct (re)search to obtain business/market information on corporate websites or SocMed sites.
ISMBU4	<i>ISMBU</i> Keinänen et al. (2015)	My business encourages to engage in SocMed (read or write business blogs).	Replication	I read or write business blogs or microblogs.
ISMBU5	<i>ISMBU</i> Trainor et al. (2014)	Technologies (e.g. LinkedIn, Facebook) to build networks with others.	New Scale Professional/ Personal	I grow my social network on LinkedIn/XING that people get to know our brand.
ISMBU6				I grow my social network on Facebook that people get to know our brand.

Scales in Final Questionnaire (Question 1h)

Q1h Items	Original Scale Label HSMBU Hesitation to Social Media Business Usage	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
HSMBU1	<i>Hesitation to Social Media Business Usage HSMBU</i> Bolton et al. (2013); Keinänen et al. (2015)	Social Media can be misused on an individual level (Invasion of Privacy).	New Scale	I am hesitating to use SocMed. I fear that others misuse my private data.
HSMBU2	<i>HSMBU</i> D'Arcy et al. (2014)	Social Media may adversely affect employee productivity through interruptions.	New Scale	I am hesitating to use SocMed to avoid violating company policy which prohibits SocMed usage being perceived as an unproductive distraction for our work-flow.
HSMBU3	<i>HSMBU</i> Heinonen and Michelsson (2006); Michaelidou et al. (2011); Feedback from Pilot Study	Perceived barriers (...) negative views about the usefulness (...) Industry: Aerospace & Defense	New Scale	I am hesitating to use SocMed which is perceived as not useful and/or valuable for our particular industry (Example: sensitive information).
HSMBU4	<i>HSMBU</i> Heinonen and Michelsson (2006)	B2B-relationships start either traditionally or digitally or just remain traditionally.	New Scale	I am hesitating to use SocMed since I am very effective in using Email, Phone, Brochures and Personal Letters in our business.

Appendix D2

Scales in Final Questionnaire (Question 2a)

Q2a Items	Original Scale Label SMB1 (SocMed in BD Phase 1)	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
SMB11	<i>Social Media</i> Rodriguez et al. (2012); Kazienko et al. (2013)	Our use of SocMed has significantly increased as a tool to identify decision-makers. SocMed is a good resource to find suitable influential key contacts at potential B2B-customers.	Partial New Scale	SocMed (LinkedIn/XING) as an 'up-to-date' Rolodex (business card holder) makes it easier than a 'difficult to access and often outdated' database (e.g. Dun & Bradstreet, Hoovers or Hoppenstedt) to identify and prospect key contacts.
SMB12	<i>Social Media</i> Ahearne et al. (2008); Agnihotri et al. (2012)	The sales person is perceived as knowledgeable and capable. SocMed can execute trust-building behaviours and activities.	New Scale	My SocMed Profile differentiates myself from the crowd of sales callers by being perceived as an 'expert' or 'consultant' and overcoming objections of gatekeepers easier.
SMB13	<i>Self-Disclosure</i> Kaplan and Haenlein (2010); Rodriguez et al. (2012)	Self-Disclosure is the revelation of personal information in line with the person's ideal image. Profile knowledge makes calls less invasive.	New Scale	Prospects perceive my 'cold calls' as 'warm calls' when I refer to their and/or my SocMed Profile which increases their interest to accept my call.
SMB14	<i>Self-Disclosure</i> Joinson and Paine (2012);	'Healthy' self-disclosure is critical to building online trust. SocMed facilitates the ability to gain personal detailed information by establishing rapport.	New Scale	Building rapport makes it easier to obtain critical contact information, especially by referring to each other's SocMed profile during the call.
SMB15	Mesch (2012); Bolton et al. (2013)			'Well-balanced' self-disclosure on SocMed Profiles breaks the ice. It establishes common ground and a trustworthy atmosphere.
SMB16	<i>Trust of Information</i> Agnihotri et al. (2012); Cicala et al. (2012)			The more information professionals disclose on Facebook, LinkedIn or XING, the more they come across as credible and trustworthy, and vice versa.
SMB17	<i>Social Media</i> Rodriguez et al. (2012)	Social Media can increase the pool of decision-makers (Social Capital) which may shorten the transaction time.	Partial New Scale	SocMed usage can accelerate the B2B-Business Development phase of 'Identifying and prospecting potential buyers/vendors'.

Appendix D3

Scales in Final Questionnaire (Question 2b)

Q2b Items	Original Scale Label SMB2 (SocMed in BD Phase 2)	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
SMB21	<i>Satisfaction</i> Keinänen et al. (2015)	I receive relevant information from the company via social media channels.	Replication	SocMed is considered as one of the most cost-effective tools in business to obtain deal relevant business information and knowledge.
SMB22	<i>Sharing Information</i> Anderson and Narus (1990); Agnihotri et al. (2012)	Formal and informal sharing of meaningful information and timely information between firms.	Replication	SocMed Business Usage allows the exchange of meaningful and timely information. This makes it easy to comprehend and maintain competitor, industry and market information and knowledge.
SMB23	<i>Sharing Information</i> Agnihotri et al. (2012); (2016)	SocMed is a means to share information and knowledge.	Partial New Scale	Our Request for Information (RFI)/Quotation/Proposal/(RFQ/RFP) process could be considerably improved by accessing valuable information via SocMed (LinkedIn/XING, Blogs, Micro-blogs (Twitter), Success Stories) at just the right time.
SMB24	<i>Accessibility of Information</i> Lee et al. (2002); Panahi et al. (2012)	This information is easily retrievable. This information is easily accessible. This information is easily obtainable.	Replication	Tacit knowledge and competitor/industry information are usually quite easy to access, retrieve and obtain on SocMed when both parties mutually share.
SMB25	<i>Reliability/Trust of Information</i> Cheung and Lee (2008); Agnihotri et al. (2012)	The information on (...) is credible. The information on (...) is trustworthy.	Replication	Posted information (endorsements, referrals, success stories) on SocMed is generally perceived as credible and trustworthy.
SMB26	<i>Social Media Usage</i> Rodriguez et al. (2012)	Social Media can be used early to research profile of the target.	New Scale	I tend to share information + communicate more openly by phone when I like the SocMed profile photo, educational and/or professional background of the caller.
SMB27	<i>Sharing Information</i> Ahearne et al. (2008); Trainor et al. (2014) <i>Corporate Culture</i> Keinänen et al. (2015)	IT increases the mobility of information because of the better communication speed and access to information. Our Company encourages SocMed usage to share information.	Partial New Scale	SocMed Business Usage renders the B2B-Business Development phase 'sharing information and maintaining knowledge' easier and faster.

Appendix D4

Scales in Final Questionnaire (Question 2c)

Q2c Items	Original Scale Label SMB3 (SocMed in BD Phase 3)	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
SMB31	<i>Trust</i> Morgan and Hunt (1994) <i>Relationships</i> Palmer et al. (2005); Trainor et al. (2014)	Set of technologies (e.g. Facebook, LinkedIn) to build a network. Identify the distinctive characteristics of B2B-relationships	New Scale	SocMed might be an excellent tool to build social networks and establishing credibility and trust with new and existing customers by identifying these criteria which are relevant to a particular relationship.
SMB32	<i>Communication</i> Andersen (2001) <i>Social Media</i> Rodriguez et al. (2014)	Communication forms the groundwork of the relationship. SocMed is a new phenomenon to understand existing customer needs and reach new customers.	Replication	SocMed might be the key media to raise/increase awareness for our services/ solutions by communicating and interacting effectively (listen and converse meaningful insights) with new and existing customers .
SMB33	<i>Perceived Ease of Use</i> Rauniar et al. (2014)	Interaction with SocMed is clear and understandable.	Partial New Scale	SocMed interactions become so clear, intuitive and understandable to nurture our relationships with existing and new customers.
SMB34		SocMed is flexible to interact with.		SocMed allows us to communicate and interact more effectively with all levels of our existing and new customers to achieve our business goals.
SMB35	<i>Word of Mouth</i> Hoffman and Fodor (2010) <i>Perceived Usefulness</i> Keinänen et al. (2015)	Social Media is a good way to gather feedback and recommendations in the B2B-sector.	New Scale	SocMed supports building relationships similar to the real-world through 'word-of-mouth' (endorsements, recommendations, likes, congrats, and co-creating value).
SMB36	<i>Social Media Strategy</i> Agnihotri et al. (2012)	SocMed success requires cross-functional cooperation (sales, marketing etc.)	Partial New Scale	SocMed is increasingly critical to collaborate on our marketing/sales/business development function in developing new & managing existing customers.
SMB37	<i>Social Media/Social Capital</i> Rodriguez et al. (2012) <i>Perceived Usefulness</i> Rauniar et al. (2014)	Social Media increases the number of relevant decision-makers (Social Capital), which may shorten the transaction time.	Partial New Scale	My relevant SocMed contact base might accelerate the B2B-Business Development phase of 'building and maintaining relationships'.

Appendix D5

Scales in Final Questionnaire (Question 2d)

Q2d Items	Original Scale Label SMB4 (SocMed in BD Phase 4)	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
SMB41	<i>Social Media Usage</i> Avlonitis and Panagopoulos (2010)	Use of Social Networks to generate leads.	Partial New Scale	My Social Network (e.g. LinkedIn/XING) contacts and online groups help to discover and exploit profitable leads and opportunities.
SMB42	<i>Trust/Word of Mouth</i> Hoffman and Fodor (2010) <i>Performance Satisfaction</i> Graca et al. (2015)	The performance by this supplier leads to the desired results.	Partial New Scale	Our SocMed efforts consisting of regularly sharing updates, blogs and information lead to the desired outcome in terms of leads and opportunities.
SMB43	Perceived Usability Keinänen et al. (2015)	Presence in social media can strengthen the credibility of a company.	Partial New Scale	The SocMed presence of our employees ensures that our company can be trusted most of the time which creates the atmosphere to generate new leads and opportunities.
SMB44	<i>Creating Opportunity</i> Shih (2009); Agnihotri et al. (2012)	We consistently follow a standardized process to qualify opportunities.	Partial Replication	SocMed Business Usage helps our B2B-Business Development/Marketing team to identify potential leads and opportunities which have to meet specific company criteria in order to be approved by the Salesforce/Sales Function.
SMB45	<i>Creating Opportunity</i> Rodriguez et al. (2012)	Our salespeople are experts in our products and services.	Partial Replication	We are experts in tailoring our solution and services according to our customers' expectations resulting in more leads and opportunities.
SMB46		Our salespeople are always held accountable for converting leads to business.	Replication	Our B2B-Business Developers are always held responsible for generating leads and opportunities through SocMed for our sales team.
SMB47	<i>Social Media Norms</i> Avlonitis and Panagopoulos (2010); Schultz et al. (2012)	Optimize sales processes by looking for a more efficient way to generate leads and qualify prospects.	Partial New Scale	SocMed has been very helpful to speed up the B2B-Business Development phase of 'increasing the number of leads and generating opportunities'.

Appendix D6

Scales in Final Questionnaire (Question 2e)

Q2e Items	Original Scale Label	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
SMP1	<i>Social Media Business Use</i> Kaplan and Haenlein (2010); Keinänen et al. (2015)	The Social Media Platforms suggested by these authors are examined concerning their involvement in the respective B2B-Business Development process phase.	New Scale	Social Networking Sites (LinkedIn, XING, Facebook)
SMP2				Company Website Subscription/Blog
SMP3				CRM System (e.g. Sales Force) combined with Social Networking Sites
SMP4				Others (Google Plus, Wikipedia, YouTube, Twitter)

Scales in Final Questionnaire (Question 2f)

Q2f Items	Original Scale Label	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
	INFO Three most critical Sources of Information			
INFO1	<i>Traditional Media/Social Media</i> Ramos and Young (2009); Peters et al. (2010)	Peers & Colleagues (Word of Mouth) Word of Mouth is a conversation with those who are "someone like me".	Replication	Peers & Colleagues (Word of Mouth)
INFO2	<i>Traditional Media/Social Media</i> Ramos and Young (2009)	Face-to-Face (Meeting)	New Scale	Face-to-Face (Consultant/Salespeople)
INFO3		Technology/Business Magazines	Replication	Business/Trade Magazines
INFO4	<i>SocMed Technology Use</i> Trainor et al. (2014)	Conversation Support	Replication	Webinars/Virtual Presentations
INFO5	<i>Traditional Media/Social Media</i> Ramos and Young (2009)	Emails/Electronic Newsletter	Replication	Emails/Electronic Newsletter
INFO6	<i>Social Media Technology Use</i> Trainor et al. (2014)	Conversation Support	Replication	Business Blogs, Microblogs (Twitter)
INFO7		Relationship Support		Facebook
INFO8				LinkedIn, XING
INFO9	<i>Traditional Media</i> Pretest 2017	Suggestion by IT executive	New Scale	Knowledge Management System (traditional sense)
INFO10		Suggestion by Sales executive		Brochures and Presentations
INFO11	<i>Traditional/Social Media</i> Ramos and Young (2009)	Vendor, Industry, Trade web site	Replication	Corporate Website
INFO12	<i>Social Media Technology use</i> Trainor et al. (2014)	Sharing Support	Replication	Others (YouTube, Wikipedia, etc.)

Appendix D7

Scales in Final Questionnaire (Question 2g)

Q2g Items	Original Scale Label DEM B2B-Decision-Making	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
DEM1	<i>Threshold Performance Level</i> Spekman (1988)	Standard criteria of quality, price, delivery) are necessary but alone not sufficient to be considered.	New Scale	Rational arguments, pricing and technical specifications.
DEM2	<i>Trust in the relationship</i> Morgan and Hunt (1994) <i>Commitment to Emotions</i> Cicala et al. (2012) <i>Performance satisfaction</i> Graca et al. (2015)	The supplier has high integrity. He gives us reliable information Commitment is grounded in emotional bonds. The performance by this supplier meets our expectations.		Emotional arguments, trustworthy, reliable and competent personalities.
DEM3	<i>Tacit Knowledge</i> Agnihotri et al. (2009); Arnett and Wittmann (2014)	Tacit Knowledge enables decision-makers to master standard processes improving the speed.		Industry experience, tacit market knowledge and intuition.

Appendix D8

Scales in Final Questionnaire (Question 3a)

Q3a Items	Original Scale Label SCAP Social Capital	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
SCAP1	<i>Social Relationships</i> Lin (2002); Van Deth (2003); McEvily and Marcus (2005); Rodriguez et al. (2012)	Leverage the size of social networks to access key contacts.	New Scale	The bigger the network (accumulation of SocCap) the better the possibility to leverage it for identifying and accessing B2B-business-critical contacts.
SCAP2	<i>Trust and Communication</i> Adler and Kwon (2002); Doney et al. (2007) <i>Degree of Self-Disclosure</i> Kaplan and Haenlein (2010); Joinson and Paine (2012); Bolton et al. (2013)	Self-Disclosure is a step in the development of close relationships and can occur between complete strangers. Trust as a key source for SocCap is related to frequent social interaction and open communication.	Replication	SocCap is about self-disclosure and building trust by regularly interacting and communicating openly with my business contacts even if they are complete strangers.
SCAP3	<i>Trust</i> Li et al. (2013)	I trust my network members. I am fully confident about my network partner's business ability.	Partial New Scale	I believe my SocCap results in new leads and opportunities since I can generally trust and have confidence in the business ability of my network connections.
SCAP4	<i>Benefits of Social Capital</i> Adler and Kwon (2002);	The impact of weak/close ties on the efficient and timely flow and management of information and knowledge.	Replication	SocCap facilitates the cost-effective search for new information through indirect, wide-ranging contacts of contacts.
SCAP5	Kline and Alex-Brown (2013); Keinänen et al. (2015)			The power of SocCap is to exchange complex information and tacit knowledge cost-effectively among direct (business-critical) contacts.
SCAP6	<i>Cognitive Dimension</i> De Carolis and Saporito (2006) <i>Shared Values</i> Li et al. (2013)	We share similar code, interests and principles regarding how to conduct business.	Partial Replication	SocCap consists of building high-quality relationships with those sharing similar business interests, principles and values.

Appendix D9

Scales in Final Questionnaire (Question 3b)

Q3b Items	Original Scale Label UCRIT User Criteria	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
UCRIT1	<i>Social Media Usage and Gender Differences</i>	Adapted from research question. Does the relationship between personality predictors and social media use differ by gender? I intend to use SocMed to get reconnected with people that matter to me.	Partial New Scale	Mainly professional SocMed (LinkedIn, XING) seems to be used by primary men to (re)connect with people beneficial to their business.
UCRIT2	<i>Correa et al. (2010)</i> <i>Intention to use</i> <i>Rauniar et al. (2014)</i>			Semi-Professional SocMed (Facebook) seems to be primarily used by women to (re)connect with people beneficial to their business.
UCRIT3	<i>Social Media Usage and Gender Differences</i>	Adapted from the research question: Does the relationship between personality predictors and social media use differ by sociodemographics?	New Scale	The higher the career or level of seniority, the higher the engagement in primarily professional SocMed such as LinkedIn/XING.
UCRIT4	<i>Correa et al. (2010)</i>			The lower the career or level of seniority, the higher the engagement in primarily semi-professional SocMed like Facebook.
UCRIT5	<i>Intention to Use/ Perceived Usefulness</i> <i>Rauniar et al. (2014)</i>	I will continue to use Facebook for Social Networking. Using Facebook enhances my effectiveness to stay in touch with others.	Partial New Scale	SocMed usage enhances my effectiveness to connect and stay in contact with others. While Facebook is more useful for social networking for small businesses, LinkedIn is more suitable for a medium- or large-sized corporate setting.
UCRIT6	<i>Easiness of Use/Satisfaction towards SocMed activities</i> <i>Cheung and Lee (2008)</i> <i>Keinänen et al. (2015)</i>	SocMed applications are easy to use and to navigate. I receive relevant information about the company x via SocMed channels.	Partial Replication	SocMed applications are easy to use and I have relevant company/client information available at my fingertips with just a few mouse clicks 24-7.

Appendix D10

Scales in Final Questionnaire (Question 3c)

Q3c Items	Original Scale Label PERF Business Performance	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
PERF1	<i>Performance</i> Sujan et al. (1994)	Identifying major accounts in your territory.	Partial New Scale	SocMed in B2B-Business Development/Procurement helps to identify major suppliers/purchasers more efficiently (time/cost savings).
PERF2	<i>Performance Measure</i> Avlonitis and Panagopoulos (2010); Gilfoil and Jobs (2012)	Social Media Tool & corresponding measure. Use Network to increase the ability to generate leads.	New Scale	SocMed (Facebook, LinkedIn, XING, Twitter) enhance the B2B-Business Development/Sales/Purchasing Process by providing valuable competitor knowledge and information more efficiently (time/cost savings).
PERF3	<i>Relationship Sales Performance</i> Rodriguez et al. (2012)	Compared to last year, the number of qualified leads has increased.	Replication	SocMed in Business Development/Procurement has helped to increase the number and quality of business relevant key contacts.
PERF4	<i>Performance Measure</i> Hoffman and Fodor (2010); Gilfoil and Jobs (2012)	Social Media Tool and corresponding measures	New Scale	SocMed (blogs, updates) increase the number of views on our SocMed profiles to build relationships more efficiently by engaging new and existing customers.
PERF5	<i>(Outcome) Performance</i> Sujan et al. (1994); Rodriguez et al. (2012); Schultz et al. (2012)	Generate B2B-sales more quickly. Compared to last year, our productivity per salesperson (B2B-business developer, buyer) has increased.	Partial New Scale	SocMed within B2B-Business Development (<i>Procurement</i>) generates leads and opportunities more efficiently (time/cost savings) which improves the pipeline for Sales to close transactions at higher profit-margins and the options for <i>Procurement</i> to purchase solutions or services at better terms.
PERF6	<i>(Outcome) Relationship Sales Performance</i> Rodriguez et al. (2012); Schultz et al. (2012) <i>New Business Development</i> Li et al. (2013)	Compared to last year, the number and quality of opportunities have increased. SocCap impacts positively new business development being defined as the proportion of revenues of new business of the total business.	Partial New Scale	SocMed in B2B-Business Development has improved the conversion rate of opportunities into the number of business deals closed.

Appendix D11

Scales in Final Questionnaire (Question 3d)

Q3d Items	Original Scale Label TRU Trust, RELC Relationship Commitment COO Cooperation	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
RELC1	<i>Commitment</i> Morgan and Hunt (1994); Nyaga and Whipple (2011)	We expect this relationship to strengthen over time.	Partial Replication	I expect our business relationship to strengthen over time, whereby engaging in SocMed is deemed particularly important.
RELC2		This supplier/buyer is genuinely concerned that we succeed.		Our partners (suppliers, customers, etc.) are genuinely concerned that our business succeeds which is consistent with their SocMed presence and principles.
TRU1	<i>Trust/Competence</i> Ryssel et al. (2004)	We are perceived to be professional and motivated by customers.	Partial Replication	The first step to being perceived as professional and motivated by (potential) partners (suppliers, customers, etc.) is our SocMed presence.
TRU2	<i>Trust</i> Morgan and Hunt (1994); Nyaga and Whipple (2011) <i>Reliability</i> Cheung and Lee (2008)	Suppliers/buyers get confidence in us. The supplier/buyer is trustworthy. We give reliable information and advice.		I believe that our information posted on SocMed is perceived as reliable which enhances the confidence and trust in our solutions and services.
COO1	<i>Perception of usability of Social Media</i> Keinänen et al. (2015)	It is important for a B2B-company to use SocMed as cooperation via SocMed is supportive.	Partial Replication	SocMed can be critical to assess whether others really cooperate by sharing (contact) information and/or obtaining knowledge from SocMed to tailor their solutions to our specific needs.
COO2	<i>Mutual Cooperation</i> Lages et al. (2008) <i>Perception of the usability of Social Media</i> Keinänen et al. (2015)	My firm and firm X regularly interact. Cooperation with others via SocMed is supportive.	Replication	Our SocMed presence improves the mutual cooperation with (potential) partners (suppliers, customers, etc.) through regular interactions.

Appendix D12

Scales in Final Questionnaire (Question 4b) Question 4a branches out into one different section for Vendors (V), Third Parties (TP) and Buyers (B)

Q4bV;T;B Items	Original Scale Label SMJU Social Media Usage Justification (Outcome-related)	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
SMJU1	<i>Outcome Expectation</i> Gupta et al. (2011); Agnihotri et al. (2012)	Though there is no clear ROI approach Manager should expect a reasonable ROI from a SocMed investment.	Partial New Scale	I expect that SocMed Business Usage impacts our ROI in the longer-term.
SMJU2	<i>Information Sharing + Social Media Usage</i> Ahearne et al. (2008); Agnihotri et al. (2012)	IT increases the mobility of information because of increased communication speed and access to information. Microblogging and Social Networking Sites accelerate sharing of information.	Partial New Scale	I expect that SocMed Business Usage abbreviates our B2B-Business Development/ Research/Procurement Process by enhancing our communication and information with others.
SMJU3	<i>Social Media Usage</i> Hoffman and Fodor (2010); Agnihotri et al. (2012)	Being an active user of Social Media provides benefits (privileged access to customers, ..., referrals) which results in new revenues.	Partial New Scale	I expect that intensive SocMed Business Usage might improve my day-to-day process activities (e.g. B2B-Business Development).

Scales in Final Questionnaire (Question 4c)

Q4cV;T;B Items	Original Scale Label Importance of STMU Social Media Business Usage versus Traditional Media Business Usage	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
STMU1	Diffley et al. (2011)	Context Statement	New Scale	SocMed Business Usage substitutes increasingly TradMed Usage.
STMU2	<i>Integration of both media</i> Kaplan and Haenlein (2010); Rodriguez and Peterson (2012)	Integration of Traditional and Social Media is critical. Social Media are an extension of Traditional ones.	Replication	SocMed Business Usage complements TradMed Usage.
STMU3	<i>Feedback from Pilot Study</i>	TradMed (Face-to-Face meetings) dominate for security reasons.	New Scale	TradMed Usage always remains paramount, yet SocMed continues to increase.
STMU4				TradMed is the 'only way'. There is 'absolute no use at all' for Social Media in our business.

Appendix D13

Scales in Final Questionnaire (Question 4d)

Q4dV;T;B Items	Original Scale Label Assessment of the Motivation of Social Media Usage	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
AMOT1	<i>Social Media Usage</i> Agnihotri et al. (2012)	Successful use of Social Media helped strengthen customer bonds and network expansion. (Networking)	Replication	I use SocMed to develop my network of business contacts and strengthen customer/vendor relationships.
AMOT2	<i>Self presentation</i> Kaplan and Haenlein (2010) <i>Branding</i> Marshall et al. (2012); Agnihotri et al. (2016)	Create an impression in line with a person's identity. Convey a set of values to potential buyers. Establish credibility by building the brand across networks. (Branding)	Partial New Scale	I use SocMed to brand our solution/vendor selection approach and myself (as a professional).
AMOT3	<i>Social Media Usage and Process Optimisation</i> Ahearne et al. (2008); Avlonitis and Panagopoulos (2010); Agnihotri et al. (2012)	IT increases the mobility of information because of increased communication speed and access to information. Optimize processes by looking more efficient way to generate leads, qualify prospects. Microblogging and Social Networking Sites accelerate the information sharing. (Agility)	Partial New Scale	I use SocMed to make our B2B-Business Development/Procurement/Research and Sales Processes more agile and flexible.

Scales in Final Questionnaire (Question 4e)

Q4eV;T;B Items	Original Scale Label Social Media Efforts within the Organisation	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
EFF1 (EFFP1)	<i>Organisation</i> Avlonitis and Panagopoulos (2010); Andzulis et al. (2012)	Marketing and Sales (Procurement and Purchasing) collaborate in terms of SocMed efforts.	New Scale	Marketing and Sales (Procurement and Purchasing) cooperate closely in their SocMed efforts following clear guidelines.
EFF2 (EFFP2)		Marketing and Sales (Procurement and Purchasing) are not integrated silos in terms of SocMed efforts.		Marketing and Sales (Procurement and Purchasing) are pursuing SocMed efforts independently from each other with some guidelines.
EFF3 (EFFP3)		SocMed efforts are not really organis ed.		Social Media efforts are solely up to individual employees deciding how and to which extent they use SocMed.

Appendix D14

Scales in Final Questionnaire (Question 4f)

Q4fV;T;B Items	Original Scale Label Benefits for Processes	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
BENE1 – BENE4	<i>Social Media Benefits for Processes</i> Feedback from Pilot Study	Key Informants noticed a potential impact of SocMed on B2B-Business Development /Sales Processes.	New Scale	Awareness of SocMed Benefits for B2B-Business Development/Sales Processes.

Scales in Final Questionnaire (Question 4g)

Q4gV;T;B Items	Original Scale Label Benefits for Performance	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
BENEP1 – BENEP4	<i>Social Media Benefits for Performance</i> Feedback from Pilot Study	Key Informants noticed a potential impact of SocMed in B2B-Business Development on Business Performance.	New Scale	Awareness of SocMed Benefits for Business Performance in B2B-Business Development.

Scales in Final Questionnaire (Question 4h – Question 4i)

Q4h – Q4i V;T;B Items	Original Scale Label Duration of the Software Cycle/ B2B-Business Development/ Sales/Procurement Processes	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
DBD1 – DBD8 DPP1 – DPP8 DURBMIN DURBMAX DURPMIN DURPMAX	<i>Software Cycle/Processes</i> Gronau (2001); Davis and Sun (2006); Feedback from Pilot Study	Verify Statement(s) about the average length of the Software Cycle as well as of the B2B-Business Development/ Procurement/Sales Process.	New Scale	The duration of the B2B-software cycle varies from less than 6 months to more than 3.5 years. Estimate the duration of the B2B-Business Development/Sales/Buying/ Procurement/Purchasing/Processes (Services/Solutions, e.g. Software) from a minimum of 0 months to a maximum of 48 months.

Scales in Final Questionnaire (Question 4j)

Q4jV;T;B Items	Original Scale Label Actual Use of SocMed	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
ACT1 – ACT4	<i>Actual Use</i> Rauniar et al. (2014)	The frequency of SocMed Usage.	New Scale	Social Med Business Usage in relation to TradMed, Face-to-Face, and others which should add up to 100%.

Appendix D15

Scales in Final Questionnaire (Question 4k)

Q4kV;T;B Item	Original Scale Label Sales Revenues/Buying Expenses	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
DEAL1 – DEAL6	<i>Annual Sales Revenues</i> <i>Annual Purchase Expenses</i> Feedback from Pilot Study	Key informants suggested the consideration of KPIs in Pilot Study.	New Scale	≤ 49.9K US Dollar, British Pounds or Euro (DEAL1); ≥ 50K ≤ 99.9K (DEAL2); ≥ 100K ≤ 299.9K (DEAL3); ≥ 300K ≤ 599.9K (DEAL4); ≥ 600K ≤ 999.9K (DEAL5); ≥ 1MM (DEAL6).

Scales in Final Questionnaire (Question 5a–5f)

Q5a – Q5f Items	Original Scale Label Sociodemographics	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
GEND1 – GEND2	<i>Usage Criteria</i> Keinänen et al. (2015)	Gender	Replication	Gender
YOB	<i>Usage Criteria</i> Correa et al. (2010)	Year of Birth (Four Digits) ⇒ Age	New Scale	Year of Birth ⇒ Age (whereby the age was assumed for the completed year of 2017) ⇒ Generation (Recoding)
EXP1 – EXP9	<i>Usage Criteria</i> Feedback from Pilot Study Keinänen et al. (2015)	Experiences	Partial Replication	Job Experiences in total years.
PRO1 – PRO3		Professional Background	New Scale	Specialist/Expert, Generalist, or Diverse.
RAR1 – RAR3		Role and Responsibilities		Team, Leadership, or Mixed Roles.
EDU1 – EDU5	<i>Usage Criteria</i> Correa et al. (2010)	Education	Partial Replication	Five Categories from 'High School and/or School of Life Experiences' to PhD.

Appendix D16

Scales in Final Questionnaire (Question 5g)

Q5g Items	Original Scale Label Describe your SocMed Affinity	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
AFFN1	<i>Corporate Culture encourages SocMed Use</i> Keinänen et al. (2015) <i>Perceived Playfulness</i> Rauniar et al. (2014)	SocMed are delightful, exciting, thrilling and fun (4 statements) I view technology as a viable option. Term: 'Perceived Playfulness'	New Scale	I tend to enjoy new SocMed technology and am eager to apply and recommend it as a viable option to my colleagues.
AFFN2	<i>Perceived Playfulness</i> Rauniar et al. (2014) <i>Technology Savviness</i> Howe and Strauss (2007)	SocMed is delightful, exciting, thrilling and fun (4 Statements). Term: 'Technology Savviness'	New Scale	I like to play with new SocMed technology and learn to become quickly good at it since it is delightful, exciting and has become my second nature.
AFFN3	<i>Technostress</i> D'Arcy et al. (2014);	Term: 'Technostress'	New Scale	New SocMed technology usually causes more stress than enjoyment. I am still 'old-school'.
AFFN4	Rauniar et al. (2014)			I use SocMed technology only when the job demands it and training is provided.
AFFN5	<i>Generation</i> Rosenbloom and Larsen (2003); Howe and Strauss (2007)	Even in the age of advanced communications technology, managers will often use 'old fashioned' means.	New Scale	All I need are traditional tools like brochures, phone and email.
AFFN6	<i>Generation</i> Moncrief and Marshall (2005); Howe and Strauss (2007)	Technology usage varies with generations.	New Scale	I like the best of both worlds: new technologies combined with traditional ways help me to be most efficient and effective in my job.

Scales in Final Questionnaire (Question 6a–6c)

Q6a – Q6c Items	Original Scale Label Critique of Research	Context Statement or Original Scale Item	Development of Scale Item	Final Survey Version Statement
CRIT1	Author's idea	Interest in current research	New Scale	How valuable was this research for your business?
CRIT2	'Pulse check' of practical relevance + future commitment	Interest in future research		Would you participate in a similar research project in the future?
CRIT3		Interest in incentive schemes		Would you like to receive an executive summary and participate in a raffle?

Appendix E

Extract of B2B Vendors

Appendix E

Potential Community of B2B Software Vendors (Extract)

Company (B2B Software Vendor)	SNS LinkedIn	Business-To-Business (B2B) Position		
		Business Development	Marketing	Sales
ABB Ltd.	4.296	3.516	3.316	774
Activant (Epicor)	129	111	97	223
Andea Solutions	38	18	7	11
Apriso Corporation	106	68	44	78
Dassault Systèmes S.A.	1.067	889	919	304
AspenTech	47	43	37	136
Consona Corp.	45	41	35	20
Emerson Electric Co.	384	363	338	103
Epicor Electrical Co.	7	7	7	129
Eyelit, Inc.	2	2	1	3
General Electric	2.755	2.499	2.223	784
Honeywell International, Inc.	5.169	4.647	4.312	1.423
IFS	588	487	432	154
IBM Corp.	36.367	29.886	25.924	10.859
...
Werum Software & Systems	851	409	129	17
Σ Companies	96.215	75.347	72.591	28.230

Status: 31 Oct. – 1 Nov. 2016 Platform: LinkedIn [Multiple answers possible].
A search algorithm [Company B2B, Function (e.g. Business Development)] was used to identify the number of the criteria.

Appendix F

Qualtrics Survey

Appendix F1

Introduction Email Qualtrics

Doctoral Research W. Krings Henley Business School

Dear Survey Participant,

I am currently conducting for my doctorate at Henley Business School/University of Reading, Henley-on-Thames, United Kingdom a survey on the topic of the *Social Media Impact on B2B-Business Processes*. This survey will provide meaningful insights of Social Media activities within your business purposes and will ask questions about your view of this media as part of your business development, sales, research or procurement processes, and other useful information.

In today's practitioner terms it also touches the area of *Social Selling*. The survey is part of my doctorate at Henley Business School, whereby the results will help to understand how Social Media might impact various processes and improve these.

The link to this 20-25 minutes survey below can be completed by you and sent to your sphere of influence 25 to how many you like to include without them being disclosed at all several times. If your colleagues/customers answer the survey the only hint of the data set will be to your specific email address and organisation for all of your participants the same!

This is the link which you forward to your sphere of influence [\\${!://SurveyLink?d=Take the survey}](#) or copy and paste the URL below into your internet browser: [\\${!://SurveyURL}](#)

There is only one exception if someone wants to participate in the raffle and is interested in the executive summary of the research outcome. Then their emails will be separately tracked in a different file. These emails are considered completely isolated for the executive summaries which will be sent upon their request in 2018. Then for ethics reasons, these emails will be discarded.

Thank you for participating in this important doctoral survey.

Best regards

Werner Krings

+49 (0) 151 151 61934

Information about me <https://www.linkedin.com/in/wernerkrings/>

https://www.xing.com/profile/Werner_Krings2

Follow the link to opt out of future emails

[\\${!://OptOutLink?d=Click here to unsubscribe}](#)

Appendix F2

Reminder Email Qualtrics

Dear Survey Participant,

This is a reminder that I am conducting an important doctoral survey to Social Media Impact on B2B-Business Development and related Sales/Marketing and Purchasing processes. If you already took the survey yourself and found it valuable please also share the following link with others.

https://henley.eu.qualtrics.com/jfe/form/SV_1C9j119rm2tpCpn

If you take the survey for the first time, please consider supporting my doctorate with 20 – 25 minutes of your time.

The Link for this Survey is: `{!://SurveyLink?d=Take the survey}` simply **click on this address to go directly to the survey. If the link does not work, please copy and paste the URL below into the address bar of your Internet browser.**

`{!://SurveyURL}`

Your participation in this survey is strictly voluntary, but I ask for your appreciated support. Your completion and submission of the questionnaire indicate your consent to participate in the survey (please read the 'Survey information sheet', the first page of the survey for more information).

Thank you for participating in this important survey.

Werner Krings (LinkedIn/Xing Profiles see below)

+49 (0) 151 151 61934

<https://www.linkedin.com/in/wernerkrings/>

https://www.xing.com/profile/Werner_Krings2

Follow the link to opt out of future emails

`{!://OptOutLink?d=Click here to unsubscribe}`

Appendix F3

Thank You Email Qualtrics

Thank you for your appreciated opinion!

Dear Survey Participant,

First of all, I would like to thank all of you who have already contributed to the success of my doctoral survey to Social Media in B2B.

There are now 337 who completed the survey. I would like to ask you as my LinkedIn/Xing contact to participate, so I receive **113 more surveys**. So if you deal with Social Media (LinkedIn, Twitter, Xing, Facebook, and Blogs) in B2B in Procurement, Purchasing, Sales, and Business Development, Marketing, or as Board Member dealing with Social Media I ask for your favour to complete one questionnaire (20-25 minutes).

Thank you.

The incentives will include the executive summary and a raffle for one Reflective Seminar and 20 gift cards from Amazon. Winners will be notified by June 2017. The executive summary will be released to those who participated and signed up at the completion of my doctorate in summer 2018.

Here is the link:

[\\${!://SurveyLink?d=Take the survey}](#)

Or copy and paste the URL below into your internet browser: [\\${!://SurveyURL}](#)

Best, Werner Krings

Doctoral Researcher at the University of Reading / Henley Business School

Follow the link to opt out of future emails

[\\${!://OptOutLink?d=Click here to unsubscribe}](#)

Appendix F4

Continuous Engagement before, during and after the Data-Gathering-Phase



[YouTube Announcement Video](#)



[LinkedIn Survey Blog](#)



[YouTube Thank You Video](#)



Chance of Winning:

$$1 - (355/356)^{21} = 1 - 0.9426 = 0.057$$

Announcement Video: (ASK!)

Lay the Groundwork: The project was communicated regularly by posting updates on Social Media profile page and online groups (11/2016 – 03/2017).

Touchpoints: Facebook, LinkedIn, XING, Twitter, and YouTube-Video

Blog of the Survey Purpose: (SHARE!)

Build Momentum: The progress was communicated daily by status updates about the completion and remaining surveys within the different regions (April 3rd to May 15th 2017).

Touchpoints: Facebook, LinkedIn, XING, and Twitter

Thank You Video: (RECOGNISE!)

Honour the Audience: Sent regularly individualised appreciation messages to supporters (1st, 2nd contacts and multipliers) who were critical to the research project. Occasionally endorsed contacts.

Released video at 500th completions (30th April 2017).

Touchpoints: Facebook, LinkedIn, XING, Twitter, and YouTube-Video

The Announcement of the Winners

I am happy to announce 21 winners out of 356 who signed up for the raffle (5.7% chance of winning) in my doctoral research survey. I thank my wife who randomly picked the numbers which were matched as close as possible to the random numbers assigned to each survey participant who signed up for the raffle.

In total, 20 Amazon gift certificates and one Reflection Seminar were awarded. 20 winners will receive Amazon gift certificates by email on 26 June 2017. The #1 Prize Winner will receive a voucher for a Reflection Seminar.

All winners were informed by email and Social Media messages. Congratulations and thank you again for your appreciated support! In 2018 an executive summary of the doctoral research will be shared with those participants who signed up for it.

Touchpoints: Emails, Facebook, LinkedIn, and XING.

Appendix F5

Extract of Survey Participants who signed up for the Incentive Schemes (Executive Summary and Raffle) and the final winners

Survey #	Separate Email File #	Assigned Random #	Date of Record	Completion Time	Perceived Value	Signed up for Incentive
528	344	4324	06/05/17	00:35:35	Y	Y
529	345	6266	07/05/17	22:24:21	Y	Y
530	346	5931	08/05/17	00:30:10	Y	Y
531	347	4258	08/05/17	05:12:40	Y	Y
532	348	3009	10/05/17	287:59:31	Y	Y
533	349	4471	10/05/17	00:58:23	Y	Y
534	350	3894	10/05/17	00:34:21	Y	Y
535	351	7317	10/05/17	01:12:41	Y	Y
536	352	8842	10/05/17	03:22:53	N	Y
537	353	2199	11/05/17	00:36:28	Y	Y
538	354	4949	11/05/17	01:12:26	Y	Y
539	355	8293	15/05/17	00:14:09	Y	Y
540	N	3268	15/05/17	07:34:04	N	N
541	356	8059	16/05/17	01:32:00	Y	Y
542	357	3008	22/05/17	00:33:19	Y	Y
543	N	6196	26/05/17	00:09:58	N	N

Random Number Generator Link

The winners of the raffle shall be determined as follows: 21 random numbers were generated on 24 June 2017, and the numbers that were closest to or corresponded with the original random numbers assigned to the survey were selected. The first price was a Reflection Seminar worth about 1,890 € besides ten Amazon gift certificates each of which was 25 \$/€/£ and ten each of which was 10 \$/€/£ were raffled.

Drawing of prizes on 24 June 2017	Value of Prize	Winning Random #	Survey Random #	Assigned Survey #	Region for Currency
Reflection Seminar	1,890 €	6233	6234	395	DACH
Gift Certificate 1	25 €	8969	8983	309	Western Europe
Gift Certificate 2	10 €	5180	5111	346	DACH
Gift Certificate 3	25 €	217	225	305	DACH
Gift Certificate 4	10 €	5151	5142	323	DACH
Gift Certificate 5	25 €	3113	3139	88	DACH
Gift Certificate 6	10 €	1058	1058	277	DACH
Gift Certificate 7	25 \$	709	705	161	North America
Gift Certificate 8	10 €	1498	1516	505	Western Europe
Gift Certificate 9	25 €	5836	5813	352	DACH
Gift Certificate 10	10 €	9202	9206	216	Eastern Europe
Gift Certificate 11	25 \$	3932	3955	294	North America
Gift Certificate 12	10 \$	4630	4610	33	North America
Gift Certificate 13	25 \$	7161	7157	449	North America
Gift Certificate 14	10 €	593	596	474	DACH
Gift Certificate 15	25 €	5555	5557	62	DACH
Gift Certificate 16	10 €	8175	8199	240	DACH
Gift Certificate 17	25 €	8257	8242	506	Western Europe
Gift Certificate 18	10 \$	4049	4080	58	North America
Gift Certificate 19	25 €	505	529	30	DACH
Gift Certificate 20	10 €	7431	7443	91	DACH

Notification of the prize (Email sent on 25 June 2017)

Dear Mr./Mrs. (Anonymised),

Thanks again for participating in my doctoral research survey this spring. Since I gathered the data within the intended time I decided to do the raffle already this year.

Congratulations! You are the winner of a gift certificate which will be emailed to you by Amazon tomorrow. The random number (1 to 9999) assigned to your questionnaire was 7443.

This number closely matched with the random number (7431) that my wife generated yesterday. Next year, I will provide you with the Executive Summary if you signed up for it.

Best regards, *Werner Krings*

Appendix G

Descriptive Statistics

Appendix G1

Geographical Breakdown

Location of Corporate Headquarters by Region (REG)							
Original Table	Frequency	Valid Percent	Rank	Updated Table*	Frequency	Valid Percent	Cumulative Percent
(REG1) North America (NA)	146	26.9	2	(REG4) DACH	188	34.6	34.6
(REG2) Latin America	5	.9	8	(REG1) North America (NA)	146	26.9	61.5
(REG3) Western Europe (WE)	134	24.7	3	(REG3) Western Europe (WE)	134	24.7	86.2
(REG4) DACH	188	34.6	1	Others (Recoded)	75	13.8	100.0
(REG5) Central/Eastern Europe	6	1.1	7	Missing Values	0	.0	
(REG6) Northern Europe	21	3.9	5	Total	543	100.0	
(REG7) Asia Pacific (ASPAC)	15	2.8	6				
(REG8) Middle East/Africa	28	5.2	4				
Missing Values	0	.0					
Total	543	100.0					

*Updated Table is designed more user-friendly.

Specification of the Regions

DACH: Germany, Austria, Switzerland

Western Europe: Benelux, France, Italy, Spain, Malta, Ireland and the UK

Others:

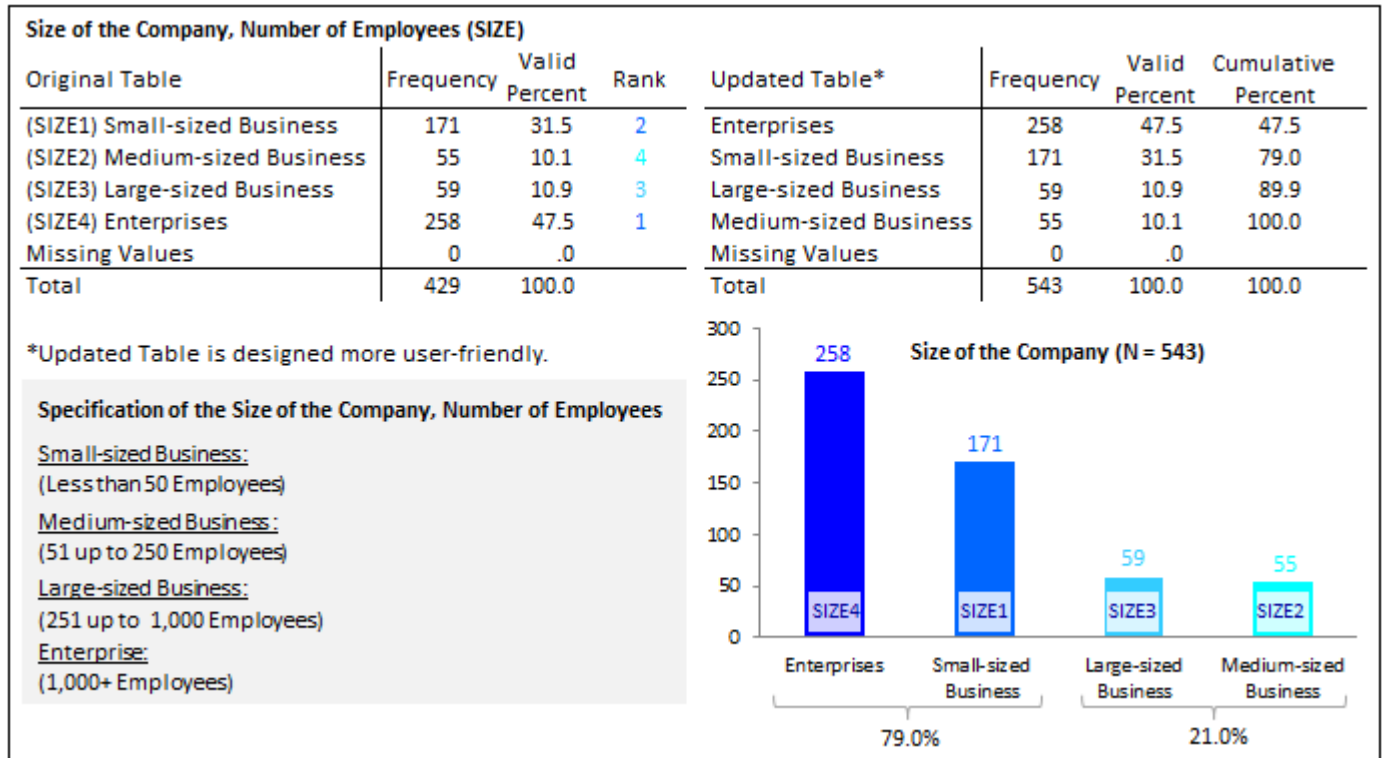
- Middle East/Africa
- Northern Europe: Denmark, Finland, Norway and Sweden
- Asia Pacific: Australia, New Zealand, India, Japan and China
- Central/Eastern Europe: Poland, Russia, etc.
- Latin America: Central, Middle and South America

Location of the Corporate Headquarters (N = 543)

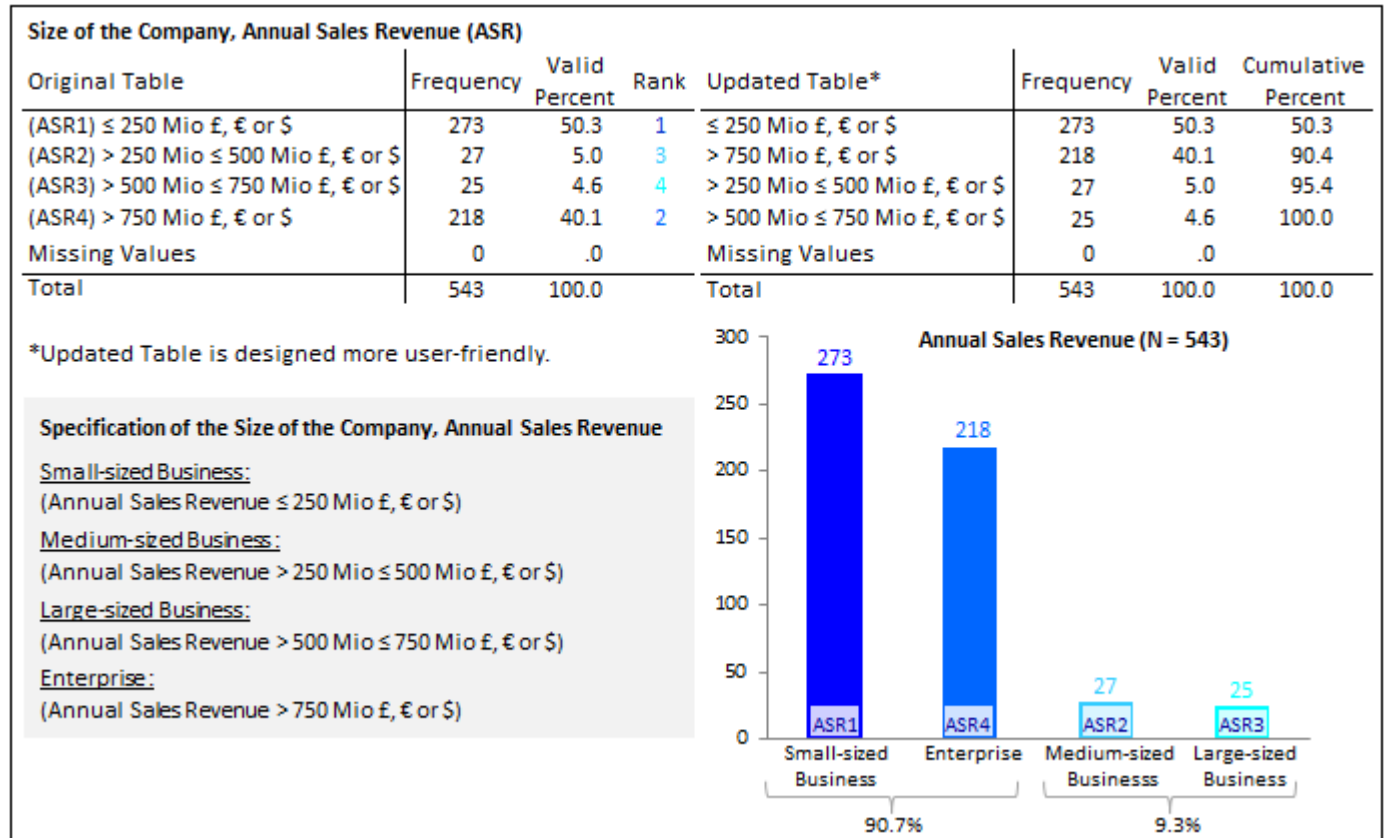
Region	Frequency	Valid Percent
DACH	188	34.6%
NA	146	26.9%
WE	134	24.7%
Others	75	13.8%

Appendix G2

Breakdown of Corporate Size (Number of Employees)



Breakdown of Corporate Size (Annual Sales Revenue)



Appendix G3

Industry Data

Industry (IND)	Responses		Percent of Cases	Rank
	Frequency	Valid Percent		
Multiple Response Industry				
(IND1) Aerospace & Defence	27	3.2	5.0	11
(IND2) Automation, Transportation & Mobility	51	6.0	9.4	7
(IND3) Construction	13	1.5	2.4	16
(IND4) Consumer Goods (Convenience)	16	1.9	2.9	15
(IND5) Consumer Goods (Luxury)	5	.6	.9	19
(IND6) Health & Beauty	10	1.2	1.8	18
(IND7) Business Services, Consulting & Professional Services	139	16.4	25.6	1
(IND8) Banking, Financial Services, Insurance & Real Estate	71	8.4	13.1	4
(IND9) Human Resources, Headhunting & Staffing	22	2.6	4.1	13
(IND10) Advertising & Marketing	25	2.9	4.6	12
(IND11) Life Sciences, Medical Devices & Pharmaceuticals	35	4.2	6.4	10
(IND12) Cleantech	3	.4	.6	21
(IND13) Packaging	4	.5	.7	20
(IND14) Education & Research Institutes	52	6.1	9.6	6
(IND15) Technology & Engineering	70	8.2	12.9	5
(IND16) Technology (Hardware)	38	4.5	7.0	9
(IND17) Technology (Software)	107	12.6	19.7	2
(IND18) Technology (Services)	76	9.0	14.0	3
(IND19) Telecommunication	20	2.4	3.7	14
(IND20) Retail & Wholesale	16	1.9	2.9	17
(IND21) Others	49	5.8	9.0	8
Missing Values	0	.0	.0	
Total	849	100.0	156.4	
Combined Variable \$CombinedInd ^a .				
a. Dichotomy group tabulated at value 1				

Appendix G4

B2B Employer

Current or Most Recent Employment in the B2B Software and Related Services/Solutions Arena (EMP)							
Original Table	Frequency	Valid Percent	Rank	Updated Table*	Frequency	Valid Percent	Cumulative Percent
(EMP1) B2B Vendor	194	35.7	2	(EMP2) B2B Third Party	240	44.2	44.2
(EMP2) B2B ThirdParty	240	44.2	1	(EMP1) B2B Vendor	194	35.7	79.9
(EMP2) B2B Buyer	109	20.1	3	(EMP3) B2B Buyer	109	20.1	100.0
Missing Values	0	.0		Missing Values	0	.0	
Total	543	100.0		Total	543	100.0	100.0

*Updated Table is designed more user-friendly.

Specifications of the Employer

If the respondent had a duplicate function he should choose the most intensive one.

Vendor/Buyer:
B2B Software Services/Solutions, e.g. ERP, MES, BI, and Cloud.

Third Party:
B2B Software related Services/Solutions, e.g. Consulting, HR, Recruitment, Staffing, Marketing, and Professional Services

Employer (N = 543)

Employer Type	Frequency	Valid Percent
B2B Vendor	194	35.7%
B2B Third Party	240	44.2%
B2B Buyer	109	20.1%

Corporate Function within the Organisation

Corporate Functions in the Organisation Only 1 Answer (FORG)							
Original Table	Frequency	Valid Percent	Rank	Updated Table*	Frequency	Valid Percent	Cumulative Percent
(FORG1) Business Development	103	19.0	2	Executive Leadership	114	20.9	20.9
(FORG2) Marketing	34	6.3	7	Business Development	103	19.0	39.9
(FORG3) Pre-Sales & Sales	78	14.4	4	Operations	99	18.2	58.1
(FORG4) Operations	99	18.2	3	Pre-Sales & Sales	78	14.4	72.5
(FORG5) Support/Services	53	9.8	6	Other	62	11.4	83.9
(FORG6) Executive Leadership	114	20.9	1	Support/Services	53	9.8	93.7
(FORG7) Other	62	11.4	5	Marketing	34	6.3	100.0
Missing Values	0	.0		Missing Values	0	.0	
Total	543	100.0		Total	543	100.0	100.0

*Updated Table is designed more user-friendly.

Specification of the Functions in the Organisation

Operational Team: Product Development, Procurement, Technical

Support/Services: Human Resources Team

Executive Leadership: C-Level, Board Member, Managing Director

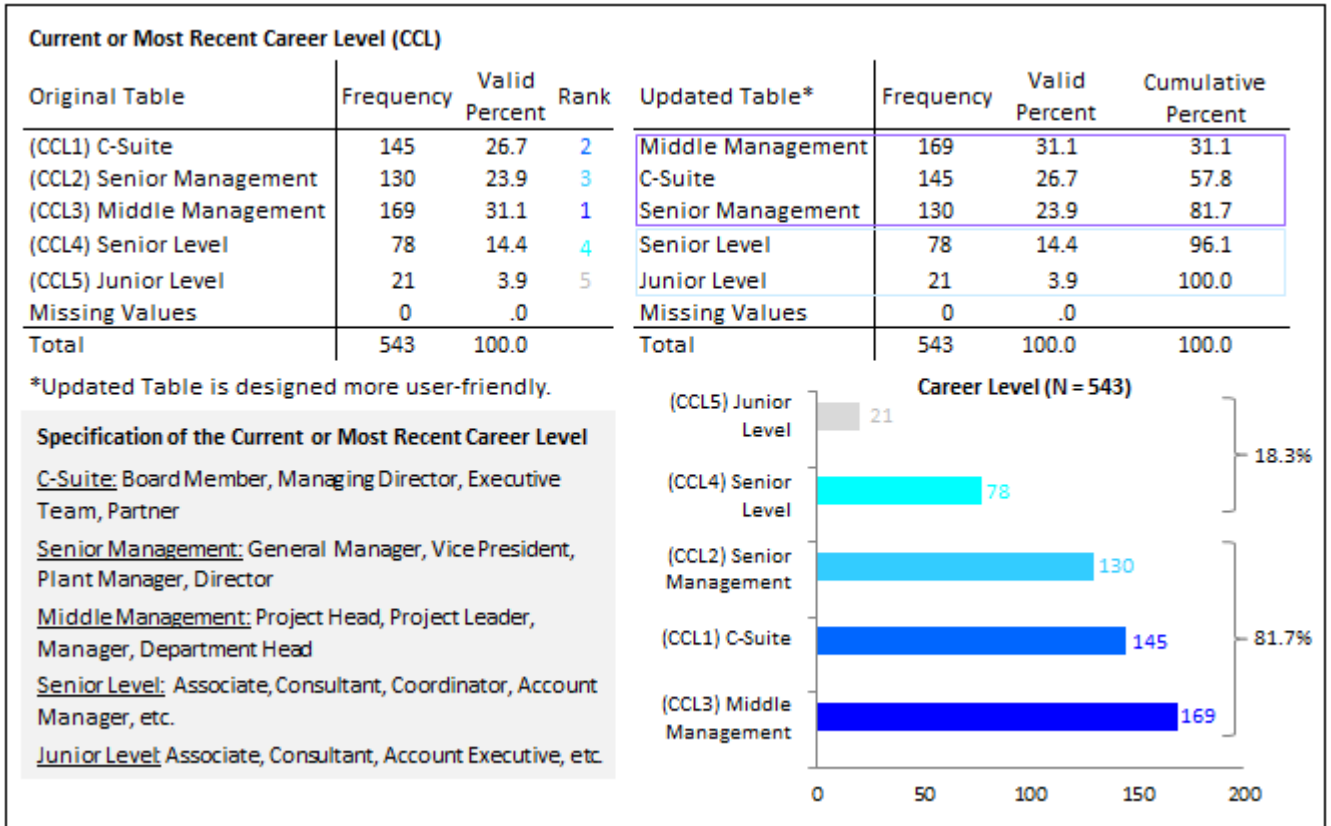
Pre-Sales & Sales were combined:
Formerly (FORG3) & (FORG4) were recoded to (FORG3). Other Functions were recoded correspondingly. e.g. (FORG5) Support Services was recoded to (FORG4) in a next steps, etc.

Primary Function (N = 543)

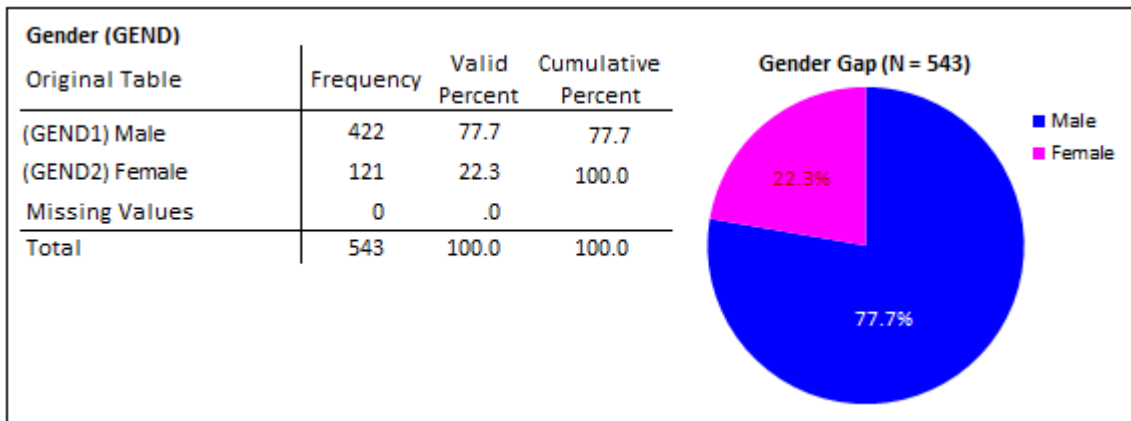
Function	Frequency
Executive Leadership	114
Business Development	103
Operations	99
Pre-Sales & Sales	78
Other	62
Support/Services	53
Marketing	34

Appendix G5

Current B2B Career Level



Gender Gap



Appendix G6

Age Groups in accordance with Generation Groups

Age Groups (AGEGRP) and Generation Groups (GENER)				
Age Groups	Frequency	Valid Percent	Rank	*Generation Groups
22 - 35 years	69	12.7	3	Year 1982 - 2005: Generation Y or Millennials
36 - 56 years	389	71.6	1	Year 1961 - 1981: Generation X
57 - 74 years	82	15.1	2	Year 1943 - 1960: Baby Boomer Generation
75+ years	3	.6	4	Year 1925 - 1942: Silent Generation or Traditionalist
Missing Values	0	.0		
Total	543	100.0		Total

*Age groups correspond with Generations

Development of both Variables

The question for age (AGE) is a particularly sensitive issue in the NA region. It was bypassed with the question for Year of Birth (YOB) to avoid a high non-response rate. This question obviously seemed less intrusive. YOB was assigned to generational brackets (GENER) aligned with age groups (AGEGRP). The age (AGE) was derived from the YOB by choosing the age of the respondents by Dec 31st, 2017.

Age Groups and Generation Groups (N = 543)

Age Group	Percentage	Generation Group
75+ years	0.6%	Silent Generation
57 - 74 years	15.1%	Baby Boomer Generation
36 - 56 years	71.6%	Generation X
22 - 35 years	12.7%	Generation Y

Levels of Education

Levels (EDU) Condensed Levels of Education (REDU)						
Levels of Education	Frequency	Valid Percent	Rank	* Condensed Level	Frequency	Valid Percent
High School / 'School of Life Experiences'	11	2.0	3	Lower	31	5.7
Associates Degree/Internship/Vocation School (2 -year College)	20	3.7				
Bachelor (3-year or 4-year College)	94	17.3	2	Medium	94	17.3
Master/Graduate Degree	362	66.7	1	Higher	418	77.0
Doctoral Degree /PhD	56	10.3				
Missing Values	0	.0			0	.0
Total	543	100.0		Total	543	100.0

* Condensed Level of Education (REDU)

From (EDU) to (REDU)

The original five education levels(EDU) were recoded to three educational levels(REDU).

Lower Level: High School/2-year College)

Medium Level: Bachelor (3-year or 4-year College)

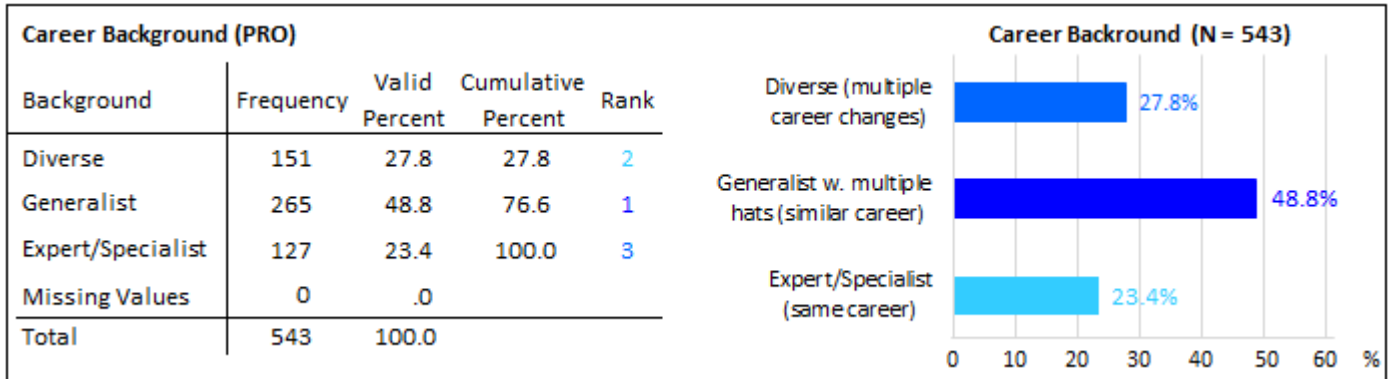
Higher Level: Master and Doctors (Graduate School)

(Condensed) Levels of Education (N = 543)

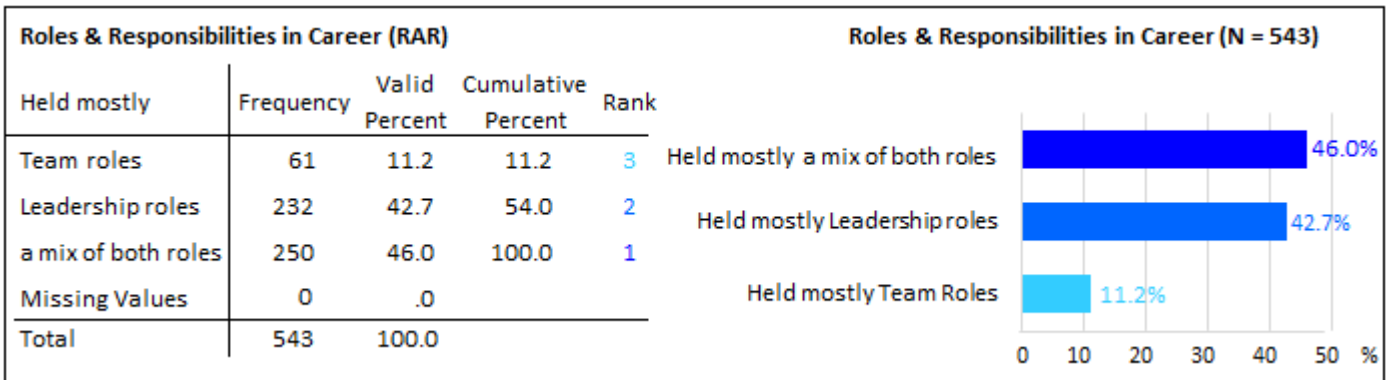
Condensed Level	Percentage
Higher Level	77.0%
Medium Level	17.3%
Lower Level	5.7%

Appendix G7

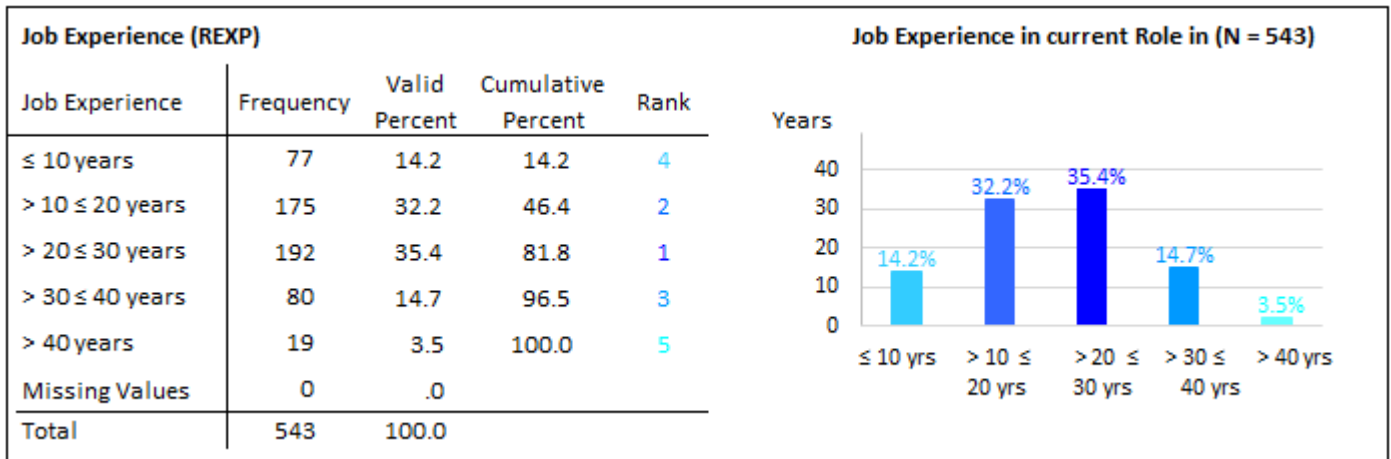
Career Background



Roles and Responsibilities



Experience



Appendix G8

Inclination/Intensity towards Social Media Business Usage

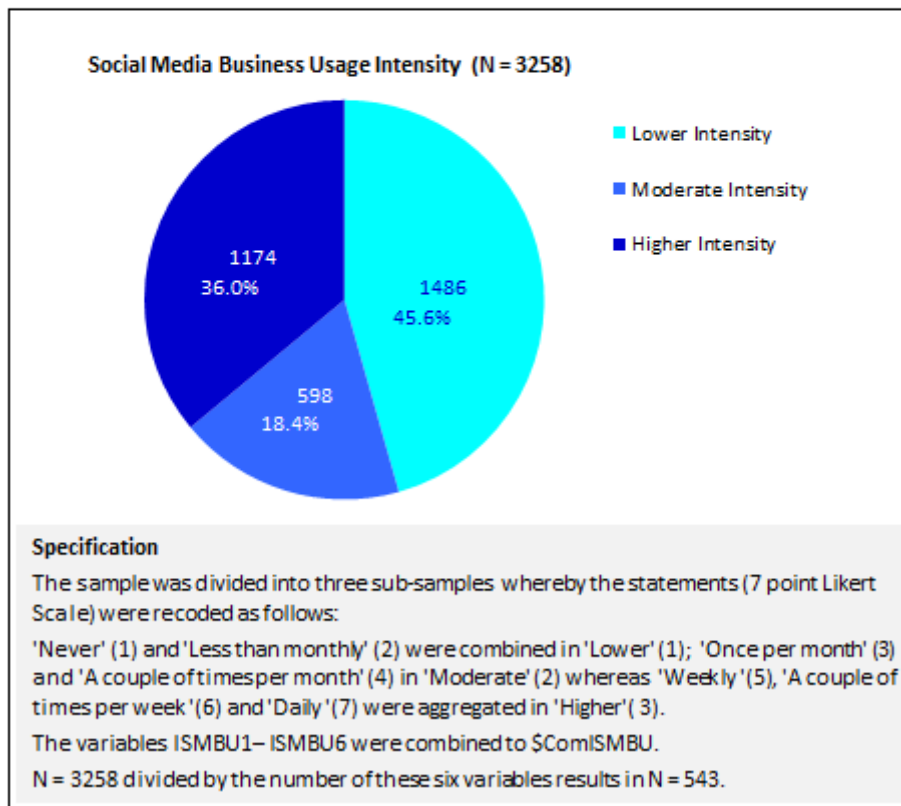
Frequency (Valid Percentage) Inclination towards Social Media Business Usage (ISMBU)	Never (1)	Less than monthly (2)	Once per month (3)	A couple of times per month (4)	Weekly (5)	A couple of times per week (6)	Daily (7)	Missing Value	N
(ISMBU1) I attend or hold webinars.	347 (63.9%)		139 (25.6%)		57 (10.5%)		543 (100.0%)		
	104 (19.2%)	243 (44.8%)	34 (6.3%)	105 (19.3%)	16 (2.9%)	19 (3.4%)	22 (4.1%)	0 (0.0%)	543 (100.0%)
(ISMBU2) I participate in online forums (Facebook, LinkedIn, and XING).	153 (28.2%)		97 (17.9%)		293 (54.0%)		543 (100.0%)		
	52 (9.6%)	101 (18.5%)	32 (5.9%)	65 (12.0%)	77 (14.2%)	56 (10.3%)	160 (29.5%)	0 (0.0%)	543 (100.0%)
(ISMBU3) I research information on corporate Web- or SocMed sites.	200 (36.8%)		104 (19.2%)		239 (44.0%)		543 (100.0%)		
	80 (14.7%)	120 (22.1%)	29 (5.4%)	75 (13.8%)	58 (10.7%)	88 (16.2%)	93 (17.1%)	0 (0.0%)	543 (100.0%)
(ISMBU4) I read or write blogs and microblogs (Twitter).	274 (50.5%)		103 (19.0%)		166 (30.6%)		543 (100.0%)		
	159 (29.3%)	115 (21.2%)	20 (3.7%)	83 (15.3%)	45 (8.2%)	77 (14.2%)	44 (8.1%)	0 (0.0%)	543 (100.0%)
(ISMBU5) I grow my social network on LinkedIn & XING that people get to know our brand.	122 (22.5%)		106 (19.5%)		315 (58.0%)		543 (100.0%)		
	51 (9.4%)	71 (13.1%)	30 (5.5%)	76 (14.0%)	74 (13.6%)	88 (16.2%)	153 (28.2%)	0 (0.0%)	543 (100.0%)
(ISMBU6) I grow my social network on Facebook that people get to know our brand.	390 (71.8%)		49 (9.0%)		104 (19.2%)		543 (100.0%)		
	309 (56.9%)	81 (14.9%)	9 (1.7%)	40 (7.4%)	24 (4.4%)	46 (8.5%)	34 (6.2%)	0 (0.0%)	543 (100.0%)
Social Media Business Usage Intensity	Lower		Moderate		Higher		Sample		
Usage Intensity (Colour Code)									
The higher the valid percentage of the respondents, the darker the colour et vice versa.	Lower Business Usage Intensity ≈ Lower Inclination towards Business Usage				Higher Business Usage Intensity ≈ Higher Inclination towards Business Usage				

Appendix G9

Intensity of Social Media Business Usage (Multi Response)

Social Media Business Usage Intensity (\$ComISMBU) Frequencies				
MULT RESPONSE GROUPS=\$ComISMBU ^a N = 543 Percent 100.0% MV = 0 Percent 0.0%		Responses		Percent of Cases
		N	Percent	
Business Usage Intensity ^a	Lower Intensity	1486	45.6	273.7
	Moderate Intensity	598	18.4	110.1
	Higher Intensity	1174	36.0	216.2
Total		3258	100.0	600.0

a. Group



Appendix G10

Hesitation/Inhibition towards Social Media Business Usage

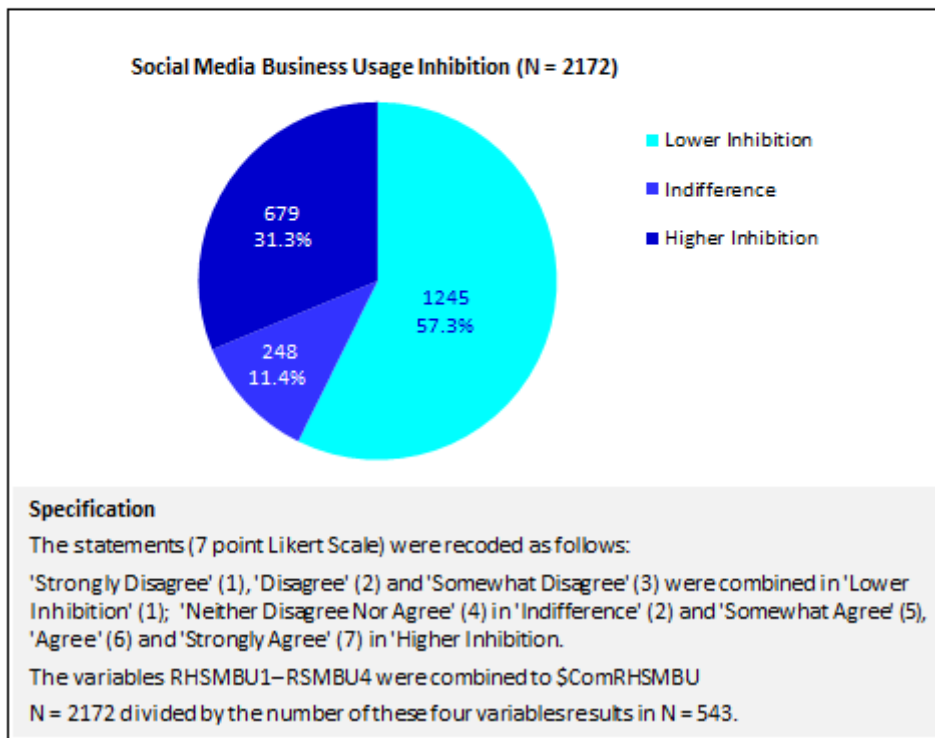
Frequency (Valid Percentage) Hesitation towards Social Media Business Usage (RHSMBU)	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Disagree Nor Agree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)	Missing Value	N
(RHSMBU1) I have fear that others misuse my private data.	284 (52.3%)			59 (10.9%)	200 (36.8%)			0 (0.0%)	543 (100.0%)
	82 (15.1%)	144 (26.5%)	58 (10.7%)	59 (10.9%)	113 (20.8%)	62 (11.4%)	25 (4.6%)	0 (0.0%)	543 (100.0%)
(RHSMBU2) I avoid violating company policy which prohibits Social Media (unproductive distraction for workflow).	339 (62.4%)			60 (11.0%)	144 (26.5%)			0 (0.0%)	543 (100.0%)
	122 (22.5%)	161 (29.7%)	56 (10.3%)	60 (11.0%)	71 (13.1%)	41 (7.6%)	32 (5.8%)	0 (0.0%)	543 (100.0%)
(RHSMBU3) Our particular industry perceives Social Media as not useful/valuable (sensitive information).	311 (57.3%)			66 (12.2%)	166 (30.6%)			0 (0.0%)	543 (100.0%)
	119 (21.9%)	139 (25.6%)	53 (9.8%)	66 (12.2%)	73 (13.4%)	69 (12.7%)	24 (4.4%)	0 (0.0%)	543 (100.0%)
(RHSMBU4) I am very effective in using Email, Phone, Brochures and Personal Letters.	311 (57.3%)			63 (11.6%)	169 (31.1%)			0 (0.0%)	543 (100.0%)
	106 (19.5%)	133 (24.5%)	72 (13.3%)	63 (11.6%)	78 (14.4%)	63 (11.6%)	28 (5.1%)	0 (0.0%)	543 (100.0%)
Social Media Business Usage Attitude	Rather confident (Uninhibited)			Indifferent	Rather reserved (Inhibited)			Sample	
Hesitation toward Social Media Business Usage (Colour Code) The higher the valid percentage of the respondents, the darker the colour et vice versa.	← Lower Hesitation towards Business Usage ≈ Lower Inhibition			Higher Hesitation towards Business Usage ≈ Higher Inhibition →					
Original Survey: Recoded 1 = (7) Strongly Agree; 2 = (6) Agree; 3 = (5) Somewhat Agree; 4 = (4) Neither Agree Nor Disagree; 5 = (3) Somewhat Disagree; 6 = (2) Disagree; 7 = (1) Strongly Disagree into 7 = (7) Strongly Agree; 6 = (6) Agree; 5 = (5) Somewhat Agree; 4 = (4) Neither Agree Nor Disagree; 3 = (3) Somewhat Disagree; 2 = (2) Disagree; 1 = (1) Strongly Disagree									

Appendix G11

Inhibition towards Social Media Business Usage (Multi Response)

Social Media Business Usage Inhibition (\$ComRHSMBU) Frequencies				
MULT RESPONSE GROUPS=\$ComRHSMBU ^a N = 543 Percent 100.0% MV = 0 Percent 0.0%	Responses		Percent of Cases	
	N	Percent		
Business Usage Inhibition ^a				
Lower Inhibition	1245	57.3	229.3	
Indifference	248	11.4	45.7	
Higher Inhibition	679	31.3	125.0	
Total	2172	100.0	400.0	

a. Group



Appendix G12

Social Media Usage Intensity/Inclination by Corporate Functions (Statistics)

Inclination towards Social Media Business Usage ISMBU1 - ISMBU6 by Recoded Corporate Functions RFORG1 = Business Development; RFORG2 = Marketing; RFORG3 = Pre-Sales & Sales; RFORG4 = Operational/Procurement; RFORG5 = Support/Services; RFORG6 = C-Level; RFORG7 = Other
 1 = Never; 2 = Less than monthly; 3 = Once per month; 4 = A couple of times per month; 5 = Weekly; 6 = A couple of times per week; 7 = Daily

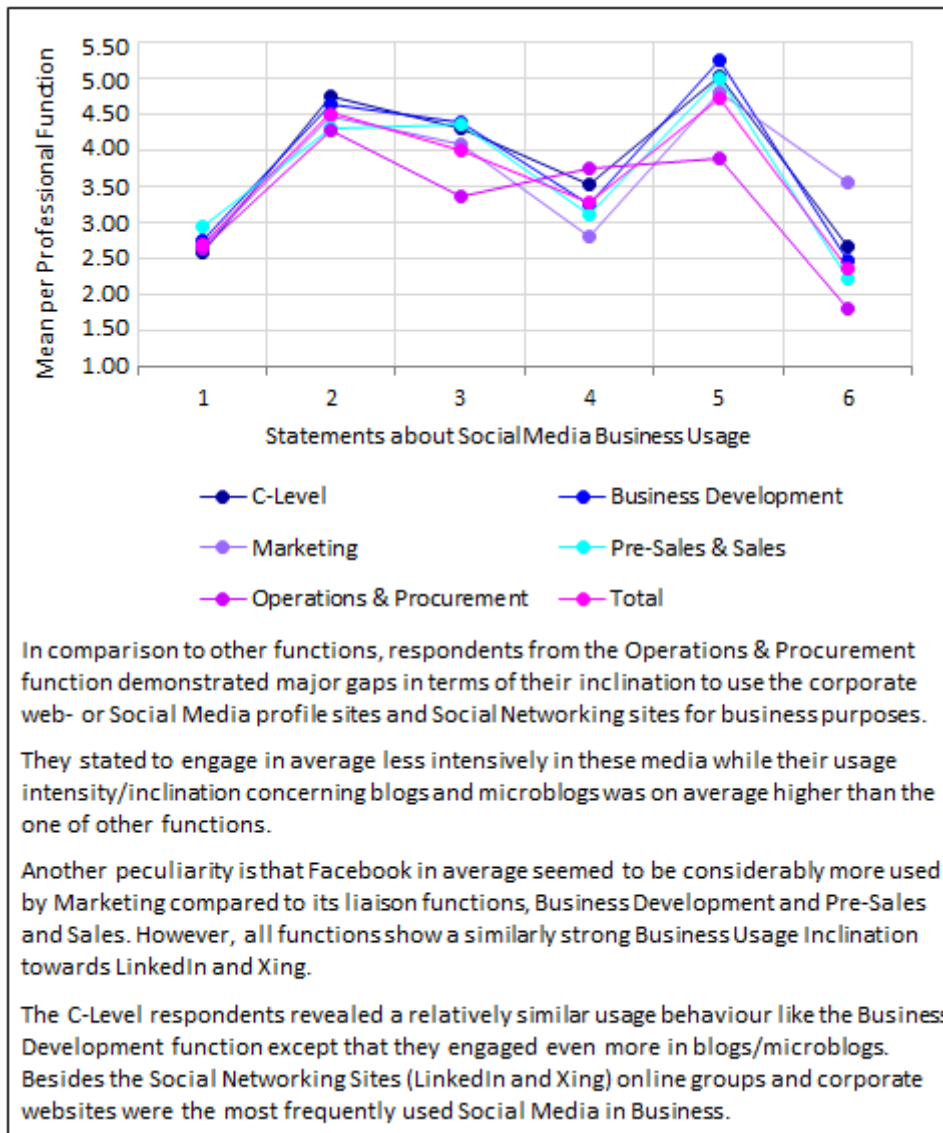
ISMBU1 Webinars				ISMBU2 Business Online Forums				ISMBU3 Corporate Web- or Social Media Sites			
Corporate Function	Mean	N	SD	Corporate Function	Mean	N	SD	Corporate Function	Mean	N	SD
C-Level	2.58	114	1.510	C-Level	4.75	114	2.124	C-Level	4.29	114	2.144
Business Developm.	2.75	103	1.702	Business Developm.	4.64	103	2.019	Business Developm.	4.39	103	2.161
Marketing	2.68	34	1.430	Marketing	4.47	34	2.259	Marketing	4.09	34	1.990
Pre-Sales & Sales	2.95	78	1.562	Pre-Sales & Sales	4.31	78	2.247	Pre-Sales & Sales	4.36	78	2.132
Operat./ Procurem.	2.63	99	1.433	Operat./ Procurem.	4.28	99	2.204	Operat./ Procurem.	3.35	99	2.042
<i>Support/Services</i>	<i>2.72</i>	<i>53</i>	<i>1.680</i>	<i>Support/Services</i>	<i>4.40</i>	<i>53</i>	<i>2.088</i>	<i>Support/Services</i>	<i>3.60</i>	<i>53</i>	<i>2.022</i>
<i>Other</i>	<i>2.55</i>	<i>62</i>	<i>1.479</i>	<i>Other</i>	<i>4.63</i>	<i>62</i>	<i>2.212</i>	<i>Other</i>	<i>3.76</i>	<i>62</i>	<i>2.178</i>
Total	2.69	543	1.548	Total	4.51	543	2.148	Total	4.01	543	2.137

ISMBU4 Business Blogs or Microblogs				ISMBU5 LinkedIn and Xing				ISMBU6 Facebook			
Corporate Function	Mean	N	SD	Corporate Function	Mean	N	SD	Corporate Function	Mean	N	SD
C-Level	3.52	114	2.227	C-Level	5.01	114	1.939	C-Level	2.68	114	2.155
Business Developm.	3.33	103	2.007	Business Developm.	5.25	103	1.770	Business Developm.	2.47	103	1.994
Marketing	3.44	34	2.259	Marketing	4.79	34	2.171	Marketing	3.56	34	2.232
Pre-Sales & Sales	3.12	78	1.987	Pre-Sales & Sales	4.99	78	2.080	Pre-Sales & Sales	2.22	78	1.998
Operat./ Procurem.	3.24	99	2.110	Operat./ Procurem.	3.89	99	2.133	Operat./ Procurem.	1.81	99	1.621
<i>Support/Services</i>	<i>3.08</i>	<i>53</i>	<i>2.037</i>	<i>Support/Services</i>	<i>4.45</i>	<i>53</i>	<i>2.135</i>	<i>Support/Services</i>	<i>2.21</i>	<i>53</i>	<i>1.965</i>
<i>Other</i>	<i>3.03</i>	<i>62</i>	<i>2.064</i>	<i>Other</i>	<i>4.37</i>	<i>62</i>	<i>2.082</i>	<i>Other</i>	<i>2.29</i>	<i>62</i>	<i>2.011</i>
Total	3.27	543	2.092	Total	4.71	543	2.062	Total	2.38	543	2.016

Corporate Function implies Primary Function. The Functions/Values in *Italics* were excluded from the graphic (Appendix G13).

Appendix G13

Social Media Business Usage Intensity/Inclination by Selected Corporate Functions (Graphics)



Appendix G14

Hesitation towards Social Media Business Usage by Selected Corporate Functions (Statistics)

Recoded Hesitation towards Social Media Business Usage
 RHSMBU1 - RHSMBU4 by Recoded Corporate Functions RFORG1 = Business Development;
 RFORG2 = Marketing; RFORG3 = Pre-Sales & Sales; RFORG4 = Operational/Procurement;
 RFORG5 = Support/Services; RFORG6 = C-Level; RFORG7 = Other
 Recoded Original Survey: 1 = (7) Strongly Agree; 2 = (6) Agree; 3 = (5) Somewhat Agree; 4 = (4)
 Neither Agree Nor Disagree; 5 = (3) Somewhat Disagree; 6 = (2) Disagree; 7 = (1) Strongly
 Disagree into 7 = (7) Strongly Agree; 6 = (6) Agree; 5 = (5) Somewhat Agree; 4 = (4) Neither Agree
 Nor Disagree; 3 = (3) Somewhat Disagree; 2 = (2) Disagree; 1 = (1) Strongly Disagree

RHSMBU1 I fear the misuse of private data.			
Corporate Function	Mean	N	SD
C-Level	3.25	114	1.875
Business Developm.	3.24	103	1.807
Marketing	3.18	34	1.914
Pre-Sales & Sales	3.19	78	1.894
Operat./ Procurem.	3.96	99	1.635
<i>Support/Services</i>	<i>3.98</i>	<i>53</i>	<i>1.759</i>
<i>Other</i>	<i>3.68</i>	<i>62</i>	<i>1.827</i>
Total	3.48	543	1.529

RHSMBU2 I avoid violating company policy.			
Corporate Function	Mean	N	SD
C-Level	2.49	114	1.547
Business Developm.	2.94	103	1.888
Marketing	2.56	34	1.541
Pre-Sales & Sales	3.00	78	1.879
Operat./ Procurem.	3.67	99	1.906
<i>Support/Services</i>	<i>3.91</i>	<i>53</i>	<i>1.954</i>
<i>Other</i>	<i>3.21</i>	<i>62</i>	<i>1.848</i>
Total	3.09	543	1.857

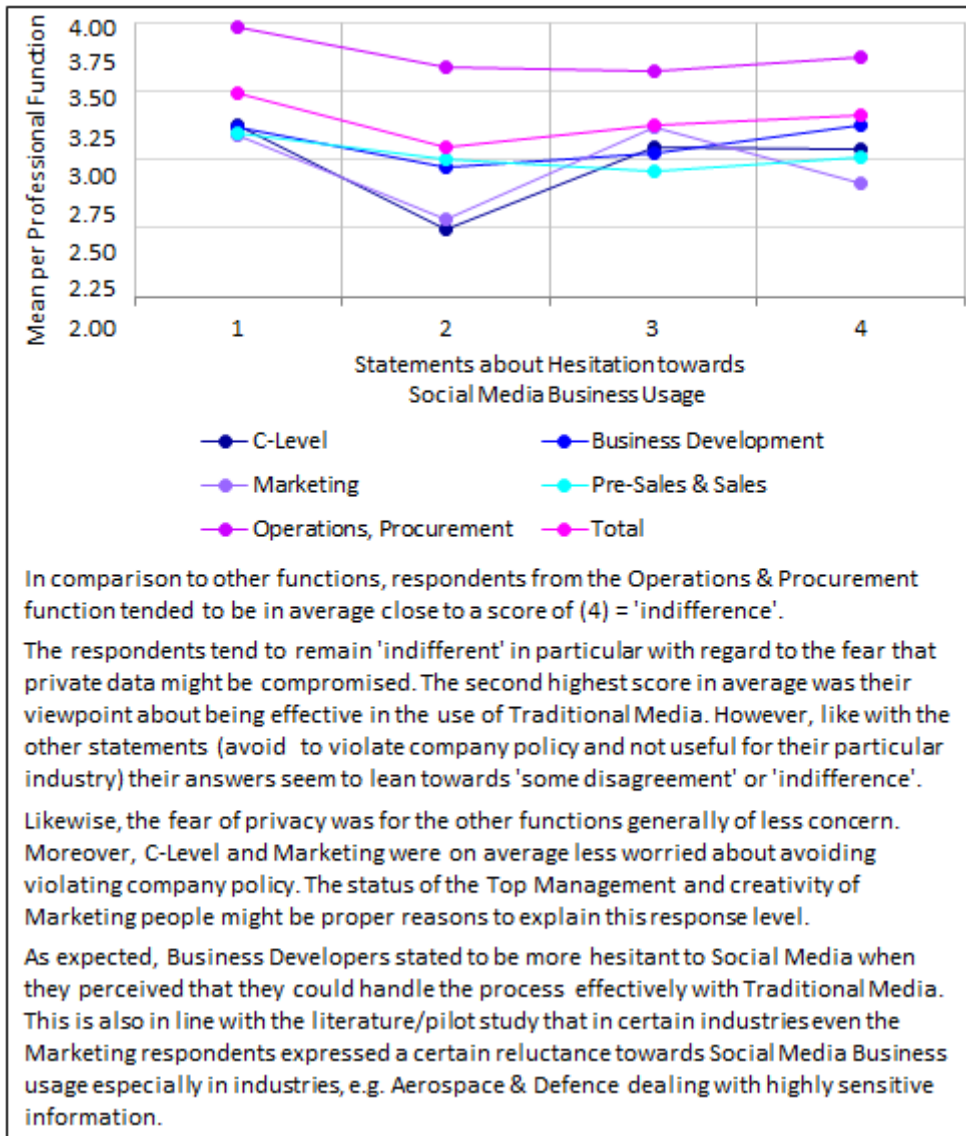
RHSMBU3 It is not useful for my industry.			
Corporate Function	Mean	N	SD
C-Level	3.09	114	1.917
Business Developm.	3.05	103	1.932
Marketing	3.24	34	2.104
Pre-Sales & Sales	2.92	78	1.734
Operat./ Procurem.	3.65	99	1.848
<i>Support/Services</i>	<i>3.55</i>	<i>53</i>	<i>1.897</i>
<i>Other</i>	<i>3.45</i>	<i>62</i>	<i>1.853</i>
Total	3.25	543	1.893

RHSMBU4 I am effective in traditional media.			
Corporate Function	Mean	N	SD
C-Level	3.08	114	1.901
Business Developm.	3.25	103	1.924
Marketing	2.82	34	1.898
Pre-Sales & Sales	3.01	78	1.732
Operat./ Procurem.	3.75	99	1.854
<i>Support/Services</i>	<i>3.77</i>	<i>53</i>	<i>1.958</i>
<i>Other</i>	<i>3.48</i>	<i>62</i>	<i>1.647</i>
Total	3.32	543	1.868

Corporate Function implies Primary Function. The Functions/Values in Italics were excluded from the graphic (Appendix G15).

Appendix G15

Hesitation towards Social Media Business Usage by Selected Corporate Functions (Graphics)



Appendix G16

Crosstable: Survey Origin, Interest in Executive Summary/Raffle

Is there a relationship between the origin of the contact and the interest in obtaining an executive summary of this research and participating in the raffle?

Survey Origin * Q6c Interest in Executive Summary and Raffle The DACH Region includes Germany, Austria and Switzerland	Cases					
	Valid		Missing		Total	
	N [DACH]	Percent [DACH]	N [DACH]	Percent [DACH]	N [DACH]	Percent [DACH]
	530 [185]	100.0% [100.0%]	0 [0]	0.0% [0.0%]	530 [185]	100.0% [100.0%]

Origin of Survey * Interest in Executive Summary and Raffle Cross Tabulation

Survey Origin DACH Region in square brackets	Q6c Executive Summary of Research and Raffle to win a Seminar or Amazon gift card				Total	
	(1) Yes		(2) No			
(1) LinkedIn Contact Count	256	[87]	130	[44]	386	[131]
% within Survey Origin	66.3%	[66.4%]	33.7%	[33.6%]	100.0%	[100.0%]
% Exec. Summary & Raffle	71.9%	[71.3%]	74.7%	[69.8%]	72.8%	[70.8%]
% of Total	48.3%	[47.0%]	24.5%	[23.8%]	72.8%	[70.8%]
(2) Xing Contact Count	22	[12]	13	[11]	35	[23]
% within Survey Origin	62.9%	[52.2%]	37.1%	[47.8%]	100.0%	[100.0%]
% Exec. Summary & Raffle	6.2%	[9.8%]	7.5%	[17.5%]	6.6%	[12.4%]
% of Total	4.2%	[6.5%]	2.5%	[5.9%]	6.6%	[12.4%]
(3) Anonymous Contact Count	78	[23]	31	[8]	109	[31]
% within Survey Origin	71.6%	[74.2%]	28.4%	[25.8%]	100.0%	[100.0%]
% Exec. Summary & Raffle	21.9%	[18.9%]	17.8%	[12.7%]	20.6%	[16.8%]
% of Total	14.7%	[12.4%]	5.8%	[4.3%]	20.6%	[16.8%]
Total Count	356	[122]	174	[63]	530	[185]
% within Survey Origin	67.2%	[65.9%]	32.8%	[34.1%]	100.0%	[100.0%]
% Exec. Summary and Raffle	100.0%	[100.0%]	100.0%	[100.0%]	100.0%	[100.0%]
% of Total	67.2%	[65.9%]	32.8%	[34.1%]	100.0%	[100.0%]

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.374 ^a [2.894 ^a]	2 [2]	.503 [.235]
Likelihood Ratio	1.391 [2.846]	2 [2]	.499 [.241]
Linear-by-Linear Association	.840 [.155]	1 [1]	.360 [.693]
N of Valid Cases	530 [185]		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.49.

Symmetric Measures

	Value	Approximate Significance
Nominal by Nominal Phi	.051 [.125]	.503 [.235]
Cramer's V	.051 [.125]	.503 [.235]
N of Valid Cases	530 [185]	

Appendix G17

Obtained Results

This partial study aimed at identifying impacts on the response rate depending on the motivation to obtain the research outcome in form of an executive summary and participate in a raffle. It was suggested that depending on the origin (LinkedIn, Xing, or Anonymous Email) there existed a statistical significant association, referring to the raffle, especially to DACH since the reflection seminar (main prize) was given in Munich.

According to Gravetter and Wallnau (2004,605) the findings from the chi-square test for independence suggested to report the value of Cramer's V instead of the Phi Coefficient with a three by two table. For this research, the lesser value of either R-1 or C-1 (here: 3-2 or 2-1) equal to 1 applies with effect sizes .01 for a small, .30 a medium and .50 or above for a large effect.

The Chi-square test for independence indicated that there existed *no* significant association between the origin of survey contacts and interest in the executive summary and raffle, Pearson $\chi^2(2, n = 530) = 1.374, p = .503 >> .05$, *Cramer's V* = .051. The effect size of *Cramer's V* was higher than the small $V = .01$ for two categories. Similarly, in the DACH region, where the main prize in form of a reflection seminar for €1,890 was awarded in Munich, and a higher response rate was expected, *no* significant difference was observed, Pearson $\chi^2(2, n = 185) = 2.894, p = .235 >> .05$, *Cramer's V* = .125.

Gravetter, F J and Wallnau, L B (2004) *Statistics for the behavioral Sciences* (6th edn.). Belmont, CA: Wadsworth.

Appendix H

Missing Value Analyses

Appendix H1

Missing Value Analysis Univariate Statistics

Research Model Component	Qualtrics Question Statement	SPSS Variable	All Respondents					Three Sub-Samples															
			N	Mean	SD	MV	%	Vendor					Third Party					Buyer					
								N _v	Mean	SD	MV	%	N _{TP}	Mean	SD	MV	%	N _B	Mean	SD	MV	%	
Antecedent: Social Media Business Usage	Inclination	Q1g_1	ISMBU1	543	2.69	1.548	0	.0	194	2.96	1.653	0	.0	240	2.58	1.526	0	.0	109	2.45	1.330	0	.0
		Q1g_2	ISMBU2	543	4.51	2.148	0	.0	194	4.66	2.175	0	.0	240	4.50	2.134	0	.0	109	4.28	2.130	0	.0
		Q1g_3	ISMBU3	543	4.01	2.137	0	.0	194	4.08	2.211	0	.0	240	4.15	2.103	0	.0	109	3.57	2.038	0	.0
		Q1g_4	ISMBU4	543	3.27	2.092	0	.0	194	3.10	1.949	0	.0	240	3.42	2.102	0	.0	109	3.26	2.299	0	.0
		Q1g_5	ISMBU5	543	4.71	2.062	0	.0	194	4.86	2.127	0	.0	240	4.71	1.964	0	.0	109	4.43	2.145	0	.0
		Q1g_6	ISMBU6	543	2.38	2.016	0	.0	194	2.38	1.960	0	.0	240	2.38	2.013	0	.0	109	2.38	2.133	0	.0
	Scale Inclination	TISMBU	543	3.59	1.305	0	.0	194	3.67	1.290	0	.0	240	3.62	1.274	0	.0	109	3.39	1.389	0	.0	
	Hesitation	Q1h_1	RHSMBU1	543	3.48	1.829	0	.0	194	3.36	1.784	0	.0	240	3.43	1.851	0	.0	109	3.83	1.833	0	.0
		Q1h_2	RHSMBU2	543	3.09	1.857	0	.0	194	3.07	1.858	0	.0	240	2.92	1.765	0	.0	109	3.50	2.003	0	.0
		Q1h_3	RHSMBU3	543	3.25	1.893	0	.0	194	3.20	1.879	0	.0	240	3.10	1.873	0	.0	109	3.70	1.912	0	.0
Q1h_4		RHSMBU4	543	3.32	1.868	0	.0	194	3.08	1.802	0	.0	240	3.31	1.829	0	.0	109	3.77	1.998	0	.0	
Scale Hesitation	TRHSMBU	543	3.29	1.523	0	.0	194	3.18	1.508	0	.0	240	3.19	1.510	0	.0	109	3.70	1.521	0	.0		
Independent Variable: Business Development Process	BD Process Phase I.	Q2a_1	SMB11	543	5.33	1.399	0	.0	194	5.26	1.556	0	.0	240	5.47	1.271	0	.0	109	5.16	1.355	0	.0
		Q2a_2	SMB12	543	4.95	1.348	0	.0	194	4.85	1.466	0	.0	240	5.05	1.281	0	.0	109	4.93	1.267	0	.0
		Q2a_3	SMB13	543	4.39	1.315	0	.0	194	4.37	1.341	0	.0	240	4.48	1.284	0	.0	109	4.23	1.331	0	.0
		Q2a_4	SMB14	543	4.86	1.300	0	.0	194	4.76	1.369	0	.0	240	5.05	1.202	0	.0	109	4.63	1.338	0	.0
		Q2a_5	SMB15	543	5.16	1.136	0	.0	194	5.13	1.169	0	.0	240	5.23	1.083	0	.0	109	5.07	1.192	0	.0
		Q2a_6	SMB16	543	4.59	1.540	0	.0	194	4.60	1.620	0	.0	240	4.60	1.472	0	.0	109	4.53	1.555	0	.0
		Q2a_7	SMB17	543	5.20	1.191	0	.0	194	5.19	1.220	0	.0	240	5.33	1.118	0	.0	109	4.94	1.261	0	.0
		Scale BDI	TSMBI	543	4.93	.937	0	.0	194	4.88	1.027	0	.0	240	5.03	.872	0	.0	109	4.79	.889	0	.0
	BD Process Phase II.	Q2b_1	RSMB21	543	4.78	1.522	0	.0	194	4.72	1.589	0	.0	240	4.92	1.444	0	.0	109	4.60	1.552	0	.0
		Q2b_2	RSMB22	543	4.97	1.423	0	.0	194	4.93	1.524	0	.0	240	5.08	1.309	0	.0	109	4.78	1.468	0	.0
		Q2b_3	RSMB23	543	4.38	1.473	0	.0	194	4.34	1.546	0	.0	240	4.54	1.319	0	.0	109	4.10	1.621	0	.0
		Q2b_4	RSMB24	543	4.63	1.420	0	.0	194	4.61	1.415	0	.0	240	4.97	1.332	0	.0	109	4.32	1.569	0	.0
		Q2b_5	RSMB25	543	4.40	1.467	0	.0	194	4.47	1.490	0	.0	240	4.50	1.411	0	.0	109	4.07	1.514	0	.0
		Q2b_6	RSMB26	543	4.76	1.451	0	.0	194	4.77	1.469	0	.0	240	4.81	1.425	0	.0	109	4.65	1.481	0	.0
Q2b_7	RSMB27	543	5.11	1.174	0	.0	194	5.14	1.213	0	.0	240	5.25	1.048	0	.0	109	4.75	1.299	0	.0		
Scale BDII	TRSMBII	543	4.72	.991	0	.0	194	4.71	1.034	0	.0	240	4.84	.875	0	.0	109	4.47	1.109	0	.0		

The 7-point Likert Scales were re-coded from 1 = (7) Strongly Agree; 2 = (6) Agree; 3 = (5) Somewhat Agree; 4 = (4) Neither Agree Nor Disagree; 5 = (3) Somewhat Disagree; 6 = (2) Disagree; 7 = (1) Strongly Disagree to 7 = (7) Strongly Agree, 6 = (6) Agree, etc. in the blue coloured questions. This avoided that respondents were suffering from a lack of concentration (survey fatigue).

Appendix H2

Missing Value Analysis Univariate Statistics (Continued)

Research Model Component	Qualtrics Question Statement	SPSS Variable	All Respondents					Three Sub-Samples															
			N	Mean	SD	MV	%	Vendor					Third Party					Buyer					
								N _v	Mean	SD	MV	%	N _{TP}	Mean	SD	MV	%	N _B	Mean	SD	MV	%	
Independent Variable: Business Development Process (Continued)	BD Process Phase III.	Q2c_1	SMB31	543	5.31	1.243	0	.0	194	5.36	1.197	0	.0	240	5.35	1.249	0	.0	109	5.14	1.301	0	.0
		Q2c_2	SMB32	543	4.91	1.459	0	.0	194	4.92	1.528	0	.0	240	5.02	1.341	0	.0	109	4.67	1.564	0	.0
		Q2c_3	SMB33	543	4.51	1.398	0	.0	194	4.47	1.455	0	.0	240	4.60	1.350	0	.0	109	4.37	1.399	0	.0
		Q2c_4	SMB34	543	4.76	1.420	0	.0	194	4.70	1.525	0	.0	240	4.88	1.334	0	.0	109	4.62	1.400	0	.0
		Q2c_5	SMB35	543	4.72	1.506	0	.0	194	4.88	1.458	0	.0	240	4.74	1.432	0	.0	109	4.39	1.700	0	.0
		Q2c_6	SMB36	543	4.91	1.439	0	.0	194	4.99	1.434	0	.0	240	5.02	1.358	0	.0	109	4.50	1.555	0	.0
		Q2c_7	SMB37	543	4.94	1.306	0	.0	194	4.97	1.321	0	.0	240	5.00	1.243	0	.0	109	4.72	1.400	0	.0
	Scale BDIII	TSMBIII	543	4.87	1.064	0	.0	194	4.90	1.081	0	.0	240	4.95	.995	0	.0	109	4.63	1.155	0	.0	
	BD Process Phase IV.	Q2d_1	RSMB41	543	4.63	1.431	0	.0	194	4.63	1.460	0	.0	240	4.68	1.446	0	.0	109	4.53	1.351	0	.0
		Q2d_2	RSMB42	543	4.58	1.388	0	.0	194	4.70	1.405	0	.0	240	4.59	1.329	0	.0	109	4.36	1.469	0	.0
		Q2d_3	RSMB43	543	4.69	1.378	0	.0	194	4.84	1.390	0	.0	240	4.72	1.295	0	.0	109	4.39	1.496	0	.0
		Q2d_4	RSMB44	543	4.73	1.389	0	.0	194	4.74	1.498	0	.0	240	4.80	1.349	0	.0	109	4.54	1.266	0	.0
		Q2d_5	RSMB45	543	4.91	1.449	0	.0	194	4.98	1.480	0	.0	240	4.94	1.375	0	.0	109	4.70	1.543	0	.0
		Q2d_6	RSMB46	543	4.03	1.586	0	.0	194	4.13	1.630	0	.0	240	4.10	1.521	0	.0	109	3.72	1.622	0	.0
Q2d_7		RSMB47	543	4.52	1.538	0	.0	194	4.62	1.560	0	.0	240	4.63	1.478	0	.0	109	4.13	1.576	0	.0	
Scale BDIV	TRSMBIV	543	4.59	1.055	0	.0	194	4.66	1.101	0	.0	240	4.64	.989	0	.0	109	4.34	1.088	0	.0		
Moderator Variables:	Social Capital	Q3a_1	SCAP1	543	5.05	1.405	0	.0	194	5.13	1.328	0	.0	240	4.98	1.463	0	.0	109	5.06	1.409	0	.0
		Q3a_2	SCAP2	543	4.98	1.293	0	.0	194	5.04	1.313	0	.0	240	5.01	1.224	0	.0	109	4.82	1.402	0	.0
		Q3a_3	SCAP3	543	4.83	1.259	0	.0	194	4.97	1.269	0	.0	240	4.78	1.225	0	.0	109	4.70	1.302	0	.0
		Q3a_4	SCAP4	543	5.22	1.124	0	.0	194	5.38	1.119	0	.0	240	5.22	1.060	0	.0	109	4.94	1.223	0	.0
		Q3a_5	SCAP5	543	4.62	1.406	0	.0	194	4.84	1.407	0	.0	240	4.49	1.399	0	.0	109	4.51	1.385	0	.0
		Q3a_6	SCAP6	543	4.95	1.406	0	.0	194	4.99	1.466	0	.0	240	4.97	1.344	0	.0	109	4.82	1.435	0	.0
		ScaleScap	TSCAP	543	4.94	.958	0	.0	194	5.06	1.010	0	.0	240	4.91	.887	0	.0	109	4.81	.999	0	.0
	Usage Criteria	Q3b_1	RUCRIT1	543	3.90	1.687	0	.0	194	3.99	1.685	0	.0	240	3.85	1.696	0	.0	109	3.87	1.678	0	.0
		Q3b_2	RUCRIT2	543	3.28	1.424	0	.0	194	3.20	1.435	0	.0	240	3.36	1.434	0	.0	109	3.26	1.384	0	.0
		Q3b_3	RUCRIT3	543	3.73	1.628	0	.0	194	3.75	1.679	0	.0	240	3.78	1.628	0	.0	109	3.57	1.536	0	.0
		Q3b_4	RUCRIT4	543	4.43	1.463	0	.0	194	4.28	1.459	0	.0	240	4.54	1.475	0	.0	109	4.44	1.437	0	.0
		Q3b_5	RUCRIT5	543	4.90	1.535	0	.0	194	5.02	1.525	0	.0	240	4.83	1.575	0	.0	109	4.83	1.463	0	.0
		Q3b_6	RUCRIT6	543	5.17	1.275	0	.0	194	5.28	1.290	0	.0	240	5.14	1.276	0	.0	109	5.02	1.240	0	.0
ScaleUcrit	TRUCRIT	543	4.23	.885	0	.0	194	4.25	.908	0	.0	240	4.25	.886	0	.0	109	4.17	.848	0	.0		

The 7-point Likert Scales were re-coded from 1 = (7) Strongly Agree; 2 = (6) Agree; 3 = (5) Somewhat Agree; 4 = (4) Neither Agree Nor Disagree; 5 = (3) Somewhat Disagree; 6 = (2) Disagree; 7 = (1) Strongly Disagree to 7 = (7) Strongly Agree, 6 = (6) Agree, etc. in the blue coloured questions. This avoided that the respondents were suffering from a lack of concentration (survey fatigue).

Appendix H3

Missing Value Analysis Univariate Statistics (Continued)

Research Model Component	Qualtrics Question Statement	SPSS Variable	All Respondents					Three Sub-Samples															
								Vendor					Third Party					Buyer					
			N	Mean	SD	MV	%	N _v	Mean	SD	MV	%	N _{TP}	Mean	SD	MV	%	N _B	Mean	SD	MV	%	
Dependent Variable: Business Performance	Social Media Impact	Q3c_1	PERF1	543	4.45	1.342	0	.0	194	4.53	1.366	0	.0	240	4.48	1.297	0	.0	109	4.26	1.390	0	.0
		Q3c_2	PERF2	543	4.64	1.290	0	.0	194	4.70	1.367	0	.0	240	4.69	1.199	0	.0	109	4.41	1.328	0	.0
		Q3c_3	PERF3	543	4.87	1.285	0	.0	194	4.92	1.362	0	.0	240	4.90	1.265	0	.0	109	4.70	1.182	0	.0
		Q3c_4	PERF4	543	5.00	1.243	0	.0	194	5.16	1.171	0	.0	240	5.00	1.236	0	.0	109	4.73	1.345	0	.0
		Q3c_5	PERF5	543	4.44	1.317	0	.0	194	4.61	1.358	0	.0	240	4.42	1.275	0	.0	109	4.18	1.299	0	.0
		Q3c_6	PERF6	543	4.22	1.377	0	.0	194	4.37	1.434	0	.0	240	4.26	1.290	0	.0	109	3.86	1.411	0	.0
		ScalePerf	TPERF	543	4.94	1.379	0	.0	194	5.06	1.010	0	.0	240	4.62	.987	0	.0	109	4.36	1.028	0	.0
		Q4b_1	RSMJU1	543	5.03	1.518	0	.0	194	5.19	1.029	0	.0	240	5.11	1.452	0	.0	109	4.56	1.668	0	.0
		Q4b_2	RSMJU2	543	5.07	1.427	0	.0	194	5.28	1.357	0	.0	240	5.23	1.335	0	.0	109	4.36	1.526	0	.0
		Q4b_3	RSMJU3	543	4.62	1.557	0	.0	194	4.72	1.544	0	.0	240	4.77	1.503	0	.0	109	4.12	1.061	0	.0
		ScaleRSMJU	TRSMJU	543	4.91	1.300	0	.0	194	5.06	1.272	0	.0	240	5.04	1.226	0	.0	109	4.35	1.343	0	.0
		Q4f	BENE	543	1.99	.827	0	.0	194	1.88	.756	0	.0	240	1.93	.815	0	.0	109	2.33	.893	0	.0
		Q4g	BENEP0	543	3.34	1.212	0	.0	194	3.27	1.227	0	.0	240	3.41	1.121	0	.0	109	3.31	1.372	0	.0
Q4g*	BENEP1	422	2.87	.936	121	22.3	152	2.80	.930	42	21.6	194	3.04	.901	46	19.2	76	2.58	.956	33	30.3		

The light blue coloured questions indicate the cases with missing values. The option Q4g* 'Don't know (at all)' was re-coded to 'Missing Value' to avoid misrepresented mean and standard deviation values. The blue frame highlights both variables, before (BENEP0) and after (BENEP1) the re-coding, for illustrative purposes. The original 5-point Likert Scale in Q4b was re-coded to align with the 7-point Likert Scale, e.g. (1) = 1.0, (2) = 2.5, (3) = 4.0, (4) = 5.5, and (5) = 7.0, whereby 1.0 = of no importance to 7.0 = of very great importance. The final version of the dependent variable: Business Performance included only Q3c and Q4b.

Appendix H4

Missing Value Analysis Univariate Statistics (Continued)

Accompanying Concepts	Qualtrics Question Statement	SPSS Variable	All Respondents					Three Sub-Samples														
								Vendor					Third Party					Buyer				
			N	Mean	SD	MV	%	N _v	Mean	SD	MV	%	N _{TP}	Mean	SD	MV	%	N _B	Mean	SD	MV	%
Platforms	Q2e_1	SMP1	543	2.10	1.272	0	.0	194	2.07	1.200	0	.0	240	2.08	1.280	0	.0	109	2.23	1.379	0	.0
	Q2e_2	SMP2	543	2.37	1.192	0	.0	194	2.33	1.180	0	.0	240	2.30	1.182	0	.0	109	2.59	1.219	0	.0
	Q2e_3	SMP3	543	1.89	1.262	0	.0	194	1.92	1.189	0	.0	240	1.81	1.255	0	.0	109	2.03	1.397	0	.0
	Q2e_4	SMP4	543	2.45	1.396	0	.0	194	2.41	1.297	0	.0	240	2.46	1.402	0	.0	109	2.49	1.555	0	.0
Three Sources of Information	Q2f_1	INFO1	543	25.68	21.268	0	.0	194	23.63	19.715	0	.0	240	25.61	21.788	0	.0	109	29.49	22.420	0	.0
	Q2f_2	INFO2	543	30.34	21.798	0	.0	194	29.29	20.635	0	.0	240	31.17	22.882	0	.0	109	30.39	21.481	0	.0
	Q2f_3	INFO3	543	2.69	8.295	0	.0	194	2.62	7.814	0	.0	240	2.42	8.308	0	.0	109	3.44	9.096	0	.0
	Q2f_4	INFO4	543	3.29	8.782	0	.0	194	4.95	11.324	0	.0	240	2.18	6.261	0	.0	109	2.80	7.947	0	.0
	Q2f_5	INFO5	543	3.64	9.694	0	.0	194	3.20	9.166	0	.0	240	4.43	10.428	0	.0	109	2.69	8.840	0	.0
	Q2f_6	INFO6	543	1.80	6.348	0	.0	194	1.30	5.035	0	.0	240	2.33	7.298	0	.0	109	1.50	6.156	0	.0
	Q2f_7	INFO7	543	1.25	6.119	0	.0	194	1.42	7.798	0	.0	240	1.17	4.999	0	.0	109	1.16	4.888	0	.0
	Q2f_8	INFO8	543	11.17	15.888	0	.0	194	10.82	15.335	0	.0	240	12.91	16.494	0	.0	109	7.94	15.065	0	.0
	Q2f_9	INFO9	543	5.05	11.958	0	.0	194	7.45	14.512	0	.0	240	3.25	8.718	0	.0	109	4.76	12.470	0	.0
	Q2f_10	INFO10	543	4.36	9.723	0	.0	194	4.22	9.193	0	.0	240	3.84	9.193	0	.0	109	5.87	11.821	0	.0
	Q2f_11	INFO11	539	8.95	14.275	0	.0	194	8.86	14.250	0	.0	240	9.12	14.429	0	.0	109	8.72	14.100	0	.0
	Q2f_12	INFO12	540	1.76	7.425	0	.0	194	2.24	7.647	0	.0	240	1.60	8.081	0	.0	109	1.26	5.188	0	.0
Underlying Constructs	Qualtrics Question Statement	SPSS Variable	All Respondents					Three Sub-Samples														
								Vendor					Third Party					Buyer				
			N	Mean	SD	MV	%	N _v	Mean	SD	MV	%	N _{TP}	Mean	SD	MV	%	N _B	Mean	SD	MV	%
Relational Commitment, Trust & Cooperation	Q3d_1	RRELC1	543	4.81	1.384	0	.0	194	4.89	1.378	0	.0	240	4.83	1.377	0	.0	109	4.60	1.402	0	.0
	Q3d_2	RRELC2	543	4.31	1.363	0	.0	194	4.44	1.373	0	.0	240	4.26	1.354	0	.0	109	4.17	1.358	0	.0
	ScaleRRELC	TRRELC	543	4.56	1.183	0	.0	194	4.67	1.207	0	.0	240	4.55	1.143	0	.0	109	4.38	1.215	0	.0
	Q3d_3	RTRU1	543	4.25	1.533	0	.0	194	4.26	1.592	0	.0	240	4.32	1.478	0	.0	109	4.06	1.541	0	.0
	Q3d_4	RTRU2	543	5.17	1.179	0	.0	194	5.13	1.230	0	.0	240	5.24	1.112	0	.0	109	5.10	1.232	0	.0
	ScaleRTRU	TRTRU	543	4.71	1.130	0	.0	194	4.69	1.204	0	.0	240	4.78	1.066	0	.0	109	4.58	1.125	0	.0
	Q3d_5	RCOO1	543	4.64	1.229	0	.0	194	4.60	1.252	0	.0	240	4.73	1.192	0	.0	109	4.53	1.266	0	.0
	Q3d_6	RCOO2	543	4.76	1.330	0	.0	194	4.77	1.304	0	.0	240	4.84	1.271	0	.0	109	4.53	1.482	0	.0
	ScaleRCOO	TRCOO	543	4.70	1.133	0	.0	194	4.69	1.100	0	.0	240	4.78	1.115	0	.0	109	4.53	1.218	0	.0

The 7-point Likert Scales were re-coded from 1 = (7) Strongly Agree; 2 = (6) Agree; 3 = (5) Somewhat Agree; 4 = (4) Neither Agree Nor Disagree; 5 = (3) Somewhat Disagree; 6 = (2) Disagree; 7 = (1) Strongly Disagree to 7 = (7) Strongly Agree, 6 = (6) Agree, etc. in the blue coloured questions. This avoided that the respondents were suffering from a lack of concentration (survey fatigue).

Missing Value Analysis Univariate Statistics (Continued)

Appendix H5

Underlying Constructs (Continued)	Qualtrics Question Statement	SPSS Variable	All Respondents					Three Sub-Samples														
								Vendor					Third Party					Buyer				
			N	Mean	SD	MV	%	N _v	Mean	SD	MV	%	N _{TP}	Mean	SD	MV	%	N _B	Mean	SD	MV	%
Social Media Affinity	Q5g_1	AFFN1	543	5.24	1.487	0	.0	194	5.34	1.471	0	.0	240	5.23	1.531	0	.0	109	5.07	1.412	0	.0
	Q5g_2	AFFN2	543	4.84	1.566	0	.0	194	4.98	1.461	0	.0	240	4.81	1.617	0	.0	109	4.66	1.623	0	.0
	Q5g_3	RAFFN3	543	5.09	1.505	0	.0	194	5.03	1.564	0	.0	240	5.19	1.477	0	.0	109	4.99	1.462	0	.0
	Q5g_4	RAFFN4	543	5.27	1.527	0	.0	194	5.35	1.447	0	.0	240	5.30	1.552	0	.0	109	5.06	1.606	0	.0
	Q5g_5	RAFFN5	543	5.78	1.414	0	.0	194	5.82	1.434	0	.0	240	5.83	1.404	0	.0	109	5.61	1.401	0	.0
	Q5g_6	AFFN6	543	5.57	1.220	0	.0	194	5.50	1.244	0	.0	240	5.57	1.279	0	.0	109	5.69	1.034	0	.0
	ScaleAFFN	TAFFN	543	5.30	.967	0	.0	194	5.34	.905	0	.0	240	5.32	1.008	0	.0	109	5.18	.980	0	.0

Themes within the Organization	Qualtrics Question Statement	SPSS Variable	All Respondents					Three Sub-Samples														
								Vendor					Third Party					Buyer				
			N	Mean	SD	MV	%	N _v	Mean	SD	MV	%	N _{TP}	Mean	SD	MV	%	N _B	Mean	SD	MV	%
Media within the Organisation	Q4c	STMU	543	1.89	.703	0	.0	194	1.90	.720	0	.0	240	1.86	.682	0	.0	109	1.94	.724	0	.0
	Q4d_1	AMOT1	543	2.32	.999	0	.0	194	2.18	1.028	0	.0	240	2.33	.958	0	.0	109	2.57	.994	0	.0
	Q4d_2	AMOT2	543	2.48	1.030	0	.0	194	2.33	1.045	0	.0	240	2.44	.962	0	.0	109	2.84	1.073	0	.0
	Q4d_3	AMOT3	543	3.02	1.080	0	.0	194	2.82	1.111	0	.0	240	2.92	1.011	0	.0	109	3.59	.983	0	.0
	ScaleAMot	TAMOT	543	2.61	.858	0	.0	194	2.44	.886	0	.0	240	2.56	.815	0	.0	109	3.00	.782	0	.0
	Q4e	EFF	543	1.92	.844	0	.0	194	1.81	.806	0	.0	240	1.85	.833	0	.0	109	2.23	.867	0	.0
	Q4h*	RDURPROC	464	2.31	1.402	79	14.5	168	2.57	1.334	26	13.4	199	2.27	1.490	41	17.1	97	1.93	1.244	12	11.0
	Q4i* Listwise	RDURMIN	526	6.70	6.295	17	3.1	188	7.22	6.835	6	3.1	233	6.15	5.688	7	.4	105	6.96	6.528	4	3.7
		RDURMAX	526	22.92	12.179	17	3.1	188	26.16	12.139	6	3.1	233	22.22	11.888	7	2.9	105	18.67	11.414	4	3.7
		RAVEDUR	526	14.81	7.872	17	3.1	188	16.69	8.032	6	3.1	233	14.19	7.455	7	2.9	105	12.81	7.847	4	3.7
	Q4j_1	ACT1	543	21.75	19.466	0	.0	194	21.88	19.671	0	.0	240	23.60	20.214	0	.0	109	17.44	16.719	0	.0
	Q4j_2	ACT2	543	41.55	21.479	0	.0	194	41.03	23.056	0	.0	240	40.71	20.633	0	.0	109	44.36	20.326	0	.0
	Q4j_3	ACT3	543	30.44	18.885	0	.0	194	29.30	18.734	0	.0	240	31.05	19.473	0	.0	109	31.13	17.882	0	.0
Q4j_4	ACT4	543	6.26	13.355	0	.0	194	7.79	15.899	0	.0	240	4.65	11.861	0	.0	109	7.07	11.017	0	.0	
Q4k*	RDEAL	389	3.90	2.049	154	28.4	149	4.80	1.712	45	23.2	162	3.20	2.000	78	32.5	78	3.65	2.125	31	28.4	

The light blue coloured questions indicate the cases with missing values. The options in Q4i* '0'; Q4h* and Q4k* 'Don't know (at all)' were re-coded to 'Missing Values' to avoid misrepresented mean and standard deviation values. The fomular used for the average duration RAVEDUR in Q4i* is (RDURMIN + RDURMAX) / 2. The formula for the Pooled Mean in Q4i* is (NV * Mean_v + NTP * Mean_{TP} + NTB * Mean_B) / (NV + NTP + NB); the fomular for the pooled Standard Deviation is $(((NV-1) * SDV^2 + (NTP-1) * SDTP^2 + (NB-1) * SDB^2) / (NV + NTP + NB - 3))^{0.5}$. Thereby, the listwise corrected values were taken into account.

Appendix H6

Missing Value Analysis Univariate Statistics (Continued)

Practical Relevance of Research	Qualtrics Question Statement	SPSS Variable	All Respondents					Three Sub-Samples														
								Vendor					Third Party					Buyer				
			N	Mean	SD	MV	%	N _v	Mean	SD	MV	%	N _{TP}	Mean	SD	MV	%	N _B	Mean	SD	MV	%
Project	Q6_a	CRIT1	543	3.20	1.027	0	.0	194	3.20	1.088	0	.0	240	3.08	.974	0	.0	109	3.47	.987	0	.0
	Q6_b	CRIT2	543	2.52	.878	0	.0	194	2.51	.906	0	.0	240	2.50	.848	0	.0	109	2.59	.895	0	.0

Withholding of Information Behaviour of the Respondents

Chi-Square Tests for Independence Q4k	Statistical Significance Criteria	Y = Yes N = No	Comment: Withholding of Information: 'Don't know.'
Software Deal Size by Company Size (N _T = 530)	$\chi^2 (9, n = 530) = 127.86$, $p = .000$, <i>Cramer's V</i> = .284 No violations.	Y	Small: 18.5%; Medium: 25.5%; Large-Sized Companies: 25.0%; Enterprises: 37.1%; Overall: 28.7%
Software Deal Size by Company Size (N _V = 188)	$\chi^2 (9, n = 188) = 48.67$, $p = .000$, <i>Cramer's V</i> = .294 *37.5% cells violated the assumption of minimum expected cell frequency	Y*	Small: 23.1%; Medium: 21.1%; Large-Sized Companies: 8.3%; Enterprises: 27.4%; Overall: 23.4%
Software Deal Size by Company Size (N _{TP} = 235)	$\chi^2 (9, n = 235) = 63.55$, $p = .000$, <i>Cramer's V</i> = .300 *31.3% cells violated the assumption of minimum expected cell frequency	Y*	Small: 18.0%; Medium: 25.9%; Large-Sized Companies: 46.7%; Enterprises: 52.4%; Overall: 32.8%
Software Deal Size by Company Size (N _B = 107)	$\chi^2 (9, n = 107) = 23.72$, $p = .005$, <i>Cramer's V</i> = .272 *62.5% cells violated the assumption of minimum expected cell frequency	Y*	Small: 11.1%; Medium: 33.3%; Large-Sized Companies: 29.4%; Enterprises: 33.3%; Overall: 29.0%
Significance Level $p < .05$ (alpha level) indicated a statistically significant result.			

Appendix H7

Sliders: Min + Max Duration by Perceived Ease of Use

Chi-Square Tests for Independence Q4i	Statistical Significance Criteria	Y = Yes N = No	Comment: Agree versus Indifferent and Disagree
<i>Two Sliders for Min and Max Duration by Perceived Ease of Use</i> (N _T = 530)	$\chi^2 (6, n = 530) = 13.85$, $p = .031$, <i>Cramer's V</i> = .114	Y	(1) ≤ 10 months: 66.5% vs. 33.5%; (2) > 10 months ≤ 20 months: 64.7% vs. 35.3%; (3) > 20 months ≤ 30 months: 52.4% vs. 47.6%; (4) > 30 months: 64.7% vs. 35.3%; (5) Total: 62.8% vs. 37.2%
(N _V = 188)	$\chi^2 (6, n = 188) = 6.06$, $p = .416$, <i>Cramer's V</i> = .127 *Violation: 2 cells less than 5	N	(1) 65.9% vs. 34.1%; (2) 58.4% vs. 41.6%; (3) 54.5% vs. 45.5%; (4) 64.3% vs. 35.7%; (5) Total: 59.6% vs. 40.4%
(N _{TP} = 235)	$\chi^2 (6, n = 235) = 2.79$, $p = .834$, <i>Cramer's V</i> = .077 *Violation: 2 cells less than 5	N	(1) 69.7% vs. 30.3%; (2) 65.4% vs. 34.6%; (3) 59.5% vs. 40.5%; (4) 69.2% vs. 30.8%; (5) Total: 66.0% vs. 34.0%
(N _B = 107)	$\chi^2 (6, n = 107) = 21.70$, $p = .001$, <i>Cramer's V</i> = .318 *Violation: 6 cells less than 5	Y	(1) 62.3% vs. 37.7%; (2) 82.1% vs. 17.8%; (3) 31.6% vs. 68.4%; (4) 57.1% vs. 42.9%; (5) Total: 61.7% vs. 38.3%
Significance Level $p < .05$ (alpha level) indicated a statistically significant result.			

Sliders: Min + Max Duration by Perceived Playfulness

Chi-Square Tests for Independence Q4i	Statistical Significance Criteria	Y = Yes N = No	Comment: Agree versus Indifferent and Disagree
<i>Two Sliders for Min and Max Duration by Perceived Playfulness</i> (N _T = 530)	$\chi^2 (6, n = 530) = 2.69$, $p = .847$, <i>Cramer's V</i> = .050 *Violation: 1 cell less than 5	N	(1) ≤ 10 months: 68.8% vs. 31.2%; (2) > 10 months ≤ 20 months: 66.5% vs. 33.5%; (3) > 20 months ≤ 30 months: 63.8% vs. 36.2%; (4) > 30 months: 76.5% vs. 23.5%; (5) Total: 67.4% vs. 32.6%
(N _V = 188)	$\chi^2 (6, n = 188) = 2.86$, $p = .826$, <i>Cramer's V</i> = .087 *Violation: 4 cells less than 5	N	(1) 75.6% vs. 24.4%; (2) 69.7% vs. 30.3%; (3) 72.7% vs. 27.3%; (4) 78.6% vs. 21.4%; (5) Total: 72.3% vs. 27.7%
(N _{TP} = 235)	$\chi^2 (6, n = 235) = 2.65$, $p = .852$, <i>Cramer's V</i> = .075 *Violation: 2 cells less than 5	N	(1) 67.1% vs. 32.9%; (2) 64.4% vs. 35.6%; (3) 59.5% vs. 40.5%; (4) 76.9% vs. 23.1%; (5) Total: 65.1% vs. 34.9%
(N _B = 107)	$\chi^2 (6, n = 107) = 2.61$, $p = .856$, <i>Cramer's V</i> = .110 *Violation: 6 cells less than 5	N	(1) 66.0% vs. 34.0%; (2) 64.3% vs. 35.7%; (3) 52.6% vs. 47.4%; (4) 71.4% vs. 28.6%; (5) Total: 63.6% vs. 36.4%
Significance Level $p < .05$ (alpha level) indicated a statistically significant result.			

Appendix I

Preliminary Analyses

Appendix I1

Crosstable: Survey Completion and Survey Submission

Is there a relationship between the time of survey completion and the timing of survey submission?

Time of Survey Completion * The timing of Survey Submission	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
	543	100.0%	0	0.0%	543	100.0%

Time of Survey Completion * Timing of Survey Submission Cross Tabulation

Time of Survey Completion	The timing of Survey Submission			Total	
	(1) within five days	(2) within ten days	(3) after ten days		
(1) Within 30 Minutes	Count	249	0	0	249
	% of the time to complete	100.0%	0.0%	0.0%	100.0%
	% within timing to submit	49.6%	0.0%	0.0%	45.9%
	% of Total	45.9%	0.0%	0.0%	45.9%
(2) Within 60 Minutes	Count	142	0	0	142
	% of the time to complete	100.0%	0.0%	0.0%	100.0%
	% within timing to submit	28.3%	0.0%	0.0%	26.2%
	% of Total	26.2%	0.0%	0.0%	26.2%
(3) More than 1 hour	Count	111	20	21	152
	% within time to complete	73.0%	13.2%	13.8%	100.0%
	% within timing to submit	22.1%	100.0%	100.0%	28.0%
	% of Total	20.4%	3.7%	3.9%	28.0%
Total	Count	502	20	21	543
	% of the time to complete	92.4%	3.7%	3.9%	100.0%
	% within timing to submit	100.0%	100.0%	100.0%	100.0%
	% of Total	92.4%	3.7%	3.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	114.081 ^a	4	.000
Likelihood Ratio	113.442	4	.000
Linear-by-Linear Association	77.833	1	.000
N of Valid Cases	543		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.23.

Appendix I2

Symmetric Measures

		Value	Asymptotic Standardized Error ^a	Approximate T ^b	Approximate Significance
Nominal by Nominal	Phi	.458			.000
	Cramer's V	.324			.000
Interval by Interval	Pearson's R	.379	.027	9.525	.000 ^c
Ordinal by Ordinal	Spearman Correlation	.383	.028	9.650	.000 ^c
N of Valid Cases		543			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Obtained Results

This partial study aimed at identifying a statistically significant association, referring to the time of survey completion and the timing of survey submission.

According to Gravetter and Wallnau (2004,605), the findings from the chi-square test for independence suggested reporting the value of Cramer's V instead of the Phi Coefficient with a three by three table. For this research, the lesser value of either R-1 or C-1 (here: 3-2 or 3-2) equal to 2 applies with effect sizes .07 for a small, .21 a medium and .35 for a large effect.

The (Pearson) Chi-square test for independence indicated that there existed a significant association between the time to complete and the timing to submit the survey, Pearson $\chi^2 (4, n = 543) = .000$, *Cramer's V* = .324. The effect size of Cramer's V was slightly lower than the maximal V = .35 for three categories. Dependent on whether interval by interval or ordinal by ordinal scales are assumed the Pearson's R = .379 or Spearman = .383 applies.

Gravetter, F J and Wallnau, L B (2004) *Statistics for the behavioral Sciences* (6th edn.). Belmont, CA: Wadsworth.

Appendix I3

Test of Equality of Means Example Q4k

One-way ANOVA was used to compare the three sub-samples, i.e. wave-levels (independent, categorical variables) against SWDEAL (the dependent, continuous variable) Q4k. One-way ANOVA might reveal whether significant differences in the mean scores of SWDEAL across the WAVE sub-sample existed. Descriptive statistics for the sub-samples indicated that the average *software transactions* tend to be slightly lower with *early* submitted responses illustrated below.

Descriptives

Q4k SW Deal (SW = Software Solutions and/or Services) including Option 9 = don't know

Submission of Survey	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
(1) Within 5 days	502	5.33	2.871	.128	5.07	5.58	1	9
(2) Within 10 days	20	5.85	3.265	.730	4.32	7.38	1	9
(3) After 10 days	21	5.43	2.785	.608	4.16	6.70	1	9
Total	543	5.35	2.879	.124	5.11	5.59	1	9

Test of Homogeneity of Variances

ANOVA

Q4k SW Deal (SW = Software Solutions and/or Services) including Option 9 = don't know

Levene Statistic	df1	df2	Sig.	Sum of Squares	df	Mean Square	F	Sig.
1.140	2	540	.321	Between Groups	5.402	2	2.701	.325
				Within Groups	4488.115	540	8.311	.723
				Total	4493.517	542		

Post-hoc tests aimed to identify the location of any significant differences. Reviewing the sub-sample size levels, it became evident that the 2nd and 3rd groups were underrepresented ($n < 200$).

To examine whether the score variance was identical for each sub-sample, a Levene's test of variances-homogeneity was performed. With a Significance value of .321 ($> .05$) one could assume that the data did not violate the assumption of homogeneity of variance.

The ANOVA table demonstrated a p-value of .723 ($> .05$) which indicated a non-significant difference somewhere among the mean scores on SWDEAL (dependent variable) for the wave levels, (Pallant, 2013). Therefore the robust tests of Equality of Means, Welch and Brown-Forsythe, could be neglected.

Robust Tests of Equality of Means

Q4k SW Deal (SW = Software Solutions and/or Services) including Option 9 = don't know

	Statistic ^a	df1	df2	Sig.
Welch	.253	2	27.888	.778
Brown-Forsythe	.294	2	40.411	.747

Sig. $> .05$ suggested that there was no significant difference between the mean scores of the dependent variable for the three groups.

a. Asymptotically F distributed.

Appendix I4

Multiple Comparisons

Q4k SW Deal (SW = Software Solutions and/or Services) including Option 9 = don't know

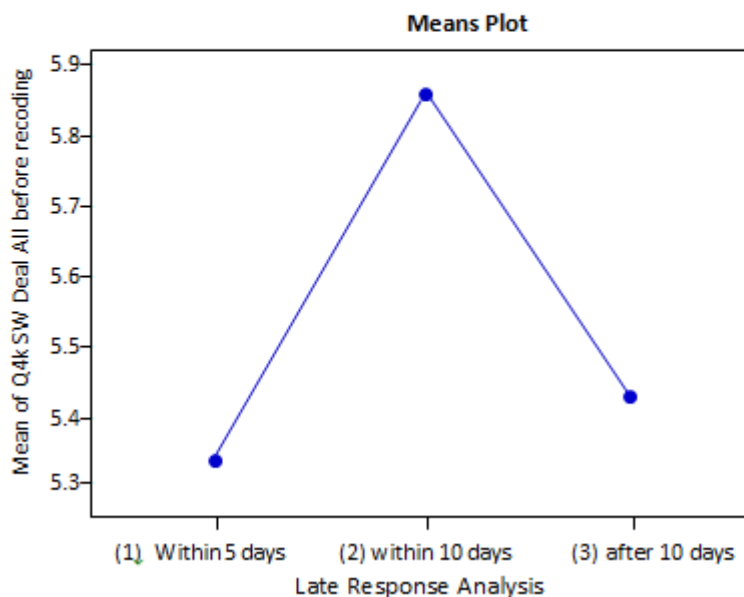
Tukey HSD

(I) Late Response Analysis	(J) Late Response Analysis	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
(1) Within 5 days	(2) Within 10 days	-.523	.657	.706	-.207	1.02
	(3) After 10 days	-.102	.642	.986	-1.61	1.41
(2) Within 10 days	(1) Within 5 days	-.523	.657	.706	-1.02	2.07
	(3) After 10 days	-.421	.901	.886	-1.70	2.54
(3) After 10 days	(1) Within 5 days	.102	.642	.986	-.45	1.61
	(2) After 10 days	-.421	.901	.886	-.67	1.70

The post-hoc tests signaled that no significant differences among the sub-samples existed ($p > .05$).

The Means Plot illustrated a comparison of the means scores for the different sub-samples (waves).

Though the differences looked substantially on the graph, the actual differences were very small (5.33, 5.43, and 5.85). It was stated before that there was no significant difference detectable.



Outcome from one-way between-groups ANOVA with post hoc comparisons

A one-way between-groups analysis of variance was conducted to explore the impact of Late Response Analysis on answering Q4k. Respondents were divided into three groups or sub-samples according to the waves (1) Early or within five days, (2) Regular or within 10 days, (3) Late or after 10 days. There was no statistically significant difference at the $p < .05$ level in answering Q4k for the three sub-samples. $F(2, 540) = .325, p = .723$. The actual difference in mean scores between the sub-samples was small. The effect size using eta squared was .001. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for 1 ($M = 5.33, SD = 2.87$) was not significantly different from 3 ($M = 5.43, SD = 2.79$). Likewise, Sub-sample 2 ($M = 5.85, SD = 3.27$) differed not significantly from either 1 or 3.

$$\text{Eta squared} = \frac{\text{Sum of squares between groups}}{\text{Total sum of squares}} = \frac{5.402}{4493.517} \approx .001$$

Cohen (1988) proposed guidelines for interpreting Eta squared .01 as a small effect; .06 as a medium effect; .14 as a large effect.

Appendix I5

A **multiple regression analysis** was conducted to understand how well the independent variables (predictors) consisting of Region, Size of Business, Current Career Level, Function in Organisation, Generation, Job Experience and Education were able to predict the three waves of response (outcome) dependent variable. The dependent variable was deemed as 'continuous' due to the underlying completion time though it could be argued that it was 'categorical' by its nature (Pallant, 2013,175).

Preceding the regression analysis the sample size was reviewed: sample sizes of > 106 based on seven independent variables (predictors) were required for generalisability, (Tabachnick and Fidell, 2013). This requirement was with 543 cases fulfilled.

Descriptive Statistics

<i>Dependent Variable and Predictors</i>	Mean*	Std. Deviation**	N
<i>Late Response Analysis</i>	1.11	.423	543
Region	3.31	1.862	543
Size of Business	2.74	1.332	543
Career Level	2.45	1.142	543
Organisational Function	4.75	2.393	543
Employer (e.g. Vendor)	1.84	.731	543
Generation	3.03	.547	543
Education	3.80	.752	543

Examining Multicollinearity included first reviewing the correlation-matrix regarding relationships between (outcome variable) and the seven predictors whereby guidelines suggested values [above .3](#).

Correlations

Pearson Correlation	Late Response Analysis	Region	Size of Business	Career Level	Org. Function	Employer	Generation	Education
<i>Late Response Analysis</i>	1.000							
Region	-.007	1.000						
Size of Business	-.027	-.084	1.000					
Career Level	.005	-.109	.444	1.000				
Org. Function	.001	.013	-.120	-.226	1.000			
Employer	-.020	.087	-.024	-.057	.107	1.000		
Generation	-.049	-.166	-.170	-.250	.098	.028	1.000	
Education	-.054	.084	-.006	-.074	.154	.042	.053	1.000
Sig. (1-tailed)	Late Response Analysis	Region	Size of Business	Career Level	Org. Function	Employer	Generation	Education
<i>Late Response Analysis</i>	.							
Region	.436	.						
Size of Business	.268	.026	.					
Career Level	.456	.006	.000	.				
Org. Function	.487	.386	.003	.000	.			
Employer	.324	.022	.287	.091	.006	.		
Generation	.126	.000	.000	.000	.011	.261	.	
Education	.104	.025	.442	-.043	.000	.162	.108	.

Appendix I6

The predictors (region, size of business, career level, organisational function, employer, generation and education) clearly indicated no correlations ($\leq .054$) with the Late Response Analysis.

The analysis of bivariate correlations between the predictors showed that the values did not raise any concern: the highest correlation career level and size of business (.444) was well below the suggested guideline of .7.

Coefficients^a

Model	Unstandardized Coefficients		Standard. Coeffic.	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	St. Error	Beta			Lower Bound	Upper Bound	Zero Order	Partial	Part	Tolerance	VIF
1 (Constant)	1.398	.171		8.173	.000	1.062	1.734					
Region	-.003	.010	-.013	-.293	.770	-.023	.017	-.007	-.013	-.013	.931	1.074
Size of Business	-.012	.015	-.038	-.795	.427	-.042	.018	-.027	-.034	-.034	.795	1.258
Career Level	.002	.019	.005	.099	.921	-.035	.038	.005	.004	.004	.734	1.363
Org. Function	.002	.008	.013	.292	.770	-.013	.018	.001	.013	.013	.919	1.088
Employer	-.010	.025	-.017	-.388	.698	-.059	.040	-.020	-.017	-.017	.980	1.021
Generation	-.042	.035	-.055	-1.198	.231	-.112	.027	-.049	-.052	-.052	.890	1.124
Education	-.029	.025	-.051	-1.169	.243	-.077	.020	-.054	-.050	-.050	.965	1.037

a. Dependent Variable: *Late Response Analysis*

Collinearity Statistics like Tolerance and Variance Inflation Factor (VIF) served as further analyses for Multicollinearity. Tolerance indicated how much variability of the specified predictors was not explained by others in the model, calculated as $(1 - R^2)$ for each predictor. With scores as low as .734 (Guideline: Tolerance < .10) and as high as 1.363 (VIF Cut-off > 10) it was revealed that the assumption of multicollinearity was not violated.

Diagnostics to check underlying assumptions

To comply with assumptions of normality, outliers, linearity, homoscedasticity and independence of residuals several outputs were inspected.

Reviewing the Normal P-P Plot of the Regression Standardised Residual showed data points positioned in the form of a reasonable straight diagonal line from bottom left to top right. This indicated no major deviations from normality.

Likewise, the Scatterplot suggested a slight deviation from normality: the standardised residuals were roughly distributed in parallel lines (Pallant, 2013) with outliers (standardised residuals of > +3.3) (Tabachnick and Fidell, 2013). The outliers were evaluated with the Mahalanobis Distances and Cook's Distance in the Residuals Statistics.

Appendix I7

Residual Statistics^a

Values	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.02	1.24	1.11	.035	543
Std. Predicted Value	-2.669	3.470	.000	1.000	543
Standard Error of Predicted Value	.023	.098	.050	.012	543
Adjusted Predicted Value	.99	1.25	1.11	.036	543
Residual	-.237	1.922	.000	.421	543
Std. Residual	-.588	4.532	.000	.994	543
Stud. Residual	-.569	4.573	.000	1.000	543
Deleted Residual	-.246	1.958	.000	.427	543
Stud. Deleted Residual	-.569	4.661	.003	1.015	543
Mahalanobis Distance	.578	28.195	6.987	4.028	543
Cook's Distance	.000	.084	.002	.007	543
Centered Leverage Value	.001	.052	.013	.007	543

a. Dependent Variable: *Late Response Analysis*

The maximum Mahalanobis Distance of 28.19 exceeded the critical chi-square value of 24.32 using seven predictors as degrees of freedom. This measure allowed the multivariate assessment of each observation across a set of variables. Higher D^2 values represented observations farther removed from the general distribution of observations. The Mahalanobis D^2 -measure consists of statistical properties allowing for significance testing. The D^2 -measure divided by the number of variables involved, e.g. $\max D^2 = 28.195$ from (MAH_1 column in SPSS Datafile) divided by 7 equalled about 4.03. Threshold levels for the D^2/df measure should be conservative .005 or .001 resulting in values of 3 or 4 (large samples). Values exceeding these threshold levels could be designated as outliers. These might be retained or deleted (Hair et al., 2010,66-67).

Casewise Diagnostics^a

Case Number	Std. Residual	Late Response Analysis	Predicted Value	Residual
365	4.274	3	1.19	1.813
369	4.409	3	1.13	1.870
389	4.529	3	1.08	1.921
398	4.472	3	1.10	1.897
401	4.462	3	1.11	1.893
406	4.499	3	1.09	1.908
408	4.532	3	1.08	1.922
416	4.407	3	1.13	1.869
431	4.454	3	1.11	1.889
438	4.490	3	1.10	1.905
439	4.391	3	1.14	1.862
445	4.409	3	1.13	1.870
448	4.428	3	1.12	1.878
458	4.392	3	1.14	1.863
468	4.397	3	1.14	1.865
469	4.444	3	1.12	1.885
479	4.476	3	1.10	1.899
483	4.409	3	1.13	1.870
499	4.422	3	1.12	1.875
502	4.234	3	1.20	1.796
532	4.305	3	1.17	1.826

21 Outlier Cases with Std. Residuals above 3.0

a. Dependent Variable: *Late Response Analysis*

The Casewise Diagnostic table listed 3.87% (21 of 543 cases) outliers with standardised residual values outside the ± 3.3 guideline. For example, case 365 recorded a late submission (3) whereas the model predicted an early submission (1.19) for this case.

Appendix I8

The number of outliers (3.87%) was out of the scope of the expectations (1%) for normality. Yet, the Cook's Maximum Distance of .084 (≤ 1.0) did not reflect any undue impact of the outliers on the outcome of the model. Finally, as it could not be confirmed that outliers were non-representative of observations in the population, the decision was made for retention.

Model Fit

The Model Summary below contained the information to evaluate the model. The R Square indicated how much variance in the outcome variable *Late Response Analysis* was explained by the model, i.e. R Square = .007 suggested that the model accounted for just 0.7% of the variance in the *Late Response Analysis*. The ANOVA table illustrating the model's statistical significance assessment – tested the null hypothesis that *multiple R in the population equalled zero*. The model did not reach statistical significance (Sig. = .808).

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.083 ^a	.007	-.006	.424

a. Predictors: (Constant) Region, Size of Business, Career Level, Organizational Function, Employer, Generation, and Education

b. Dependent Variable: *Late Response Analysis*

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.674	7	.096	.535	.808 ^b
	Residual	96.247	535	.180		
	Total	96.921	542			

a. Predictors: (Constant) Region, Size of Business, Career Level, Organizational Function, Employer, Generation, and Education

b. Dependent Variable: *Late Response Analysis*

No Impact of independent variables

The Coefficients table (Appendix I6) reflected how well each independent variable contributed to predicting the outcome variable *late response analysis* in the equation.

Standardised Beta coefficients ensured that different predictors were converted to the same scale to be comparable (unstandardised were used to create the regression equation). In order of the importance of their beta coefficients, Generation (.055) – made the strongest unique contribution to explain the *Late Respondent Analysis* when the variance explained by all other predictors was controlled for (Pallant, 2013) – followed by Education (.051), Size of Business (.031), etc.

Standardised Beta values indicated the number of standard deviations, e.g. (.423) that scores in the dependent variable *Late Respondent Analysis* would change if one standard deviation unit changed in the predictor Generation (.547), Appendix I5.

Glancing over the column Sig. revealed none of the predictors made any statically significant contributions to the prediction of *Late Response Analysis*

The squared part correlation coefficients listed below ranked the unique contributions (without any overlap or shared variance) of the predictors to the total R square (.7%).

Appendix I9

Individual Contributions of Predictors to total R square

Predictors	Squared Part Correlation Coefficients	Ranking Contribution in % (Rounded Values)	Significance? Yes/No
Generation	-.052 ²	.270	No
Education	-.050 ²	.250	No
Size of Business	-.034 ²	.116	No
Employer	-.017 ²	.029	No
Region	-.013 ²	.017	No
Organisational Function	.013 ²	.017	No
Career Level	.004 ²	.002	No

a. Dependent Variable: *Late Response Analysis*

Overall, the explored relationship between the *Late Response Analysis* and *Demographics* might be commented that the regressions model outcome only explained .7% of the variance in *Late Response Analysis* leaving 99,993% unexplained. Of the predictors, Generation (beta = -.055, t = -1.198, p = .231) explained uniquely only around .27% with 99.73% being explained by other aspects. Yet, this outcome was of no statistical significance!

Appendix I10

Assessing Normality

Descriptive Statistics prepare for explaining sample characteristics and data distributions. Sample size plays a substantial impact in affecting statistical significance: smaller groups < 200 (e.g. 194 vendor or 109 buyer responses) might question the generalisability since the results might be unusually good, while larger representations $n > 400$, (e.g. 543 respondents) might inflate the statistical power challenging practical significance of the results, (Hair Jr. et al., 2011).

Descriptive Statistics for Scale Variables: The quasi-continuous variables were analyzed for measures of location, i.e. mean and mode as well as measures of dispersion like standard deviation and variance for the entire sample $N = 543$ and the in Q4a determined sub-samples (McBain, 2013).

Descriptive Statistics

Scale Variable	N	Min.	Max.	Mean	Std. Dev.	Skewness		Kurtosis	
	Stat.	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TISMBU (Total Social Media Usage)	N _T 543	1	7	3.59	1.305	.141	.105	-.771	.209
	N _V 194	1	7	3.67	1.290	.011	.175	-.879	.347
	N _{TP} 240	1	7	3.62	1.274	.069	.157	-.738	.313
	N _B 109	1	7	3.39	1.389	.526	.231	-.438	.459

TISMBU (Total Inclination towards Social Media Business Usage) provides figures from 543 respondents, ranging in the answer option between 1 = never to 7 = daily, with mean of 3.59 once to a couple of times per months and a Standard Deviation of about 1.305.

Reviewing the various samples, the values for Mean and Standard Deviation tended to decrease across the three sub-samples Vendors (N_V) Third Party (N_{TP}) and Buyers (N_B). The assessment of Skewness (Symmetry) and Kurtosis (Peakedness) indicated no deviations from a normal distribution. Within reasonable large sample ($N > 200$), the analysis will not substantially differentiate by Skewness; the risk of variance underestimation is mitigated by Kurtosis (Tabachnick and Fidell, 2013).

TISMBU reflected values within the guideline (Skewness $\leq \pm 1.0$; Kurtosis $\leq \pm 3.0$)

Case Processing Summary

Scale Variable	Cases					
	Valid		Missing		Total	
	N _T	Percent	N _T	Percent	N _T	Percent
	543	100.0%	0	0.00%	543	100.00
Descriptive Statistics					Statistic	Std. Error
Total Inclination towards Social Media Business Usage (TISMBU)	Mean				3.59	.056
	95% Confidence Interval for Mean	Lower Bound			3.48	
		Upper Bound			3.70	
	5% Trimmed Mean				3.58	
	Median				3.50	
	Variance				1.704	
	Std. Deviation				1.305	
	Minimum				1	
	Maximum				7	
	Range				6	
	Interquartile Range				2	
	Skewness				.141	.105
Kurtosis				-.771	.209	

TISMBU (1) Never (2) Less than monthly (3) Once per month (4) A couple of times per month (5) Weekly (6) A couple of times per week (7) Daily

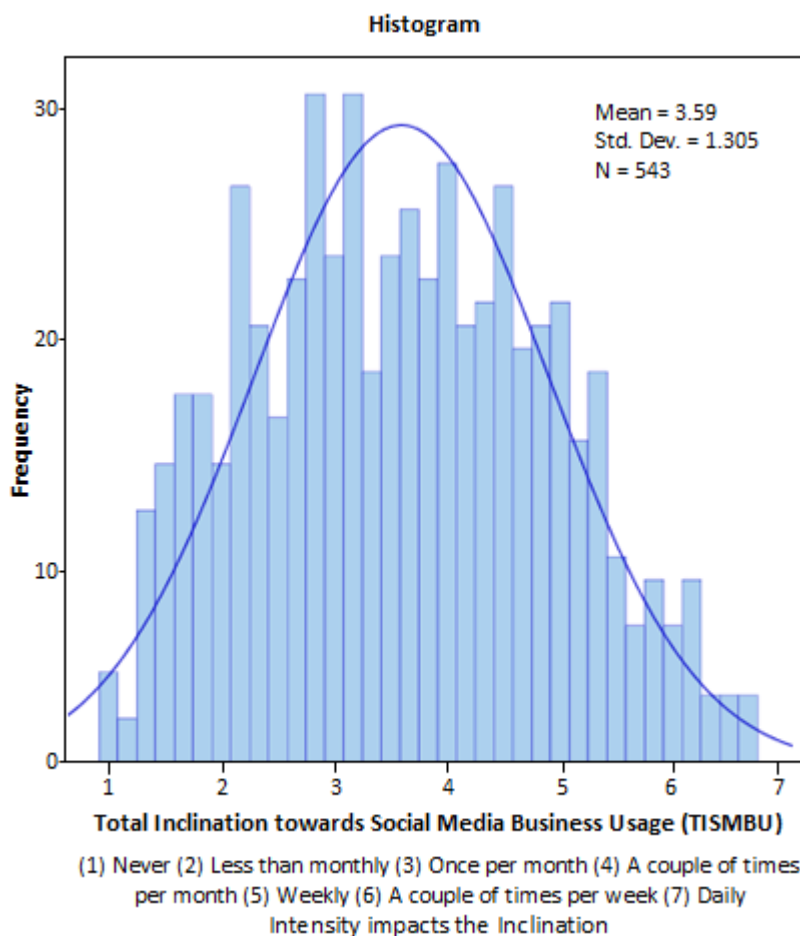
Appendix I11

The *Central Limit-Theorem* for large samples states that for independent random observations from populations (mean μ ; finite variance σ^2) the mean-distribution is approximately normal (mean μ ; variance σ^2/n). The larger the sample size, the better the sample mean estimates the population mean, (McBain, 2013).

The Confidence Interval denotes if the respondents represent a sample of the larger population, that the average TISMBU in the sample amounts to 3.59 with a 95%-probability that the overall average TISMBU of the population is somewhere from 3.48 to 3.70. Based on sample data researchers can be therefore 95% confident, that the 'true' average TISMBU in population) is approximately between 3.5 and 3.7. If additional 100 samples were taken, 95 times out of 100, the average TISMBU in the population would be in this range, i.e. between once per month and a couple of times per month.

The standard error .056 equals standard deviation 1.305 divided by the square root of $n = 543$. The margin of error (.11) is obtained by Δ (Upper Bound – Mean) or Δ (Mean – Lower Bound) or by multiplying the standard error .056 by z-value of the 95% CI, (1.96).

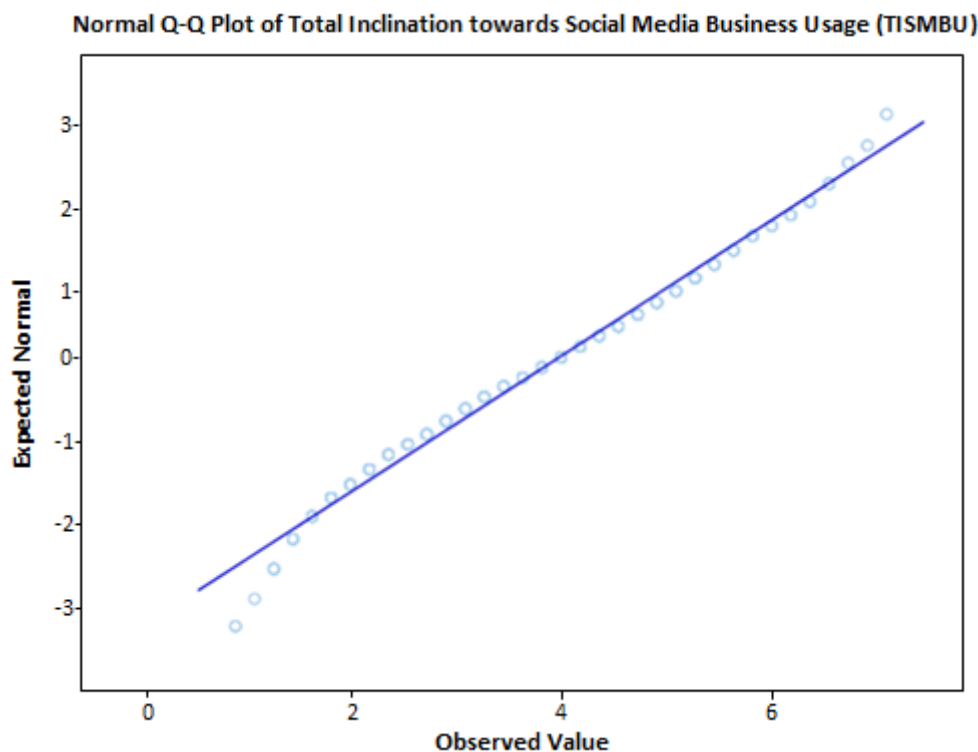
Normality and Outliers: To run statistical analyses of the scale variables, e.g. TISMBU successfully, it is suggested examining potential violation of normal assumptions and identifying outliers. A first glance of the actual shape distribution of scale variables is obtained by a histogram which plots observation values on the horizontal axis with a vertical bar demonstrating how frequent each value appears in the data set (Field, 2013).



Appendix I12

The *shape of the histogram* suggests that the TISMBU scale variable is reasonably normal distributed (with most scores centred, tapering out towards the extremes. Few respondents indicated above average values in terms of a very irregular Inclination towards Social Media Business Usage while others stood out for below average values in terms of once up to a couple of times per month Inclination towards Social Media Business Usage. Superior values were again identified at a very regular Inclination towards Social Media Business Usage level.

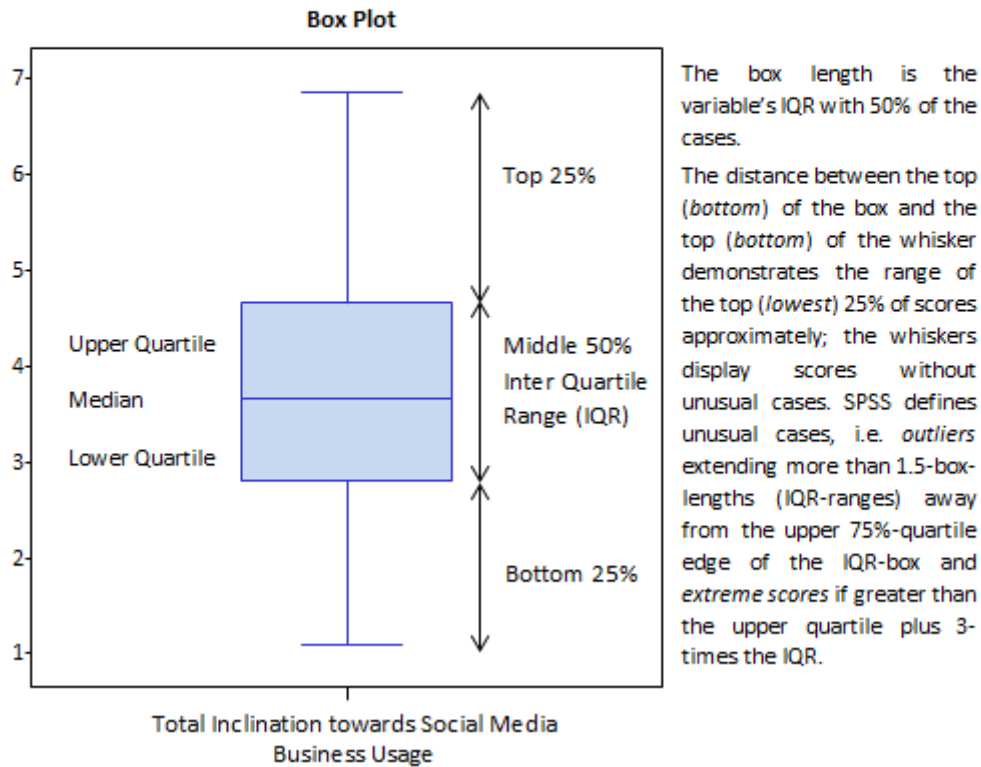
The normality assumption is also supported by the *Normal Q-Q Plot* of Total Inclination towards Social Media Business Usage demonstrating a reasonably straight line where the *observed value* of each score is plotted against the *expected value* from the normal distribution.



- Field, A (2013) *Discovering Statistics using IBM SPSS Statistics* (4th edn.). SAGE Publications Ltd.
- Hair, J F, Black, W C, Babin, B J and Anderson, R E (2010) *Multivariate Data Analysis: A Global Perspective* (7th edn.). Prentice-Hall, Upper Saddle River, NJ.
- Hair Jr., J F, Celsi, M W, Money, A H, Samouel, P and Page, M J (2011) *Essentials of Business Research Methods* (2nd edn.). ME Sharpe.
- McBain, R (2013) 'A Basic Introduction to Using SPSS in Quantitative Data Analysis'. In: *Quantitative Techniques Workshop*, Henley Business School, 11-16 November.
- Pallant, J (2013) *SPSS Survival manual - a step by step guide to data analysis using IBM SPSS*. Berkshire, England: McGraw-Hill Education.
- Tabachnick, B G and Fidell, L S (2013) *Using Multivariate Statistics*. Boston: Pearson Education.

Appendix I13

The results of the boxplot indicated *reasonable normality*. There were no unusual cases or *outliers* and no violation of normality. The trimmed mean (3.58) and original mean (3.59) were nearly identical. The distances of the whiskers and media in the 50%-IQR were similar likewise the whiskers depicting top/bottom scores. The highest (lowest) value – not outliers in the data set is 7 (1). Thus, a fit for normality exists.



Problematic outliers can be identified by comparing the 5%-Trimmed Mean (exclusion of 5% top/bottom cases) with the original mean. The trimmed mean is obtained in IBM-SPSS by removing the top and bottom 5% of the cases. Since **both mean values are quite similar**, outliers will be retained (Pallant, 2013).

Comparison of Trimmed Mean and Sample Mean

Scale Variables	Descriptive Statistics	
	5% Trimmed Mean	Sample Mean
TISMBU	3.58	3.59

The Kolmogorov-Smirnov Statistics indicate a **violation** of normality of the scale variable.

Test of Normality

Scale Variable	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
TISMBU	.061	543	.000	.982	543	.000

a. Lilliefors Significance Correction

Kolmogorov-Smirnov-Statistics (Sig. value of .000) for the scale variable suggests a violation of normality which is common for larger samples.

(Non-significant Sig. values > .05 would suit Normality).

Appendix I14

Outcome for the Total Sample $N_T = 543$

Question	Construct Scale Variable	Assessment of Normality					
		Graphical		Numerical			
		Histogram Normality Plot	Boxplot Outliers	Skewness Value	Kurtosis Value	5% Trimmed Mean vs. Sample Mean	Kolmogorov-Smirnov Sig.
Q1g	TISMBU	Reasonable Fit	0	.141	-.771	Δ .01 In Scope	.000
Q1h	TRHSMBU	Reasonable Fit	0	.235	-0.960	Δ .04 In Scope	.000
Q2a	TSMBI	Reasonable Fit	10	-.361	.493	Δ .02 In Scope	.001
Q2b	TRSMBII	Reasonable Fit	8	-.735	.683	Δ .05 In Scope	.000
Q2c	TSMBIII	Reasonable Fit	6	-.574	.298	Δ .03 In Scope	.000
Q2d	TRSMBIV	Reasonable Fit	4	-.318	-.038	Δ .02 In Scope	.000
Q3a	TSCAP	Reasonable Fit	6	-.497	.356	Δ .03 In Scope	.000
Q3b	TRUCRIT	Reasonable Fit	5	-.093	.243	Δ .01 In Scope	.000
Q3c	TPERF	Reasonable Fit	9	-.460	.494	Δ .03 In Scope	.000
Q3d	TRRELC	Reasonable Fit	5	-.425	-.085	Δ .03 In Scope	.000
Q3d	TRTRU	Reasonable Fit	2	-.348	-.190	Δ .03 In Scope	.000
Q3d	TRCOO	Reasonable Fit	6	-.626	.301	Δ .05 In Scope	.000
Q4b	TRSMJU	Reasonable Fit	7	-.777	.604	Δ .06 In Scope	.000
Q4d	TAMOT	Reasonable Fit	6	.437	.103	Δ .03 In Scope	.000
Q5g	TAFFN	Reasonable Fit	7	-.676	.382	Δ .04 In Scope	.000

- The Histogram and Normality Plots demonstrated a reasonable normality fit.
- If the distribution was *perfectly normal*, the Skewness and Kurtosis value would be zero.
- **Negative (Positive)** Skewness values indicated a clustering of scores on the **right-(left-)** hand side of the histogram. **Negative (Positive)** Kurtosis revealed a rather **flat (peaked)** distribution.
- The outcome showed that the Skewness and Kurtosis values were within the guidelines (Skewness $\leq \pm 1.0$; Kurtosis $\leq \pm 3.0$) and irrelevant with min and max values being coloured.
- Kolmogorov-Smirnov: The Null Hypothesis is that the scale variable has a normal distribution with a specific population mean and standard deviation.
- The Kolmogorov-Smirnow Test applies usually for smaller samples ($n \leq 100$). The Sig. value of $\leq .05$ indicated a violation of normality which was expected for a larger sample size.

Outcome for the Vendor Sample $N_V = 194$

Question	Construct Scale Variable	Assessment of Normality					
		Graphical		Numerical			
		Histogram Normality Plot	Boxplot Outliers	Skewness Value	Kurtosis Value	5% Trimmed Mean vs. Sample Mean	Kolmogorov-Smirnov Sig.
Q1g	TISMBU	Reasonable Fit	0	.011	-.879	Δ .00 In Scope	.033
Q1h	TRHSMBU	Reasonable Fit	0	.298	-0.912	Δ .05 In Scope	.000
Q2a	TSMBI	Reasonable Fit	2	-.563	.587	Δ .03 In Scope	.009
Q2b	TRSMBII	Reasonable Fit	1	-.696	.263	Δ .05 In Scope	.000
Q2c	TSMBIII	Reasonable Fit	1	-.541	-.183	Δ .04 In Scope	.001
Q2d	TRSMBIV	Reasonable Fit	1	-.252	-.235	Δ .02 In Scope	.009
Q3a	TSCAP	Reasonable Fit	1	-.524	.105	Δ .03 In Scope	.001
Q3b	TRUCRIT	Reasonable Fit	3	-.096	.516	Δ .01 In Scope	.008
Q3c	TPERF	Reasonable Fit	4	-.270	.225	Δ .01 In Scope	.026
Q3d	TRRELC	Reasonable Fit	2	-.473	-.279	Δ .04 In Scope	.000
Q3d	TRTRU	Reasonable Fit	1	-.382	-.154	Δ .03 In Scope	.000
Q3d	TRCOO	Reasonable Fit	2	-.472	-.027	Δ .03 In Scope	.000
Q4b	TRSMJU	Reasonable Fit	5	-.599	-.045	Δ .06 In Scope	.000
Q4d	TAMOT	Reasonable Fit	4	.550	.076	Δ .03 In Scope	.000
Q5g	TAFFN	Reasonable Fit	1	-0.715	.690	Δ .02 In Scope	.000

- **Negative (Positive)** Skewness values indicated a clustering of scores on the **right-(left-)** hand side of the histogram. **Negative (positive)** Kurtosis revealed a rather **flat (peaked)** distribution.

Appendix I15

Outcome for the Third Party Sample N_{TP} = 240

Question	Construct Scale Variable	Assessment of Normality					
		Graphical		Numerical			
		Histogram Normality Plot	Boxplot Outliers	Skewness Value	Kurtosis Value	5% Trimmed Mean vs. Sample Mean	Kolmogorov-Smirnov Sig.
Q1g	TISMBU	Reasonable Fit	0	.069	-.738	Δ .01 In Scope	.081
Q1h	TRHSMBU	Reasonable Fit	0	.331	-.842	Δ .05 In Scope	.000
Q2a	TSMBI	Reasonable Fit	4	-.196	.301	Δ .01 In Scope	.066
Q2b	TRSMBII	Reasonable Fit	7	-.717	1.259	Δ .03 In Scope	.000
Q2c	TSMBIII	Reasonable Fit	1	-.385	-.006	Δ .02 In Scope	.010
Q2d	TRSMBIV	Reasonable Fit	3	-.340	.013	Δ .02 In Scope	.004
Q3a	TSCAP	Reasonable Fit	4	-.411	.198	Δ .02 In Scope	.018
Q3b	TRUCRIT	Reasonable Fit	1	-.060	.138	Δ .01 In Scope	.000
Q3c	TPERF	Reasonable Fit	6	-.780	1.013	Δ .05 In Scope	.000
Q3d	TRRELC	Reasonable Fit	9	-.586	.344	Δ .04 In Scope	.000
Q3d	TRTRU	Reasonable Fit	0	-.251	-.319	Δ .01 In Scope	.000
Q3d	TRCOO	Reasonable Fit	4	-.859	1.128	Δ .07 In Scope	.000
Q4b	TRSMJU	Reasonable Fit	8	-.994	1.562	Δ .05 In Scope	.000
Q4d	TAMOT	Reasonable Fit	7	.587	.543	Δ .03 In Scope	.000
Q5g	TAFFN	Reasonable Fit	4	-.690	.195	Δ .05 In Scope	.000

- **Negative (Positive)** Skewness values indicated a clustering of scores on the **right-(left-)** hand side of the histogram. **Negative (Positive)** Kurtosis revealed a rather **flat (peaked)** distribution.
- Kolmogorov-Smirnov: A Sig. > .05 indicates **normal distribution**.

Outcome for the Buyer Sample N_B = 109

Question	Construct Scale Variable	Assessment of Normality					
		Graphical		Numerical			
		Histogram Normality Plot	Boxplot Outliers	Skewness Value	Kurtosis Value	5% Trimmed Mean vs. Sample Mean	Kolmogorov-Smirnov Sig.
Q1g	TSMBU	Reasonable Fit	0	.526	-.438	Δ .05 In Scope	.000
Q1h	TRHSMBU	Reasonable Fit	0	-.076	-1.036	Δ .00 In Scope	.018
Q2a	TSMBI	Reasonable Fit	3	-.053	.164	Δ .00 In Scope	.098
Q2b	TRSMBII	Reasonable Fit	2	-.592	.261	Δ .04 In Scope	.023
Q2c	TSMBIII	Reasonable Fit	7	-.793	.883	Δ .05 In Scope	.004
Q2d	TRSMBIV	Reasonable Fit	2	-.387	.080	Δ .03 In Scope	.200*
Q3a	TSCAP	Reasonable Fit	5	-.679	.990	Δ .04 In Scope	.006
Q3b	TRUCRIT	Reasonable Fit	1	-.204	-.047	Δ .01 In Scope	.200*
Q3c	TPERF	Reasonable Fit	3	-.352	.246	Δ .01 In Scope	.017
Q3d	TRRELC	Reasonable Fit	0	-.075	-.231	Δ .01 In Scope	.007
Q3d	TRTRU	Reasonable Fit	1	-.418	-.237	Δ .03 In Scope	.000
Q3d	TRCOO	Reasonable Fit	1	-.401	-.413	Δ .04 In Scope	.000
Q4b	TRSMJU	Reasonable Fit	0	-.704	.148	Δ .07 In Scope	.000
Q4d	TAMOT	Reasonable Fit	2	.263	.252	Δ .02 In Scope	.005
Q5g	TAFFN	Reasonable Fit	1	-.593	.482	Δ .04 In Scope	.039

- **Negative (Positive)** Skewness values indicated a clustering of scores on the **right-(left-)** hand side of the histogram. **Negative (Positive)** Kurtosis revealed a rather **flat (peaked)** distribution.
- Kolmogorov-Smirnov: A Sig. > .05 indicates **normal distribution**.
- *This is a lower bound of the true significance.

Appendix I16

Detected Multivariate Outliers within SPSS for Sample and Subsamples EMP: Vendors, Third Parties, and Buyers

(Sub-)Sample			N _T = 543		N _V = 194		N _{TP} = 240		N _B = 109	
Survey Case	#	Outlier	MAH_All Critical Value	P_MDAll	MAH_Vendor Critical Value	P_MDVendor	MAH_ThirdParty Critical Value	P_MDThirdParty	MAH_Buyer Critical Value	P_MDBuyer
45	1	1	86.55	.00000	64.91	.00000				
262	2	1	44.88	.00008	42.45	.00019				
342	3	1	48.15	.00002	42.03	.00022				
501	4	1	43.84	.00012	40.07	.00044				
*444	5	1	40.05	.00045						
*196	6	1	39.02	.00064						
299	7	1	73.63	.00000			64.02	.00000		
170	8	1	55.55	.00000			49.18	.00002		
509	9	1	54.35	.00000			54.51	.00000		
276	10	1	49.37	.00002					42.04	.00022
117	11	1	45.85	.00006			45.31	.00007		
397	12	1	42.30	.00020			44.20	.00010		
274	13	1	38.92	.00066					38.67	.00072

The cases represent multivariate outliers at the α -level of $p < .001$. The multivariate outliers (non-outliers) were coded 1 (0). The $\chi^2_{.999(15df)}$ criterion for 15 variables is 37.70. The Mahalanobis values which equal or exceed this value were considered multivariate outliers. Though cases 444 and 196 were detected as outliers in N_T, they did not* represent multivariate outliers in the three sub-samples.

Appendix I17

Detected Multivariate Outliers within SPSS for Sample and Subsamples, REGNEW: DACH, WE, NA and OTHERs

(Sub-)Sample			N _T = 543		N _{DACH} = 188		N _{WE} = 134		N _{NA} = 146		N _{OTH} = 75	
Survey Case	#	Outlier	MAH_All Critical Value	P_MDAll	MAH_DACH Critical Value	P_MDDACH	MAH_WE or Critical Value	P_MDWE	MAH_NA or Critical Value	P_MDNA	MAH_Other	P_MDOther
45	1	1	86.55	.00000					55.74	.00000		
262	2	1	44.88	.00008			48.05	.00003				
342	3	1	48.15	.00002					43.07	.00015		
501	4	1	43.84	.00012	41.55	.00026						
444	5	1	40.05	.00045	38.20	.00084						
*196	6	1	39.02	.00064								
299	7	1	73.63	.00000							41.12	.00031
*170	8	1	55.55	.00000								
509	9	1	54.35	.00000					43.86	.00012		
276	10	1	49.37	.00002			47.72	.00003				
117	11	1	45.85	.00006	42.99	.00016						
*397	12	1	42.30	.00020								
274	13	1	38.92	.00066					40.89	.00033		

The cases represent multivariate outliers at the α -level of $p < .001$. The multivariate outliers (non-outliers) are coded 1 (0). The $\chi^2_{.999(15df)}$ criterion for 15 variables is 37.70. The Mahalanobis values which equal or exceed this value were considered multivariate outliers. The cases 196, 170 and 397 did not* represent multivariate outliers in terms of the individual regions.

Appendix I18

Scale: Business Development Process Phase I.

Case Processing Summary

		N	%
Cases	Valid	530	100.0
	Excluded ^a	0	.0
	Total	530	100.0

- a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.822	.830	7

Item Statistics

Item of the Business Development Process Phase 1 (Q2a)	Mean	Standard Deviation	N
SMB11	5.34	1.377	530
SMB12	4.98	1.316	530
SMB13	4.40	1.298	530
SMB14	4.89	1.259	530
SMB15	5.19	1.090	530
SMB16	4.60	1.523	530
SMB17	5.22	1.146	530

Inter-Item Correlation Matrix

Item of the Business Development Process Phase 1 (Q2a)	SMB11	SMB12	SMB13	SMB14	SMB15	SMB16	SMB17
SMB11	1.000						
SMB12	.399	1.000					
SMB13	.248	.402	1.000				
SMB14	.255	.412	.603	1.000			
SMB15	.374	.425	.499	.598	1.000		
SMB16	.243	.389	.344	.406	.471	1.000	
SMB17	.404	.387	.396	.451	.472	.436	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.410	.243	.603	.360	2.479	.009	7

Appendix I19

Item-Total Statistics

Item of the Business Development Process Phase 1 (Q2a)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SMB11	29.30	31.179	.432	.255	.822
SMB12	29.65	29.858	.565	.326	.799
SMB13	30.22	29.849	.577	.416	.794
SMB14	29.74	29.407	.639	.505	.787
SMB15	29.44	30.390	.677	.482	.784
SMB16	30.02	28.816	.525	.311	.809
SMB17	29.40	30.781	.599	.368	.794

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
34.67	39.713	6.302	7

Interpretation of the Output from Reliability

The check of the respondents and number of items was in line with expectations.

The positive values in the Inter-Item Correlation Matrix indicated that the items are measuring the *same* underlying characteristic.

The Cronbach's Alpha shown in the Reliability Statistics table with the value of .822 suggests *very good internal consistency reliability* for the scale with this sample. A value above .8 seems preferable.

Moreover, the Corrected Item-Total correlation values shown in the Item-Total Statistics table with *greater than .3 seem acceptable*, which is similar for the scale's overall Cronbach Alpha the case being >> .7 (Indication of the degree to which each item correlates with the total score).

Similarly, the mean inter-item correlation value of .41 ranging between .24 and .60 seems *acceptable*.

According to Davis and Sun (2006) who report Cronbach alpha coefficients in the range of .62 – .77 for three variables, .52 for one variable, the *first* Business Development Process Phase in this research points out a *very good internal consistency* with a Cronbach alpha coefficient of .822.

Appendix J

Exploratory Factor Analyses

Appendix J1

Exploratory Factor Analysis (EFA) of the Antecedents of Business Development (Social Media Business Usage Hesitation/Inclination)

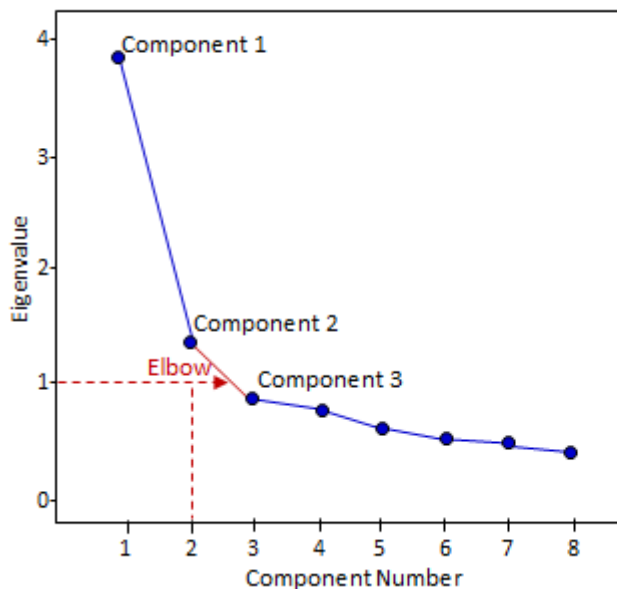
Eigenvalues and Total Variance Explained: Predictors of SMBI–SMBIV

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	3.63	45.41	45.41
2	1.32	16.47	61.87
3	.68	8.51	70.38
4	.58	7.30	77.68
5	.54	6.79	84.48
6	.45	5.63	90.11
7	.41	5.14	95.25
8	.38	4.75	100.00

- Only the first two components (factors) recorded eigenvalues of ≥ 1 .
- These two components explained a total of 61.9% of the variance.
- The Monte Carlo PCA for Parallel Analysis supported the decision to retain only two factors for further investigation (O'Connor, 2000).

Extraction Method: Principal Component Analysis (PCA)

Scree Plot



- The Scree Plot reveals a clear break between the second and third component.
- This outcome suggests extracting only two components.

Rotated Component Matrix^a of the Predictors of SMBI–SMBIV

Items	Components	
	1	2
Q1h2	.833	-.122
Q1h3	.793	-.100
Q1h1	.772	-.235
Q1h4	.753	-.332
Q1g3	-.094	.762
Q1g2	-.196	.742
Q1g4	-.121	.718
Q1g5	-.337	.672

- Most of the items load quite strongly $> .600$
- Ideally, three or more items load on each component. Thus, a two-component solution is suggested.

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations

Appendix J2

Pattern and Structure Matrix for PCA with Oblimin Rotation of Two Factor Solution of Social Media Business Usage Hesitation and Inclination Items Predictors of SMBI–SMBIV

Items	Pattern Coefficients		Structure Coefficients		Communalities
	Component 1	Component 2	Component 1	Component 2	
Q1h2 RHSMBU2 Not useful or valuable	.867	.065	.840	-.296	.708
Q1h3 RHSMBU3 Avoid violating policy	.829	.079	.796	-.267	.639
Q1h1 RHSMBU1 Fear of misuse privacy	.775	-.072	.804	-.394	.651
Q1h4 RHSMBU4 Traditional Media usage	.732	-.180	.807	-.485	.677
Q1g3 ISMBU3 Social Media research	.078	.797	-.255	.765	.590
Q1g2 ISMBU2 Business online forums	-.037	.751	-.350	.766	.588
Q1g4 ISMBU4 Blogs or microblogs	.038	.743	-.271	.727	.530
Q1g5 ISMBU5 LinkedIn/Xing network	-.205	.643	-.473	.728	.565

Convergent validity:
High correlations of variables within a single factor which is evident by the factor loadings.

Discriminant validity:
The extent to which both factors are distinct to each other, see: Pattern Matrix.

Face validity:
Do the factors make sense?

Note: Major loadings ($\geq .500$) for each item are coloured for both components.
 Pattern and Structure Matrix: Extraction Method: Principal Component Analysis.
 Rotation Method: Oblimin with Kaiser Normalization.
 Pattern Matrix: Rotation converged in 5 iterations.
 Communalities $> .300$ indicate that these items fit well with the other items in its components.

Interpretation of the Output of EFA for the Antecedent of Business Development

The eight items of Social Media Business Usage Inclination and Hesitation were subjected to **Principal Component Analysis (PCA)**. Prior to conducting PCA, the suitability of data (**Adequacy**) for the factor analysis was assessed. The inspection of the correlation matrix indicated that many coefficients were above .30. The **Kaiser-Meyer-Olkin (KMO)** value was .86, exceeding the recommended value of .06 (Kaiser, 1970; 1974). The **Bartlett's Test of Sphericity** reached statistical significance ($\text{sig. } .00 < .05$) which supports the factorability of the correlation matrix (Bartlett, 1954).

PCA revealed two components with **Eigenvalues (latent roots)** exceeding 1, explaining 45.4%, and 16.5% of the variance respectively. An inspection of the scree plot showed a clear break after the second component. According to **Cattell's (1966) Scree test**, two components were retained for further examination. A parallel analysis supported this outcome revealing only two components with Eigenvalues exceeding the corresponding criterion values for a randomly generated data matrix of the same size (8 variables x 530 respondents).

The two-component solution explained a total of 61.9% of the variance with **Component 1** contributing 45.4% and **Component 2** contributing 16.5%. To support the interpretation of these two components, **Oblimin** rotation was performed. The rotated solution revealed a simple structure (Thurstone, 1947) with both components showing strong loadings and all items loading substantially on only one component. The interpretation of both components was mostly consistent with **Social Media Business Usage research** by Trainor et al. (2014); Keinänen et al. (2015) however two items, Q1g1 (webinars) and Q1g6 (Facebook network) were removed because of their low communality values (.281) and (.254) indicating that they did not fit well with the remaining items within the components. The results suggest considering **Inclination and Hesitation towards Social Media Business Usage as antecedents** (Bolton et al., 2013; D'Arcy et al., 2014).

Appendix J3

Exploratory Factor Analysis (EFA) of the four Business Development process phases Eigenvalues and Total Variance Explained: Four Business Development process phases

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	10.67	38.12	38.12
2	1.63	5.80	43.93
3	1.45	5.17	49.10
4	1.30	4.65	53.74
5	1.01	3.59	57.34
6	.95	3.39	60.72
7	.83	2.97	63.69
8	.80	2.86	66.55
9	.73	2.62	69.17
10	.68	2.43	71.60
11	.65	2.34	73.93
12	.64	2.28	76.21
13	.59	2.11	78.33
14	.57	2.03	80.35
15	.54	1.92	82.27
16	.52	1.85	84.12
17	.50	1.78	85.90
18	.49	1.75	87.65
19	.46	1.65	89.30
20	.43	1.53	90.83
21	.40	1.44	92.27
22	.36	1.29	93.56
23	.35	1.24	94.80
24	.32	1.13	95.92
25	.30	1.09	97.00
26	.29	1.04	98.05
27	.28	1.00	99.05
28	.27	.95	100.00

- The first five components recorded eigenvalues ≥ 1 .
- These five components explained a total of 57.3% of the variance which is only just below the recommended threshold of 60.0% (Hair Jr et al., 2009).

Extraction Method: Principal Component Analysis (PCA)

Appendix J4

**Exploratory Factor Analysis (EFA) of the four Business Development process phases
Rotated Component Matrix^a: Business Development process phases**

Items	Components				
	1	2	3	4	5
Q2c3 SMBIII3	.759	.206	.171	.160	.055
Q2c4 SMBIII4	.704	.298	.248	.106	.068
Q2c2 SMBIII2	.696	.197	.210	.165	.139
Q2c5 SMBIII5	.643	.203	.196	.226	.038
Q2c6 SMBIII6	.623	.252	.195	.202	.204
Q2c1 SMBIII1	.577	.040	.091	.203	.381
Q2c7 SMBIII7	.529	.251	.216	.229	.425
Q2d3 RSMBIV3	.238	.701	.175	.178	.173
Q2d2 RSMBIV2	.253	.654	.208	.128	.281
Q2d6 RSMBIV6	.360	.632	.155	.070	-.094
Q2d4 RSMBIV4	.289	.628	.207	.090	.176
Q2d7 RSMBIV7	.370	.617	.214	.162	.223
Q2d5 RSMBIV5	-.034	.609	.024	.305	-.103
Q2d1 RSMBIV1	.182	.490	.226	.130	.478
Q2b1 RSMBII1	.151	.131	.790	.023	.155
Q2b2 RSMBII2	.140	.211	.775	.077	.171
Q2b4 RSMBII4	.283	.198	.638	.155	.010
Q2b3 RSMBII3	.305	.113	.613	.230	.021
Q2b7 RSMBII7	.263	.246	.474	.382	.189
Q2b6 RSMBII6	.042	.035	.389	.388	.205
Q2b5 RSMBII5	.292	.250	.322	.249	.078
Q2a4 SMBI4	.176	.193	.132	.777	.070
Q2a3 SMBI3	.203	.152	.056	.746	.084
Q2a5 SMBI5	.292	.174	.119	.676	.223
Q2a6 SMBI6	.174	.138	.222	.511	.242
Q2a1 SMBI1	.150	.019	.114	.173	.761
Q2a2 SMBI2	.101	.268	.139	.398	.503
Q2a7 SMBI7	.337	.183	.252	.398	.410

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 6 iterations.

Appendix J5

Exploratory Factor Analysis (EFA) of the four Business Development process phases

Pattern and Structure Matrix for PCA with Oblimin Rotation of Five Factor Solution of the four Business Development process phases

Item	Pattern Coefficients					Structure Coefficients					Communalities
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	
Q2d3 RSMBIV3	.701	.033	.054	-.080	-.089	.783	.355	.398	-.450	-.254	.640
Q2d2 RSMBIV2	.649	-.037	.089	-.097	-.205	.747	.321	.431	-.469	-.356	.631
Q2d5 RSMBIV5	.648	.273	-.051	.185	.163	.617	.371	.161	-.127	.042	.477
Q2d4 RSMBIV4	.615	-.065	.098	-.157	-.094	.714	.272	.412	-.476	-.250	.560
Q2d6 RSMBIV6	.608	-.051	.049	-.274	.193	.697	.224	.338	-.491	.015	.566
Q2d7 RSMBIV7	.577	.001	.081	-.241	-.128	.735	.358	.453	-.569	-.316	.639
Q2d1 RSMBIV1	.481	-.036	.123	-.024	-.428	.597	.313	.432	-.402	-.540	.570
Q2a4 SMBI4	.062	.793	.025	-.047	.045	.366	.827	.338	-.357	-.218	.694
Q2a3 SMBI3	.027	.769	-.063	-.105	.020	.319	.788	.264	-.358	-.221	.631
Q2a5 SMBI5	.039	.651	-.014	-.191	-.116	.367	.762	.355	-.468	-.363	.636
Q2a6 SMBI6	.027	.469	.145	-.053	-.156	.299	.595	.392	-.346	-.355	.418
Q2b1 RSMBII1	.000	-.131	.866	.032	-.051	.281	.179	.819	-.342	.255	.688
Q2b2 RSMBII2	.088	-.081	.836	.064	-.062	.363	.242	.829	-.356	-.278	.700
Q2b4 RSMBII4	.051	.033	.659	-.140	.118	.358	.300	.722	-.450	-.132	.551
Q2b3 RSMBII3	-.055	.127	.627	-.177	.110	.291	.361	.702	-.462	-.151	.535
Q2b7 RSMBII7	.109	.227	.429	-.103	-.069	.429	.524	.637	-.471	-.322	.536
Q2b6 RSMBII6	-.073	.344	.390	.102	-.129	.176	.458	.473	-.209	-.303	.347
Q2b5 RSMBII5	.145	.160	.267	-.194	.023	.387	.370	.465	-.435	-.182	.320
Q2c3 SMBIII3	.038	.041	.020	-.799	.075	.399	.326	.402	-.818	-.176	.677
Q2c2 SMBIII2	.037	.038	.070	-.710	-.016	.392	.335	.436	-.777	-.256	.614
Q2c4 SMBIII4	.149	-.037	.115	-.705	.063	.479	.291	.472	-.793	-.185	.662
Q2c5 SMBIII5	.045	.126	.067	-.649	.090	.386	.372	.408	-.720	-.159	.545
Q2c6 SMBIII6	.113	.073	.050	-.608	-.090	.440	.375	.431	-.733	-.317	.573
Q2c1 SMBIII1	-.098	.095	-.055	-.601	-.304	.229	.345	.312	-.653	-.471	.529
Q2c7 SMBIII1	.130	.079	.070	-.473	-.330	.447	.416	.466	-.685	-.530	.623
Q2a1 SMBI1	-.026	.053	.020	-.072	-.759	.158	.299	.283	-.304	-.797	.644
Q2a2 SMBI2	.224	.308	.034	.045	-.457	.402	.517	.341	-.310	-.581	.513
Q2a7 SMBI7	.062	.294	.140	-.232	-.320	.375	.543	.471	-.521	-.524	.537

- Note: Major loadings (> ±.50) for each item are coloured for the five components. Though factor loadings of ±.30 to ±.40 are minimally acceptable for interpretability purposes values > ±.50 are considered necessary for practical significance (Hair Jr, 2009).
- The Factor Pattern Matrix contains the loadings which reveal the unique contribution of each item to the factor.
- The Factor Structure Matrix shows the bivariate correlations between the items and the factors. These loadings include the unique variance between item and factor as well as the correlation among the factors.
- Pattern and Structure Matrix: Extraction Method: Principal Component Analysis.
- Rotation Method: Oblimin with Kaiser Normalization. Pattern Matrix: Rotation converged in 18 iterations.
- Communalities reveal how much of the variance in each item is explained. Communalities of > .3 indicate that these items have a good fit with the other items in its component or factor.

Appendix J6

Interpretation of the Output of EFA for the Business Development Process Phases

The twenty-eight items of the four Business Development Phases, SMBI-SMBIV, were subjected to Principal Component Analysis (PCA) for data reduction purposes. Prior to conducting PCA, the suitability of data for the factor analysis was assessed. The inspection of the correlation matrix indicated that the majority of coefficients were above .30 which was sufficient due to the sample size surpassing 350 (Hair Jr et al., 2009).

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .95, exceeding the minimum value of .60 for good factor analysis (Kaiser, 1970; 1974; Tabachnick and Fidell, 2013). The Bartlett's Test of Sphericity reached statistical significance ($\text{sig} .00 < .05$) which supports the factorability of the correlation matrix (Bartlett, 1954).

PCA revealed five factors with eigenvalues exceeding 1, explaining 38.1%, 5.8%, 5.2%, 4.7%, and 3.6% of the total variance respectively. It was decided to keep all five components. The first four components reflect the Business Development phases, whereby the order of the process phases changed the way that the original last phase 'increase the number of leads and generate opportunities' moved from the last place to first place, while the components two to four referred to the first three original phases. The fifth factor loaded high in particular on statements regarding whether Social Media Usage would accelerate the individual process phases.

Yet, the five-component solution explained only a total of 57.3% of the variance with the first Component contributing 38.1% and the remaining four components contributing 19.2%. To support the interpretation of these five components, Oblimin rotation was performed. The rotated solution revealed a simple structure (Thurstone, 1947) with five components showing strong loadings and all items loading substantially on only one component. The interpretation of the components was mostly consistent with the research of Social Media in B2B Sales by Rodriguez et al. (2012). The results suggest considering the original four Business Development Process phases, with the fifth component providing limited information about how Social Media engagement might accelerate process phases based on social networks/contacts or social profile information.

- Bartlett, M S (1954) 'A note on the multiplying factors for various χ^2 approximations'. *Journal of the Royal Statistical Society. Series B (Methodological)*: 296-298.
- Hair Jr, J F, Black, W C, Babin, B J and Anderson, R E (2009) *Multivariate Data Analysis: A Global Perspective* (7th edn.). Upper Saddle River, NJ: Prentice Hall.
- Kaiser, H F (1970) 'A second generation little jiffy'. *Psychometrika*, 35 (4): 401-415.
- Kaiser, H F (1974) 'An index of factorial simplicity'. *Psychometrika*, 39 (1): 31-36.
- Rodriguez, M, Peterson, R M and Krishnan, V (2012) 'Social Media's Influence On Business-To-Business Sales Performance'. *Journal of Personal Selling and Sales Management*, XXXII (3): 365-378.
- Tabachnick, B G and Fidell, L S (2013) *Using Multivariate Statistics*. Boston: Pearson Education.
- Thurstone, L L (1947) *Multiple factor analysis*. Chicago: University of Chicago Press.

Appendix J7

Exploratory Factor Analysis (EFA) of the two Moderators Social Capital and Usage Criteria Eigenvalues and Total Variance Explained: Two Moderators SCAP and RUCRIT

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	3.44	28.66	28.66
2	1.92	16.03	44.69
3	1.15	9.57	54.26
4	.90	7.46	61.72
5	.80	6.64	68.37
6	.71	5.95	74.31
7	.70	5.84	80.15
8	.58	4.82	84.97
9	.50	4.13	89.10
10	.46	3.81	92.91
11	.44	3.66	96.58
12	.41	3.43	100.00

- The first three components recorded eigenvalues ≥ 1 .
- These three components explained only a total of 54.3% of the variance which is clearly below the recommended threshold of 60.0% (Hair Jr et al., 2009).

Extraction Method: Principal Component Analysis (PCA)

Rotated Component Matrix^a: Two Moderators

Items	Components		
	1	2	3
Q3a3 SCAP3	.785	-.016	.161
Q3a6 SCAP6	.776	.019	-.023
Q3a5 SCAP5	.749	.054	-.060
Q3a2 SCAP2	.717	.139	.040
Q3a4 SCAP4	.675	-.108	.316
Q3a1 SCAP1	.574	.003	.275
Q3b2 RUCRIT2	.021	.847	-.099
Q3b1 RUCRIT1	-.046	.764	.098
Q3b3 RUCRIT3	.121	.496	.183
Q3b6 RUCRIT6	.230	-.092	.747
Q3b5 RUCRIT5	.108	.222	.682
Q3b4 RUCRIT4	-.077	.422	.495

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Appendix J8

Exploratory Factor Analysis (EFA) of the Two Moderators

Pattern and Structure Matrix for PCA with Oblimin Rotation of Three Factor Solution of the Two Moderators

Items	Pattern Coefficients			Structure Coefficients			Communalities
	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3	
Q3a6 SCAP6	.794	.021	-.111	.769	.010	.075	.602
Q3a3 SCAP3	.779	-.035	.082	.797	-.012	.254	.642
Q3a5 SCAP5	.772	.060	-.148	.739	.042	.040	.567
Q3a2 SCAP2	.728	.135	-.048	.719	.134	.144	.535
Q3a4 SCAP4	.645	-.146	.261	.703	-.092	.383	.566
Q3a1 SCAP1	.550	-.029	.222	.600	.017	.343	.406
Q3b2 RUCRIT2	.050	.867	-.168	.022	.837	-.001	.727
Q3b1 RUCRIT1	-.045	.761	.049	-.026	.770	.176	.596
Q3b3 RUCRIT3	.109	.481	.139	.146	.507	.250	.294
Q3b6 RUCRIT6	.136	-.178	.755	.307	-.041	.755	.429
Q3b5 RUCRIT5	.026	.147	.679	.183	.269	.711	.527
Q3b4 RUCRIT4	-.135	.371	.490	-.018	.457	.525	.619

Note: Major loadings for each item are coloured for the three components. Pattern and Structure Matrix: Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization. Pattern Matrix: Rotation converged in 7 iterations. Communalities > .3 indicate that these items fit well with the other items in its components.

Most of the items load quite strongly > .500

Ideally, three or more items load on each component. Thus, a three-component solution is suggested.

Interpretation of the Output of EFA for the Moderators Social Capital and Usage Criteria

The **twelve items** of the two moderators Social Capital SCAP1-SCAP6 and Usage Criteria RUCRIT1-RUCRIT6 were subjected to **Principal Component Analysis (PCA)** for data reduction purposes. Prior to conducting PCA, the suitability of data for the factor analysis was assessed. The inspection of the correlation matrix indicated **that the majority of coefficients were above .30 for SCAP** which was however not the case for RUCRIT.

The **Kaiser-Meyer-Olkin (KMO)** measure of sampling adequacy was **.81**, exceeding the minimum value of **.60** for good factor analysis (Kaiser, 1970; 1974; Tabachnick and Fidell, 2013). The **Bartlett's Test of Sphericity** reached statistical significance (**sig .00 < .05**) which supports the factorability of the correlation matrix (Bartlett, 1954).

PCA revealed **three factors with eigenvalues exceeding 1**, explaining 28.7%, 16.0%, and 9.6% of the total variance respectively. It was decided to keep all three components. The first factor refers to Social Capital while the latter two refer to Usage Criteria.

Yet, the three-component solution **explained only a total of 54.2% of the variance** with the first Component contributing 28.7% and the remaining two components contributing 25.5%. To support the interpretation of these three components, Oblimin rotation was performed. The rotated solution revealed a simple structure (Thurstone, 1947) with three components showing strong loadings and all items loading substantially on only one component. **The interpretation of the components (factors) was for the first factor consistent with the definition of Social Capital whereas the second factor covered Usage Criteria/Sociodemographic and the third-factor Usage Criteria/Ease of Use, Connect.** But unexpectedly, **both factors for usage criteria represented only one aspect of career level.** The second factor tended to attach greater importance to the higher career level on LinkedIn/Xing, and the third factor referred to the lower career level on Facebook.

Appendix J9

Exploratory Factor Analysis (EFA) of the Outcome Variables PERF and RSMJU Eigenvalues and Total Variance Explained: Business Performance in the strict sense and Justification of Social Media for Business Usage in terms of the Potential Outcome

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	4.93	54.76	54.76
2	1.03	11.48	66.24
3	.71	7.89	74.13
4	.57	6.30	80.43
5	.46	5.41	85.57
6	.37	4.07	89.64
7	.33	3.66	93.30
8	.30	3.38	96.69
9	.30	3.31	100.00

- The first two components recorded eigenvalues ≥ 1 .
- These two components explained a total of 66.2% of the variance which is clearly above the recommended threshold of 60.0% (Hair Jr et al., 2009).

Extraction Method: Principal Component Analysis (PCA)

Rotated Component Matrix^a: PERF and RSMJU

Items	Components	
	1	2
Q3c1 PERF1	.806	
Q3c2 PERF2	.783	
Q3c3 PERF3	.757	.338
Q3c5 PERF5	.711	.348
Q3c6 PERF6	.655	.406
Q3c4 PERF4	.643	.378
Q4b2 RSMJU2		.839
Q4b1 RSMJU1		.837
Q4b3 RSMJU3		.751

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 3 iterations.

Appendix J10

Exploratory Factor Analysis (EFA) of the Outcome Variable Business Performance and Justification of Social Media Business Usage for potential Outcome

Pattern and Structure Matrix for PCA with Oblimin Rotation of the Two Factor Solution of PERF and RSMJU

Items	Pattern Coefficients		Structure Coefficients		Communalities
	Factor 1	Factor 2	Factor 1	Factor 2	
Q3c1 PERF1	.901		.825	.539	.663
Q3c2 PERF2	.874		.806	.412	.653
Q3c3 PERF3	.767		.801	.339	.687
Q3c5 PERF5	.710		.785	.536	.627
Q3c6 PERF6	.624		.749	.575	.593
Q3c4 PERF4	.620		.730	.546	.557
Q4b2 RSMJU2		.881	.527	.882	.758
Q4b1 RSMJU1		.862	.484	.870	.778
Q4b3 RSMJU3		.759	.508	.802	.646

Note: Major loadings for each item are coloured for the two components (factors). Pattern and Structure Matrix: Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization. Pattern Matrix: Rotation converged in 5 iterations. Communalities > .3 indicate that these items fit well with the other items in its factors. Most of the items load strongly > .600. Ideally, three or more items load on each component. Therefore, a two-component solution is suggested.

Interpretation of the Output of EFA for the Outcome Variables PERF and RSMJU

The **nine items** of the outcome variable Business Performance including the six items PERF1-PERF6 and three items RSMJU1-RSMJU3 were subjected to **Principal Component Analysis (PCA)** for data reduction purposes. Prior to conducting PCA, the suitability of data for the factor analysis was assessed. The Inspection of the correlation matrix indicated **that the majority of coefficients were above .40**.

The **Kaiser-Meyer-Olkin (KMO)** measure of sampling adequacy was **.90**, exceeding the minimum value of **.60** for good factor analysis (Kaiser, 1970; 1974; Tabachnick and Fidell, 2013). The **Bartlett's Test of Sphericity** reached statistical significance ($\text{sig } .00 < .05$) which supports the factorability of the correlation matrix (Bartlett, 1954).

PCA revealed **two factors with eigenvalues exceeding 1**, explaining 54.8%, and 11.5% of the total variance respectively. It was decided to keep both components. The **first-factor PERF** refers to Business Performance in the strict sense while the **second factor RSMJU** is about the justification of Social Media Business Usage towards the **potential outcome**.

The two-component solution **explained a total of 66.2% of the variance** with the first factor contributing 54.8 % and the remaining factor contributing 11.5%. To support the interpretation of these two factors, Oblimin rotation was performed. The rotated solution revealed a simple structure (Thurstone, 1947) with two components (factors) showing strong loadings and all items loading substantially on only one component. **Justification of Social Media Business Usage RSMJU** includes the **abbreviation of the Business Development Process by enhancing communication and information, the impact on the ROI long-term and the improvement of day-to-day activities**.

Appendix J11

Exploratory Factor Analysis (EFA) of the Underlying Concepts Eigenvalues and Total Variance Explained of RRELC, RTRU, RCOO

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	3.23	52.09	52.09
2	.76	12.72	64.81
3	.61	10.16	74.97
4	.56	9.40	84.36
5	.56	9.25	93.61
6	.38	6.39	100.00

- Only the first component recorded the eigenvalue ≥ 1 .
- This components explained a total of 52.1% of the variance which is clearly below the recommended threshold of 60.0% (Hair Jr et al., 2009).

Extraction Method: Principal Component Analysis (PCA)

Correlation Matrix of the Underlying Concepts: RRELC, RTRU, RCOO

Question # Item	3d1 RRELC1	3d2 RRELC2	3d3 RTRU1	3d4 RTRU2	3d5 RCOO1	3c6 RCOO2
3d1 RRELC1	1.00					
3d2 RRELC2	.46	1.00				
3d3 RTRU1	.40	.44	1.00			
3d4 RTRU2	.35	.30	.36	1.00		
3d5 RCOO1	.37	.39	.41	.44	1.00	
3d6 RCOO2	.53	.53	.49	.45	.55	1.00

The inspection of the correlation matrix for the underlying concepts, i.e. Relationship Commitment, Trust, and Cooperation revealed the presence of all coefficients of **.35 and above** indicating moderate to quite strong correlations between the six items.

Varimax and Oblique rotation could not be performed because **only one** factor was extracted.

Interpretation of the Output of EFA for the Underlying Concepts: RRELC, RTRU, RCOO

The **three dimensions** of the underlying concepts containing six items, two for Relationship Commitment, two for Trust, and two for Cooperation were subjected to **Principal Component Analysis (PCA)** for data reduction purposes. Prior to conducting PCA, the suitability of data for the factor analysis was assessed. The inspection of the correlation matrix indicated **that all coefficients were above .30**.

The **Kaiser-Meyer-Olkin (KMO)** measure of sampling adequacy was **.85**, exceeding the minimum value of **.60** for good factor analysis (Kaiser, 1970; 1974; Tabachnick and Fidell, 2013). The **Bartlett's Test of Sphericity** reached statistical significance ($\text{sig } .00 < .05$) which supports the factorability of the correlation matrix (Bartlett, 1954).

PCA revealed **only one factor with eigenvalue exceeding 1**, explaining **52.1%** of the total variance. All six items loaded on one factor, which did not allow rotating the solution.

Appendix J12

Exploratory Factor Analysis (EFA) of the Statements to Social Media Affinity Eigenvalues and Total Variance Explained: Social Media Affinity

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	2.80	46.65	46.65
2	1.03	17.10	63.75
3	.71	15.93	79.68
4	.57	9.34	89.03
5	.46	7.54	96.57
6	.30	3.43	100.00

- The first two components recorded eigenvalues ≥ 1 .
- These two components explained a total of 63.8% of the variance which is clearly above the recommended threshold of 60.0% (Hair Jr et al, 2009).

Extraction Method: Principal Component Analysis (PCA)

Rotated Component Matrix^a: Social Media Affinity

Items	Components	
	1	2
Q5g2 AFFN2	.839	-.207
Q5g1 AFFN1	.827	-.125
Q5g3 RAFFN3	.752	.136
Q5g4 RAFFN4	.660	.375
Q5g5 RAFFN5	.603	.398
Q5g6 AFFN6	-.052	.832

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 3 iterations.

Exploratory Factor Analysis (EFA) of Social Media Affinity Pattern and Structure Matrix for PCA with Oblimin Rotation of the Two Factor Solution

Items	Pattern Coefficients		Structure Coefficients		Communalities
	Factor 1	Factor 2	Factor 1	Factor 2	
Q5g2 AFFN2	.835	-.306	.808	-.235	.774
Q5g1 AFFN1	.826	-.224	.806	-.153	.700
Q5g3 RAFFN3	.759	.046	.763	.111	.585
Q5g4 RAFFN4	.675	.295	.700	.353	.576
Q5g5 RAFFN5	.619	.324	.647	.378	.523
Q5g6 AFFN6	-.023	.835	.048	.833	.695

Note: Major loadings for each item are coloured for the two components (factors). Pattern and Structure Matrix: Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization. Pattern Matrix: Rotation converged in 6 iterations.

Communalities $> .3$ indicate that these items fit well with the other items in its factors.

Most of the items load strongly $> .600$. Ideally, three or more items load on each component. Therefore, a two-component solution is suggested.

Appendix J13

Interpretation of the Output of EFA for Social Media Affinity

The six items of the Social Media Affinity were subjected to Principal Component Analysis (PCA) for data reduction purposes. Prior to conducting PCA, the suitability of data for the factor analysis was assessed. The inspection of the correlation matrix indicated that the majority of coefficients were above .30.

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .72, exceeding the minimum value of .60 for good factor analysis (Kaiser, 1970; 1974; Tabachnick and Fidell, 2013). The Bartlett's Test of Sphericity reached statistical significance ($\text{sig } .00 < .05$) which supports the factorability of the correlation matrix (Bartlett, 1954).

PCA revealed two factors with eigenvalues exceeding 1, explaining 54.8%, and 11.5% of the total variance respectively. It was decided to keep both components. The first component refers to Social Media Affinity whereas the second component.

Yet, the two-component solution explained a total of 63.8% of the variance with the first Component contributing 46.7 % and the remaining component contributing 17.1%. To support the interpretation of these two components, Direct Oblimin rotation was performed. The rotated solution revealed a simple structure (Thurstone, 1947) with two components showing strong loadings. Five of the six items loaded substantially on one factor with the exception of one item which loaded strongly on the second factor. The first factor indicated mostly a Social Media Affinity with the exception of one item bearing a negative sign (Traditional Media Preference). In contrast, the second factor indicated job efficiency/effectiveness by combining both Social and Traditional Media.

Appendix J14

Exploratory Factor Analysis (EFA) of the Motivation to use Social Media in Organisations Eigenvalues and Total Variance Explained

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	2.05	68.31	68.31
2	.55	18.43	86.74
3	.40	13.26	100.00

- Only the first component recorded the eigenvalue ≥ 1 .
- This component explained a total of 68.3% of the variance which is clearly below the recommended threshold of 60.0% (Hair Jr et al., 2009).

Extraction Method: Principal Component Analysis (PCA)

Correlation Matrix of the Motivation to use Social Media in Organisations

Question # Item	4d1 AMOT1	4d2 AMOT2	4d3 AMOT3
4d1 AMOT1	1.00		
4d2 AMOT2	.57	1.00	
4d3 AMOT3	.45	.55	1.00

The inspection of the correlation matrix for Social Media Business Usage in Organisations revealed the presence of all coefficients of .45 and above indicating quite strong correlations between the three items.

Varimax and Oblique rotation could not be performed because only one factor was extracted.

Interpretation of the Output of the Motivation to use Social Media in Organisations

The three items of the dimension 'Motivation to use Social Media in Organisations' AMOT1–AMOT3 were subjected to [Principal Component Analysis \(PCA\)](#) for data reduction purposes. Prior to conducting PCA, the suitability of data for the factor analysis was assessed. The inspection of the correlation matrix indicated that all coefficients were above .30.

The [Kaiser-Meyer-Olkin \(KMO\)](#) measure of sampling adequacy was .68, exceeding the minimum value of .60 for good factor analysis (Kaiser, 1970; 1974; Tabachnick and Fidell, 2013). The [Bartlett's Test of Sphericity](#) reached statistical significance ($\text{sig } .00 < .05$) which supports the factorability of the correlation matrix (Bartlett, 1954).

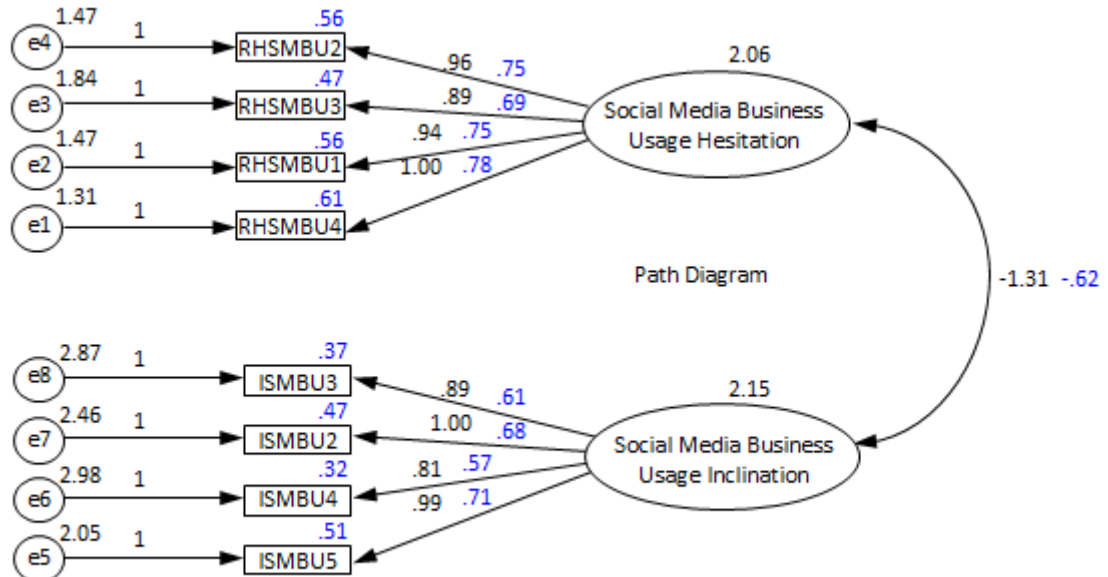
PCA revealed only one factor with eigenvalue exceeding 1, explaining 68.3% of the total variance. All three items loaded on one factor, which did not allow rotating the solution.

Appendix K

Confirmatory Factor Analyses

Appendix K1

Confirmatory Factor Analysis AMOS v23 – Dimensions of the Antecedent Original Measurement Model (Hypothesized Model)



Note: The model is recursive. Sample size = 530

AMOS Output for hypothesized Two-Factor CFA Model: Summary of Model Variables

Your model contains the following variables

RHSMBU4	}	Observed, endogenous variables (Input data or dependent variables)
RHSMBU1		
RHSMBU3		
RHSMBU2		
ISMBU5		
ISMBU4		
ISMBU2		
ISMBU3		

Hesitation	Inclination	}	Unobserved, exogenous variables (All factors and error terms or independent variables)
e1	e5		
e2	e6		
e3	e7		
e4	e8		

Variable counts

Number of variables in your model:	18
Number of observed variables:	8
Number of unobserved variables:	10
Number of exogenous variables:	10
Number of endogenous variables:	8

Appendix K2

AMOS Output for hypothesized Two-factor CFA Model: Summary of Model Parameters

Parameter Summary						
	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	10	0	0	0	0	10
Labeled	0	0	0	0	0	0
Unlabeled	6	1	10	0	0	17
Total	16	1	10	0	0	27

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	144
Number of distinct parameters to be estimated:	68
Degrees of freedom (144 - 68):	76

144 was the number of distinct sample moments, the elements in the sample covariance matrix, i.e. the number of pieces of information provided by the data. 68 parameters to be estimated. 76 Degrees of freedom based on an over identified model with a Chi-square of 158.242 with a p-level of .000. For a good fit to the sample data, the null hypothesis that *there is no significant difference between the observed and estimated covariance matrices* should be retained.

Result (Default model)

Minimum was achieved
Chi-square = 158.242
Degrees of freedom = 76
Probability level = .000.

AMOS Output for hypothesized Two-Factor CFA Model: Parameter Estimates

Maximum Likelihood Estimates	Estimate	S.E.	C.R.	P
Regression Weights (Factor Loadings)				
RHSMBU4 <--- Hesitation	1.000			
RHSMBU1 <--- Hesitation	.944	.058	16.297	***
RHSMBU3 <--- Hesitation	.889	.059	14.998	***
RHSMBU2 <--- Hesitation	.958	.058	16.396	***
ISMBU5 <--- Inclination	.993	.081	12.300	***
ISMBU4 <--- Inclination	.808	.077	10.497	***
ISMBU2 <--- Inclination	1.000			
ISMBU3 <--- Inclination	.882	.079	11.099	***
Covariances				
Hesitation <--> Inclination	-1.312	.151	-8.670	***
Variances				
Hesitation	2.060	.208	9.891	***
Inclination	2.149	.278	7.740	***
e1	1.309	.116	11.319	***
e2	1.469	.119	12.341	***
e3	1.840	.136	13.512	***
e4	1.469	.120	12.219	***
e5	2.050	.184	11.165	***
e6	2.983	.213	13.975	***
e7	2.463	.206	11.953	***
e8	2.869	.214	13.411	***

All t-values are > 1.96 (2TT) – all loadings are significant

Parameter Estimates should demonstrate the correct sign and size. They were unreasonable if their correlations > 1.00 or indicated negative variances and covariance or correlation matrices which were not positive definite.

S.E. Standard Errors revealed the precision with which a parameter had been estimated. A value close to zero or a large value indicated that the test statistics for a parameter could not be defined or a parameter could not be determined.

C.R. Critical Ratio represented the estimate of the parameter divided by its standard error. It operated as z-statistic in examining that the estimate was statistically significant different from zero. Based on a probability level of .05 the test statistic had to exceed ± 1.96 before the hypothesis that the estimate equaled zero could be rejected (Byrne 2010).

*** Probability < .000. Weights were significant at .001 (2TT)
All loadings were significant.

Appendix K3 (Extract)

AMOS Output for hypothesized Two-Factor CFA Model:
Goodness-of-Fit Statistics

Model Fit Summary					
CMIN					
Model	NPAR	CMIN	DF	P	CMIN/DF
Your (Default) model	68	158.242	76	.000	2.082
Saturated model	144	.000	0		
Independence model	32	2820.185	112	.000	25.180
RMR, GFI					
Model	RMR	GFI	AGFI	PGFI	
Your (Default) model	.209	.965	.934	.509	
Saturated model	.000	1.000			
Independence model	1.322	.483	.335	.375	
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Your (Default) model	.944	.917	.970	.955	.970
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
Parsimony-Adjusted Measures					
Model	PRATIO	PNFI	PCFI		
Your (Default) model	.679	.640	.658		
Saturated model	.000	.000	.000		
Independence model	1.000	.000	.000		
NCP					
Model	NCP	LO90	HI90		
Your (Default) model	82.242	49.989	122.259		
Saturated model	.000	.000	.000		
Independence model	2708.185	2538.830	2884.869		
FMIN					
Model	FMIN	F0	LO90	HI90	
Your (Default) model	.150	.078	.047	.116	
Saturated model	.000	.000	.000	.000	
Independence model	2.671	2.565	2.404	2.732	
RMSEA					
Model	RMSEA	LO90	HI90	PCLOSE	
Your (Default) model	.032	.025	.039	1.000	
Independence model	.151	.147	.156	.000	

Criteria Chapter 4,136; Schreiber et al. (2006); Byrne (2010); Hair et al. (2010)

NPAR = Number of Parameters

CMIN = Minimum discrepancy between unrestricted sample covariance matrix S , and restricted covariance matrix $\Sigma\theta$ representing the Likelihood ratio test or χ^2 statistic.

P-Value < .0001

The fit of the data to the hypothesized model was not entirely adequate.

The threshold of **CMIN/DF** should be < 5.0.

The sample size of 530 influenced the **AGFI** (Adjusted) **GFI** Goodness of Fit Index.

The **GFI** and **AGFI** suggested that the hypothesized model fitted the sample data relatively well.

RFI and **CFI** in Baseline Comparison indicated a good fit.

The **PCFI** in Parsimony-adjusted measures was not acceptable, should be > .80.

The **PCLOSE** should be > .05.

Indices	Recommended Benchmarks	Results
χ^2/df = Norm Chi-Square	between 1.00 and 5.00	2.082
GFI = Goodness-of-Fit Index	$\geq .92$	.965
RMSEA = Root Mean Squared Error	$\leq .07$	.032
CFI = Comparative Fit Index	$\geq .92$	.970
AGFI = Adjusted Goodness-of-Fit Index	$\geq .90$	.934
NFI = Normed Fit Index	$\geq .95$	.944

Appendix K4

Assessing Validity of Reflective Latent Variables for the Antecedents	
Convergent Validity	AVE
Social Media Usage Hesitation	.55
Social Media Usage Inclination	.42 < .50
Convergent Validity Formular	
$AVE = \frac{\sum L_i^2}{n}$ <p>Convergent validity of a construct represents the ratio of the amount of the variance of its indicators captured by the constructs relative to the amount of the total variance including the variance due to measurement errors.</p> <p>L_i represents the standardized factor loadings, and i is the number of items. The estimated factor loadings should be .50 or higher For n items, AVE is computed as the total of all squared standardized factor loadings (squared multiple correlations) divided by the number of items. Rule of Thumb AVE \geq .50 i.e., 50% or more of the variance of the indicators is accounted for and to support convergent validity.</p>	
<p>The AVE < .50 means the variance explained by the latent variable is less than the measurement error. This means that this construct does not have enough commonality to suggest a single underlying latent factor.</p> <p>The results indicated that there was <u>not enough sufficient</u> evidence to confirm convergent validity for the second factor <i>Social Media Business Usage Inclination</i>.</p>	
Discriminant Validity	√AVE
Social Media Usage Hesitation	.742
Social Media Usage Inclination	.632
Discriminant Validity Formular	
$\{\sqrt{AVE(\eta_i)}\} > \text{Corr}(\eta_i, \eta_j) \text{ or } AVE(\eta_i) > \{\text{Corr}(\eta_i, \eta_j)\}^2$ <p>√AVE of a latent variable should be greater than the correlations among the latent variables to fully satisfy the requirements for discriminant validity or AVE estimated for two factors should be greater than the square of the correlations between two factors.</p>	
<p>The results indicated that discriminant validity was <u>achieved</u>.</p>	

Assessing Reliability of Reflective Latent Variables for the Antecedents	
Composite Reliability	ρ_c
Social Media Usage Hesitation	.830
Social Media Usage Inclination	.738
Composite Reliability / Internal Consistency Formular	
$\rho_c = \frac{\sum \lambda^2}{n} = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + (\sum 1 - \lambda^2)}$ <p>λ^2 indicates the amount of variance of an item accounted for by ist associated construct (item reliability). The λ values are standardized loadings which were taken from the rotated component matrix. $(1 - \lambda^2)$ is the measurement error E.</p>	
Construct Reliability (CR)	α
Social Media Usage Hesitation	.830
Social Media Usage Inclination	.739
Construct Reliability Formular	
$\alpha = (k/(k-1))\{1 - (\sum r_{ii} / \sum r_{ij})\}$ <p>k Number of items/variables.</p> <p>$\sum r_{ii}$ Sum of correlations on main diagonal and $\sum r_{ij}$ Sum of all correlations on main and off diagonals.</p> <p>CR (Construct Reliability) should be greater than .70 to suggest convergence and internal consistency.</p>	

Appendix K5

To detect model misspecifications the *standardized residuals* and *modification indices* were reviewed.

AMOS Output for hypothesized Two-Factor CFA Model: Standardized Residual Covariances

	ISMBU3	ISMBU2	ISMBU4	ISMBU5	RHSMBU2	RHSMBU3	RHSMBU1	RHSMBU4
ISMBU3	.000							
ISMBU2	-.073	.000						
ISMBU4	1.770	.087	.000					
ISMBU5	-.364	.252	-1.125	.000				
RHSMBU2	1.294	1.449	1.311	.047	.000			
RHSMBU3	1.173	1.026	.801	.566	.959	.000		
RHSMBU1	1.002	.575	-.545	-1.622	.453	-.602	.000	
RHSMBU4	.044	-1.110	-.682	-2.201	-.548	.082	-.120	.000

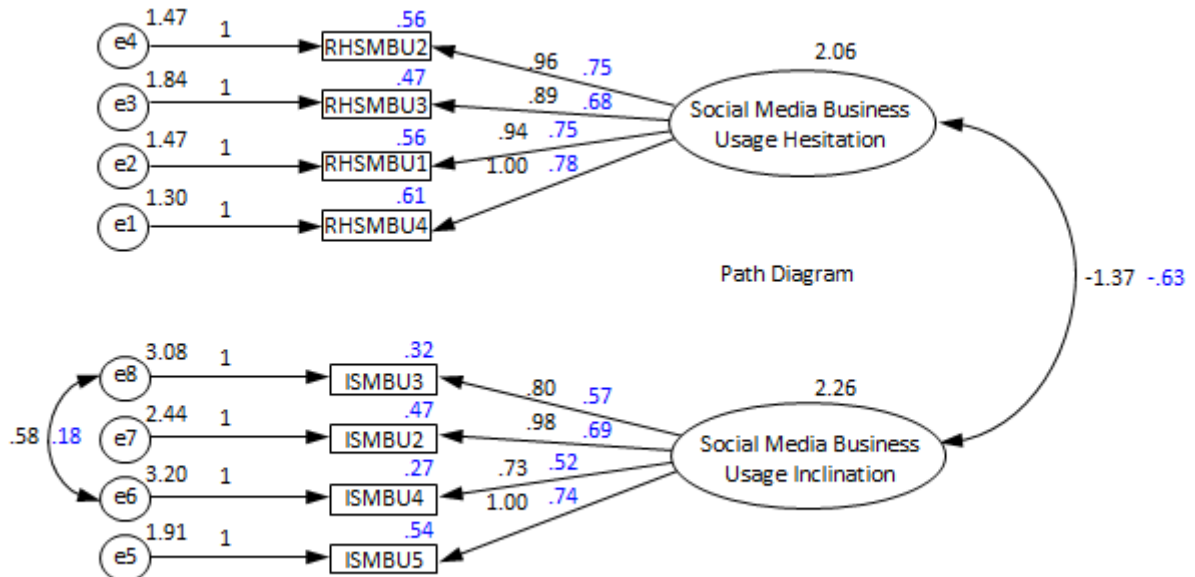
Values > 2.58 cut-off point by Jöreskog and Sörbom (1993)

AMOS Output for hypothesized Two-Factor CFA Model:
Modification Indices and Parameter Change Statistics

	M.I.	Par Change	
Covariances			
e6 <--> e8	10.279	.459	
e5 <--> Hesitation	6.354	-.241	
e5 <--> e6	6.181	-.317	
e4 <--> Inclination	7.106	.230	
e3 <--> Inclination	4.603	.200	
e3 <--> e4	6.982	.223	
e2 <--> e5	4.411	-.202	
e1 <--> Inclination	12.566	-.297	
e1 <--> Hesitation	4.101	-.152	
e1 <--> e5	4.392	-.196	
Variances			
Regression Weights: (Your model)			
ISMBU3 <--- SMBU4	6.365	.095	<i>Variances</i> contained no values since all parameters representing variances (factors and measurement errors) were freely estimated. M.I. was only applicable to model parameters which were set to a value of .00.
ISMBU4 <--- SMBU3	5.742	.089	
ISMBU5 <--- RHSMBU1	6.170	-.097	
ISMBU5 <--- RHSMBU4	5.871	-.094	
RHSMBU2 <--- ISMBU2	4.267	.057	
RHSMBU2 <--- ISMBU4	4.399	.059	
RHSMBU4 <--- Inclination	6.091	-.109	
RHSMBU4 <--- ISMBU2	7.480	-.073	
RHSMBU4 <--- ISMBU5	8.068	-.080	

Appendix K6

Confirmatory Factor Analysis AMOS v23 – Dimensions of the Antecedent Modified Model



Note: The model is recursive. Sample size = 530

AMOS Output for modified Two-Factor CFA Model: Summary of Model Variables

Your model contains the following variables

RHSMBU4 RHSMBU1 RHSMBU3 RHSMBU2 ISMBU5 ISMBU4 ISMBU2 ISMBU3	}	Observed, endogenous variables (Input data or dependent variables)
--	---	--

Hesitation e1 e2 e3 e4	}	Inclination e5 e6 e7 e8	}	Unobserved, exogenous variables (All factors and error terms or independent variables)
---	---	--	---	--

Variable counts

Number of variables in your model:	18
Number of observed variables:	8
Number of unobserved variables:	10
Number of exogenous variables:	10
Number of endogenous variables:	8

Appendix K7

AMOS Output for modified Two-factor CFA Model: Summary of Model Parameters

Parameter Summary						
	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	10	0	0	0	0	10
Labeled	0	0	0	0	0	0
Unlabeled	6	2	10	0	0	18
Total	16	2	10	0	0	28

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 144
 Number of distinct parameters to be estimated: 72
 Degrees of freedom (144 - 72): 72

Result (Default model)

Minimum was achieved
 Chi-square = 130.907
 Degrees of freedom = 72
 Probability level = .000.

144 was the number of distinct sample moments, the elements in the sample covariance matrix, i.e. the number of pieces of information provided by the data. 72 parameters to be estimated. 72 Degrees of freedom based on an over identified model with a Chi-square of 45.49 with a p-level of .000. For a good fit to the sample data, the null hypothesis that there is no significant difference between the observed and estimated covariance matrices should be retained.

AMOS Output for modified Two-Factor CFA Model: Parameter Estimates

Maximum Likelihood Estimates	Estimate	S.E.	C.R.	P
Regression Weights (Factor Loadings)				
RHSMBU4 <--- Hesitation	1.000			
RHSMBU1 <--- Hesitation	.943	.058	16.325	***
RHSMBU3 <--- Hesitation	.887	.059	14.998	***
RHSMBU2 <--- Hesitation	.957	.058	16.412	***
ISMBU5 <--- Inclination	1.000			
ISMBU4 <--- Inclination	.725	.075	9.699	***
ISMBU2 <--- Inclination	.979	.081	12.148	***
ISMBU3 <--- Inclination	.804	.077	10.477	***
Covariances				
Hesitation <--> Inclination	-1.371	.153	-8.984	***
e6 <--> e8	.576	.168	3.432	***
Variances				
Hesitation	2.065	.208	9.909	***
Inclination	2.260	.273	8.287	***
e1	1.304	.115	11.306	***
e2	1.468	.119	12.348	***
e3	1.844	.136	13.532	***
e4	1.471	.120	12.242	***
e5	1.910	.190	10.048	***
e6	3.196	.226	14.122	***
e7	2.445	.211	11.574	***
e8	3.080	.226	13.613	***

All t-values are > 1.96 (2TT) – all loadings are significant

Parameter Estimates should demonstrate the correct sign and size. They were unreasonable if their correlations > 1.00 or indicated negative variances and covariance or correlation matrices which were not positive definite.

S.E. Standard Errors revealed the precision with which a parameter had been estimated. A value close to zero or a large value indicated that the test statistics for a parameter could not be defined or a parameter could not be determined.

C.R. Critical Ratio represented the estimate of the parameter divided by its standard error. It operated as z-statistic in examining that the estimate was statistically significant different from zero. Based on a probability level of .05 the test statistic had to exceed ± 1.96 before the hypothesis that the estimate equaled zero could be rejected (Byrne 2010).

*** Probability < .000. Weights were significant at .001 (2TT)
 All loadings were significant.

Appendix K8 (Extract)

AMOS Output for modified Two-Factor CFA Model:
Goodness-of-Fit Statistics

Model Fit Summary					
CMIN					
Model	NPAR	CMIN	DF	P	CMIN/DF
Your (Default) model	72	130.907	72	.000	1.818
Saturated model	144	.000	0		
Independence model	32	2820.185	112	.000	25.180
RMR, GFI					
Model	RMR	GFI	AGFI	PGFI	
Your (Default) model	.188	.971	.942	.485	
Saturated model	.000	1.000			
Independence model	.1312	.483	.336	.376	
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Your (Default) model	.967	.949	.980	.969	.980
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
Parsimony-adjusted Measures					
Model	PRATIO	PNFI	PCFI		
Your (Default) model	.643	.622	.630		
Saturated model	.000	.000	.000		
Independence model	1.000	.000	.000		
NCP					
Model	NCP	LO90	HI90		
Your (Default) model	27.491	11.338	51.319		
Saturated model	.000	.000	.000		
Independence model	1357.779	1239.582	1483.351		

FMIN					
Model	FMIN	F0	LO90	HI90	
Your (Default) model	.124	.056	.029	.090	
Saturated model	.000	.000	.000	.000	
Independence model	2.671	2.565	2.404	2.732	
RMSEA					
Model	RMSEA	LO90	HI90	PCLOSE	
Your (Default) model	.028	.020	.035	1.000	
Independence model	.151	.147	.156	.000	

Criteria Chapter 4,136; Schreiber et al (2006); Byrne (2010); Hair et al (2009)

NPAR = Number of Parameters

CMIN = Minimum discrepancy between unrestricted sample covariance matrix S , and restricted covariance matrix $\Sigma\theta$ representing the Likelihood ratio test or χ^2 statistic.

P-Value < .0001

The fit of the data to the hypothesized model was not entirely adequate.

The threshold of **CMIN/DF** was < 5.0.

The sample size of 530 influenced the **AGFI** (Adjusted) **GFI** Goodness of Fit Index.

The **GFI** and **AGFI** suggested that the modified model fitted the sample data relatively well.

NFI, **RFI**, and **CFI** in Baseline Comparison indicated a good fit.

The **PCFI** in Parsimony-adjusted measures was still critical, should be > .80.

The **PCLOSE** should be > .05.

Indices	Recommended Benchmarks	Results
χ^2/df = Norm Chi-Square	between 1.00 and 5.00	1.818
GFI = Goodness-of-Fit Index	$\geq .92$	.971
RMSEA = Root Mean Squared Error	$\leq .07$	.028
CFI = Comparative Fit Index	$\geq .92$	.978
AGFI = Adjusted Goodness-of-Fit Index	$\geq .90$	.942
NFI = Normed Fit Index	$\geq .95$	.954

Appendix K9

Interpretation of the Model Fit Appraisal Criteria

Measure	Poor	Acceptable	Good
CMIN/DF	> 5	> 3	> 1
CFI	< .90	< .95	> .95
SRMR	> .10	> .08	< .08
RMSEA	> .08	> .06	< .06
PClose	< .01	< .05	> .05

AMOS Output for modified Two-Factor CFA Model: Standardized Residual Covariances

	ISMBU3	ISMBU2	ISMBU4	ISMBU5	RHSMBU2	RHSMBU3	RHSMBU1	RHSMBU4
ISMBU3	.000							
ISMBU2	.471	.000						
ISMBU4	.000	.715	.000					
ISMBU5	-.045	-.119	-.709	.000				
RHSMBU2	.992	1.601	.947	.415	.000			
RHSMBU3	.892	1.162	.463	.899	.978	.000		
RHSMBU1	.705	.734	-.909	-1.241	.458	-.592	.000	
RHSMBU4	-.264	-.934	-1.059	-1.792	-.552	.084	-.134	.000

Values > 2.58 cut-off point by Jöreskog and Sörbom (1993)

AMOS Output for modified Two-Factor CFA Model: Modification Indices and Parameter Change Statistics

	M.I.	Par Change	
Covariances			
e4 <--> Inclination	7.133	.238	
e3 <--> Inclination	5.041	.216	
e3 <--> e4	7.229	.228	
e1 <--> Inclination	12.962	-.310	
e1 <--> Hesitation	4.319	-.155	
Variances			
Regression Weights: (Your model)			
RHSMBU2 <--- ISMBU2	4.548	.059	
RHSMBU3 <--- ISMBU5	4.049	.063	
RHSMBU4 <--- Inclination	5.997	-.106	
RHSMBU4 <--- ISMBU2	6.957	-.070	
RHSMBU4 <--- ISMBU5	6.977	-.074	

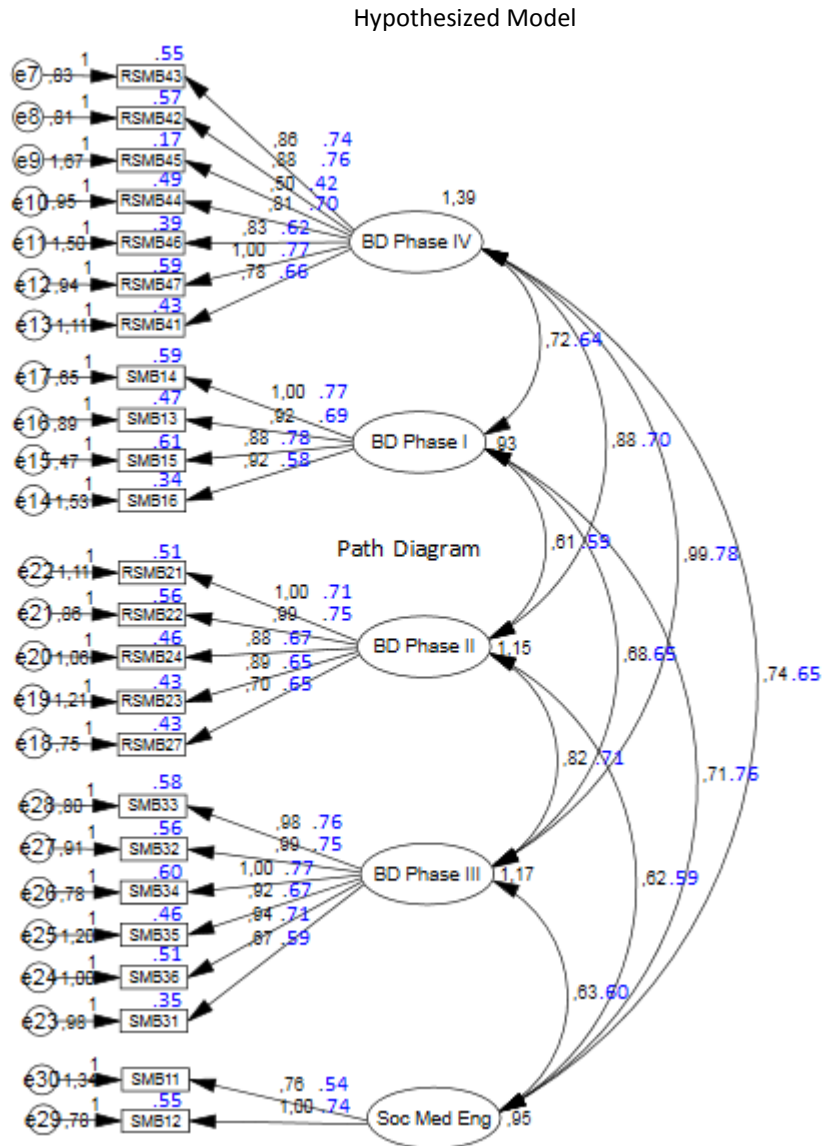
Variances contained no values since all parameters representing variances (factors + measurement errors) were freely estimated.

M.I. was only applicable to model parameters which were set to a value of .00.

Appendix K10

Confirmatory Factor Analysis AMOS v23 – Dimensions of the Independent Variable Original Measurement Model (Hypothesized Model)

Black (blue) figures = unstandardized (standardized) estimates (factor loadings or correlations)



Note: The model is recursive. Sample size = 530

Appendix K11

Factors and Underlying Statements for the Independent Variable

BD Phase IV: Increase the number of leads and generate opportunities

RSMBIV3: The Social Media presence of our employees ensures that our company can be trusted most of the time which generates the atmosphere to generate new leads and opportunities.

RSMBIV2: Our Social Media efforts consisting of regularly sharing updates, blogs and information lead to the desired outcome in terms of leads and opportunities.

RSMBIV5: We are Social Media 'experts' in tailoring our solution and services according our customers' expectations resulting in more leads and opportunities.

RSMBIV4: Social Media helps our Business Development/Marketing team to identify potential leads and opportunities which have to meet specific company criteria in order to be approved by Sales.

RSMBIV6: Our Business Developers are always held responsible to generate leads and opportunities through Social Media for our sales team.

RSMBIV7: Social Media has been very helpful to speed up the Business Development phase of 'increasing the number of leads and generating opportunities'.

RSMBIV1: My Social Network (e.g. LinkedIn/Xing) contacts and online groups help to discover and exploit profitable leads and opportunities.

BD Phase I: Identify and prospect potential buyers

SMBI4: Building rapport makes it easier to obtain critical contact information, especially by referring to each other's Social Media profile during the call.

SMBI3: Prospects perceive my 'cold calls' as 'warm calls' when I refer to their and/or my Social Media Profile which increases their interest to accept my call.

SMBI5: 'Well-balanced' self-disclosure on Social Media Profiles 'breaks the ice' and establishes common ground and a trustworthy atmosphere.

SMBI6: The more information professionals disclose on Facebook, LinkedIn, or Xing, the more they come across as credible and trustworthy, and vice versa.

BD Phase II: Share information and maintain knowledge

RSMBII1: Social Media is considered as one of the most cost-effective tools to obtain deal relevant business information and knowledge.

RSMBII2: Social Media business usage allows the exchange of meaningful and timely information. This makes it easy to comprehend and maintain competitor, industry & market information, and knowledge. RSMBII2

RSMBII4: Tacit knowledge and competitor/industry information is usually quite easy to access, retrieve, and obtain on Social Media when both mutually share.

RSMBII3: Our Request for Information (RFI), Quotation/Proposal (RFQ/RFP) process could be considerably improved by accessing valuable information via Social Media (LinkedIn/Xing, Blogs, Micro-blogs, Success stories) at just the right time.

RSMBII7: Social Media business usage may render the Business Development phase 'sharing information and maintaining knowledge' easier and faster.

BD Phase III: Build social networks and manage existing relationships

SMBIII3: Social Media interactions become so clear, intuitive, and understandable to nurture our relationships with existing and new customers.

SMBIII2: Social Media might be the key media to raise/increase awareness for our solutions/services by communicating and interacting effectively (listen and converse meaningful insights) with new and existing customers.

SMBIII4: Social Media allows us to communicate and interact more effectively with all levels of new and our existing customers to achieve our company goals.

SMBIII5: Social Media supports building relationships similar to the real-world through 'word-of-mouth' endorsements, recommendations, likes, congrats, and co-creating value.

SMBIII6: Social Media is increasingly critical to collaborate across our marketing/sales/business development function in developing new and managing existing customers.

SMBIII1: Social Media might be an excellent tool to build social networks and establishing credibility and trust with new and existing customers by identifying these criteria which are relevant for a particular relationship.

Social Media Engagement

SMBI1: Social Media (LinkedIn/Xing) as an 'up-to-date' Rolodex (business card holder) makes it easier than a 'difficult to access and often outdated' company database (e.g. Dun & Bradstreet, Hoovers or Hoppenstedt) to identify and prospect key contacts.

SMBI2: My Social Media Profile differentiates myself from the crowd of sales callers by being perceived as an 'expert' or 'consultant' and overcoming objections of gatekeepers easier.

Appendix K12

AMOS Output for modified Five-factor CFA Model: Summary of Model Variables

Your model contains the following variables

RSMB43	RSMB27	SMB12		} Observed, endogenous variables (Input data or dependent variables)
RSMB42	RSMB23	SMB11		
RSMB45	RSMB24			
RSMB44	RSMB22			
RSMB46	RSMB21			
RSMB47	SMB31			
RSMB41	SMB36			
SMB16	SMB35			
SMB15	SMB34			
SMB13	SMB32			
SMB14	SMB33			
BD Phase IV	BD Phase I	BD Phase III	e23		} Unobserved, exogenous variables (All factors and error terms or independent variables)
e7	e14	Soc Med Eng	e30	
e8	e15	e12	e29	
e9	e17	e13	e19	
e10	BD Phase II	e16	e18	
e11	e20	e26	e27	
	e21	e25	e28	
	e22	e24		

Variable counts

Number of variables in your model: 53
 Number of observed variables: 24
 Number of unobserved variables: 29
 Number of exogenous variables: 29
 Number of endogenous variables: 24

AMOS Output for hypothesized Five-Factor CFA Model:
Summary of Model Parameters

Parameter Summary						
	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	29	0	0	0	0	29
Labeled	0	0	0	0	0	0
Unlabeled	19	10	29	0	0	58
Total	48	10	29	0	0	87

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	1200	1200 was the number of distinct sample moments,
Number of distinct parameters to be estimated:	232	the elements in the sample covariance matrix, i.e.
Degrees of freedom (1200 - 232):	968	the number of pieces of information provided by the data. 232 parameters to be estimated. 968 Degrees

Result (Default model)

Minimum was achieved
 Chi-square = 1953.812
 Degrees of freedom = 968
 Probability level = .000.

of freedom based on an over identified model with a Chi-square of 1953,81 with a p-level of .000. For a good fit to the sample data, the null hypothesis that there is no significant difference between the observed and estimated covariance matrices should be retained.

Appendix K13

AMOS Output for hypothesized Five-Factor CFA Model:
Parameter Estimates

Maximum Likelihood Estimates			Estimate	S.E.	C.R.	P
Regression Weights (Factor Loadings)						
RSMB43	<---	BD Phase IV	.864	.050	17.371	***
RSMB42	<---	BD Phase IV	.883	.050	17.673	***
RSMB45	<---	BD Phase IV	.504	.054	9.249	***
RSMB44	<---	BD Phase IV	.811	.050	16.191	***
RSMB46	<---	BD Phase IV	.833	.058	14.270	***
RSMB47	<---	BD Phase IV	1.000			
RSMB41	<---	BD Phase IV	.779	.052	15.053	***
SMB16	<---	BD Phase I	.916	.073	12.546	***
SMB15	<---	BD Phase I	.879	.052	16.774	***
SMB13	<---	BD Phase I	.924	.062	14.909	***
SMB14	<---	BD Phase I	1.000			
RSMB27	<---	BD Phase II	.698	.051	13.558	***
RSMB23	<---	BD Phase II	.885	.065	13.549	***
RSMB24	<---	BD Phase II	.878	.063	13.964	***
RSMB22	<---	BD Phase II	.986	.064	15.385	***
RSMB21	<---	BD Phase II	1.000			
SMB31	<---	BD Phase III	.670	.050	13.456	***
SMB36	<---	BD Phase III	.937	.056	16.599	***
SMB35	<---	BD Phase III	.925	.059	15.605	***
SMB34	<---	BD Phase III	1.000			
SMB32	<---	BD Phase III	.993	.057	17.532	***
SMB33	<---	BD Phase III	.980	.055	17.980	***
SMB12	<---	SocMedEng	1.000			
SMB11	<---	SocMedEng	.763	.080	9.546	***

*** Probability < .000. Weights were significant at .001 (2TT)
All loadings were significant.

All t-values are > 1.96 (2TT) –
all loadings are significant.

Parameter Estimates should demonstrate the correct sign and size. They were unreasonable if their correlations were > 1.00 or indicated negative variances and covariance or correlation matrices which were not positive definite.

S.E. Standard Errors revealed the precision with which a parameter has been estimated. A value close to zero or a large value indicated that the test statistics for a parameter could not be defined or a parameter could not be determined.

C.R. Critical Ratio represented the estimate of the parameter divided by its standard error. It operated as z-statistic in examining that the estimate was statistically significant different from zero. Based on a probability level of .05 the test statistic had to exceed ± 1.96 before the hypothesis that the estimate equaled zero could be rejected (Byrne 2010).

AMOS Output for hypothesized Five-Factor CFA Model:
Parameter Estimates (Continued)

Maximum Likelihood Estimates			Estimate	S.E.	C.R.	P
Covariances						
BD Phase IV	<-->	BD Phase I	.724	.076	9.585	***
BD Phase IV	<-->	BD Phase II	.881	.089	9.842	***
BD Phase IV	<-->	BD Phase III	.990	.091	10.912	***
BD Phase IV	<-->	SocMedEng	.741	.082	9.056	***
BD Phase I	<-->	BD Phase II	.609	.070	8.751	***
BD Phase I	<-->	BD Phase III	.680	.070	9.719	***
BD Phase I	<-->	SocMedEng	.712	.072	9.830	***
BD Phase II	<-->	BD Phase III	.824	.083	9.948	***
BD Phase II	<-->	SocMedEng	.615	.076	8.140	***
BD Phase III	<-->	SocMedEng	.633	.074	8.605	***

*** Probability < .000. Weights were significant at .001 (2TT)
All loadings were significant.

Appendix K14

AMOS Output for hypothesized Five-Factor CFA Model:
Parameter Estimates (*Continued*)

Maximum Likelihood Estimates	Estimate	S.E.	C.R.	P
Variances				
BD Phase IV	1.386	.137	10.097	***
BD Phase I	.931	.096	9.666	***
BD Phase II	1.150	.130	8.826	***
BD Phase III	1.171	.115	10.162	***
SocMedEng	.945	.129	7.320	***
e7	.830	.060	13.764	***
e8	.808	.059	13.582	***
e9	1.673	.106	15.834	***
e10	.949	.066	14.341	***
e11	1.504	.100	14.981	***
e14	1.534	.104	14.730	***
e15	.467	.040	11.546	***
e17	.651	.055	11.878	***
e20	1.063	.077	13.879	***
e21	.861	.069	12.545	***
e22	1.109	.083	13.298	***
e12	.945	.071	13.321	***
e13	1.115	.076	14.754	***
e16	.888	.066	13.549	***
e26	.780	.059	13.251	***
e25	1.197	.082	14.588	***
e24	.996	.070	14.194	***
e23	.982	.065	15.189	***
e30	1.344	.097	13.829	***
e29	.782	.100	7.819	***
e19	1.211	.086	14.141	***
e18	.751	.053	14.136	***
e27	.910	.066	13.718	***
e28	.800	.060	13.438	***

*** Probability < .000

Appendix K15 (Extract)

AMOS Output for hypothesized Five-Factor CFA Model:
Goodness-of-Fit Statistics

Model Fit Summary					
CMIN					
Model	NPAR	CMIN	DF	P	CMIN/DF
Your (Default) model	232	1.953.812	968	.000	2.018
Saturated model	1200	.000	0		
Independence model	96	12222.758	1104	.000	11.071
RMR, GFI					
Model	RMR	GFI	AGFI	PGFI	
Your (Default) model	.120	.867	.835	.699	
Saturated model	.000	1.000			
Independence model	.700	.245	.179	.225	
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Your (Default) model	.840	.818	.912	.899	.911
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
Parsimony-Adjusted Measures					
Model	PRATIO	PNFI	PCFI		
Your (Default) model	.877	.737	.799		
Saturated model	.000	.000	.000		
Independence model	1.000	.000	.000		
NCP					
Model	NCP	LO90	HI90		
Your (Default) model	985.812	863.531	1115.841		
Saturated model	.000	.000	.000		
Independence model	11118.758	10766.615	11477.381		
FMIN					
Model	FMIN	F0	LO90	HI90	
Your (Default) model	1.850	.934	.818	1.057	
Saturated model	.000	.000	.000	.000	
Independence model	11.575	10.529	10.196	10.869	
RMSEA					
Model	RMSEA	LO90	HI90	PCLOSE	
Your (Default) model	.031	.029	.033	1.000	
Independence model	.098	.096	.099	.000	

Criteria Chapter 4,136; Schreiber et al. (2006); Byrne (2010); Hair et al. (2009)

NPAR = Number of Parameters

CMIN = Minimum discrepancy between unrestricted sample covariance matrix S , and restricted covariance matrix $\Sigma\theta$ representing the Likelihood ratio test or χ^2 statistic.

P-Value < .0001
The fit of the data to the hypothesized model was not entirely adequate.

The threshold of **CMIN/DF** should be < 5.0.

The sample size of 530 influenced the **AGFI** (Adjusted) **GFI** Goodness of Fit Index.

The **GFI** and **AGFI** suggested that the hypothesized model did not fit the sample data well.

RFI in Baseline Comparison indicated a reasonable fit.

The **PCFI** in Parsimony-adjusted measures was not acceptable, should be > .80.

The **PCLOSE** should be > .05.

Indices	Recommended Benchmarks	Results
χ^2/df = Norm Chi-Square	between 1.00 and 5.00	2.018
GFI = Goodness-of-Fit Index	$\geq .92$	.867
RMSEA = Root Mean Squared Error	$\leq .07$	.031
CFI = Comparative Fit Index	$\geq .92$	.911
AGFI = Adjusted Goodness-of-Fit Index	$\geq .90$	.835
NFI = Normed Fit Index	$\geq .95$	.840

Appendix K16 (Extract)

AMOS Output for hypothesized Five-Factor CFA Model:
Modification Indices and Parameter Change Statistics

	M.I.	Par Change
Covariances		
e28 <--> BD Phase III	5.379	.074
e27 <--> e28	13.542	.157
e26 <--> BD Phase I	5.426	-.078
e25 <--> e27	23.641	-.247
e25 <--> e26	6.342	.120
e24 <--> BD Phase III	4.453	-.074
e24 <--> e28	4.814	-.097
e24 <--> e26	4.506	-.093
e24 <--> e25	5.365	.122
e23 <--> e30	14.709	.209
e23 <--> e26	7.702	-.118
e22 <--> BD Phase II	11.201	.141
e22 <--> BD Phase I	8.464	-.116
e21 <--> BD Phase III	7.067	-.093
e21 <--> BD Phase II	5.373	.087
e21 <--> e24	6.106	-.117
e21 <--> e22	67.863	.414
e19 <--> BD Phase III	5.126	.090
e19 <--> e26	5.398	.114
e19 <--> e23	5.516	-.122
e18 <--> BD Phase II	23.520	-.116
e18 <--> BD Phase I	16.451	.130
e18 <--> e24	7.469	.116
e18 <--> e22	13.962	-.169
e18 <--> e21	7.112	-.108
e17 <--> BD Phase III	4.565	-.066
e17 <--> BD Phase I	4.409	.063
e17 <--> e30	5.110	-.110
e16 <--> e25	7.176	.136
e16 <--> e21	4.129	-.093
e16 <--> e17	20.197	.177
e15 <--> e30	8.019	.118
e15 <--> e22	4.491	-.082
e15 <--> e20	4.039	.075
e15 <--> e16	4.797	-.074
e14 <--> BD Phase I	6.816	-.115
e14 <--> e27	4.254	.119
e14 <--> e17	4.109	-.103
e14 <--> e16	5.715	-.135

Appendix K17 (Extract)

AMOS Output for hypothesized Five-Factor CFA Model:
Modification Indices and Parameter Change Statistics (*Continued*)

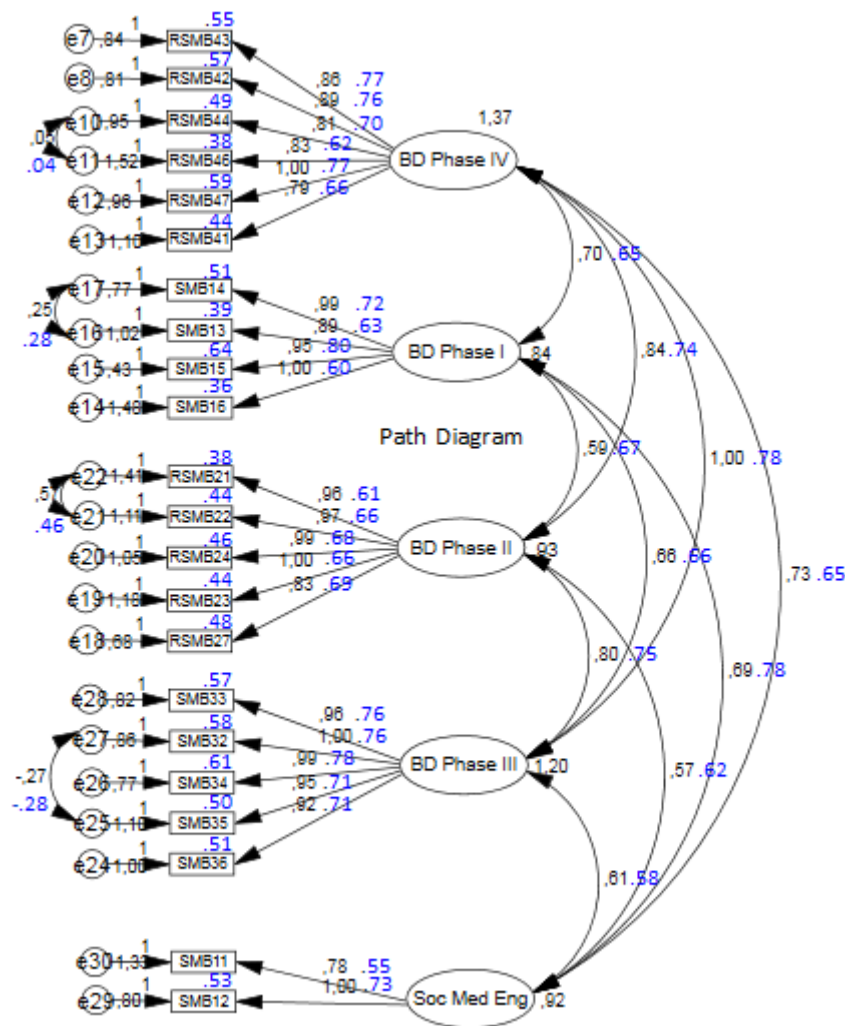
	M.I.	Par Change
Covariances		
e13 <-> SocMedEng	16.440	.194
e13 <-> e29	11.088	.170
e11 <-> SocMedEng	6.168	-.137
e11 <-> BD Phase III	6.232	.108
e11 <-> e30	4.138	-.138
e11 <-> e23	15.671	-.223
e11 <-> e13	7.310	-.164
e11 <-> e12	23.506	.282
e9 <-> BD Phase III	6.534	-.114
e9 <-> e22	4.110	-.132
e9 <-> e13	7.915	-.176
e8 <-> e20	4.271	.096
e8 <-> e13	13.239	.168
e8 <-> e11	15.595	-.211
e7 <-> e25	4.917	-.108
e7 <-> e19	7.431	-.135
e7 <-> e18	4.195	.078
e7 <-> e13	4.003	-.095
e7 <-> e12	10.224	-.142
e7 <-> e10	5.533	.102
e7 <-> e8	15.653	.162
Variances		
<p><i>Variances</i> contained no values since all parameters representing variances (factors+ measurement errors) were freely estimated.</p> <p>M.I. was only applicable to model parameters which were set to a value of .00.</p>		
Regression Weights (Extract)		
SMB11 < --- SMB31	11.522	.147
SMB12 < --- RSMB41	6.065	.082
SMB33 < --- SMB32	5.297	.068
SMB33 < --- RSMB27	4.908	-.082
SMB32 < --- SMB33	4.906	.071
SMB32 < --- SMB35	11.893	-.104
SMB34 < --- SMB31	4.780	-.075
SMB35 < --- SMB32	9.134	-.105
SMB35 < --- SMB13	5.670	.092
SMB36 < --- RSMB27	5.816	.097
SMB31 < --- SMB11	14.531	.123
SMB31 < --- SMB15	4.573	.087
SMB31 < --- RSMB46	10.386	-.091
RMB21 < --- BD Phase III	5.100	-.110
RSMB21 < --- BD Phase I	9.267	-.171
RSMB21 < --- BD Phase IV	5.044	-.101
...

Appendix K18

Confirmatory Factor Analysis AMOS v23 – Dimensions of the Independent Variable Modified Model

Black (blue) figures = unstandardized (standardized) estimates (factor loadings or correlations)

Modified Model



Note: The model is recursive. Sample size = 530

Appendix K19

AMOS Output for modified Five-factor CFA Model: Summary of Model Variables

Your model contains the following variables

RSMB43	RSMB27	SMB12		} Observed, endogenous variables (Input data or dependent variables)
RSMB42	RSMB23	SMB11		
RSMB44	RSMB24			
RSMB46	RSMB22			
RSMB47	RSMB21			
RSMB41	SMB36			
SMB16	SMB35			
SMB15	SMB34			
SMB13	SMB32			
SMB14	SMB33			
BD Phase IV	BD Phase I	BD Phase III	e19	
e7	e14	Soc Med Eng	e18		} Unobserved, exogenous variables (All factors and error terms or independent variables)
e8	e15	e12	e25	
e10	e17	e13	e24	
e11	BD Phase II	e16	e30	
	e20	e26	e29	
	e21	e28		
	e22	e27		

Variable counts

Number of variables in your model:	49
Number of observed variables:	22
Number of unobserved variables:	27
Number of exogenous variables:	27
Number of endogenous variables:	22

AMOS Output for modified Five-Factor CFA Model:
Summary of Model Parameters

Parameter Summary						
	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	27	0	0	0	0	27
Labeled	0	0	0	0	0	0
Unlabeled	17	14	27	0	0	58
Total	44	14	27	0	0	85

Note: The model was recursive. Sample Size: 530. Model: Default Model

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	1212	1212 was the number of distinct sample moments, the elements in the sample covariance matrix, i.e. the number of pieces of information provided by the data.
Number of distinct parameters to be estimated:	232	232 parameters to be estimated.
Degrees of freedom (1200 - 232):	780	780 Degrees of freedom based on an over identified model with a Chi-square of 1299.91 with a p-level of .000. For a good fit to the sample data, the null hypothesis that there is no significant difference between the observed and estimated covariance matrices should be retained.

Result (Default model)

Minimum was achieved
Chi-square = 1299.911
Degrees of freedom = 780
Probability level = .000.

Appendix K20 (Extract)

AMOS Output for modified Five-Factor CFA Model:
Parameter Estimates

Maximum Likelihood Estimates			Estimate	S.E.	C.R.	P
Regression Weights (Factor Loadings)						
RSMB43	<---	BD Phase IV	.863	.051	17.072	***
RSMB42	<---	BD Phase IV	.889	.051	17.521	***
RSMB44	<---	BD Phase IV	.814	.051	15.951	***
RSMB46	<---	BD Phase IV	.830	.060	13.912	***
RSMB47	<---	BD Phase IV	1.000			
RSMB41	<---	BD Phase IV	.792	.052	15.120	***
SMB16	<---	BD Phase I	1.000			
SMB15	<---	BD Phase I	.950	.073	12.981	***
SMB13	<---	BD Phase I	.889	.080	11.070	***
SMB14	<---	BD Phase I	.987	.081	12.212	***
RSMB27	<---	BD Phase II	.825	.063	13.179	***
RSMB23	<---	BD Phase II	1.000			
RSMB24	<---	BD Phase II	.986	.076	12.975	***
RSMB22	<---	BD Phase II	.969	.076	12.677	***
RSMB21	<---	BD Phase II	.958	.081	11.846	***
SMB36	<---	BD Phase III	.923	.057	16.192	***
SMB35	<---	BD Phase III	.953	.067	14.289	***
SMB34	<---	BD Phase III	.992	.056	17.844	***
SMB32	<---	BD Phase III	1.000			
SMB33	<---	BD Phase III	.958	.055	17.323	***
SMB12	<---	SocMedEng	1.000			
SMB11	<---	SocMedEng	.781	.081	9.636	***

All t-values are > 1.96 (2TT) – all loadings are significant.

Parameter Estimates should demonstrate the correct sign and size. They were unreasonable if their correlations were > 1.00 or indicated negative variances and covariance or correlation matrices which were not positive definite.

S.E. Standard Errors revealed the precision with which a parameter has been estimated. A value close to zero or a large value indicated that the test statistics for a parameter could not be defined or a parameter could not be determined.

C.R. Critical Ratio represented the estimate of the parameter divided by its standard error. It operated as z-statistic in examining that the estimate was statistically significant different from zero. Based on a probability level of .05 the test statistic had to exceed ± 1.96 before the hypothesis that the estimate

*** Probability < .000. Weights were significant at .001 (2TT)
All loadings were significant.

AMOS Output for modified Five-Factor CFA Model:
Parameter Estimates (Continued)

Maximum Likelihood Estimates			Estimate	S.E.	C.R.	P
Covariances						
BD Phase IV	<-->	BD Phase I	.698	.081	8.655	***
BD Phase IV	<-->	BD Phase II	.838	.086	9.694	***
BD Phase IV	<-->	BD Phase III	.997	.092	10.794	***
BD Phase IV	<-->	SocMedEng	.734	.082	9.005	***
BD Phase I	<-->	BD Phase II	.585	.072	8.172	***
BD Phase I	<-->	BD Phase III	.662	.076	8.708	***
BD Phase I	<-->	SocMedEng	.687	.078	8.841	***
BD Phase II	<-->	BD Phase III	.796	.082	9.756	***
BD Phase II	<-->	SocMedEng	.574	.071	8.054	***
BD Phase III	<-->	SocMedEng	.613	.074	8.327	***
e10	<-->	e11	.052	.060	.873	.382
e17	<-->	e16	.251	.052	4.790	***
e21	<-->	e22	.570	.072	7.876	***
e27	<-->	e25	-.269	.052	-5.174	***

*** Probability < .000.

Appendix K21 (Extract)

AMOS Output for modified Five-Factor CFA Model:
Goodness-of-Fit Statistics

Model Fit Summary					
CMIN					
Model	NPAR	CMIN	DF	P	CMIN/DF
Your (Default) model	232	1.299.911	780	.000	1.667
Saturated model	1012	.000	0		
Independence model	88	11300.727	924	.000	12.230
RMR, GFI					
Model	RMR	GFI	AGFI	PGFI	
Your (Default) model	.100	.902	.873	.695	
Saturated model	.000	1.000			
Independence model	.727	.249	.177	.227	
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Your (Default) model	.885	.864	.951	.941	.950
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
Parsimony-Adjusted Measures					
Model	PRATIO	PNFI	PCFI		
Your (Default) model	.844	.747	.802		
Saturated model	.000	.000	.000		
Independence model	1.000	.000	.000		
NCP					
Model	NCP	LO90	HI90		
Your (Default) model	519.911	424.587	632.112		
Saturated model	.000	.000	.000		
Independence model	10376.727	10037.477	10722.438		
FMIN					
Model	FMIN	F0	LO90	HI90	
Your (Default) model	1.231	.492	.402	.590	
Saturated model	.000	.000	.000	.000	
Independence model	10.701	9.826	9.505	10.154	
RMSEA					
Model	RMSEA	LO90	HI90	PCLOSE	
Your (Default) model	.025	.023	.028	1.000	
Independence model	.103	.101	.105	.000	

Criteria Chapter 4,136; Schreiber et al. (2006); Byrne (2010); Hair et al (2009)

NPAR = Number of Parameters

CMIN = Minimum discrepancy between unrestricted sample covariance matrix S , and restricted covariance matrix $\Sigma\theta$ representing the Likelihood ratio test or χ^2 statistic.

P-Value < .0001

The fit of the data to the modified model was not entirely adequate.

The threshold of **CMIN/DF** should be < 5.0.

The sample size of 530 influenced the **AGFI** (Adjusted) **GFI** Goodness of Fit Index.

The **GFI** and **AGFI** suggested that the modified model did still not fit the sample data well.

RFI and **CFI** in Baseline Comparison indicated a good fit.

The **PCFI** in Parsimony-adjusted measures was acceptable, since it was > .80.

The **PCLOSE** should be > .05.

Indices	Recommended Benchmarks	Results
χ^2/df = Norm Chi-Square	between 1.00 and 5.00	1.667
GFI = Goodness-of-Fit Index	≥ .92	.902
RMSEA = Root Mean Squared Error	≤ .07	.025
CFI = Comparative Fit Index	≥ .92	.950
AGFI = Adjusted Goodness-of-Fit Index	≥ .90	.873
NFI = Normed Fit Index	≥ .95	.885

Appendix K22 (Extract)

AMOS Output for modified Five-Factor CFA Model: Standardized Residual Covariances (Extract)

	SMB11	SMB12	SMB33	SMB32	...	SMB36	...	RSMB43
SMB11	.000							
SMB12	.000	.000						
SMB33	-.038	.032	.000					
...				
SMB36	.122	.080	-.063	-.024	...	.000		
RSMB21	-.007	.025	-.101	-.023	...	...
RSMB27	.134	.012	-.050	.034	...	.148	...	
...
RSMB43	-.087	.000	-.091	-.059	...	.043	...	.000

The sample covariance between SMB33 and SMB12 is .032 larger than the model-implied covariance.

Values > 2.58 cut-off point by Jöreskog and Sörbom (1993)

Assessing Reliability of Reflective Latent Variables for the Independent Construct (CFA - Modified Model)	
Composite Reliability	ρ_c
BD Process Phase IV	.858
BD Process Phase I	.782
BD Process Phase II	.797
BD Process Phase III	.861
Social Media Engagement	.582
Composite Reliability / Internal Consistency Formular	
$\rho_c = \frac{\sum \lambda^2}{n} = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + (\sum 1 - \lambda^2)}$	
<p>λ^2 indicates the amount of variance of an item accounted for by its associated construct (item reliability). The λ values are standardized loadings which were taken from the rotated component matrix. $(1 - \lambda^2)$ is the measurement error E.</p>	
Construct Reliability (CR)	α
BD Process Phase IV	.856
BD Process Phase I	.778
BD Process Phase II	.816
BD Process Phase III	.853
Social Media Engagement	.570
Construct Reliability Formular	
$\alpha = (k / (k - 1)) \{ 1 - (\sum r_{ii} / \sum r_{ij}) \}$	
<p>k Number of items/variables. $\sum r_{ii}$ Sum of correlations on main diagonal and $\sum r_{ij}$ Sum of all correlations on main and off diagonals. CR (Construct Reliability) should be greater than .70 to suggest convergence and internal consistency.</p>	

Appendix K23

Assessing Validity of Reflective Latent Variables for the Independent Construct (CFA - Modified Model)		
Convergent Validity	AVE	
BD Process Phase IV	.755	
BD Process Phase I	.476 < .50	The AVE < .50 means the variance explained by the latent variable is less than the measurement error. This means that this construct did not have enough commonality to suggest a single underlying latent factor.
BD Process Phase II	.550	
BD Process Phase III	.692	
Social Media Engagement	.208 < .50	
Convergent Validity Formular		
$AVE = \frac{\sum L_i^2}{n}$ <p>Convergent validity of a construct represents the ratio of the amount of the variance of its indicators captured by the constructs relative to the amount of the total variance including the variance due to the measurement errors.</p> <p>L_i represents the standardized factor loadings, and i is the number of items. The estimated factor loadings should be .50 or higher. For n items, AVE is computed as the total of all squared standardized factor loadings (squared multiple correlations) divided by the number of the items. The Rule of Thumb is $AVE \geq .50$. This means that 50% or more of the variance of the indicators is accounted for and support convergent validity.</p>		
Discriminant Validity		
	vAVE	
BD Process Phase IV	.869	The results indicated that discriminant validity <u>was mostly</u> achieved with the exception of <i>BD Process Phase I</i> referring to BD Process Phase II, III and <i>Social Media Engagement</i> .
BD Process Phase I	.690	
BD Process Phase II	.742	
BD Process Phase III	.832	
Social Media Engagement	.456	
Discriminant Validity Formular		
$\{vAVE(\eta_i)\} > \text{Corr}(\eta_i, \eta_j) \text{ or } AVE(\eta_i) > \{\text{Corr}(\eta_i, \eta_j)\}^2$ <p>vAVE of a latent variable should be greater than the correlations among the latent variables or AVE estimated for two factor should be greater than the square of the correlations between two factors to fully satisfy the requirements for discriminant validity.</p>		

Discriminant Validity

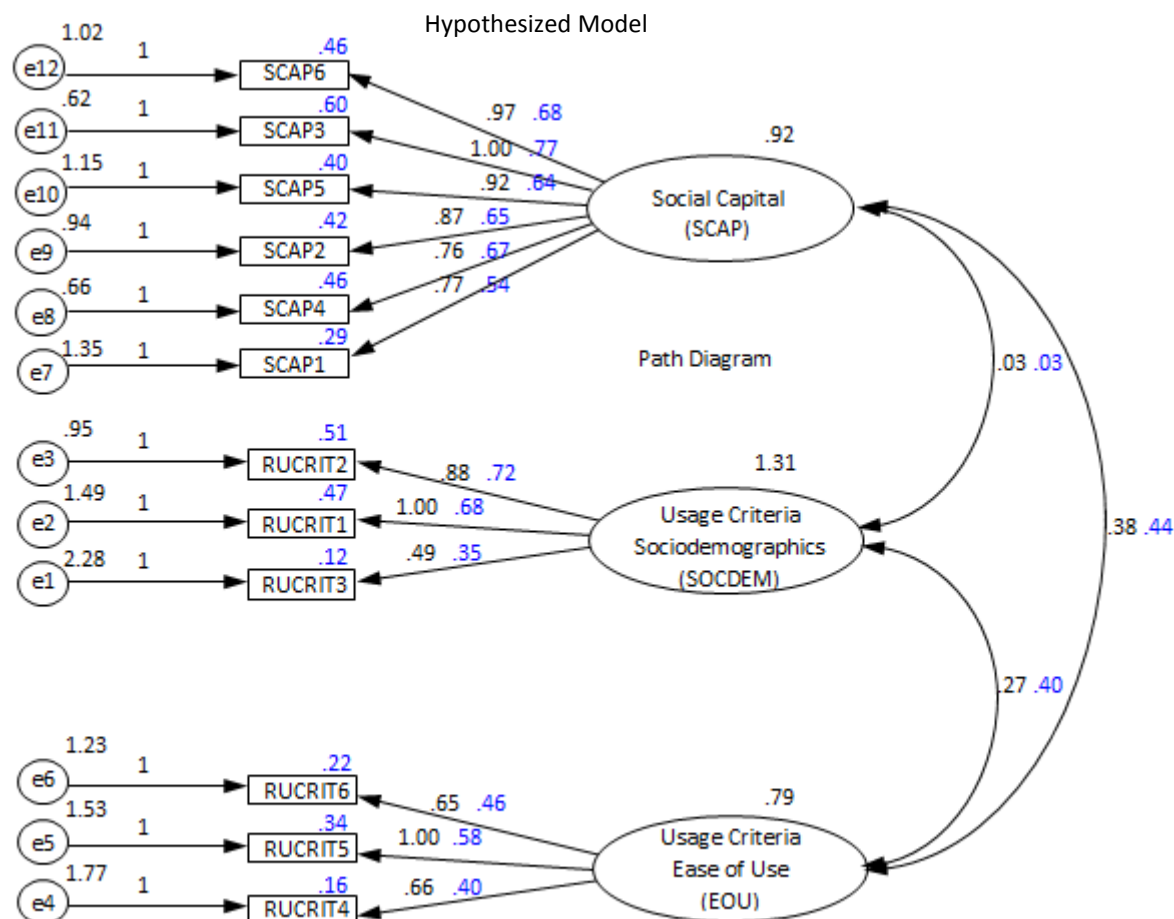
Factor 1 <--> Factor 2	AVE	Squared Correlation	vAVE	Estimate
BD Phase IV <--> BD Phase I	.757	0,425	0,870	0,652
BD Phase IV <--> BD Phase II	.757	0,552	0,870	0,743
BD Phase IV <--> BD Phase III	.757	0,602	0,870	0,776
BD Phase IV <--> SocMedEng	.757	0,426	0,870	0,653
BD Phase I <--> BD Phase II	.476	0,442	0,690	0,665
BD Phase I <--> BD Phase III	.476	0,436	0,690	0,660
BD Phase I <--> SocMedEng	.476	0,612	0,690	0,782
BD Phase II <--> BD Phase III	.550	0,567	0,742	0,753
BD Phase II <--> SocMedEng	.550	0,386	0,742	0,621
BD Phase III <--> SocMedEng	.629	0,339	0,793	0,582

AVE > Squared Correlation or vAVE > Correlations (Estimates)

Appendix K24

Confirmatory Factor Analysis AMOS v23 – Dimensions of the Moderator Variables Original Measurement Model (Hypothesized Model)

Black (blue) figures = unstandardized (standardized) estimates (factor loadings or correlations)



Note: The model is recursive. Sample size = 530

AMOS Output for hypothesized Three-factor CFA Model: Summary of Model Variables

Your model contains the following variables

RUCRIT3	SCAP1	}	Observed, endogenous variables (Input data or dependent variables)
RUCRIT1	SCAP4		
RUCRIT2	SCAP2		
RUCRIT4	SCAP5		
RUCRIT5	SCAP3		
RUCRIT6	SCAP6		
SOCDEM	SCAP	}	Unobserved, exogenous variables (All factors and error terms or independent variables)
e1	e7		
e2	e8		
e3	e9		
EOU	e10		
e4	e11		
e5	e12		
e6			

Appendix K25 (Extract)

AMOS Output for hypothesized Three-Factor CFA Model:
Goodness-of-Fit Statistics

Model Fit Summary						<p>Criteria Chapter 4,136; Schreiber et al. (2006); Byrne (2010)</p> <p>NPAR = Number of Parameters</p> <p>CMIN = Minimum discrepancy between unrestricted sample covariance matrix S, and restricted covariance matrix $\Sigma\theta$ representing the Likelihood ratio test or χ^2 statistic.</p> <p>P-Value < .0001</p> <p>The fit of the data to the hypothesized model was not entirely adequate.</p> <p>The threshold of CMIN/DF should be < 5.0.</p> <p>The sample size of 530 influenced the AGFI (Adjusted) GFI Goodness of Fit Index.</p> <p>The AGFI indicated that the hypothesized model did not fit the sample data.</p> <p>The PCFI in Parsimony-adjusted measures was not acceptable, should be > .80.</p> <p>The PCLOSE should be > .05.</p>
CMIN						
Model	NPAR	CMIN	DF	P	CMIN/DF	
Your (Default) model	108	486.281	204	.000	2.384	
Saturated model	312	.000	0			
Independence model	48	3044.954	264	.000	11.534	
RMR, GFI						
Model	RMR	GFI	AGFI	PGFI		
Your (Default) model	.147	.930	.893	.608		
Saturated model	.000	1.000				
Independence model	.436	.582	.506	.493		
Baseline Comparisons						
Model	NFI	RFI	IFI	TLI	CFI	
	Delta1	rho1	Delta2	rho2		
Your (Default) model	.840	.793	.901	.869	.898	
Saturated model	1.000		1.000		1.000	
Independence model	.000	.000	.000	.000	.000	
Parsimony-Adjusted Measures						
Model	PRATIO	PNFI	PCFI			
Your (Default) model	.773	.649	.694			
Saturated model	.000	.000	.000			
Independence model	1.000	.000	.000			
NCP						
Model	NCP	LO90	HI90			
Your (Default) model	282.281	221.605	350.660			
Saturated model	.000	.000	.000			
Independence model	2780.954	2607.016	2962.245			
FMIN						
Model	FMIN	F0	LO90	HI90		
Your (Default) model	.460	.267	.210	.332		
Saturated model	.000	.000	.000	.000		
Independence model	2.883	2.633	2.469	2.805		
RMSEA						
Model	RMSEA	LO90	HI90	PCLOSE		
Your (Default) model	.036	.032	.040	1.000		
Independence model	.100	.097	.103	.000		

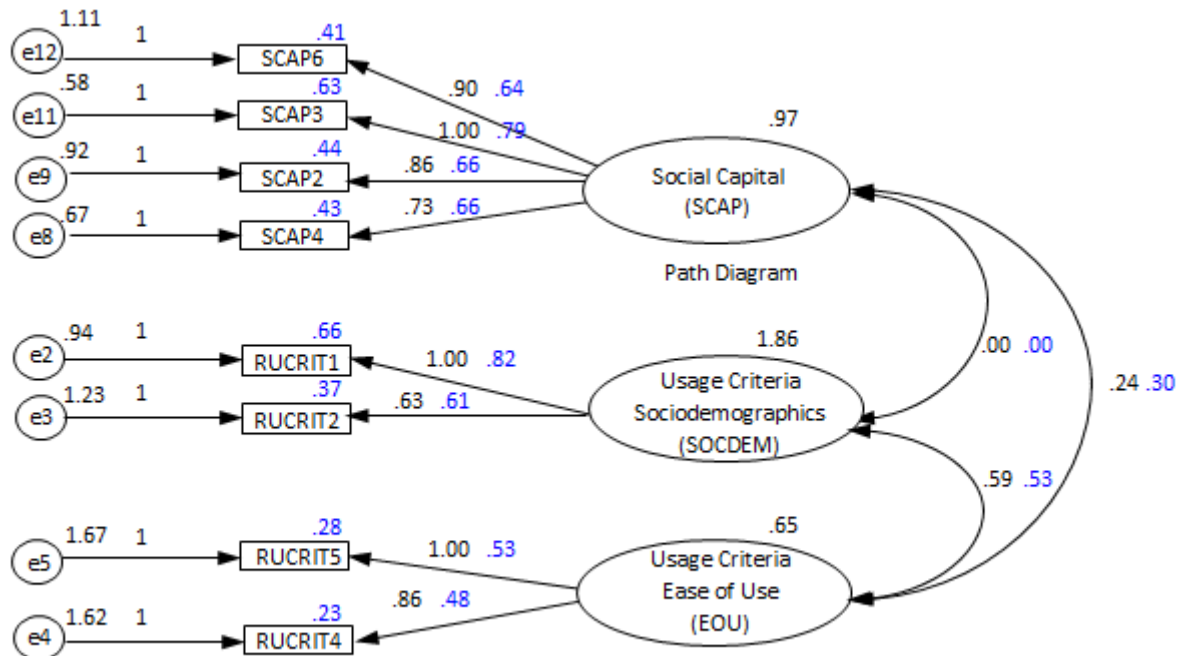
Indices	Recommended Benchmarks	Results
χ^2/df = Norm Chi-Square	between 1.00 and 5.00	2.384
GFI = Goodness-of-Fit Index	≥ .92	.930
RMSEA = Root Mean Squared Error	≤ .07	.036
CFI = Comparative Fit Index	≥ .92	.898
AGFI = Adjusted Goodness-of-Fit Index	≥ .90	.893
NFI = Normed Fit Index	≥ .95	.840

Appendix K26 (Extract)

Confirmatory Factor Analysis AMOS v23 – Dimensions of the Moderator Variables

Modified Model Black (blue) figures = unstandardized (standardized) estimates/loadings or correlations

Modified Model



Note: The model is recursive. Sample size = 530

AMOS Output for modified Three-factor CFA Model: Summary of Model Variables

Your model contains the following variables

RUCRIT1	SCAP2	}		
RUCRIT4	SCAP3			
RUCRIT5	SCAP6			
SCAP4	RUCRIT2			
SOCDEM	e8	}		Observed, endogenous variables (Input data or dependent variables)
e2	e9			
EOU	e11			
e4	e12			
e5	e3	}		Unobserved, exogenous variables (All factors and error terms or independent variables)
SCAP				

Variable counts

Number of variables in your model:	19
Number of observed variables:	8
Number of unobserved variables:	11
Number of exogenous variables:	11
Number of endogenous variables:	8

Appendix K27 (Extract)

AMOS Output for modified Three-Factor CFA Model:
Goodness-of-Fit Statistics

Model Fit Summary					
CMIN					
Model	NPAR	CMIN	DF	P	CMIN/DF
Your (Default) model	76	97.470	68	.011	1.433
Saturated model	144	.000	0		
Independence model	32	1758.932	112	.000	15.705
RMR, GFI					
Model	RMR	GFI	AGFI	PGFI	
Your (Default) model	.087	.978	.953	.462	
Saturated model	.000	1.000			
Independence model	.439	.665	.570	.518	
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Your (Default) model	.945	.909	.983	.971	.982
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
Parsimony-Adjusted Measures					
Model	PRATIO	PNFI	PCFI		
Your (Default) model	.607	.573	.596		
Saturated model	.000	.000	.000		
Independence model	1.000	.000	.000		
NCP					
Model	NCP	LO90	HI90		
Your (Default) model	29.470	7.193	59.755		
Saturated model	.000	.000	.000		
Independence model	1646.932	1514.831	1786.427		
FMIN					
Model	FMIN	F0	LO90	HI90	
Your (Default) model	.092	.028	.007	.057	
Saturated model	.000	.000	.000	.000	
Independence model	1.666	1.560	1.434	1.692	
RMSEA					
Model	RMSEA	LO90	HI90	PCLOSE	
Your (Default) model	.020	.010	.029	1.000	
Independence model	.118	.113	.123	.000	

Criteria Chapter 4,136;
Schreiber et al. (2006);
Byrne (2010)

NPAR = Number of
Parameters

CMIN = Minimum
discrepancy between
unrestricted sample
covariance matrix S,
and restricted
covariance matrix
 $\Sigma\theta$ representing the
Likelihood ratio test or
 χ^2 statistic.

P-Value < .0001

The fit of the data to
the modified model
was not entirely
adequate.

The threshold of
CMIN/DF should be
< 5.0.

The sample size of 530
influenced the
AGFI (Adjusted) GFI
Goodness of Fit Index.

The GFI and AGFI
suggested that the
modified model fitted
the sample data
relatively well.

RFI and CFI in Baseline
Comparison indicated
a good fit.

The PCFI in Parsimony-
adjusted measures was
still a problem, should
be > .80.

The RMSEA value for
the modified model
was .020 with the 90%
confidence interval
ranging from .010 to
.029.

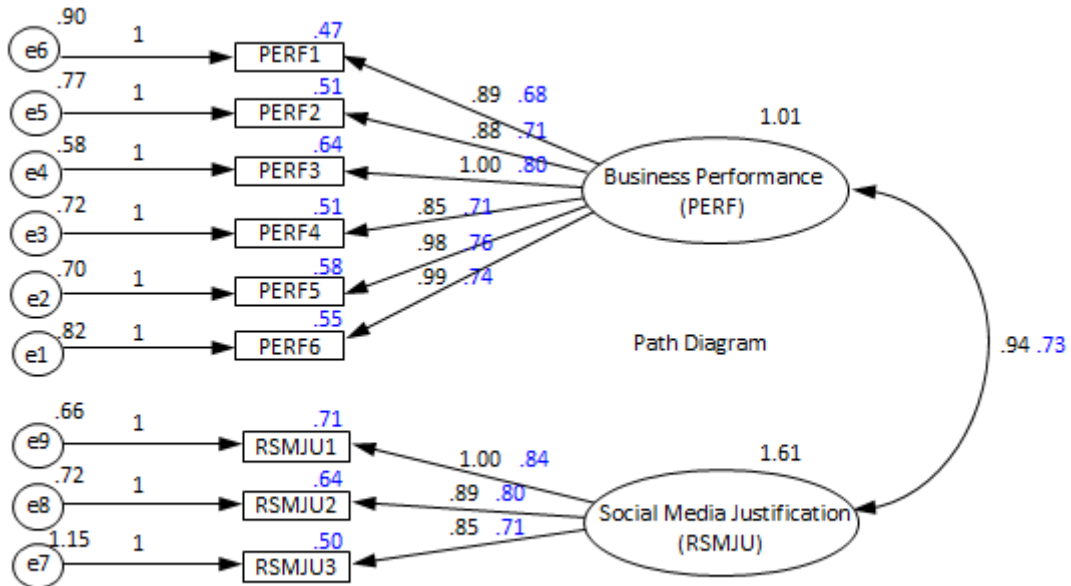
The PCLOSE should be
> .05.

Indices	Recommended Benchmarks	Results
χ^2/df = Norm Chi-Square	between 1.00 and 5.00	1.433
GFI = Goodness-of-Fit Index	$\geq .92$	.978
RMSEA = Root Mean Squared Error	$\leq .07$	.020
CFI = Comparative Fit Index	$\geq .92$	.982
AGFI = Adjusted Goodness-of-Fit Index	$\geq .90$	.953
NFI = Normed Fit Index	$\geq .95$	.945 (borderline)

Appendix K28 (Extract)

Confirmatory Factor Analysis AMOS v23 – Dimensions of the Dependent Variable Original Measurement Model (Hypothesized Model)

Black (blue) figures = unstandardized (standardized) estimates (factor loadings or correlations)



Note: The model is recursive. Sample size = 530

AMOS Output for hypothesized two-factor CFA Model: Summary of Model Variables

Your model contains the following variables

PERF6	RSMJU3	} Observed, endogenous variables (Input data or dependent variables)
PERF5	RSMJU2	
PERF4	RSMJU1	
PERF3		
PERF2		
PERF1		
PERF	RSMJU	} Unobserved, exogenous variables (All factors and error terms or independent variables)
e1	e7	
e2	e8	
e3	e9	
e4		
e5		
e6		

Variable counts

Number of variables in your model:	20
Number of observed variables:	9
Number of unobserved variables:	11
Number of exogenous variables:	11
Number of endogenous variables:	9

Appendix K29

AMOS Output for hypothesized Two-factor CFA Model:
Summary of Model Parameters

Parameter Summary						
	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	11	0	0	0	0	11
Labeled	0	0	0	0	0	0
Unlabeled	7	1	11	0	0	19
Total	18	1	11	0	0	30

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	180
Number of distinct parameters to be estimated:	76
Degrees of freedom (180 - 76):	104

Result (Default model)

Minimum was achieved
Chi-square = 383.554
Degrees of freedom = 104
Probability level = .000.

180 is the number of distinct sample moments, the elements in the sample covariance matrix, i.e. the number of pieces of information provided by the data. 76 parameters to be estimated. 104 Degrees of freedom based on an over identified model with a Chi-square of 383.55 with a p-level of .000. For a good fit to the sample data, the null hypothesis that there is no significant difference between the observed and estimated covariance matrices should be retained.

AMOS Output for hypothesized Two-Factor CFA Model:
Parameter Estimates

Maximum Likelihood Estimates			Estimate	S.E.	C.R.	P
Regression Weights (Factor Loadings)						
PERF6	<---	PERF	.998	.056	17.907	***
PERF5	<---	PERF	.983	.053	18.485	***
PERF4	<---	PERF	.855	.050	16.995	***
PERF3	<---	PERF	1.000			
PERF2	<---	PERF	.880	.052	16.967	***
PERF1	<---	PERF	.886	.055	16.220	***
RSMJU3	<---	RSMJU	.854	.051	16.754	***
RSMJU2	<---	RSMJU	.887	.047	18.882	***
RSMJU1	<---	RSMJU	1.000			
Covariances						
PERF	<-->	RSMJU	.800	.080	9.976	***
Variances						
PERF			1.014	.096	10.582	***
RSMJU			1.609	.145	11.063	***
e1			.816	.059	13.740	***
e2			.699	.052	13.410	***
e3			.720	.051	14.170	***
e4			.582	.046	12.713	***
e5			.767	.054	14.181	***
e6			.902	.062	14.468	***
e7			1.150	.086	13.411	***
e8			.721	.065	11.158	***
e9			.655	.071	9.283	***

Parameter Estimates should demonstrate the correct sign and size. They are unreasonable if their correlations > 1.00 or indicate negative variances and covariance or correlation matrices which are not positive definite.

S.E. Standard Errors reveal the precision with which a parameter has been estimated. A value close to zero or a large value indicates that the test statistics for a parameter cannot be defined or a parameter cannot be determined.

C.R. Critical Ratio represents the estimate of the parameter divided by its standard error. It operates as z-statistic in examining that the estimate is statistically significant different from zero. Based on a probability level of .05 the test statistic must exceed ± 1.96 before the hypothesis that the estimate equals zero can be rejected (Byrne 2010).

*** Probability < .000

Appendix K30

AMOS Output for hypothesized Two-Factor CFA Model:
Modification Indices and Parameter Change Statistics

	M.I.	Par Change		
Covariances				
e7 <--> PERF	5.438	.097	<i>Variances</i> contain no values since all parameters representing variances (factors+ measurement errors) were freely estimated. M.I. is only applicable to model parameters which were set to a value of .00.	
e6 <--> RSMJU	5.394	-.108		
e6 <--> e9	4.441	-.092		
e5 <--> e6	58.567	.307		
e3 <--> e6	15.752	-.154		
e3 <--> e4	6.818	.086		
e2 <--> e5	13.758	-.135		
e2 <--> e4	6.681	-.085		
e1 <--> e6	5.228	-.096		
e1 <--> e5	18.299	-.166		
e1 <--> e4	6.677	-.091		
e1 <--> e2	55.174	.281		
Variances				
Regression Weights: (Your model)				
PERF1 <--- PERF2	26.053	.178		
PERF1 <--- PERF4	6.983	-.095		
PERF2 <--- PERF1	28.486	.166		
PERF2 <--- PERF5	4.966	-.070		
PERF2 <--- PERF6	7.206	-.080		
PERF4 <--- PERF1	7.662	-.083		
PERF5 <--- PERF2	6.177	-.079		
PERF5 <--- PERF6	21.910	.137		
PERF6 <--- PERF2	8.191	-.097		
PERF6 <--- PERF5	20.023	.146		

Appendix K31

AMOS Output for hypothesized Two-Factor CFA Model:
Goodness-of-Fit Statistics

Model Fit Summary					
CMIN					
Model	NP	CMIN	DF	P	CMIN/DF
Your (Default) model	76	383.554	104	.000	3.688
Saturated model	180	.000	0		
Independence model	36	4868.387	144	.000	33.808
RMR, GFI					
Model	RMR	GFI	AGFI	PGFI	
Your (Default) model	.083	.924	.869	.534	
Saturated model	.000	1.000			
Independence model	.798	.337	.171	.270	
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Your (Default) model	.921	.891	.941	.918	.941
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
Parsimony-Adjusted Measures					
Model	PRATIO	PNFI	PCFI		
Your (Default) model	.722	.665	.679		
Saturated model	.000	.000	.000		
Independence model	1.000	.000	.000		
NCP					
Model	NCP	LO90	HI90		
Your (Default) model	279.554	223.398	343.289		
Saturated model	.000	.000	.000		
Independence model	4724.387	4500.071	4955.932		
FMIN					
Model	FMIN	F0	LO90	HI90	
Your (Default) model	.363	.265	.212	.325	
Saturated model	.000	.000	.000	.000	
Independence model	4.610	4.474	4.261	4.693	
RMSEA					
Model	RMSEA	LO90	HI90	PCLOSE	
Your (Default) model	.050	.045	.056	.435	
Independence model	.176	.172	.181	.000	

Criteria Chapter 4,136;
Schreiber et al. (2006);
Byrne (2010)

NP

CMIN = Minimum
discrepancy between
unrestricted sample
covariance matrix S,
and restricted
covariance matrix
Σθ representing the
Likelihood ratio test or
χ² statistic.

P-Value < .0001
The fit of the data to
the hypothesized
model is not entirely
adequate.

The threshold of
CMIN/DF should be <
5.0.

The sample size of 530
influences the
AGFI (Adjusted) GFI
Goodness of Fit Index.

The GFI and AGFI
suggested that the
hypothesized model
fitted the sample data
relatively well.

The CFI in Baseline
Comparison indicated a
model fit.

The PCFI in Parsimony-
adjusted measures was
not acceptable, should
be > .80.

The RMSEA value for
the hypothesized
model was .050 with
the 90% confidence
interval ranging from
.045 to .056.

The PCLOSE should be
> .05.

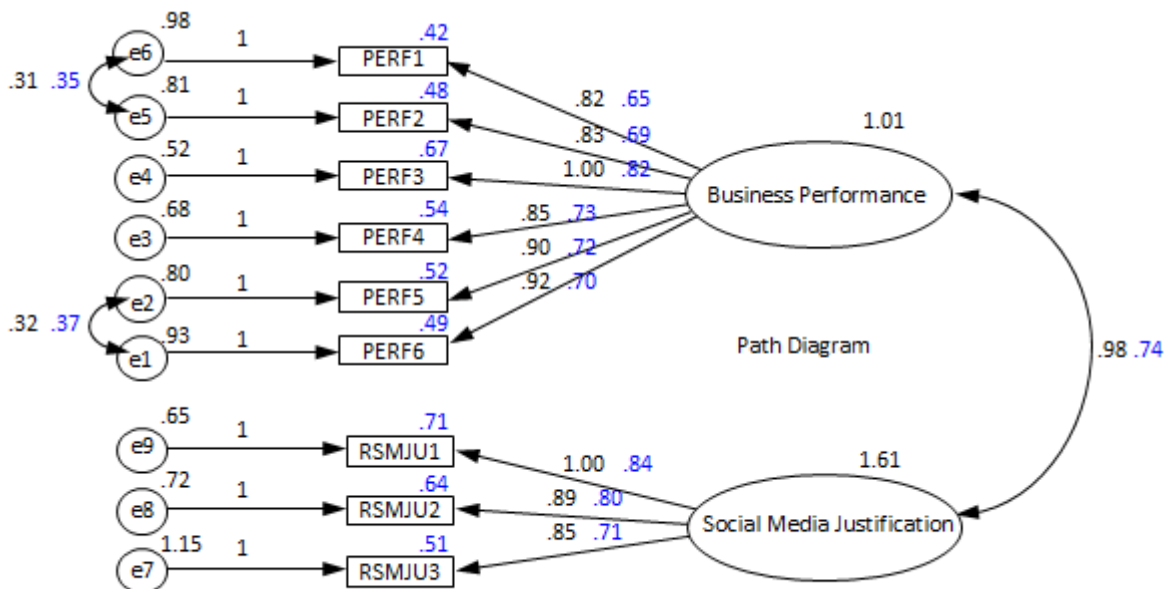
Indices	Recommended Benchmarks	Results
χ²/df = Norm Chi-Square	between 1.00 and 5.00	3.688
GFI = Goodness-of-Fit Index	≥ .92	.924
RMSEA = Root Mean Squared Error	≤ .07	.050
CFI = Comparative Fit Index	≥ .92	.941
AGFI = Adjusted Goodness-of-Fit Index	≥ .90	.869
NFI = Normed Fit Index	≥ .95	.921

Appendix K32

Confirmatory Factor Analysis AMOS v23 – Dimensions of the Dependent Variable

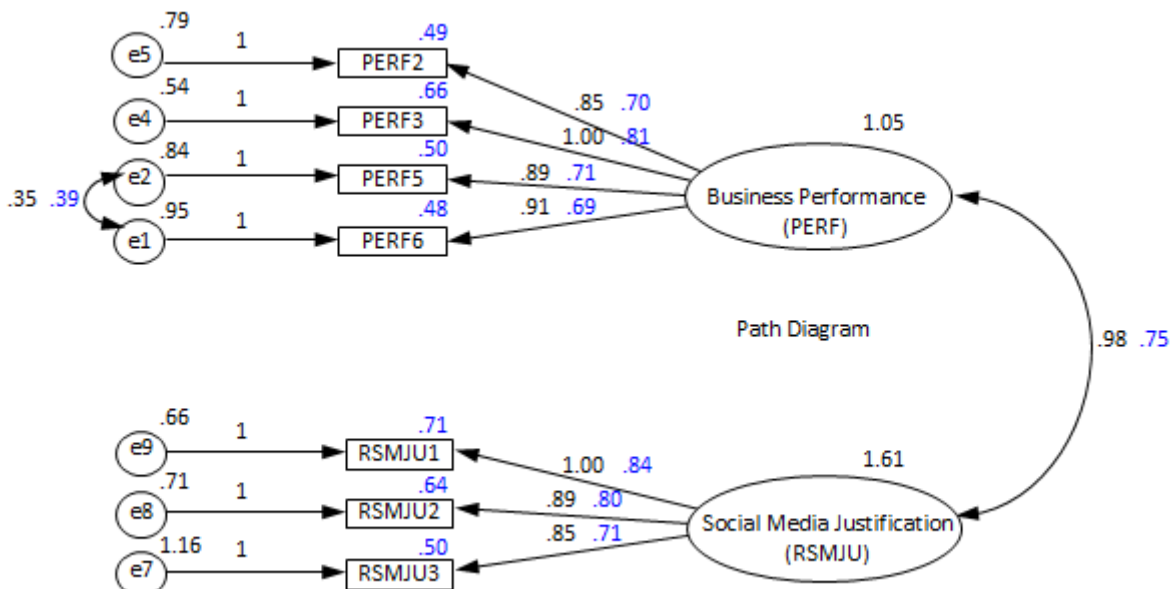
Modified Model (Preliminary Version)

Black (blue) figures = unstandardized (standardized) estimates (factor loadings or correlations)



Note: The model is recursive. Sample size = 530

Modified Model (Finalised Version)



Note: The model is recursive. Sample size = 530

Appendix K33

AMOS Output for modified Two-Factor CFA Model: Goodness-of-Fit Statistics

Model Fit Summary					
CMIN					
Model	NP	CMIN	DF	P	CMIN/DF
Your (Default) model	64	59.360	48	.126	1.237
Saturated model	112	.000	0		
Independence model	28	3448.699	84	.000	41.056
RMR, GFI					
Model	RMR	GFI	AGFI	PGFI	
Your (Default) model	.057	.984	.962	.422	
Saturated model	.000	1.000			
Independence model	.820	.397	.195	.297	
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Your (Default) model	.983	.970	.997	.994	.997
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
Parsimony-Adjusted Measures					
Model	PRATIO	PNFI	PCFI		
Your (Default) model	.571	.562	.569		
Saturated model	.000	.000	.000		
Independence model	1.000	.000	.000		
NCP					
Model	NCP	LO90	HI90		
Your (Default) model	11.360	.000	35.089		
Saturated model	.000	.000	.000		
Independence model	3364.699	3176.270	3560.427		
FMIN					
Model	FMIN	F0	LO90	HI90	
Your (Default) model	.065	.011	.000	.033	
Saturated model	.000	.000	.000	.000	
Independence model	3.266	3.186	3.008	3.372	
RMSEA					
Model	RMSEA	LO90	HI90	PCLOSE	
Your (Default) model	.017	.000	.028	1.000	
Independence model	.195	.189	.200	.000	

Criteria Chapter 4,136;
Schreiber et al. (2006);
Byrne (2010)

NP

CMIN = Minimum
discrepancy between
unrestricted sample
covariance matrix S,
and restricted
covariance matrix
 $\Sigma\theta$ representing the
Likelihood ratio test or
 χ^2 statistic.

P-Value

The fit of the data to
the modified model is
entirely adequate.

The threshold of
CMIN/DF should be <
5.0.

The sample size of 530
influences the

AGFI (Adjusted) GFI
Goodness of Fit Index.

The GFI and AGFI
suggested that the
modified model fitted
the sample data
relatively well.

NFI, RFI, and CFI in the
Baseline Comparison
indicated a good fit.

The PCFI in Parsimony-
adjusted measures is
not acceptable, should
be > .80.

The RMSEA value for
the modified model is
.017 with the 90%
confidence interval
ranging from .000 to
.028.

The PCLOSE should be
> .05.

Goodness of fit Indices (n > 250)	Recommended Benchmarks	Results
χ^2/df = Norm Chi-Square	between 1.00 and 5.00	1.237
GFI = Goodness-of-Fit Index	≥ .92	.984
RMSEA = Root Mean Squared Error	≤ .07	.015
CFI = Comparative Fit Index	≥ .92	.997
AGFI = Adjusted Goodness-of-Fit Index	≥ .90	.962
NFI = Normed Fit Index	≥ .95	.983

Appendix L

Test of the Hypotheses and Subhypotheses

Regression Analyses

Appendix L1

Test of the Hypotheses H_{5a11M}–H_{5a52M} (Moderator Analysis)

Hyp	Updated*		Vendor (N _V = 188) Change Statistics					Third Party (N _T = 235) Change Statistics					Buyer (N _B = 107) Change Statistics				
	Criterion	Predictors	R ² Δ	F Δ	df1	df2	Sig. F Δ	R ² Δ	F Δ	df1	df2	Sig. F Δ	R ² Δ	F Δ	df1	df2	Sig. F Δ
H _{5a11M}	TPERF	TSMBI, SCAP Dummy	.393	59.829	2	185	.000	.381	71.364	2	232	.000	.431	39.375	2	104	.000
		TSMBI x SCAPL (Interaction Term)	.014	4.376	1	184	.038	.004	1.355	1	231	.246	.000	.000	1	103	.986
H _{5a12M}	TPERF	TSMBI, SCAP Dummy	.393	59.829	2	185	.000	.381	71.364	2	232	.000	.431	39.375	2	104	.000
		TSMBI x SCAPH (Interaction Term)	.014	4.376	1	184	.038	.004	1.355	1	231	.246	.000	.000	1	103	.986
H _{5a21M}	TPERF	TRSMBII, SCAP Dummy	.465	80.435	2	185	.000	.335	58.395	2	232	.000	.545	62.191	2	104	.000
		TRSMBII x SCAPL (Interaction Term)	.001	.399	1	184	.528	.000	.105	1	231	.000	.003	.714	1	103	.400
H _{5a22M}	TPERF	TRSMBII, SCAP Dummy	.465	80.435	2	185	.000	.335	58.395	2	232	.000	.545	62.191	2	104	.000
		TRSMBII x SCAPH (Interaction Term)	.001	.399	1	184	.528	.000	.105	1	231	.746	.003	.714	1	103	.400
H _{5a31M}	TPERF	TSMBIII, SCAP Dummy	.506	94.862	2	185	.000	.458	97.894	2	232	.000	.536	60.103	2	104	.000
		TSMBIII x SCAPL (Interaction Term)	.019	7.544	1	184	.007	.002	.958	1	231	.329	.000	.039	1	103	.844
H _{5a32M}	TPERF	TSMBIII, SCAP Dummy	.506	94.862	2	185	.000	.458	97.894	2	232	.000	.536	60.103	2	104	.000
		TSMBIII x SCAPH (Interaction Term)	.019	7.544	1	184	.007	.002	.958	1	231	.329	.000	.039	1	103	.844
H _{5a41M}	TPERF	TRSMBIV, SCAP Dummy	.532	105.246	2	185	.000	.448	94.212	2	232	.000	.513	54.784	2	104	.000
		TRSMBIV x SCAPL (Interaction Term)	.006	2.491	1	184	.116	.000	.131	1	231	.718	.006	1.210	1	103	.274
H _{5a42M}	TPERF	TRSMBIV, SCAP Dummy	.532	105.246	2	185	.000	.448	94.212	2	232	.000	.513	54.784	2	104	.000
		TRSMBIV x SCAPH (Interaction Term)	.006	2.491	1	184	.116	.000	.131	1	231	.718	.006	1.210	1	103	.274
H _{5a51M}	TPERF	SocMedEng, SCAP Dummy	.395	60.448	2	185	.000	.298	49.350	2	232	.000	.229	15.470	2	104	.000
		SocMedEng x SCAPL (Interaction Term)	.001	.360	1	184	.549	.014	4.832	1	231	.029	.004	.601	1	103	.440
H _{5a52M}	TPERF	SocMedEng, SCAP Dummy	.395	60.448	2	185	.000	.298	49.350	2	232	.000	.229	15.470	2	104	.000
		SocMedEng x SCAPH (Interaction Term)	.001	.360	1	184	.549	.014	4.832	1	231	.029	.004	.601	1	103	.440

* After scale refinement by EFA and CFA; SCAP = Social Capital; L = Lower, H = Higher Level, M = Moderator

Appendix L2

Test of the Hypotheses H_{6a11M}–H_{6a52M} (Moderator Analysis)

Hyp	Updated*		Vendor (N _V = 188) Change Statistics					Third Party (N _{TP} = 235) Change Statistics					Buyer (N _B = 107) Change Statistics				
	Criterion	Predictors	R ² Δ	F Δ	df1	df2	Sig. F Δ	R ² Δ	F Δ	df1	df2	Sig. F Δ	R ² Δ	F Δ	df1	df2	Sig. F Δ
H _{6a11M}	TPERF	TSMBI, UCRITSD Dummy	.309	41.336	2	185	.000	.306	51.214	2	232	.000	.405	35.451	2	104	.000
		TSMBI x UCRITSDL (Interaction Term)	.000	.031	1	184	.860	.003	1.029	1	231	.311	.013	2.332	1	103	.130
H _{6a12M}	TPERF	TSMBI, UCRITSD Dummy	.309	41.336	2	185	.000	.306	51.214	2	232	.000	.405	35.451	2	104	.000
		TSMBI x UCRITSDH (Interaction Term)	.000	.031	1	184	.860	.003	1.029	1	231	.311	.013	2.332	1	103	.130
H _{6a21M}	TPERF	TRSMBII, UCRITSD Dummy	.348	49.323	2	185	.000	.255	39.672	2	232	.000	.520	56.273	2	104	.000
		TRSMBII x UCRITSDL (Interaction Term)	.009	2.649	1	184	.105	.000	.034	1	231	.853	.000	.098	1	103	.755
H _{6a22M}	TPERF	TRSMBII, UCRITSD Dummy	.348	49.323	2	185	.000	.255	39.672	2	232	.000	.520	56.273	2	104	.000
		TRSMBII x UCRITSDH (Interaction Term)	.009	2.649	1	184	.105	.000	.034	1	231	.853	.000	.098	1	103	.755
H _{6a31M}	TPERF	TSMBIII, UCRITSD Dummy	.456	77.382	2	185	.000	.427	86.275	2	232	.000	.514	54.995	2	104	.000
		TSMBIII x UCRITSDL (Interaction Term)	.000	.147	1	184	.702	.011	4.429	1	231	.036	.000	.000	1	103	.999
H _{6a32M}	TPERF	TSMBIII, UCRITSD Dummy	.456	77.382	2	185	.000	.427	86.275	2	232	.000	.514	54.995	2	104	.000
		TSMBIII x UCRITSDH (Interaction Term)	.000	.147	1	184	.702	.011	4.429	1	231	.036	.000	.000	1	103	.999
H _{6a41M}	TPERF	TRSMBIV, UCRITSD Dummy	.489	88.381	2	185	.000	.417	83.115	2	232	.000	.448	42.246	2	104	.000
		TRSMBIV x UCRITSDL (Interaction Term)	.002	.802	1	184	.372	.004	1.424	1	231	.234	.019	3.617	1	103	.060
H _{6a42M}	TPERF	TRSMBIV, UCRITSD Dummy	.489	88.381	2	185	.000	.417	83.115	2	232	.000	.448	42.246	2	104	.000
		TRSMBIV x UCRITSDH (Interaction Term)	.002	.802	1	184	.372	.004	1.424	1	231	.234	.019	3.617	1	103	.060
H _{6a51M}	TPERF	SocMedEng, UCRITSD Dummy	.312	41.919	2	185	.000	.174	24.497	2	232	.000	.130	7.747	2	104	.001
		SocMedEng x UCRITSDL (Interaction Term)	.002	.628	1	184	.429	.020	5.655	1	231	.018	.045	5.624	1	103	.020
H _{6a52M}	TPERF	SocMedEng, UCRITSD Dummy	.312	41.919	2	185	.000	.174	24.497	2	232	.000	.130	7.747	2	104	.001
		SocMedEng x UCRITSDH (Interaction Term)	.002	.628	1	184	.429	.020	5.655	1	231	.018	.045	5.624	1	103	.020

*After scale refinement by EFA and CFA; UCRITSD = Usage Criteria Sociodemographic; L = Lower, H = Higher Level, M = Moderator

Appendix L3

Test of the Hypotheses H_{6b11}– H_{6b52} (Moderator Analysis)

Hyp	Updated*		Vendor (N _V = 188) Change Statistics					Third Party (N _{TP} = 235) Change Statistics					Buyer (N _B = 107) Change Statistics				
	Criterion	Predictors	R ² Δ	F Δ	df1	df2	Sig. F Δ	R ² Δ	F Δ	df1	df2	Sig. F Δ	R ² Δ	F Δ	df1	df2	Sig. F Δ
H _{6b11M}	TPERF	TSMBI, UCRITEU Dummy	.313	42.079	2	185	.000	.308	51.690	2	232	.000	.399	34.565	2	104	.000
		TSMBI x UCRITEUL (Interaction Term)	.006	1.549	1	184	.215	.002	.668	1	231	.415	.000	.021	1	103	.884
H _{6b12M}	TPERF	TSMBI, UCRITEU Dummy	.313	42.079	2	185	.000	.308	51.690	2	232	.000	.399	34.565	2	104	.000
		TSMBI x UCRITEUH (Interaction Term)	.006	1.549	1	184	.215	.002	.668	1	231	.415	.000	.021	1	103	.884
H _{6b21}	TPERF	TRSMBII, UCRITEU Dummy	.357	51.324	2	185	.000	.284	46.024	2	232	.000	.522	56.738	2	104	.000
		TRSMBII x UCRITEUL (Interaction Term)	.005	1.414	1	184	.236	.001	.476	1	231	.491	.000	.108	1	103	.744
H _{6b22M}	TPERF	TRSMBII, UCRITEU Dummy	.357	51.324	2	185	.000	.284	46.024	2	232	.000	.522	56.738	2	104	.000
		TRSMBII x UCRITEUH (Interaction Term)	.005	1.414	1	184	.236	.001	.476	1	231	.491	.000	.108	1	103	.744
H _{6b31M}	TPERF	TSMBIII, UCRITEU Dummy	.457	77.711	2	185	.000	.437	89.914	2	232	.000	.521	56.646	2	104	.000
		TSMBIII x UCRITEUL (Interaction Term)	.001	.257	1	184	.613	.002	.839	1	231	.361	.003	.627	1	103	.430
H _{6b32M}	TPERF	TSMBIII, UCRITEU Dummy	.457	77.711	2	185	.000	.437	89.914	2	232	.000	.521	56.646	2	104	.000
		TSMBIII x UCRITEUH (Interaction Term)	.001	.257	1	184	.613	.002	.839	1	231	.361	.003	.627	1	103	.430
H _{6b41M}	TPERF	TRSMBIV, UCRITEU Dummy	.484	86.880	2	185	.000	.426	86.053	2	232	.000	.470	46.111	2	104	.000
		TRSMBIV x UCRITEUL (Interaction Term)	.000	.105	1	184	.746	.002	1.010	1	231	.316	.005	.936	1	103	.336
H _{6b42M}	TPERF	TRSMBIV, UCRITEU Dummy	.484	86.880	2	185	.000	.426	86.053	2	232	.000	.470	46.111	2	104	.000
		TRSMBIV x UCRITEUH (Interaction Term)	.000	.105	1	184	.746	.002	1.010	1	231	.316	.005	.936	1	103	.336
H _{6b51M}	TPERF	SocMedEng, UCRITEU Dummy	.315	42.621	2	185	.000	.191	27.404	2	232	.000	.135	8.117	2	104	.001
		SocMedEng x UCRITEUL (Interaction Term)	.000	.109	1	184	.742	.000	.036	1	231	.850	.016	1.985	1	103	.162
H _{6b52M}	TPERF	SocMedEng, UCRITEU Dummy	.315	42.621	2	185	.000	.191	27.404	2	232	.000	.135	8.117	2	104	.001
		SocMedEng x UCRITEUH (Interaction Term)	.000	.109	1	184	.742	.000	.036	1	231	.850	.016	1.985	1	103	.162

*After scale refinement by EFA and CFA; UCRITEU = Usage Criteria Ease of Use; L = Lower, H = Higher Level, M = Moderator

Appendix L4 (Extract TRSMJU)

Test of the Hypotheses H_{5b11}– H_{5b52} (Moderator Analysis)

Hyp	Updated*		Vendor (N _V = 188) Change Statistics					Third Party (N _{TP} = 235) Change Statistics					Buyer (N _B = 107) Change Statistics				
	Criterion	Predictors	R ² Δ	F Δ	df1	df2	Sig. F Δ	R ² Δ	F Δ	df1	df2	Sig. F Δ	R ² Δ	F Δ	df1	df2	Sig. F Δ
H5b11M	TRSMJU	TSMBI, SCAP Dummy	.393	59.829	2	185	.000	.381	71.364	2	232	.000	.431	39.375	2	104	.000
		TSMBI x SCAPL (Interaction Term)	.014	4.376	1	184	.038	.004	1.355	1	231	.246	.000	.000	1	103	.986
H5b12M	TRSMJU	TSMBI, SCAP Dummy	.393	59.829	2	185	.000	.381	71.364	2	232	.000	.431	39.375	2	104	.000
		TSMBI x SCAPH (Interaction Term)	.014	4.376	1	184	.038	.004	1.355	1	231	.246	.000	.000	1	103	.986
H5b21M	TRSMJU	TRSMBII, SCAP Dummy	.465	80.435	2	185	.000	.335	58.395	2	232	.000	.545	62.191	2	104	.000
		TRSMBII x SCAPL (Interaction Term)	.001	.399	1	184	.528	.000	.105	1	231	.000	.003	.714	1	103	.400
H5b22M	TRSMJU	TRSMBII, SCAP Dummy	.465	80.435	2	185	.000	.335	58.395	2	232	.000	.545	62.191	2	104	.000
		TRSMBII x SCAPH (Interaction Term)	.001	.399	1	184	.528	.000	.105	1	231	.746	.003	.714	1	103	.400
H5b31M	TRSMJU	TSMBIII, SCAP Dummy	.506	94.862	2	185	.000	.458	97.894	2	232	.000	.536	60.103	2	104	.000
		TSMBIII x SCAPL (Interaction Term)	.019	7.544	1	184	.007	.002	.958	1	231	.329	.000	.039	1	103	.844
H5b32M	TRSMJU	TSMBIII, SCAP Dummy	.506	94.862	2	185	.000	.458	97.894	2	232	.000	.536	60.103	2	104	.000
		TSMBIII x SCAPH (Interaction Term)	.019	7.544	1	184	.007	.002	.958	1	231	.329	.000	.039	1	103	.844
H5b41M	TRSMJU	TRSMBIV, SCAP Dummy	.532	105.246	2	185	.000	.448	94.212	2	232	.000	.513	54.784	2	104	.000
		TRSMBIV x SCAPL (Interaction Term)	.006	2.491	1	184	.116	.000	.131	1	231	.718	.006	1.210	1	103	.274
H5b42M	TRSMJU	TRSMBIV, SCAP Dummy	.532	105.246	2	185	.000	.448	94.212	2	232	.000	.513	54.784	2	104	.000
		TRSMBIV x SCAPH (Interaction Term)	.006	2.491	1	184	.116	.000	.131	1	231	.718	.006	1.210	1	103	.274
H5b51M	TRSMJU	SocMedEng, SCAP Dummy	.395	60.448	2	185	.000	.298	49.350	2	232	.000	.229	15.470	2	104	.000
		SocMedEng x SCAPL (Interaction Term)	.001	.360	1	184	.549	.014	4.832	1	231	.029	.004	.601	1	103	.440
H5b52M	TRSMJU	SocMedEng, SCAP Dummy	.395	60.448	2	185	.000	.298	49.350	2	232	.000	.229	15.470	2	104	.000
		SocMedEng x SCAPH (Interaction Term)	.001	.360	1	184	.549	.014	4.832	1	231	.029	.004	.601	1	103	.440

* After scale refinement by EFA and CFA; SCAP = Social Capital; L = Lower, H = Higher Level, M = Moderator

Appendix L5

Hierarchical Multiple Regression predicting Business Performance I. (Third Party)

Variable (Label)	Dependent Variable: TPERF (Business Performance in the narrow sense)					
	Model 1		Model 2		Model 3	
	B	β	B	β	B	β
Constant	4.381**		.640		.242	
TISMBU (Inclination)	.146*	.242**	.014	.047	.012	.020
TRHSMBU (Hesitation)	-.109*	-.171**	-.021	-.033	-.031	-.049
TSMBI (BD Phase I)			.123	.124	.100	.062
TRSMBII (BD Phase II)			.103	.124	.087	.057
TSMBIII (BD Phase III)			.299**	.314**	.236**	.063**
TRSMBIV (BD Phase IV)			.292**	.300**	.258**	.062**
SocMedEn (Engagem.)			.014	.016	.003	.051
TSCAP (Social Capital)					.199*	.181*
TRUCRSD (SocDem)					.021	.025
TRUCREU (Ease of Use)					.021	.022
TRUCR (Usage Criteria)						
R ²	.127		.536		.559	
F	16.85**		37.53**		28.35**	
ΔR^2	.127		.410		.022	
ΔF	16.85**		40.13**		3.75*	

Note: N_{TP} = 235 (Third Party Sample). * $p < .05$, ** $p < .001$.

For the Third Party Sample, the antecedents explained 12.7% of the variance in Business Performance in the narrow sense (TPERF). After including the Business Development Process Phases I–IV and SocMedEng the total variance explained by the model at Step 2 reached 53.6%, $F(7, 227) = 37.53$, $p < .001$. The five control measures explained an additional 41.0% of the variance in Business Performance (TPERF), after controlling for Inclination and Hesitation towards Social Media Business Usage, R^2 change = .410, F change (5, 227) = 40.13, $p < .001$. The total variance explained by the model as a whole reached 55.9%, $F(10, 224) = 28.35$, $p < .05$. In the final model, only a few measures were statistically significant with Beta values between .062 and .181, $p < .001$ and $p < .05$.

Hierarchical Multiple Regression predicting Business Performance I. (Buyer)

Variable (Label)	Dependent Variable: TPERF (Business Performance in the narrow sense)					
	Model 1		Model 2		Model 3	
	B	β	B	β	B	β
Constant	4.434**		.856		.684	
TISMBU (Inclination)	.169*	.277**	-.013	-.021	-.005	-.009
TRHSMBU (Hesitation)	-.192*	-.286**	-.043	-.065	-.051	-.075
TSMBI (BD Phase I)			.186*	.189*	.125	.127
TRSMBII (BD Phase II)			.244*	.286*	.231*	.271*
TSMBIII (BD Phase III)			.235**	.268**	.147	.168
TRSMBIV (BD Phase IV)			.159**	.173**	.184*	.199*
SocMedEn (Engagem.)			.000	.000	-.018	-.019
TSCAP (Social Capital)					.210*	.210*
TRUCRSD (SocDem)					-.037	-.042
TRUCREU (Ease of Use)					.006	.006
TRUCR (Usage Criteria)						
R ²	.234		.652		.677	
F	15.90**		26.47**		20.15**	
ΔR^2	.234		.418		.026	
ΔF	15.90**		23.74**		2.54	

Note: N_B = 107 (Buyer Sample). * $p < .05$, ** $p < .001$.

For the Buyer Sample, the antecedents explained 23.4% of the variance in Business Performance in the narrow sense (TPERF). After including the Business Development Process Phases I–IV and SocMedEng the total variance explained by the model at Step 2 reached 65.2%, $F(7, 99) = 26.47$, $p < .001$. The five control measures explained an additional 41.8% of the variance in Business Performance (TPERF), after controlling for Inclination and Hesitation towards Social Media Business Usage, R^2 change = .418, F change (5, 99) = 23.74, $p < .001$. The total variance explained by the model as a whole reached 67.7%, $F(10, 96) = 20.15$, $p < .001$. In the final model, only a few measures were significant with Beta values between .20 and .27 $p < .05$.

Appendix L6

Hierarchical Multiple Regression predicting Business Performance II. (Third Party)

Variable (Label)	Dependent Variable: TRSMJU (Business Performance in a broader sense)					
	Model 1		Model 2		Model 3	
	B	β	B	β	B	β
Constant	4.791**		.795		.520	
TISMBU (Inclination)	.177*	.225*	.035	.045	.032	.041
TRHSMBU (Hesitation)	-.162*	-.196*	-.069	-.084	-.075	-.091
TSMBI (BD Phase I)			.057	.045	.043	.034
TRSMBII (BD Phase II)			.186	.142	.177*	.135*
TSMBIII (BD Phase III)			.282*	.228*	.229*	.186*
TRSMBIV (BD Phase IV)			.311*	.247*	.282*	.224*
SocMedEn (Engagem.)			.050	.043	.044	.038
TSCAP (Social Capital)					.169	.119
TRUCRSD (SocDem)					.001	.001
TRUCREU (Ease of Use)					.001	.001
TRUCR (Usage Criteria)						
R ²	.131		.398		.406	
F	17.49**		21.40**		15.33**	
ΔR^2	.131		.267		.009	
ΔF	17.49**		20.08**		1.11*	

Note: N_{TP} = 235 (Third Party Sample). * $p < .05$, ** $p < .001$.

For the Third Party Sample, the antecedents explained 13.1% of the variance in Business Performance in a broader sense (TRSMJU). After including the Business Development Process Phases I-IV and SocMedEng the total variance explained by the model at Step 2 reached 39.8%, $F(7, 227) = 21.40, p < .001$. The five control measures explained an additional 26.7% of the variance in Business Performance (TRSMJU), after controlling for Inclination and Hesitation towards Social Media Business Usage, R^2 change = .267, F change (5, 227) = 20.08, $p < .001$. The total variance explained by the model as a whole reached only 40.6%, $F(10, 224) = 15.33, p < .05$. In the final model, only a few measures were statistically significant with Beta values between .14 and .22, $p < .05$.

Hierarchical Multiple Regression predicting Business Performance II. (Buyer)

Variable (Label)	Dependent Variable: TRSMJU (Business Performance in a broader sense)					
	Model 1		Model 2		Model 3	
	B	β	B	β	B	β
Constant	4.243**		1.639		1.542	
TISMBU (Inclination)	.184*	.233*	.033	.042	.044	.055
TRHSMBU (Hesitation)	-.155	-.178	-.021	-.024	-.025	-.029
TSMBI (BD Phase I)			-.037	-.029	-.112	-.088
TRSMBII (BD Phase II)			.255	.231	.251	.227
TSMBIII (BD Phase III)			.324*	.287*	.200	.177
TRSMBIV (BD Phase IV)			.258	.216	.290*	.243*
SocMedEn (Engagem.)			-.181	-.154	-.201	-.170
TSCAP (Social Capital)					.294*	.227*
TRUCRSD (SocDem)					-.075	-.065
TRUCREU (Ease of Use)					-.036	-.028
TRUCR (Usage Criteria)						
R ²	.126		.392		.425	
F	7.49*		9.12**		7.09**	
ΔR^2	.126		.266		.033	
ΔF	7.49*		8.67**		1.81	

Note: N_B = 107 (Buyer Sample). * $p < .05$, ** $p < .001$.

For the Buyer Sample, the antecedents explained 12.6% of the variance in Business Performance in a broader sense (TRSMJU). After including the Business Development Process Phases I-IV and SocMedEng the total variance explained by the model at Step 2 reached 39.2%, $F(7, 99) = 9.12, p < .001$. The five control measures explained an additional 26.6% of the variance in Business Performance (TRSMJU), after controlling for Inclination and Hesitation towards Social Media Business Usage, R^2 change = .266, F change (5, 99) = 8.67, $p < .001$. The total variance explained by the model as a whole reached 42.5%, $F(10, 96) = 7.09, p < .001$. In the final model, only a few measures were significant with Beta values between .22 and .24, $p < .05$.

Appendix L7

Hypothesis Testing with Hierarchical Multiple Regression for all Subsamples. Dependent Variable: Business Performance I. (TPERF)

Model	TPERF Construct	Vendor (N _V = 188)						Third Party (N _{TP} = 235)						Buyer (N _B = 107)					
		R ²	ΔR ²	Beta	t	Sig. Level	Coll. * N = No, Y = Yes	R ²	ΔR ²	Beta	t	Sig. Level	Coll. * N = No, Y = Yes	R ²	ΔR ²	Beta	t	Sig. Level	Coll. * N = No, Y = Yes
1	TISMBU	.221	.221	.246	3.39	.001	N	.127	.127	.242	3.46	.001	N	.234	.234	.277	2.83	.006	N
	TRHSMBU			-.306	-4.22	.000	N			-.171	-2.45	.015	N			-.286	-2.93	.004	N
2	TISMBU			.047	.87	.387	N			.023	.41	.680	N			-.021	-.28	.784	N
	TRHSMBU			-.024	-.42	.676	N			-.033	-.62	.538	N			-.065	-.91	.366	N
	TSMBI			.132	2.14	.034	N			.124	1.96	.051	N			.189	2.32	.022	N
	TRSBMBII	.615	.394	.124	1.95	.053	N	.536	.410	.102	1.80	.073	N	.652	.418	.286	3.04	.003	N
	TSMBIII			.239	3.41	.001	N			.314	4.92	.000	N			.268	2.73	.008	N
	TRSBMBIV			.320	4.75	.000	N			.300	4.74	.000	N			.173	1.88	.063	N
SocMedEng			.104	1.66	.098	N			.016	.27	.787	N			.000	.01	.995	N	
3	TISMBU			.065	1.26	.209	N			.020	.37	.711	N			-.009	-.12	.904	N
	TRHSMBU			-.021	-.39	.698	N			-.049	-.93	.354	N			-.075	-1.07	.289	N
	TSMBI			.068	1.15	.253	N			.101	1.60	.111	N			.127	1.48	.143	N
	TRSBMBII			.123	2.07	.040	N			.085	1.51	.132	N			.271	2.87	.005	N
	TSMBIII			.183	2.75	.007	N			.247	3.75	.000	N			.168	1.64	.105	N
	TRSBMBIV	.670	.055	.240	3.67	.000	N	.559	.022	.264	4.19	.000	N	.677	.026	.199	2.20	.030	N
	SocMedEng			.045	.75	.456	N			.004	.07	.948	N			-.019	-.29	.771	N
	TSCAP			.300	5.06	.000	N			.181	3.15	.002	N			.210	2.73	.008	N
	TRUCRSD			-.058	-1.26	.210	N			.025	.53	.599	N			-.042	-.67	.502	N
TRUCREU			.052	1.12	.264	N			.022	.43	.667	N			.006	.09	.930	N	

*There were no Multicollinearity issues. Cut-off: Tolerance value < .10 or VIF value > 10.0 Pallant (2013,164) $p < .05$, $p < .001$.

Appendix L8

Hypothesis Testing with Hierarchical Multiple Regression for all Subsamples. Dependent Variable: Business Performance II. (TRSMJU)

Model	TRSMJU Construct	Vendor (N _V = 188)						Third Party (N _{TP} = 235)						Buyer (N _B = 107)					
		R ²	ΔR ²	Beta	t	Sig. Level	Coll. * N = No, Y = Yes	R ²	ΔR ²	Beta	t	Sig. Level	Coll. * N = No, Y = Yes	R ²	ΔR ²	Beta	t	Sig. Level	Coll. * N = No, Y = Yes
1	TISMBU	.267	.267	.339	4.82	.000	N	.131	.131	.225	3.23	.001	N	.126	.126	.233	2.23	.028	N
	TRHSMBU			-.268	-3.81	.000	N			-.96	-2.81	.005	N			-.178	-1.71	.091	N
2	TISMBU	.527	.259	.205	.21	.001	N	.398	.267	.045	.72	.471	N	.392	.266	.042	.43	.670	N
	TRHSMBU			-.042	-.04	.504	N			-.084	-1.39	.167	N			-.024	-.26	.797	N
	TSMBI			.050	.05	.464	N			.045	.62	.535	N			-.029	-.27	.789	N
	TRSMBII			.045	.05	.528	N			.142	2.19	.029	N			.231	1.86	.066	N
	TSMBIII			.368	.37	.000	N			.228	3.14	.002	N			.287	2.20	.030	N
	TRSMBIV			.174	.17	.021	N			.247	3.42	.001	N			.216	1.78	.079	N
SocMedEng	.056	.06	.422	N	.043	.66	.512	N	-.154	-1.73	.087	N							
3	TISMBU	.549	.022	.217	3.62	.000	N	.406	.009	.041	.65	.517	N	.425	.033	.055	.57	.574	N
	TRHSMBU			-.040	-.64	.524	N			-.091	-1.49	.137	N			-.029	-.31	.760	N
	TSMBI			.003	.05	.963	N			.034	.46	.645	N			-.088	-.77	.445	N
	TRSMBII			.041	.59	.557	N			.135	2.06	.040	N			.227	1.80	.075	N
	TSMBIII			.336	4.32	.000	N			.186	2.43	.016	N			.177	1.29	.202	N
	TRSMBIV			.121	1.59	.114	N			.224	3.05	.003	N			.243	2.01	.047	N
	SocMedEng			.018	.25	.800	N			.038	.58	.566	N			-.170	-1.92	.058	N
	TSCAP			.201	2.90	.004	N			.119	1.79	.075	N			.227	2.21	.030	N
	TRUCRSD			-.009	-.17	.862	N			.001	.01	.990	N			-.065	-.78	.435	N
	TRUCREU			.008	.15	.862	N			.001	.01	.990	N			-.028	-.32	.752	N

*There were no Multicollinearity issues. Cut-off: Tolerance value < .10 or VIF value > 10.0 Pallant (2013,164) *p* < .05, *p* < .001.

Appendix L9

Hierarchical Multiple Regression predicting Business Performance II (TRSMJU) (N_T)

Variable (Label)	Dependent Variable: TRSMJU (Business Performance in the broader sense)					
	Model 1		Model 2		Model 3	
	B	β	B	β	B	β
Constant	4.694**		.935*		.618	
TISMBU (Inclination)	.211**	.261**	.075*	.093*	.078*	.097*
TRHSMBU (Hesitation)	-.201**	-.236**	-.062	-.073	-.065	-.077
TSMBI (BD Phase I)			.067	.053	.029	.023
TRSMBII (BD Phase II)			.145*	.120*	.135*	.112*
TSMBIII (BD Phase III)			.335**	.281**	.278**	.234**
TRSMBIV (BD Phase IV)			.276**	.225**	.243**	.198**
SocMedEn (Engagem.)			-.009	-.008	-.027	-.023
TSCAP (Social Capital)					.223**	.164**
TRUCRSD (SocDem)					-.005	-.004
TRUCREU (Ease of Use)					-.005	-.004
TRUCR (Usage Criteria)						
R ²	.182		.435		.451	
F	58.67**		57.44**		42.67**	
ΔR ²	.182		.253		.016	
ΔF	58.67**		46.76**		5.07**	

Note: N_T = 530 (Refined Total Sample). **p* < .05, ***p* < .001.

The full model of *Inclination/Hesitation towards Social Media Business Usage, Business Development Process Phases, and Social Capital for Business Performance in the broader sense* (TRSMJU) (Model 3) for N = 530 was statistically significant, $R^2 = .451$, $F(10, 519) = 42.671$, $p < .0005$, adjusted $R^2 = .441$. The addition of the *Business Development Phases I–IV* to the prediction of *Business Performance in the broader sense* (TRSMJU) (Model 2) led to a statistical significant increase in R^2 of .253, $F(5, 522) = 46.757$, $p < .0005$. The addition of *Social Capital* to the prediction of *Business Performance in the broader sense* (TRSMJU) (Model 3) also resulted in a statistically significant increase in R^2 of .016, $F(3, 519) = 5.074$, $p < .0005$.

Appendix L10

Subhypotheses H₁₁ - H₁₄

Hypothesis H ₁₁	Social Media Quality	SMQ	DV	Question, Statement, SPSS Variable
	Reliability	SMQREL	Predictor	Q2b, RSMB25; Q3d, RTRU2
	Usefulness	SMQUSF	Predictor	Q2c, SMB35, SMB37; Q3b, RUCRIT5
	Accessibility	SMQACC	Predictor	Q2a, SMB11; Q2b, RSMB24, RSMB27; Q3a, SCAP1
	Usability	SMQUSA	Predictor	Q2a, SMB11; Q2d, RSMB43; Q3d, RCOO1, RCOO2
Hypothesis H ₁₂	Inclination Social Media Business Usage	TISMBU	DV	Question, Statement, SPSS Variable, T = Total Scale
	Social Media Quality	ISMBUSMQ	Predictor	SUM (SMQREL+SMQUSF+SMQACC+ SMQUSA)/4
Hypothesis H ₁₃	Social Media Business Usage Intensity	TSMBUI	DV	Question, Statement, SPSS Variable, T = Total Scale
	Gender (Dummy)*	SMBUIGD*	Predictor	Q5a, GEND
	Generation	SMBUIGE	Predictor	Q5b refined, GENER
	Career Level	SMBUICL	Predictor	Q1e, CCL; Q3b, RUCRIT3, RUCRIT4
	Social Media Quality	SMBUIISMQ	Predictor	SUM (SMQREL+SMQUSF+SMQACC+ SMQUSA)/4
	Playfulness	SMBUIPLA	Predictor	Q5g, AFFN1, AFFN2
	Savviness/Eustress	SMBUISAV	Predictor	Q5g, AFFN2, RAFFN3, RAFFN4
	Satisfaction	SMBUISTF	Predictor	Q2b, RSMB21; Q2d, RSMB42; Q3b, RUCRIT6
Hypothesis H ₁₄	Social Capital	TSCAP	DV	Question, Statement, SPSS Variable, T = Total Scale
	Social Interaction Ties	SCAPTIE	Predictor	Q2c, SMB33; Q3a, SCAP2, SCAP4, SCAP5; Q3d, RCOO2
	Trustworthiness)	SCAPTRU	Predictor	Q2a,SMB14, SMB15, SMB16; Q2b, RSMB25; Q2c, SMB31; Q2d, RSMB42; Q3a,SCAP2, SCAP3; Q3d, RTRU1, RTRU2
	Self-Disclosure	SCAPSDI	Predictor	Q1h, RHSMBU1; Q2a, SMB13, SMB14, SMB15, SMB16; Q3a, SCAP2
	Knowledge Exchange	SCAPKEX	Predictor	Q2b, RSMB22, RSMB23, RSMB24, RSMB27; Q3a, SCAP5; Q3d, RCOO2
	Shared Values	SCAPSHV	Predictor	Q3a, SCAP6
	Open Communication	SCAPCOM	Predictor	Q2b, RSMB26, RSMB27; Q2c, SMB32; Q3a, SCAP2

Appendix L11

Subhypotheses H₁₅ - H₁₆

Hypothesis H ₁₅	Business Performance	TPERF	DV	Question, Statement, SPSS Variable, T = Total Scale
	Efficiency	PERFEFFI	Predictor	Q2d, RSMB47; Q3a, SCAP4, SCAP5; Q3c, PERF1, PERF2, PERF4, PERF5; Q5g, AFFN6
	Effectiveness	PERFEFFE	Predictor	Q2b, RSMB21; Q2c, SMB32, SMB34; Q3a, SCAP4, SCAP5; Q3b, RUCRIT5; Q5g, AFFN6
Hypothesis H ₁₆	Business Development Process phases	SMBI– SMBIV	DV	Question, Statement, SPSS Variable
	Cooperation	COOP	Predictor/ DV	Q2c, SMB36; Q3d, RCOO1, RCOO2
	Relationship Commitment	COOPRELC	Predictor	Q3d, RELC1, RELC2
	Trustworthiness	COOPTRU	Predictor	Q2a, SMB14, SMB15, SMB16; Q2b, RSMB25; Q2c, SMB31; Q2d, RSMB42; Q3a, SCAP2, SCAP3; Q3d, RTRU1, RTRU2

Appendix L12

Sub-Hypotheses H₁₁ – H₁₆ Testing by Simple Linear Regressions for all Subsamples

Sub Hypotheses			Vendor (N _V = 188)					Third Party (N _{TP} = 235)					Buyer (N _B = 107)				
Hyp	Criterion	Predictor	R ²	Beta	t	F	Sig.	R ²	Beta	t	F	Sig.	R ²	Beta	t	F	Sig.
H11a	SMQ	SMQREL	.090	.299	4.281	18.3	.000	.023	.152	2.340	5.5	.020	.071	.267	2.837	8.0	.005
H11b	SMQ	SMQUSF	.559	.748	16.197	235.7	.000	.584	.764	18.079	326.9	.000	.690	.831	15.278	233.4	.000
H11c	SMQ	SMQACC	.623	.790	17.545	307.8	.000	.652	.808	20.902	436.9	.000	.711	.843	16.066	258.1	.000
H11d	SMQ	SMQUSA	.715	.845	21.591	466.2	.000	.677	.823	22.124	489.5	.000	.685	.827	15.101	228.0	.000
H12	TISMBU	ISMBUSMQ	.152	.390	5.784	33.5	.000	.166	.408	6.820	46.5	.000	.176	.420	4.739	22.5	.000
H13a	TSMBUI	SMBUIGD	.005	-.069	-.941	.9	.348	.008	-.090	-1.376	1.9	.170	.086	.292	3.133	9.8	.002
H13b	TSMBUI	SMBUIGE	.006	.079	1.078	1.2	.282	.004	-.061	-.941	.9	.348	.027	-.164	-1.700	2.9	.092
H13c	TSMBUI	SMBUICL	.021	-.145	-1.998	4.0	.047	.038	-.194	-3.022	9.1	.003	.002	.040	.415	.2	.679
H13d	TSMBUI	SMBUISMQ	.126	.356	5.188	26.9	.000	.154	.392	6.510	42.4	.000	.165	.406	4.554	20.7	.000
H13e	TISMBU	SMBUIPLA	.137	.370	5.432	29.5	.000	.154	.393	6.515	42.5	.000	.186	.432	4.905	24.1	.000
H13f	TSMBUI	SMBUISAV	.088	.296	4.230	17.9	.000	.172	.414	6.950	48.3	.000	.194	.441	5.031	25.3	.000
H13g	TSMBUI	SMBUISTF	.102	.319	4.589	21.1	.000	.096	.309	4.965	24.7	.000	.174	.417	4.703	22.1	.000
H14a	TSCAP	SCAPTIE	.755	.869	23.922	572.3	.000	.682	.826	22.351	499.6	.000	.801	.895	20.557	422.6	.000
H14b	TSCAP	SCAPTRU	.596	.772	16.582	275.0	.000	.505	.710	15.408	237.4	.000	.564	.751	11.653	135.8	.000
H14c	TSCAP	SCAPSDI	.312	.559	9.193	84.5	.000	.301	.548	10.005	100.1	.000	.381	.618	8.046	64.7	.000
H14d	TSCAP	SCAPKEK	.398	.631	11.096	123.1	.000	.351	.592	11.217	125.8	.000	.478	.691	9.799	96.0	.000
H14e	TSCAP	SCAPSHV	.626	.791	17.636	311.0	.000	.497	.705	15.165	230.0	.000	.622	.789	13.144	172.8	.000
H14f	TSCAP	SCAPCOM	.397	.630	11.064	122.4	.000	.388	.623	12.147	147.5	.000	.569	.754	11.765	138.4	.000
H15a	TPERF	PERFEFFI	.853	.923	32.798	1075.7	.000	.819	.905	32.450	1053.0	.000	.836	.914	23.109	534.0	.000
H15b	TPERF	PERFEFFE	.419	.648	11.592	134.4	.000	.376	.613	11.837	140.1	.000	.499	.706	10.220	104.4	.000
H16a	COOP	COOPRELC	.411	.641	11.389	129.7	.000	.390	.625	12.205	149.0	.000	.295	.543	6.623	43.9	.000
H16b	COOP	COOPTRU	.504	.710	13.757	189.2	.000	.445	.667	13.655	186.5	.000	.460	.678	9.453	89.4	.000
H16c1	SMBI	SMB1COOP	.288	.537	8.683	75.4	.000	.215	.464	7.995	63.9	.000	.262	.512	6.104	37.3	.000
H16c2	SMBII	SMB2COOP	.313	.560	9.211	84.9	.000	.198	.445	7.595	57.7	.000	.387	.622	8.133	66.2	.000
H16c3	SMBIII	SMB3COOP	.554	.744	15.193	230.8	.000	.518	.719	15.813	250.1	.000	.655	.810	14.129	199.6	.000
H16c4	SMBIV	SMB4COOP	.427	.654	11.784	138.9	.000	.326	.571	10.608	112.5	.000	.471	.686	9.668	93.5	.000

Appendix L13

Hierarchical Multiple Regression predicting Cooperation (COOP) N_T

Variable (Label)	Dependent Variable: COOP (Cooperation)			
	Model 1		Model 2	
	B	β	B	β
Constant	2.249**		.441	
COOPRELC (Relationsh. Comm.)	.555**	.613**	.275**	.304**
COOPTRU (Trustw.)			.640**	.502**
R ²	.375		.531	
F	317.04**		298.75**	
ΔR ²	.375		.156	
ΔF	317.04**		175.61**	

Note: N_T = 530 (Refined Total Sample). **p* < .05, ***p* < .001.

The full model of *Relationship Commitment* (COOPRELC) and *Trustworthiness* (COOPTRU) for *Cooperation* (COOP) (Model 2) for N_T = 530 was statistically significant, $R^2 = .531$, $F(1, 527) = 298.748$, $p < .0005$, adjusted $R^2 = .530$. The addition of *Relationship Commitment* (COOPRELC) to the prediction of *Cooperation* (COOP) (Model 1) led to a statistically significant increase in R^2 of .375, $F(1, 528) = 317.041$, $p < .0005$. The addition of *Trustworthiness* (COOPTRU) to the prediction of *Cooperation* (COOP) (Model 2) also resulted in a statistically significant increase in R^2 of .156, $F(1, 527) = 175.609$, $p < .0005$.

Hierarchical Multiple Linear Regression for Testing of H_{16A} –H_{16B} COOP (Cooperation)

Sub Hypothesis H _{16a} – H _{16b}		β	t	Sig. Level	R ²	R ² Δ	F	F Δ	Sig. Level
Model	Construct	Vendor (N _V = 188)							
1	COOPRELC	.641	11.39	.000	.411	.411	129.7	129.7	.000
2	COOPRELC	.323	5.22	.000	.568	.157	121.6	67.3	.000
	COOPTRU	.508	8.20	.000					.000
Model	Construct	Third Party (N _{TP} = 235)							
1	COOPRELC	.625	12.21	.000	.390	.390	149.0	129.7	.000
2	COOPRELC	.359	6.53	.000	.531	.141	131.2	67.3	.000
	COOPTRU	.459	8.34	.000					.000
Model	Construct	Buyer (N _B = 107)							
1	COOPRELC	.543	6.62	.000	.295	.295	43.8	43.8	.000
2	COOPRELC	.165	1.74	.085	.475	.180	47.1	35.7	.085
	COOPTRU	.568	5.98	.000					.000

Appendix L14

Hierarchical Multiple Regression predicting Business Performance (TPERF) N_T

Variable (Label)	Dependent Variable: TPERF (Business Performance)			
	Model 1		Model 2	
	B	β	B	β
Constant	1.640*		.336*	
COOP (Cooperation)	.625**	.649**	.178**	.185**
SMBI (BD Phase I)			.157**	.158**
RSMBII (BD Phase II)			.137**	.143**
SMBIII (BD Phase III)			.175**	.186**
RSMBIV (BD Phase IV)			.257**	.265**
R ²	.421		.598	
F	384.33**		155.66**	
ΔR ²	.421		.176	
ΔF	384.33**		57.42**	

Note: N_T = 530 (Refined Total Sample). **p* < .05, ***p* < .001.

The full model of *Cooperation* (COOP) and the *Business Development Process Phases I–IV* (SMBI–RSMBIV) for *Business Performance in the narrow sense* (TPERF) (Model 2) for N_T = 530 was statistically significant, R² = .598, F (5, 524) = 155.657, *p* < .0005, adjusted R² = .594. The addition of *Cooperation* (COOP) to the prediction of *Business Performance in the narrow sense* (Model 1) led to a statistical significant increase in R² of .421, F (1, 528) = 384.330, *p* < .0005. The addition of *Business Development Phases I–IV* (SMBI–RSMBIV) to the prediction of *Business Performance in the narrow sense* (TPERF) (Model 2) resulted in a smaller statistically significant increase in R² of .176, F (4, 524) = 57.420, *p* < .0005.

Hierarchical Multiple Linear Regression for Testing of H_{16c1}–H_{16c4} Business Performance

Sub Hypothesis H _{16c1} – H _{16c4}		β	t	Sig. Level	R ²	R ² Δ	F	F Δ	Sig. Level
		Vendor (N _V = 188)							
Model	Construct								
1	COOP	.660	11.98	.000	.436	.436	143.7	143.7	.000
2	COOP	.156	2.10	.037	.614	.179	58.0	21.1	.000
	SMBI	.164	2.89	.004					
	RSMBII	.139	2.25	.026					
	SMBIII	.179	2.32	.021					
RSMBIV	.313	4.62	.000						
		Third Party (N _{TP} = 235)							
Model	Construct								
1	COOP	.618	12.00	.001	.382	.382	144.0	144.0	.000
2	COOP	.217	3.33	.001	.556	.174	57.3	22.4	.000
	SMBI	.135	2.34	.020					
	RSMBII	.094	1.70	.090					
	SMBIII	.197	2.72	.007					
RSMBIV	.271	4.38	.000						
		Buyer (N _B = 107)							
Model	Construct								
1	COOP	.679	9.47	.000	.461	.461	89.7	89.7	.000
2	COOP	.162	1.58	.117	.657	.197	38.7	14.5	.000
	SMBI	.187	2.36	.020					
	RSMBII	.284	2.32	.002					
	SMBIII	.182	4.62	.113					
RSMBIV	.140	2.10	.128						

Appendix M

Testing the Comprehensive Model

Structural Equation Modeling

Appendix M1

Structural Equation Modeling AMOS v23 – Original Model, (N_T = 530)

AMOS Output for the original Comprehensive Model (N_T = 530)

Your model contains the following variables

BD Phase IV	}	Observed, endogenous variables (Input data or dependent variables)	
BD Phase I			
BD Phase II			
BD Phase III			
SocMedEng			
SCAP			
UCRITSD			
UCRITEOU			
PERF			
INCL			
e1	e5	}	Observed, exogenous variables (Independent variables)
e2	e6		
e3	e7		
e4	e8		
e9			
			Unobserved, exogenous variables (All factors and error terms or independent variables)

Variable counts

Number of variables in your model:	19
Number of observed variables:	10
Number of unobserved variables:	9
Number of exogenous variables:	10
Number of endogenous variables:	9

AMOS Output for hypothesized Five-Factor CFA Model: Summary of Model Parameters

Parameter Summary						
	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	9	0	0	0	0	9
Labeled	0	0	0	0	0	0
Unlabeled	32	0	10	0	0	42
Total	41	10	10	0	0	51

Note: The model is recursive. Sample Size: 530. Model: Default Model

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	55	55 is the number of distinct sample moments, the elements in the sample covariance matrix, i.e. the number of pieces of information provided by the data. 42 parameters to be estimated. 13 Degrees of freedom based on an over identified model with a Chi-square of 398.31 with a p-level of .000. The null hypothesis that the model is a good fit to the sample data was rejected.
Number of distinct parameters to be estimated:	42	
Degrees of freedom (55- 42):	13	

Result (Default model)

Minimum was achieved
Chi-square = 398.307
Degrees of freedom = 13
Probability level = .000.

Appendix M2 (Extract)

AMOS Output for the original Comprehensive Model (N_T = 530)

All t-values are > 1.96 (2TT) – all loadings are significant.

Maximum Likelihood Estimates	Estimate	S.E.	C.R.	P
Regression Weights				
BD Phase IV <--- INCL	.411	.042	9.887	***
BD Phase I <--- INCL	.119	.025	4.754	***
BD Phase I <--- BD Phase IV	.282	.024	11.719	***
BD Phase II <--- INCL	.141	.033	4.234	***
BD Phase II <--- BD Phase I	.563	.052	10.778	***
BD Phase III <--- INCL	.144	.032	4.455	***
BD Phase III <--- BD Phase II	.595	.039	15.402	***
SocMedEng <--- INCL	.097	.014	6.734	***
SocMedEng <--- BD Phase III	.131	.016	8.189	***
SCAP <--- SocMedEng	.189	.066	2.883	.004
UCRITSD <--- SocMedEng	-.031	.057	-.536	.592
UCRITEOU <--- SocMedEng	.062	.050	1.260	.208
SCAP <--- BD Phase III	.150	.031	4.794	***
UCRITSD <--- BD Phase III	.021	.027	.755	.450
UCRITEOU <--- BD Phase III	-.007	.024	-.300	.765
SCAP <--- BD Phase II	.033	.035	.962	.336
UCRITSD <--- BD Phase II	.028	.030	.927	.354
UCRITEOU <--- BD Phase II	.030	.026	1.143	.253
SCAP <--- BD Phase I	.221	.043	5.155	***
UCRITSD <--- BD Phase I	.006	.037	.172	.864
UCRITEOU <--- BD Phase I	.069	.032	2.133	.033
SCAP <--- BD Phase IV	.095	.024	3.932	***
UCRITSD <--- BD Phase IV	-.018	.021	-.855	.393
UCRITEOU <--- BD Phase IV	.001	.018	.064	.949
PERF <--- BD Phase IV	.186	.021	8.721	***
PERF <--- BD Phase I	.127	.038	3.312	***
PERF <--- BD Phase II	.117	.030	3.866	***
PERF <--- BD Phase III	.146	.028	5.224	***
PERF <--- SocMedEng	.009	.058	.164	.870
PERF <--- SCAP	.228	.044	6.018	***
PERF <--- UCRITSD	-.007	.044	-.161	.872
PERF <--- UCRITEOU	-.041	.050	-.816	.415

*** Probability < .000 Weights were significant at .001 (2TT)

Parameter Estimates should demonstrate the correct sign and size. They are unreasonable if their correlations > 1.00 or indicate negative variances and covariance or correlation matrices which are not positive definite.

S.E. Standard Errors reveal the precision with which a parameter has been estimated. A value close to zero or a large value indicates that the test statistics for a parameter cannot be defined or a parameter cannot be determined.

C.R. Critical Ratio represents the estimate of the parameter divided by its standard error. It operates as z-statistic in examining that the estimate is statistically significant different from zero. Based on a probability level of .05 the test statistic must exceed ± 1.96 before the hypothesis that the estimate equals zero can be rejected (Byrne 2010).

Estimate: When INCL goes up by 1, BD Phase IV goes up by .411.

The regression weight estimate, .411 has a standard error of about .042.

The probability of getting a critical ratio as large as 2.883 in absolute value is .004. In other words, the regression weight for SocMedEng in the prediction of SCAP is significantly different from zero at the .01 level (two-tailed).

Dar Blue: † Still significant < .10
Light Blue: Not Significant

Appendix M3

AMOS Output for the original Comprehensive Model (N_T = 530)

Standardized Regression Weights			Estimate	
BD Phase IV	<---	INCL	.395	When INCL goes up by 1 standard deviation, BD Phase IV goes up by .395 standard deviations.
BD Phase I	<---	INCL	.186	
BD Phase I	<---	BD Phase IV	.460	
BD Phase II	<---	INCL	.169	
BD Phase II	<---	BD Phase I	.431	
BD Phase III	<---	INCL	.160	
BD Phase III	<---	BD Phase II	.554	
SocMedEng	<---	INCL	.271	
SocMedEng	<---	BD Phase III	.330	
SCAP	<---	SocMedEng	.115	
UCRITSD	<---	SocMedEng	-.026	
UCRITEOU	<---	SocMedEng	.060	
SCAP	<---	BD Phase III	.228	
UCRITSD	<---	BD Phase III	.043	
UCRITEOU	<---	BD Phase III	-.017	
SCAP	<---	BD Phase II	.047	
UCRITSD	<---	BD Phase II	.055	
UCRITEOU	<---	BD Phase II	.067	
SCAP	<---	BD Phase I	.240	
UCRITSD	<---	BD Phase I	.010	
UCRITEOU	<---	BD Phase I	.119	
SCAP	<---	BD Phase IV	.167	
UCRITSD	<---	BD Phase IV	-.044	
UCRITEOU	<---	BD Phase IV	.003	
PERF	<---	BD Phase IV	.309	
PERF	<---	BD Phase I	.130	
PERF	<---	BD Phase II	.156	
PERF	<---	BD Phase III	.209	
PERF	<---	SocMedEng	.005	
PERF	<---	SCAP	.215	
PERF	<---	UCRITSD	-.005	
PERF	<---	UCRITEOU	-.024	

AMOS Output for the original Comprehensive Model (N_T = 530)

Variance	Estimate	S.E.	C.R.	P
INCL	39.748	2.444	16.263	***
e1	36.365	2.236	16.263	***
e2	11.154	.686	16.263	***
e3	20.245	1.245	16.263	***
e4	19.506	1.199	16.263	***
e5	3.832	.236	16.263	***
e6	9.374	.576	16.263	***
e7	7.062	.434	16.263	***
e8	5.353	.329	16.263	***
e9	7.114	.437	16.263	***

Appendix M4 (Extract)

Squared Multiple Correlations	
	Estimate
N _{H5MLTM} = 238	
BD Phase IV	.142
BD Phase I	.374
BD Phase II	.264
BD Phase III	.334
SocMedEng	.235
UCRITEOU	.042
UCRITSD	.029
SCAP	.355
PERF	.566

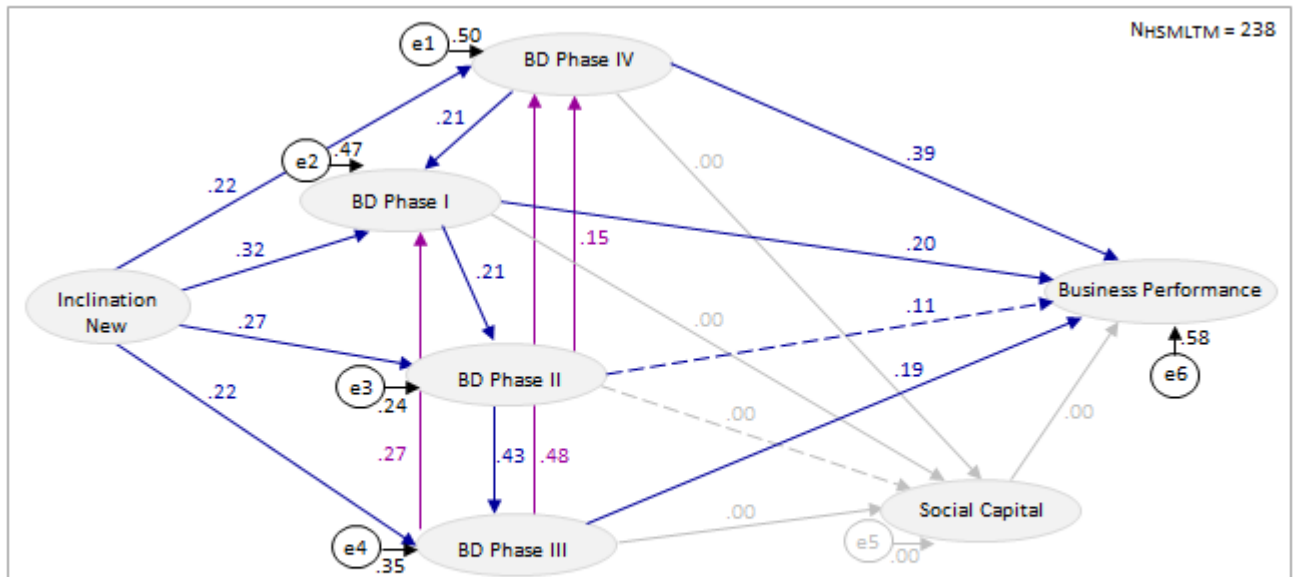
AMOS Output for the original Comprehensive Model (N_{H5MLTM} = 238)

	M.I.	Par Change
Covariances		
e3 <--> e1	17.789	6.634
e3 <--> e2	5.977	-2.187
e4 <--> e1	45.170	10.661
e4 <--> e2	5.463	2.109
e4 <--> e3	6.800	-3.183
e5 <--> e1	6.398	1.747
e5 <--> e2	21.988	1.843
e7 <--> e8	20.894	1.860
Variances		
	M.I.	Par Change
Regression Weights		
BD Phase II <--- BD Phase IV	15.262	.181
BD Phase III <--- BD Phase IV	38.754	.291
BD Phase III <--- BD Phase I	24.305	.346
SocMedEng <--- BD Phase IV	5.489	.048
SocMedEng <--- BD Phase I	23.702	.149
SocMedEng <--- BD Phase II	4.827	.054
UCRITEOU <--- UCRITSD	20.293	.229
UCRITSD <--- UCRITEOU	20.016	.358

The M.I. values exceeding 10.0 are highlighted in grey.

Appendix M5

Final Model Version; High-Social-Media-Users; Direct Effects (One Performance Dimension)

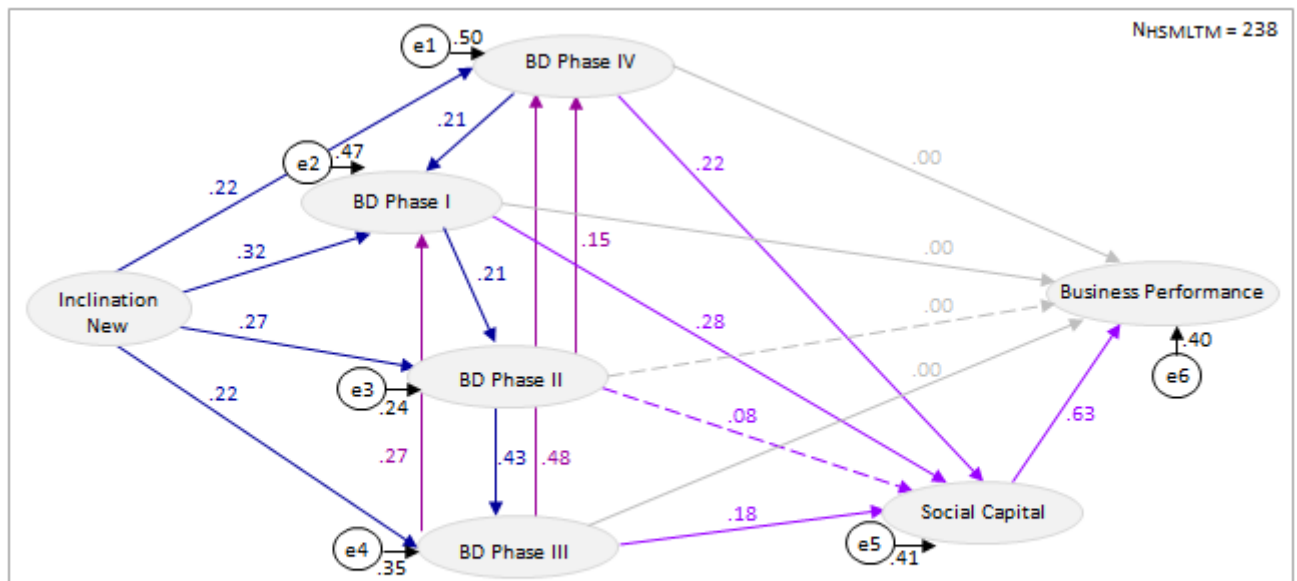


The grey coloured ellipses represent the model variables. The plum coloured arrows reflect the incorporated relationships based on the M.I. analysis. The dark blue coloured arrows show the direct effects. The grey coloured arrows show the indirect effects via the assumed mediator Social Capital which were excluded (.00). The dotted lines represent non-significant path values ($p > .05$). The structural paths of the model contain the standardized regression coefficients or β values. High-Social-Media-User–Low-Traditional-Media-User (HSMMLTM).

Index/Measure	Benchmark	Value	Comment
NHSMMLTM = 238			
CMIN	N/A	7.940	Sample Size < 250.
DF	N/A	4	Ideal Sample Size (N/DF) = 59.
CMIN/DF = Norm Chi-Square	[1.00 to 5.00]	1.985	The value is very good.
GFI = Goodness-of-Fit Index	≥ .92	.994	The value indicates a very good fit.
AGFI = Adjusted Goodness-of-Fit Index	≥ .90	.884	The value indicates an acceptable fit.
NFI = Normed Fit Index	≥ .95	.994	The value indicates a very good fit.
CFI = Comparative Fit Index	≥ .97	.997	The value is very good.
RMSEA = Root Mean Squared Error	≤ .08	.046	The value indicates a good fit. (LO = .000, HI = .092)

Appendix M6

Final Model Version; High-Social-Media-Users; Indirect Effects (One Performance Dimension)

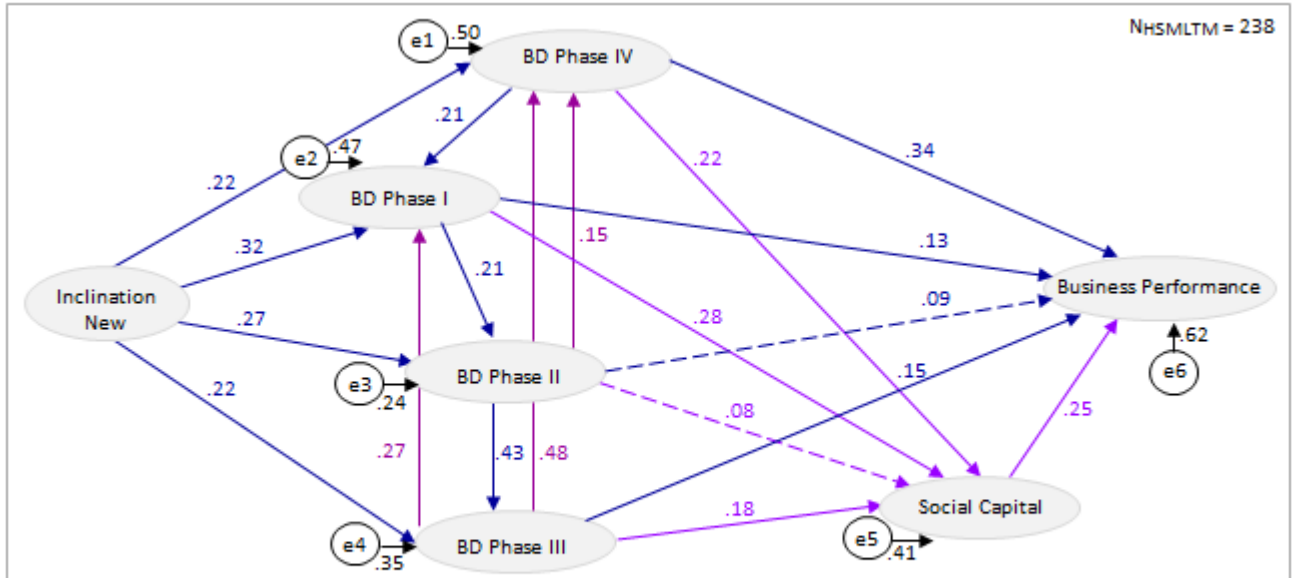


The grey coloured ellipses represent the model variables. The plum coloured arrows reflect the incorporated relationships based on the M.I. analysis. The grey coloured arrows show the direct effects which were excluded (.00). The purple coloured arrows represent the indirect effects via the assumed mediator Social Capital. The dotted lines represent non-significant path values ($p > .05$). The structural paths of the model contain the standardised regression coefficients or β values. High-Social-Media-User–Low-Traditional-Media-User (HSMLTM).

Index/Measure	Benchmark	Value	Comment
NHSMMLT = 238			
CMIN	N/A	238.916	Sample Size < 250.
DF	N/A	24	Ideal Sample Size (N/DF) = 9.
CMIN/DF = Norm Chi-Square	[1.00 to 5.00]	9.955	The value is too high.
GFI = Goodness-of-Fit Index	$\geq .92$	.899	The value indicates an acceptable fit.
AGFI = Adjusted Goodness-of-Fit Index	$\geq .90$	.528	The value is too low.
NFI = Normed Fit Index	$\geq .95$	.855	The value indicates a very good fit.
CFI = Comparative Fit Index	$\geq .97$	.863	The value is very good.
RMSEA = Root Mean Squared Error	$\leq .08$	.138	The value is too high. (LO = .122, HI = .154)

Appendix M7

Final Model Version; High-Social-Media-Users; Direct + Indirect Effects (One Performance Dimension)



The grey coloured ellipses represent the model variables. The plum coloured arrows reflect the incorporated relationships based on the M.I. analysis. The dark blue coloured arrows show the direct effects. The purple coloured arrows represent the indirect effects via the assumed mediator Social Capital. The dotted lines represent non-significant path values ($p > .05$). The structural paths of the model contain the standardised regression coefficients or β values. High-Social-Media-User–Low-Traditional-Media-User (HSMMLTM).

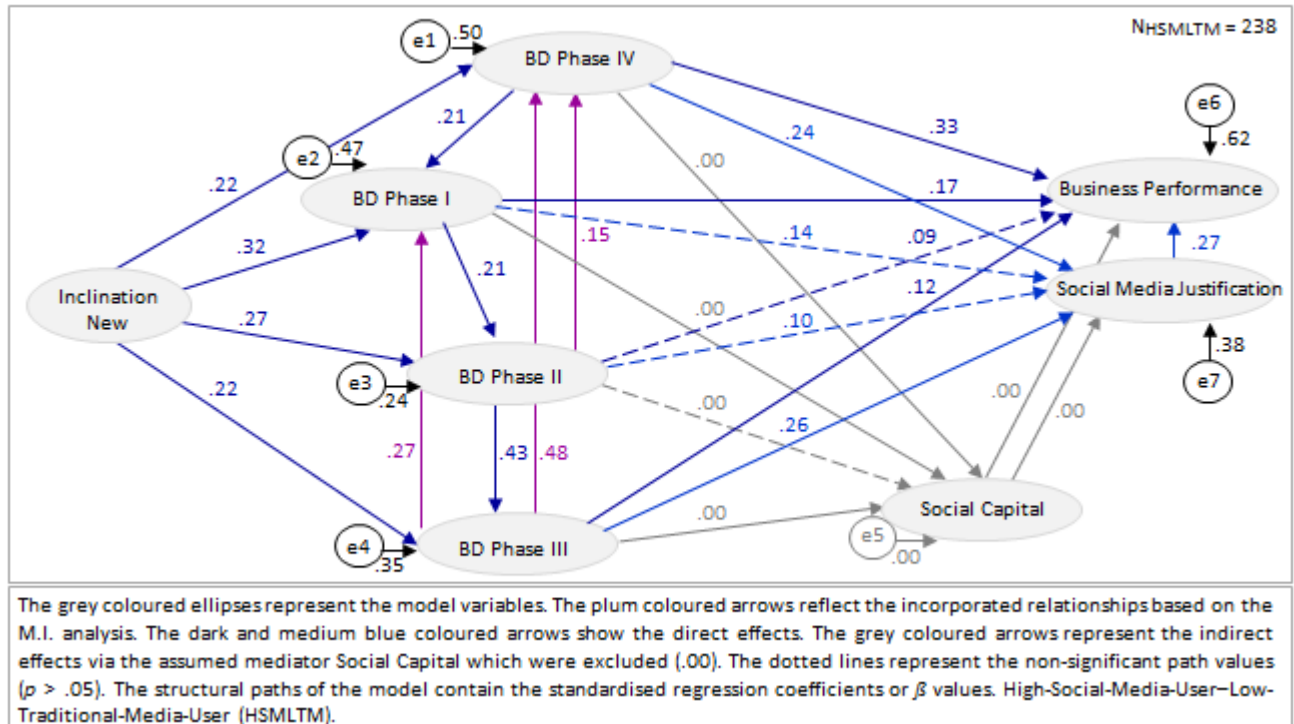
Index/Measure NHSMMLTM = 238	Benchmark	Value	Comment
CMIN	N/A	11.073	Sample Size < 250.
DF	N/A	8	Ideal Sample Size (N/DF) = 29.
CMIN/DF = Norm Chi-Square	[1.00 to 5.00]	1.384	The value is very good.
GFI = Goodness-of-Fit Index	$\geq .92$	.993	The value indicates a very good fit.
AGFI = Adjusted Goodness-of-Fit Index	$\geq .90$	.908	The value indicates a good fit.
NFI = Normed Fit Index	$\geq .95$	.993	The value indicates a very good fit.
CFI = Comparative Fit Index	$\geq .97$	.998	The value is very good.
RMSEA = Root Mean Squared Error	$\leq .08$	.029	The value indicates a good fit. (LO = .000, HI = .065)

Testing for Mediation Respecified Model; NHSMMLTM = 238; One Performance Dimension

Model Fit	Respecified Model Direct Effects	Respecified Model Indirect Effects	Respecified Model Dir. + Indir. Effects
χ^2 (Chi-Square)	7.940	238.916	11.073
Degrees of Freedom (df)	4	24	8
Probability	.094	.000	.198
RMSEA	.046	.138	.029
CFI	.997	.863	.998

Appendix M8

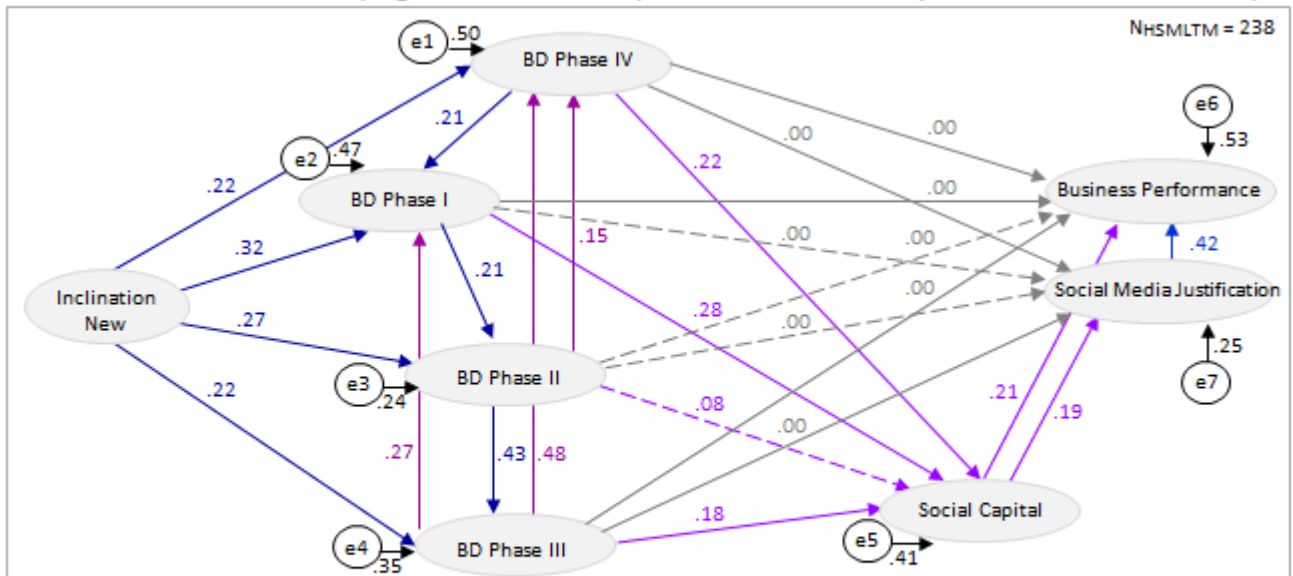
Extended Final Model Version; High-Social-Media Users Direct Effects (Two Performance Dimensions)



Index/Measure NHSMMLTM = 238	Benchmark	Value	Comment
CMIN	N/A	15.704	Sample Size < 250.
DF	N/A	8	Ideal Sample Size (N/DF) = 29.
CMIN/DF = Norm Chi-Square	[1.00 to 5.00]	1.963	The value is very good.
GFI = Goodness-of-Fit Index	$\geq .92$	.991	The value indicates a very good fit.
AGFI = Adjusted Goodness-of-Fit Index	$\geq .90$	.872	The value indicates an acceptable fit.
NFI = Normed Fit Index	$\geq .95$	.990	The value indicates a very good fit.
CFI = Comparative Fit Index	$\geq .97$	.995	The value is very good.
RMSEA = Root Mean Squared Error	$\leq .08$	.045	The value indicates a good fit. (LO = .005, HI = .078)

Appendix M9

Extended Final Model Version; High-Social-Media-Users; Direct + Indirect Effects (Two Performance Dimensions)

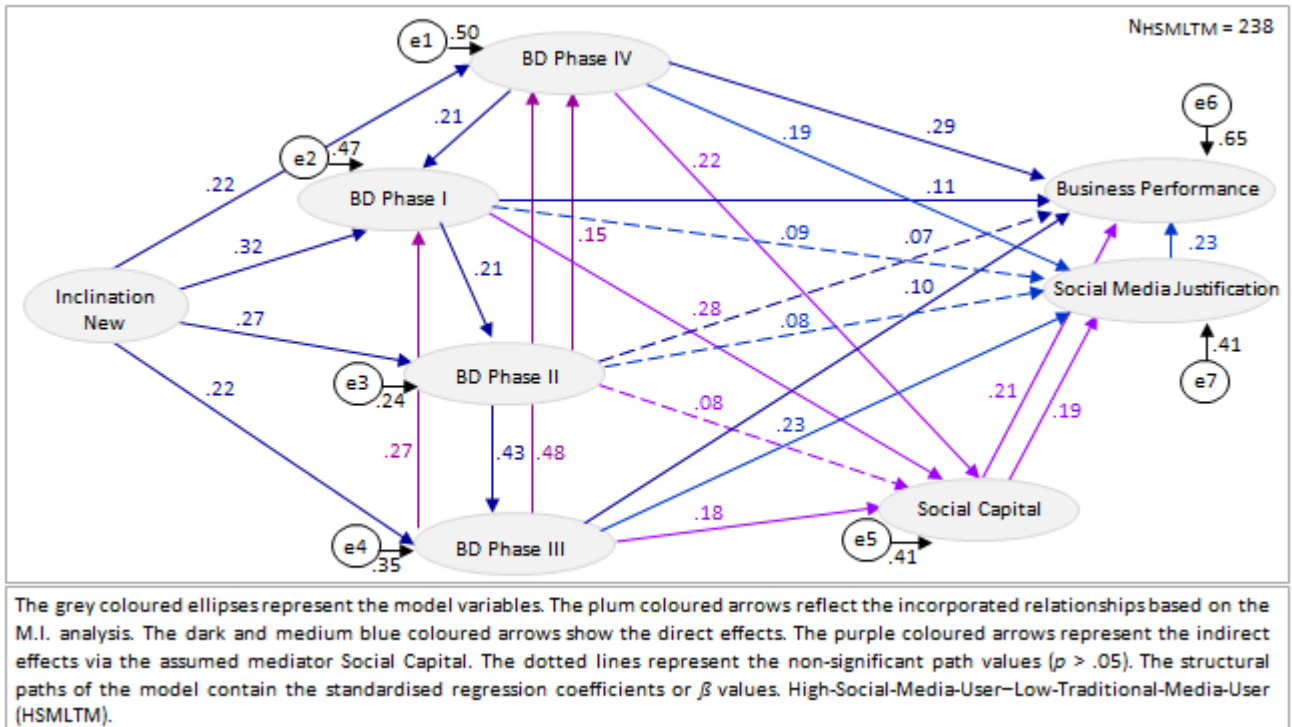


The grey coloured ellipses represent the model variables. The plum coloured arrows reflect the incorporated relationships based on the M.I. analysis. The grey coloured arrows show the direct effects which were excluded (.00). The purple coloured arrows represent the indirect effects via the assumed mediator Social Capital. The dotted lines represent the non-significant path values ($p > .05$). The structural paths of the model contain the standardised regression coefficients or β values. High-Social-Media-User–Low-Traditional Media-User (HSMLTM).

Index/Measure NHSMMLTM = 238	Benchmark	Value	Comment
CMIN	N/A	294.295	Sample Size < 250.
DF	N/A	44	Ideal Sample Size (N/DF) = 5.
CMIN/DF = Norm Chi-Square	[1.00 to 5.00]	6.689	The value is too high.
GFI = Goodness-of-Fit Index	$\geq .92$	.893	The value indicates an acceptable fit.
AGFI = Adjusted Goodness-of-Fit Index	$\geq .90$	.649	The value is clearly below the recommendation.
NFI = Normed Fit Index	$\geq .95$	.849	The value is too small.
CFI = Comparative Fit Index	$\geq .97$	.864	The value is too low for a well-fitted model.
RMSEA = Root Mean Squared Error	$\leq .08$	.110	The value indicates a poor model fit.

Appendix M10

Extended Final Model Version; High-Social-Media-Users; Direct + Indirect Effects (Two Performance Dimensions)



Index/Measure N _{HSM_LTM} = 238	Benchmark	Value	Comment
CMIN	N/A	19.193	Sample Size < 250.
DF	N/A	12	Ideal Sample Size (N/DF) = 19.
CMIN/DF = Norm Chi-Square	[1.00 to 5.00]	1.599	The value is very good.
GFI = Goodness-of-Fit Index	≥ .92	.990	The value indicates a very good fit.
AGFI = Adjusted Goodness-of-Fit Index	≥ .90	.883	The value indicates an acceptable fit.
NFI = Normed Fit Index	≥ .95	.990	The value indicates a very good fit.
CFI = Comparative Fit Index	≥ .97	.996	The value is very good.
RMSEA = Root Mean Squared Error	≤ .08	.036	The value indicates a good fit. (LO = .000, HI = .064)

Testing for Mediation Extended Final Model; N_{HSM_LTM} = 238; Two Performance Dimensions

Model Fit	Ext. Final Model Direct Effects	Ext. Final Model Indirect Effects	Ext. Final Model Dir. + Indir. Effects
χ^2 (Chi-Square)	15.704	294.295	19.193
Degrees of Freedom (df)	8	44	12
Probability	.047	.000	.084
RMSEA	.045	.110	.036
CFI	.995	.864	.996

$\Delta\chi^2 = 275.10, df = 32, p = .084$

Appendix N

Further Statistical Analyses

Appendix N1

Chi-Square Tests for Independence (Criterion)

Chi Square Tests for Independence | Criterion		Statistical Significance Criteria sorted in ascending order of the p-value	Y = Yes N = No	Comment Ratios in Percentage 1. Of High Value 2. Of Medium Value 3. Of Low Value 4. Of No Value
Value of Research CRIT1	Company Size SIZE	$\chi^2 (9, n = 530) = 9.19$, $p = .420$, <i>Cramer's V</i> = .076 No violations.	N	(1) Small : (2) Medium : (3) Large : (4) Enterprise Ratio (1) 26%:39%:24%:11%; (2) 31%:42%:24%:3%; (3) 25%:46%:15%:14%; (4) 21%:40%:26%:13%; Total: 24%:40%:24%:12%
	Roles & Responsibility RAR	$\chi^2 (6, n = 530) = 5.73$, $p = .454$, <i>Cramer's V</i> = .074 No violations.	N	Team : Leadership : Mixed Roles Ratio (1) 24%:42%:15%:19%; (2) 23%:43%:24%:10%; (3) 25%:38%:25%:12%; Total: 24%:40%:24%:12%
	Career Level CCL	$\chi^2 (6, n = 530) = 4.79$, $p = .571$, <i>Cramer's V</i> = .067 Condensed original scale No violations.	N	(1) Senior Management : (2) Middle Management : (3) Junior and Senior Executives (1) 25%:39%:25%:11%; (2) 22%:41%:26%:11%; (3) 25%:43%:17%:15%; Total: 24%:40%:24%:12%
	Generation GEN	$\chi^2 (6, n = 527) = 2.51$, $p = .867$, <i>Cramer's V</i> = .049 Excluded Silent Generation No violations.	N	(1) GenY : (2) GenX : (3) Baby Boomer Ratio (1) 21%:40%:25%:14%; (2) 25%:41%:23%:11%; (3) 22%:36%:28%:14%; Total: 24%:40%:24%:12%
	Function FORG	$\chi^2 (9, n = 530) = 2.59$, $p = .978$, <i>Cramer's V</i> = .040 Condensed original scale No violations.	N	(1) Liaison (BD, Marketing, Sales) : (2) Procurement: (3) Leadership (4) Others (1) 25%:39%:24%:12%; (2) 23%:38%:26%:13%; (3) 27%:39%:22%:12%; (4) 20%:45%:23%:12%; Total: 24%:40%:24%:12%

Chi Square Tests for Independence | Criterion (Continued)		Statistical Significance Criteria sorted in ascending order of the p-value	Y = Yes N = No	Comment Ratios in Percentage 1. Of High Value 2. Of Medium Value 3. Of Low Value 4. Of No Value
Value of Research CRIT1	Raffle Winner CRIT3	$\chi^2 (6, n = 530) = 70.44$, $p = .000$, <i>Cramer's V</i> = .258 Excluded respondents who stated 'No' and/or 'Yes' without contact data. * 16.7% cells violated the assumption of minimum expected cell frequency.	Y*	(1) No Chance to Win because of Exclusion: (2) Chance to Win : (3) Actual Winner Ratio (1) 12%:31%:31%:26%; (2) 30%:45%:20%:5%; (3) 24%:52%:24%:0%; Total: 24%:40%:24%:12%
	Employer EMP	$\chi^2 (6, n = 530) = 15.72$, $p = .015$, <i>Cramer's V</i> = .122 No violations.	Y	(1) Vendor : (2) Third Party : (3) Buyer Ratio (1) 24%:41%:20%:15%; (2) 28%:41%: 23%:8%; (3) 15%:37%:33%:15%; Total: 24%:40%:24%:12%
	Education REDU	$\chi^2 (6, n = 530) = 15.57$, $p = .016$, <i>Cramer's V</i> = .121 * 8.3% cells violated the assumption of minimum expected cell frequency.	Y*	(1) Less : (2) Normal : (3) Higher Educated Ratio (1) 20%:40%:30%:10%; (2) 31%:51%:13%:5%; (3) 23%:38%:26%:13%; Total: 24%:40%:24%:12%
	Region REG	$\chi^2 (6, n = 458) = 13.09$, $p = .042$, <i>Cramer's V</i> = .120 Excluded 'Other regions' No violations.	Y	(1) DACH : (2) WE : (3) NA Region Ratio (1) 20%:41%:24%:15%; (2) 19%:37%:35%:9%; (3) 30%:39%:20%:11%; Total: 23%:39%:26%:12%
	Social Media vs. Traditional Media STMU	$\chi^2 (6, n = 523) = 12.43$, $p = .053$, <i>Cramer's V</i> = .109 Excluded 'Traditional Media is the only way'. No violations.	N	(1) SocMed substitutes, (2) SocMed complements, (3) TradMed remains paramount Ratio (1) 29%:34%:22%:15%; (2) 24%:41%:24%:11%; (3) 12%:51%:24%:13%; Total: 24%:40%:24%:12%
Significance Level $p < .05$ (alpha level) indicated a statistically significant result. To develop the Research Value Barometer the percentage ratios of two characteristics (blue colours) were used for illustration purposes.				

Appendix N2

Question Q6a and Q6b

Is there a relationship between value perception of this research and the interest in participating in future research projects?

Perceived Value of Research by Interest in Future Research Projects Cross Tabulation

Q6a Perceived Value of Research*	Q6b Interest in Participating in Future Research Projects*			
	(1) Yes	(2) Indifferent	(3) No	Total
(1) Valuable	Count 276	151	40	467
% within Perceived Value of Research	59.1%	32.3%	8.6%	100.0%
% within Interest in Future Research	96.8%	85.3%	58.8%	88.1%
% of Total	52.1%	28.5%	7.5%	88.1%
(2) Not Valuable	Count 9	26	28	63
% within Perceived Value of Research	14.3%	41.3%	44.4%	100.0%
% within Interest in Future Research	3.2%	14.7%	41.2%	11.9%
% of Total	1.7%	4.9%	5.3%	11.9%
Total	Count 285	177	68	530
% within Perceived Value of Research	53.8%	33.4%	12.8%	100.0%
% within Interest in Future Research	100.0%	100.0%	100.0%	100.0%
% of Total	53.8%	33.4%	12.8%	100.0%

* Recoded both 5 Point Likert Scales (1) Extremely valuable, (2) Very valuable, (3) Moderately valuable, (4) Slightly valuable into (2) Valuable; (5) Not Valuable at all into (1) Valuable (2) Not Valuable; (1) Definitely Yes, (2) Yes, (3) Indifferent, (4) No, (5) Definitely No into (1) Yes (2) Indifferent (3) No.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	77.757 ^a	2	.000
Likelihood Ratio	66.779	2	.000
Linear-by-Linear Association	19.282	1	.000
N of Valid Cases	530		

a. 0 cells (0.0%) have expected count less than 5.
The minimum expected count is 8.08.

Symmetric Measures

	Value	Approximate Significance
Nominal by Nominal Phi	.383	.000
Cramer's V	.383	.000
N of Valid Cases	530	

Appendix N3

Motivation

The idea behind this question was to ascertain if respondents were committed to similar projects in the future.

Interpretation

The Pearson Chi-Square value was 77.76 with an associated significance level of .00 (Asymptotic Sig. (2-sided). The Sig. value of .00 which was less than or equal the alpha value of .05 indicated that the result was significant. This meant that the proportion of respondents which perceived the research at least to some degree of value and were committed to similar future research projects was significantly different from the proportion of those which perceived the research as not valuable and indicated a commitment to similar projects in the future. There appeared to be an association between the perception of value and the interest to commit to similar research projects in the future.

Of the minority of 11.9% who viewed the research of *no value* still 14.3% of the respondents declared an *interest in similar future studies* compared to 41.3% who were indifferent and 44.4% who clearly denied participating. The results of those (88.1%) considering the research valuable were expected. Nearly 6 out 10 (59.1%) who perceived at least some value stated that they would commit to similar future studies, while 3 out of 10 (32.3%) were indifferent. Only a small minority 8.6% of all respondents who perceived the project valuable was not at all interested in similar future projects.

The Cramer's V of .38 ranging from 0 to 1 indicated a large effect in terms of the association of both variables according to Cohen's (1988) criteria.

Results

A Chi-square test for independence (with Yates Continuity Correction) indicated a significant association between the perceived value of research and the interest in committing to similar future research projects, $\chi^2 (2, n = 530) = 77.76, p = .00, \text{Cramer's } V = .38$.

Question Q6a and Q6c

Is there a relationship between value perception of this research and the interest in obtaining an executive summary of this research?

Perceived Value by Interest in Executive Summary Cross Tabulation

Q6a Perceived Value of Research*	Q6c Interest in Executive Summary of Research and Participation in Raffle			
	(1) Yes	(2) No	Total	
(1) Valuable	Count	338	129	467
	% within Value of Research	72.4%	27.6%	100.0%
	% within Interest in Exec. Summary	94.9%	74.1%	88.1%
	% of Total	63.8%	24.3%	88.1%
(2) Not Valuable	Count	18	45	63
	% within Value of Research	28.6%	71.4%	100.0%
	% within Interest in Exec. Summary	5.1%	25.9%	11.9%
	% of Total	3.4%	8.5%	11.9%
Total	Count	356	174	530
	% within Value of Research	67.2%	32.8%	100.0%
	% within Interest in Exec. Summary	100.0%	100.0%	100.0%
	% of Total	67.2%	32.8%	100.0%

*Recorded the 5 Point Likert Scale (1) Extremely valuable, (2) Very valuable, (3) Moderately valuable, (4) Slightly valuable into (2) Valuable; (5) Not Valuable at all into (1) Valuable (2) Not valuable.

Appendix N4

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	48.305 ^a	1	.000		
<u>Continuity Correction^b</u>	<u>46.339</u>	1	<u>.000</u>		
Likelihood Ratio	45.105	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	48.214	1	.000		
N of Valid Cases	530				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 20.68.

b. Computed only for a 2x2 table (Yates' Correction for Continuity) compensates for the overestimate of the chi-square value when used with a 2x2 table.

Symmetric Measures

	Value	Approximate Significance
Nominal by Nominal <u>Phi</u>	<u>.302</u>	<u>.000</u>
Cramer's V	.302	.000
N of Valid Cases	530	

Motivation

The idea behind this question was to ascertain if respondents pretended not to see any value when they were in fact interested in obtaining the research outcome in the form of the executive summary.

Interpretation

The corrected value was 46.34 with an associated significance level of .00 (Asymptotic Sig. (2-sided)). The Sig. value of .00 which was less than or equal the alpha value of .05 indicated that the result was significant. This meant that the proportion of respondents which perceived the research at least to some degree of value and were interested in the executive summary of the research/raffle was significantly different from the proportion of those which perceived the research as not valuable and requested the executive summary/participation in the raffle anyhow. There appeared to be an association between the perception of value and the interest in the research outcome in the form of an executive summary.

Of the minority of 11.9% who viewed the research of *no* value 28.6% of the respondents declared an interest in both the executive summary (research findings) and the raffle (gift certificates and one grand prize in the form of a reflection seminar) while the majority of 71.4% showed *no* interest at all. Similarly, were the results with those who considered the research as being of at least to some degree valuable. Of the majority of 72.4% who were interested in the research outcome, a minority of 27.6% indicated *no* interest in the summary and raffle. More than two thirds (67.2%) of the sample were interested in the executive summary and raffle while the remaining one third (32.8%) did not expect any gratification/incentive for taking the survey. Approximately 7 out of 8 (88.1%) perceived the research to some degree valuable.

The phi coefficient (correlation) of .302 ranging from 0 to 1 indicated a medium effect in terms of the association of both variables according to Cohen's (1988) criteria.

Results

A Chi-square test for independence (with Yates Continuity Correction) indicated a significant association between the perceived value of research and the interest in the executive summary of the research, $\chi^2 (1, n = 530) = 46.34, p = .00, \phi = .30$.

Appendix N5

Question Q6b and Q6c

Is there a relationship between value perception of this research (selection of the respondents perceiving value (N = 467), the interest in participating in future research projects and receiving the Executive Summary and Participating in the Raffle?

Perceived Interest in Future Research Projects by Raffle participation Cross Tabulation

Q6b Interest in Participating in Future Research Projects*	Q6c Interest in receiving an Exec. Summary and participation in a raffle		
	(1) Yes	(2) No	Total**
(1) Yes	Count 229	47	276
% within Interest in future research	83.0%	17.0%	100.0%
% within Interest in receiving an Exec. Summary and particip. in a raffle	67.8%	36.4%	59.1%
% of Total	49.0%	10.1%	59.1%
(2) Indifferent	Count 91	60	151
% within Interest in future research	60.3%	39.7%	100.0%
% within Interest in receiving an Exec. Summary and particip. in a raffle	26.9%	46.5%	32.3%
% of Total	19.5%	12.8%	32.3%
(3) No	Count 18	22	40
% within Interest in future research	45.0%	55.0%	100.0%
% within Interest in receiving an Exec. Summary and particip. in raffle	5.3%	17.1%	8.6%
Total	Count 338	129	467
% within Interest in future research	72.4%	27.6%	100.0%
% within Interest in receiving an Exec. Summary and particip. in a raffle	100.0%	100.0%	100.0%
% of Total	72.4%	27.6%	100.0%

*Recorded the 5 Point Likert Scale (1) Definitely Yes, (2) Yes, (3) Indifferent, (4) No, (5) Definitely No into (1) Yes (2) Indifferent (3) No ** Only those who perceived at least value to some extent.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	41.569 ^a	2	.000
Likelihood Ratio	40.586	2	.000
Linear-by-Linear Association	40.979	1	.000
N of Valid Cases	467		

a. 0 cells (0.0%) have expected count less than 5.
The minimum expected count is 8.08.

Symmetric Measures

	Value	Approximate Significance
Nominal by Nominal Phi	.298	.000
Cramer's V	.298	.000
N of Valid Cases	467	

Appendix N6

Motivation

The idea behind this question was to ascertain if the respondents *who valued the research to some extent* (N=467) indicated also a commitment to similar projects in the future or if they were just interested in obtaining the executive summary and participate in the raffle.

Interpretation

The Pearson Chi-Square value was 41.57 with an associated significance level of .00 (Asymptotic Sig. (2-sided)). The Sig. value of .00 which was less than or equal the alpha value of .05 indicated that the result was significant. This meant that the proportion of respondents which were committed to similar future research projects and indicated their interest in the executive summary and raffle was significantly different from the proportion of those which were neither interested in participating in similar projects in the future nor in the executive summary and raffle. There appeared to be an association between the *commitments to similar research projects in the future* and the *interest in the outcome in the form of the executive summary with the chance to win a prize* by participating in the raffle.

Of the minority of 8.6% who were *not interested in participating in future similar studies* still, 45.0% declared an *interest in receiving the executive summary and participate in the raffle* compared to 55.5% who clearly denied participating. The results of those (59.1%) participating in future studies were anticipated. Approximately 8 out of 10 (83.0%) who were interested in similar future studies requested also the Executive Summary and entered Raffle, while only 17% refrained from obtaining the executive summary and entering the raffle. The Cramer's V of .30 ranging from 0 to 1 indicated a medium effect in terms of the association of both variables according to Cohen's (1988) criteria.

Results

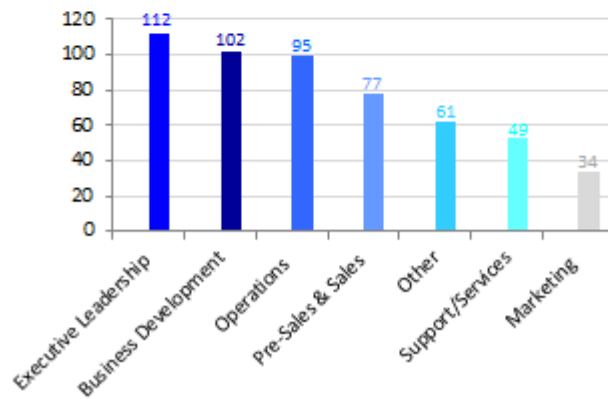
A Chi-square test for independence (with Yates Continuity Correction) indicated a significant association between the *perceived value of research* and the *interest in committing to similar future research projects*, $\chi^2 (2, n = 430) = 41.57, p = .00, \text{Cramer's } V = .30$.

Appendix N7

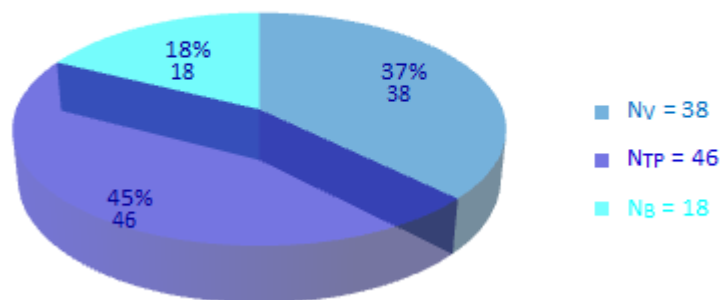
Business Development (BD) Executives represented
N_{TBD} = 102 within the original Total Sample (N_T = 530)

Updated Table	Frequency	Valid Percent	Cumulative Percent
Executive Leadership	112	21.1	21.1
Business Development	102	19.2	40.3
Operations	95	17.9	58.2
Pre-Sales & Sales	77	14.6	72.8
Other	61	11.5	84.3
Support/Services	49	9.2	93.5
Marketing	34	6.4	100.0
Missing Values	0	.0	
Total	530	100.0	100.0

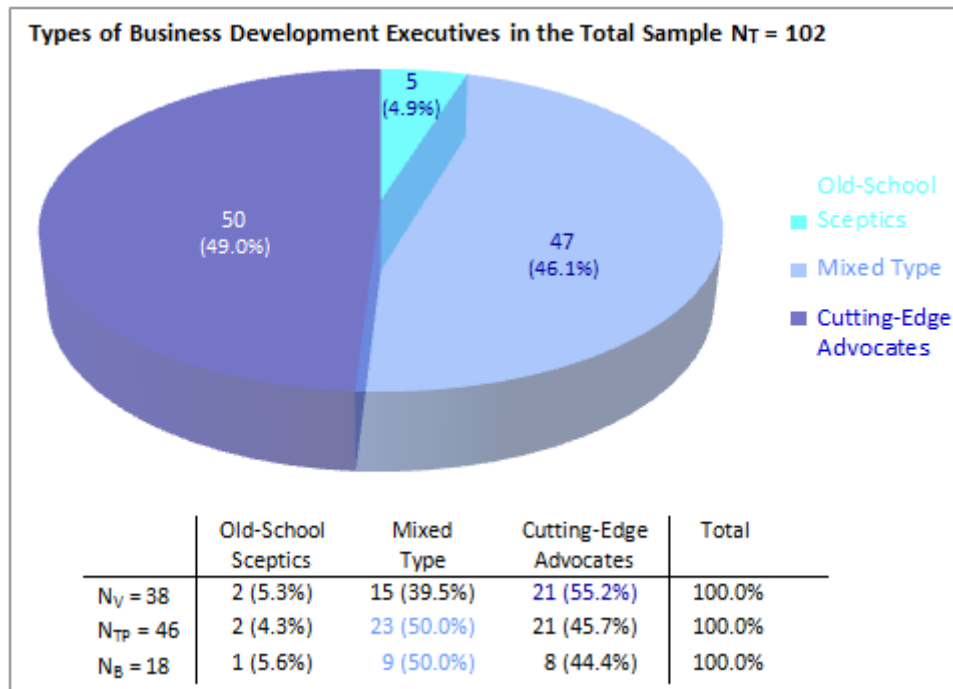
Primary Function (N = 530)



Distribution of the Business Development (BD) Executives
N_{TBD} = 102 (100%) within the Subsamples



Appendix N8



Chi Square Tests for Independence | Criterion		Statistical Significance Criteria sorted in ascending order of the p-value	Y = Yes N = No	Comment Ratios in Percentages S = Sceptic; MT = Mixed Type; A = Advocate (BD Types)
Three Types of BD	Research Value CRIT1	$\chi^2 (2, n = 102) = 9.98, p = .007, Cramer's V = .313$ *Violation: 66.7% cells EC < 5	Y*	Research Value : No Research Value Ratio (S) 60%:40%; (MT) 85%:15%; (A) 98%:2%; Total: 90%:10%
	Expected Benefits SMJU	$\chi^2 (2, n = 102) = 8.89, p = .012, Cramer's V = .295$ *Violation: 33.3% cells EC < 5	Y*	Of Importance : Of No Importance Ratio (S) 40%:60%; (MT) 51%:49%; (A) 78%:22%; Total: 64%:36%
	Support Future Research CRIT2	$\chi^2 (4, n = 102) = 10.44, p = .034, Cramer's V = .226$ *Violation: 33.3% cells EC < 5	Y*	Agree : Indifferent : Disagree Ratio (S) 20%:60%:20%; (MT) 45%:38%:17%; (A) 70%:26%:4%; Total: 56%:33%:11%
	Generation GEN	$\chi^2 (4, n = 102) = 6.08, p = .193, Cramer's V = .173$ *Violation: 33.3% cells EC < 5	N*	GenY : GenX : Baby Boomer Ratio (S) 0%:60%:40%; (MT) 9%:68%:23%; (A) 20%:68%:12%; Total: 14%:68%:18%
	Region REG	$\chi^2 (4, n = 82) = 5.80, p = .214, Cramer's V = .188$ *Violation: 33.3% cells EC < 5	N*	DACH : WE : NA Region Others excluded. (S) 50%:50%:0%; (MT) 50%:21%:29%; (A) 32%:43%:25%; Total: 41%:33%:26%
	Roles & Responsibility RAR	$\chi^2 (4, n = 102) = 5.78, p = .216, Cramer's V = .168$ *Violation: 55.6% cells EC < 5	N*	Team : Leadership : Mixed Roles Ratio (S) 0%:0%:100%; (MT) 6%:47%:47%; (A) 10%:40%:50%; Total: 8%:41%:51%
	Social Media vs. Traditional Media STMU	$\chi^2 (4, n = 102) = 4.42, p = .352, Cramer's V = .147$ *Violation: 33.3% cells EC < 5	N*	SocMed substitutes, SocMed complements, TradMed remains paramount Ratio (S) 40%:40%:20%; (MT) 30%:51%:19%; (A) 32%:62%:6%; Total: 31%:56%:13%
	Education REDU	$\chi^2 (4, n = 102) = 3.47, p = .482, Cramer's V = .131$ *Violation: 55.6% cells EC < 5	N*	Less : Normal : Higher Educated Ratio (S) 0%:20%:80%; (MT) 13%:13%:74%; (A) 6%:24%:70%; Total: 9%:19%:72%

Significance Level $p < .05$ (alpha level) indicated a statistically significant result. Expected Count (EC) < 5.

Appendix N9

Chi Square Tests for Independence | Criterion (Continued)		Statistical Significance Criteria sorted in ascending order of the p-value	Y = Yes N = No	Comment Ratios in Percentages S = Sceptic; MT = Mixed Type; A = Advocate (BD Types)
Three Types of BD	Experience EXP	$\chi^2 (4, n = 102) = 3.00$, $p = .558$, <i>Cramer's V</i> = .121 *Violation: 33.3% cells EC < 5	N*	(S) Either < 15 years' or > 30 years' experience; (MT) & (A) Mostly 15 to 30 years' experience. (S) 40%:20%:40%; (MT) 26%:53%:21%; (A) 32%:52%:16%; Total: 29%:51%:20%
	Software Deal Size SWDEAL	$\chi^2 (6, n = 102) = 4.84$, $p = .565$, <i>Cramer's V</i> = .154 *Violation: 33.3% cells EC < 5	N*	Small : Medium : Large : MV Deal Size Ratio (S) 20%:0%:40%:40%; (MT) 38%:13%:25%:24%; (A) 42%:8%:36%:14%; Total: 39%:10%:31%:20%
	Current or Most Recent Career Level CCL	$\chi^2 (4, n = 102) = 2.90$, $p = .574$, <i>Cramer's V</i> = .119 *Violation: 33.3% cells EC < 5	N*	Senior Management : Middle Management : Executive Level Ratio (S) 40%:60%:0%; (MT) 53%:32%:15%; (A) 58%:26%:16%; Total: 55%:30%:15%
	Ease of Use EOU	$\chi^2 (4, n = 102) = 2.87$, $p = .579$, <i>Cramer's V</i> = .117 *Violation: 55.6% cells EC < 5	N*	Agree : Indifferent : Disagree Ratio (S) 40%:60%:0%; (MT) 45%:55%:0%; (A) 56%:42%:2%; Total: 50%:49%:1%
	Intention of USE	$\chi^2 (4, n = 102) = 2.87$, $p = .597$, <i>Cramer's V</i> = .119 *Violation: 33.3% cells EC < 5	N*	Agree : Indifferent : Disagree Ratio (S) 60%:20%:20%; (MT) 55%:40%:5%; (A) 48%:42%:10%; Total: 52%:40%:8%
	Professional Background PRO	$\chi^2 (4, n = 102) = 1.61$, $p = .808$, <i>Cramer's V</i> = .089 *Violation: 33.3% cells EC < 5	N*	Expert same Career : Generalist : Diverse Ratio (S) 20%:60%:20%; (MT) 15%:57%:28%; (A) 18%:46%:36%; Total: 17%:52%:31%
Significance Level $p < .05$ (alpha level) indicated a statistically significant result. Expected Count (EC) < 5; MV = Missing Values.				

Appendix O

Supporting Evidence for the Research Relevance

Appendix O1

Letter of previous employer (global software vendor)



February 17, 2018

To Whom It May Concern:

I had the opportunity to work with Werner Krings when we both worked for Apriso, an industrial software provider serving global markets. Apriso was later purchased by Dassault Systèmes in July 2013. My role at Apriso, and then Dassault Systèmes, was to drive awareness across media, industry analyst and customer communities. It was in this capacity that I worked with Mr. Krings. I have since taken on a new position with Schneider Electric, where I work today within this same role.

While at Apriso, Werner Krings' focus was on business development out of our Munich office. Mr. Krings was an early adopter to recognize the value social media communities could play in the role of business development. He leveraged social media websites and blogs to develop new leads and opportunities to sell more of the company's software solutions.

Some of the benefits of Werner taking this approach was a consolidation of the sales lead development time, compared to those Business Developers who pursued just traditional methods. As an example, I worked with Werner to get a blog post published, "[5 Ways Windows 8 benefits Manufacturers](#)," which was then published in Automation World magazine, attracting attention of not only current customers and prospects, but also of a Windows Partner.

Gordon Benzie

Director of Public & Analyst Relations, Software Business
Schneider Electric

Link: [5 Ways Windows 8 benefits Manufacturers](#)

Appendix O2

LinkedIn Munich Top Social Seller Event 2017



[YouTube Link Social Selling Award 2017 by LinkedIn](#)

The LinkedIn Social Selling Index (SSI) is defined as the sum of the components

- Create a professional brand
- Find the right people
- Engage with insights
- Build relationships.

Video above: #1 Award Winner 2017

Social Selling Dashboard

Share your SSI



Werner Krings

Director of Corporate Relations |
B2B/B2C Executive Coach | Social
Media Speaker

Top **1**%
Industry SSI Rank

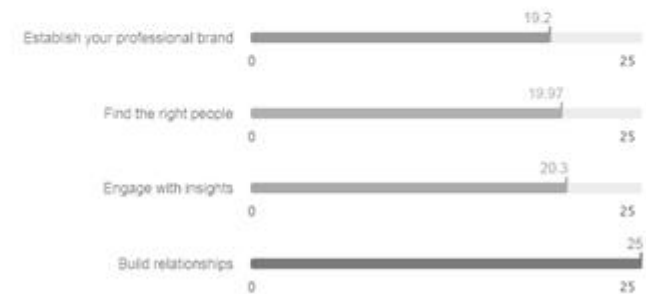
Top **1**%
Network SSI R

Social Selling Index – Today

Your Social Selling Index (SSI) measures how effective you are at establishing your professional brand, finding the right people, engaging with insights, and building relationships. It is updated daily. [Learn more](#)



The SSI is updated daily.



[Link to assess the LinkedIn SSI](#)

Appendix O3

'Tasty Science' Cookery Show Video 2018



You Tube Video Release Date: 26 Aug. 2018

Featured Guest on the Educational & Cookery show (7 Feb. 2018)

Host: Argang Ghadiri, CEO of Tasty Science

[LinkedIn Profile Argang Ghadiri](#)

[Link to Tasty Science Video](#)

[Link to Book Contribution](#)



Wissen schmeckt (Tasty Science) is one of the most innovative Educational and Cookery Programme on Social Media (YouTube) headquartered in Germany.

- Guests are scientists of various disciplines who represent their field of research while building a bridge to the culinary world.
- The new season in 2018 includes topics like Corporate Health Management, Social Media and Business Development, Sport Economics, Entrepreneurship, Molecular Physics, Neuroscience, and Digitalization.

Krings, W. (2018): Die optimierte Nutzung von sozialen Medien im B2BGeschäftsentwicklungs- und kreativ-kulinarischen Bereich.

In: A. Ghadiri, T. Vilgis, & T. Bosbach (Hrsg.), Wissen schmeckt (S. 213-231). Wiesbaden: Springer Gabler. ISBN 978-3-658-21390-9


Appendix O4

Interview in November 2017 for a Contribution to
'Manage Up! The Ultimate Career Guide
to Managing your Manager' –
Published in March 2018



Jacqueline C. Ross • 1st

Certified Leadership and Career Coach, Motivational Speaker & Presenter, Author
and Director of Human Resources

Jacqueline C. Ross LLC • Coach Training Alliance
Newton Upper Falls, Massachusetts • 500+ 

[LinkedIn Profile Jacqueline C. Ross](#)

[Link to Amazon Bookshop](#)

Story:

Mrs. Jacqueline C. Ross, a certified Leadership Coach, Motivational Speaker and Director of HR, contacted the author in November 2017 via LinkedIn to be interviewed for her new book project. She initiated the contact without knowing the author from before. Her LinkedIn Profile showed that she belonged to the BNI in Concord, MA where he was a member in 2004-2005. He committed to the project based on the assumption that the BNI had referred her to him. Mrs. Ross clarified later on that this was not the case. This might serve as example of Social Capital / Theory of Weak Ties (commonality triggers support).

Evidence:

"I had the pleasure of working with Werner when I was in the process of writing my first business book focused on how to manage your manager. I had sent Werner a request as I had done some research and wanted to interview leaders in the business and coaching field to get their perspective and experience on the subject. Werner graciously agreed to be interviewed and we spoke extensively about his experience with his previous managers and he shared the strategies he has employed in managing up. Werner struck me as having a perspective that allows him to work effectively with diverse leadership styles. As a leader himself, Werner presented as highly self-aware, attuned to working well with varying personalities and invested in his continuous learning. All those qualities tell me that Werner is a solid and impactful professional. Werner's continuous support speaks to his high level of giving and generous nature. I would highly recommend Werner to anyone who wanted to jointly work with him." (LinkedIn Recommendation of March 8, 2018)