KNOWLEDGE MANAGEMENT PRACTICES IN INDIA: A STUDY OF IT SECTOR

A Thesis

Submitted to Delhi School of Management
In fulfilment of the requirement of the degrees of

DOCTOR OF PHILOSOPHY

By

ASHA THOMAS

2k16/PhDDSM/02

Under the Guidance of

Dr VIKAS GUPTA
Associate Professor
USME



Delhi Technological University, Delhi 110042

DELHI TECHNOLOGICAL UNIVERSITY, SHAHBAD DAULATPUR, MAIN BAWANA ROAD DELHI - 110042

NOVEMBER 2021

COPYRIGHT NOTICE ©DELHI TECHNOLOGICAL UNIVERSITY, DELHI 2021 ALL RIGHTS RESERVED

EXECUTIVE SUMMARY

An organization's bottom line is enhanced by knowledge management. The knowledge resources provide a different competitive benefit by enhancing functioning. The ability to manage intangibles like knowledge is important for competition, and intelligent administrators are aware of the significance of applying and increasing knowledge for an organization's advantage. Knowledge resources include novel and important economic sources that are distinctive and worthy resources associated with an organization's competitive benefit. Knowledge capabilities impact organizations functioning. Also, tacit knowledge is presently more significant than "physical capital" in satisfying the functioning and origination of an organization. The management of knowledge, mainly tacit knowledge, is significant in maintaining and improving the functioning and origination of an organization. Literature that focuses on the elements that endorse the sharing of tacit knowledge is less. Thus, focusing on social capital and individual motivations along with technological factor web 2.0 as the employees' tacit knowledge sharing primary enablers, this study aims to study the impact of technological elements, individual motivation, and social capital on IT professionals' tacit knowledge sharing. Current researchers have not differentiated between the two types of shared knowledge, namely, tacit and explicit knowledge, and have not examined the sharing of tacit knowledge as it associates with organizations development. The aim of this study is to examine innovative work behavior with tacit knowledge sharing between IT professionals. The research also examines the moderating role of absorptive capacity in the relation between tacit knowledge sharing and innovative work behavior. The participants are Indian IT professionals in this study and data was collected from October 2020 to March 2021. The study comprised 497 samples. The examination applied version 24 of the Statistical Package (SPSS) for demographics and partial less square structural equation model (PLS-SEM) 3.3.3 for the measurement model and structural equation.

The outcomes of this study are examined by enablers like social capital, extrinsic and intrinsic motivation, web 2.0 on tacit knowledge sharing, and the indirect influence of enablers on innovative work behavior, with the mediating impact of the tacit knowledge sharing.

The research finding discus important impact of enabler's like social capital, extrinsic motivation, enjoyment in helping other people, and web 2.0 on tacit knowledge sharing between the Indian IT professionals. The research examines the direct influence on innovative work behavior and was significant between the Indian IT professionals. The examination also found partial mediation effect of social capital, extrinsic motivation, and delight in helping others between tacit knowledge sharing and innovate work behavior, while full mediation was recognized for web 2.0 between the Indian IT professionals. This research also establishes that the absorptive capacity has an important impact as a moderator between tacit knowledge sharing and innovative work behavior.

CANDIDATE'S DECLARATION

I, hereby certify that the thesis titled "Knowledge Management Practices in India: A

Study of IT Sector", submitted in fulfilment of the requirements for the award of the

degree of Doctor of Philosophy' is an authentic record of my research work carried out

under the guidance of Dr Vikas Gupta. Any material borrowed or referred to is duly

acknowledged.

The matter presented in this thesis has not been submitted elsewhere in part or entirely

to any other university or Institute for award of any degree.

Asha Thomas 2K16/PHD DSM/02

Delhi School of Management Delhi Technological University

iv

DELHI SCHOOL OF MANAGEMENT DELHI TECHNOLOGICAL UNIVERSITY
SHAHBAD DAULATPUR, MAIN BAWANA ROAD DELHI – 110042 (INDIA)

DELIECH *

SUPERVISOR'S CERTIFICATE

This is to certify that the thesis titled, "Knowledge Management Practices in India:

A Study of IT Sector", submitted in fulfilment of the requirement for the award of

the degree of Doctor of Philosophy is and original research work carried out by Ms.

Asha Thomas, under my supervision. The matter presented in this thesis has not been

submitted elsewhere in part or fully to any University or Institute for the award of any

degree, to the best of our knowledge.

Dr Vikas Gupta

Associate Professor, USME

Delhi Technological University

V

ACKNOWLEDGEMENT

I would like to thank the Al-Mighty for his infinite mercy, blessings, and the virtue of knowledge that had made me an able person to attain a position where I can proudly complete my PhD.

Thank You, Lord!

I want to thank all my teachers for helping me to become what I am today.

I am immensely proud of my dissertation and would never change my path to get to this point. Throughout my journey, I met many beautiful people to whom I owe my gratitude for all their support, guidance, and encouragement over the years. Without them, I could not have reached this incredible milestone in my journey.

My supervisors were exceptional at guiding me through the scholarly process, yet allowing me to learn, grow, and make decisions. I can never choose the right words or write enough to thank Dr Vikas Gupta for the time and effort he invested in me.

I would like to express my sincere gratitude to my preliminary examiner Professor Kavita Singh, Faculty of Management Studies, the University of Delhi, and Professor and Head of the Department, Seema Sharma, IIT Delhi. They acted as a guiding light and helped steer my research in the right direction.

I would also like to acknowledge several individuals who were instrumental in shaping and supporting my research over the years. Each of these people took time to answer my questions, always listened and addressed my concerns, were always up for a spirited debate, and most importantly, provided excellent mentorship, guidance, and

support. I acknowledge Professor Armando and Beatrice's support and positive, constructive input in my thesis and questionnaire. I express gratitude to Professor Manlio Del Giudice, and Professor Justin Paul for their consistent support.

Special gratitude to Dr Ajay Chauhan, Dr Fawad Latif, and Dr Umar Sahibzaba for generously and patiently teaching me how to analyze data and showing me how to use a statistical tool I was unfamiliar with and their support in guiding me smart PLS for completing my data analysis.

Special thanks to Professor Christian M. Ringle and Professor Marko Sarstedt for their guidance in PLS model validation. I would also like to express gratitude to my editor Seema Soni for her unconditional contribution and love. I am grateful!

I am also lucky to find friends in my fellow researchers. I want to express my special thanks and love to Late Sushant Gupta (you will always be missed), Sushil Singh, Jibu Thomas, Raina Oommen, Tejinder Singh Bedi, Ankita Jaiswal Gupta, Ajit Gore, Balaji Iyer and Heena Arora for their endless efforts in data collection. I would also like to thank all IT professionals who took the time and filled out my questionnaire.

I owe a special debt of gratitude to my family. Thank you for your words of encouragement, support, and advice over the years, Mummy and Daddy. You've always taught me that hard work pays off, and I see the results of my efforts. I hope I've done you justice and made you Proud! Mummy and Daddy you are the best and I love you unconditionally. Thank you for all sacrifices.

I am lucky and grateful to have the best brother Jibu Thomas and sister-in-law Raina Oommen for always supporting and loving. Cheers to the beautiful smile of my niece Naomi! Also, special thanks to my aunty Professor Kiran Prasad for her guidance and

unconditional support. My gratitude and love to my best father-in-law and Late

mother-in-law for their unconditional prayers and blessings. Miss you Maa!

Vihaan, my 7-year-old son, thank you for bearing my long, never-ending hours with

my laptop and playing alone when I fulfilled my research agenda. I have a deep

appreciation for your understanding that my time and energy are focused elsewhere. I

am so lucky and blessed to have a child-like you who took care of me right when you

were three years old. You made sure not to disturb me or complain about anything.

Instead, you always motivated me with your magical words, "Yes, mummy, you can

do it." This work is equally your achievement because you are the one who sacrificed

the most. Thank you, my lucky charm! I love you 3000 infinity.

Finally, I can't thank my spouse Sushil enough for being my support system. In times

of weakness, you became my strength, made me see my aim when it became blurry,

boosted up my spirits when I was low. No words of affection or thanks can explain

my gratitude for you. This work is as much your achievement as it is mine.

Delhi, September 2021

Asha Thomas

viii

Blessed are those who find wisdom,
those who gain understanding,
for she is more profitable than silver
and yields better returns than gold.
She is more precious than rubies;
nothing you desire can compare with her."

~Proverbs 3:13-15

In loving memory of my mother-in-law!

ABBREVIATIONS

 α : Alpha

 Λ : Item Loadings

A : Acquisition

AC : Absorptive Capacity

AT : Attribution Theory

AVE : Average Variance Extracted

B : Beta

CR : Composite Reliability

CMB : Common Method Bias

EH : Enjoyment in Helping Others

ER : Extrinsic rewards

EVT : Expectancy Value theory

GOT : Goal Oriented Theory

IT : Information Technology

ICT : Information and Communication Technology

IoT : Internet of Things

KM : Knowledge Management

KS : Knowledge Sharing

TKS Enabler (s): Tacit Knowledge sharing Enablers

KBV : Knowledge Based View

M : Motivation

MM : Measurement Model

MSV : Maximum Squared Shared Variance

OP : Organizational Performance

P : Probability

PhD : Doctor of Philosophy

R : Rewards

REC : Reciprocity

REPU : Reputation

RBV : Resource Based View

SC : Social capital

SCT : Social Cognitive Theory

SI : Social Interaction

SG : Shared Goals

SH : Sharing

SD : Standard Deviation

SDT : Self-Determination Theory

SPSS : Statistical Package for social Sciences

Smart PLS: Smart Partial Least Squares

SEM : Structural Equation Model

SRMR : Standardize Root Mean Square Residual

T: T- Statistics

TRU: Trust

TK : Tacit Knowledge

TKS: Tacit Knowledge Sharing

VIF : Variance Inflation Factor

TABLE OF CONTENTS

Exe	cutive S	Summary	ii
Can	didate	's Declaration	iv
Ack	nowled	dgement	vi
Abb	reviati	ions	X
Tab	le of C	ontents	xii
List	of Tab	oles	xvi
List	of Figu	ures	. xviii
Cha	pter 1:		1
1.1	Backg	ground of the Study	1
1.2		nent of Problem	
1.3	Object	tives of the Study	5
1.4	Resear	rch Questions	6
1.5	Summ	nary of Research Hypotheses and Conceptual Framework	6
1.6	Resear	rch Scope	8
	1.6.1	Conceptual Scope	8
	1.6.2	Choice of Data Context	9
	1.6.3	Scope of Study	9
1.6	The Si	ignificance of the Study	10
1.7	Contri	ibution to the Research	10
1.8	Resear	rch Plan	11
Cha	pter 2	: Literature Review and Theoretical Basis	15
Intro	oduction	n	15
2.1	Conce	epts Relating to Knowledge Sharing	16
	2.1.1	Knowledge Conceptualization	16
	2.1.2	Knowledge, Information, and Data	16
	2.1.3	Viewpoints on Knowledge	18
	2.1.4	Classification of Knowledge	18
	2.1.5	Explicit and Tacit Knowing	19
	2.1.6.	Spiral of Organizational Knowledge Creation	21
2.2	Theor	retical Basis/Underpinning Theories	23
	2.2.1	Resource-Based View Theory	23
	2.2.2	Knowledge-Based View Theory	25

	2.2.3	Motivation Theories	27
	2.2.4	Self-Determination Theory of Motivation	29
	2.2.5	Social Capital Theory	32
2.3	Key I	iterature	36
2.4	System	natic Literature Review	41
	2.4.1	Enablers of Tacit Knowledge Sharing	42
	2.4.2	Outcome of Tacit Knowledge	46
	2.4.3	Publications	47
	2.4.4	Productive Countries	48
Cha	pter 3:	Conceptual Discussion and Hypotheses Development	51
Intro	oduction	n	51
3.1	Social	Capital	52
3.2	Extrin	sic Motivation	57
3.3	Enjoy	ment in Helping Others	60
3.6	Absor	ptive Capacity	65
Cha	pter 4:	Research Methodology	68
Intro	oduction	n	68
4.1 I	Research	n Philosophy	68
4.2 1	Nature o	f Research	69
4.3	Resear	rch Procedures	70
4.4	Resear	rch Design	71
4.5	Sampl	e Study	72
	4.5.1	The Population of the Research	72
	4.5.2	Target Population and Sampling Frame	73
	4.5.3	Sampling Technique	73
	4.5.4	Sampling Method	73
	4.5.5	Representativeness of the Sample Size	74
4.6	Metho	od for Data Collection	75
4.7	Resear	rch Domain	75
4.8	Questi	ionnaire/Measurement Design	76
	4.8.1	Social Capital	77
	4.8.2	Extrinsic Motivation	79
	4.8.3	Enjoyment in Helping Others	79
	4.8.3	Web 2.0	80
	4.8.5	Absorptive Capacity	80

	4.8.6	Tacit Knowledge Sharing	81
	4.8.4	Innovative Work Behavior	81
4.9	Pre-Tes	st of Questionnaire	82
4.10	Pilot St	tudy	82
4.11	Analyti	ical Methods	84
4.12	Reflect	ive and Formative Measurement Models	84
Cha	pter 5:_	Analysis of Data and its Interpretation	86
Intro	duction	1 86	
5.1. N	Multivar	iate Analysis: Assumption's Analysis	87
	5.1.1	Missing Data	87
	5.1.2	Linearity	88
	5.1.3	Multi-Collinearity	88
	5.1.4	Homoscedasticity	90
5.2	Test of	Normality	95
5.3	Descrip	ptive Statistics	97
5.4	Respon	ndent Profile: Experience with Existing Organization	100
5.5	Variabl	le Descriptive Statistics	100
	5.5.1	Social Interaction	101
	5.5.2	Trust	102
	5.5.3	Reciprocity	103
	5.5.4	Shared Goals	105
	5.5.5	Enjoyment in Helping Others	106
	5.5.6	Extrinsic Rewards	107
	5.5.7	Reputation	108
	5.5.8	Web 2.0	109
	5.5.9	Tacit Knowledge Sharing	109
	5.5.10	Absorptive Capacity	110
	5.5.11	Innovative Work Behavior	111
	5.5.12	Common Method Bias	112
5.6	Measur	rement Model	114
5.7	Reliabi	lity and Validity Analysis	114
5.8	Conver	gent Validity	115
5.9	Discrin	ninant Validity	118
	5.10.1	Validating Higher-Order Constructs	123
	5 10 2	Validating Formative Indicators	124

5.11	Model Fit		
5.12	Structu	ral Equation Modeling	125
	5.12.1	Coefficient of Determination (R ²)	125
	5.12.2	Structural Model Assessment	126
	5.12.3	Conclusion	128
	5.12.4	Mediation Analysis	129
	5.12.5	Moderation Analysis	132
5.13	Predict	ive Relevance: The Stone Geisser (Q-Square)	134
Chapter 6: Discussion, Conclusion, and Implications		Discussion, Conclusion, and Implications	135
6.1	Discuss	sion	135
6.2	Conclu	sion	138
6.3	Theore	tical Implications	141
6.4	Practica	al Implications	141
6.5	Limitat	ion and Future Scope	144
Refe	rences		.146
App	endix		.178
Refe	References		
List of Information Technology Organizations			179

LIST OF TABLES

Table 2. 2	Self-Determination Theory Used in Knowledge Sharing	29
Table 2. 3	Intrinsic and Extrinsic Motivation Used in Past Studies	32
Table 2. 4	Social Capital Dimensions Used in Past Studies	35
Table 2.5	Key Literature	37
Table 2. 6	Inclusion and Exclusion Criteria	41
Table 2. 7	Most Productive Countries	48
Table 2. 8	An Avant-Garde Overview of Context, Research Method, Country, and Year of Publication	49
Table 4. 1	Overview of Instrument/Questionnaire	77
Table 4. 2	Social Capital Items	78
Table 4. 3	Extrinsic Motivation Items	79
Table 4. 4	Enjoyment in Helping Others Items	80
Table 4. 5	Web 2.0 Items	80
Table 4. 6	Absorptive Capacity Items	81
Table 4.7	Tacit Knowledge Sharing Items	81
Table 4. 8	Innovative work Behaviour scale items	82
Table 4. 9	Reliability Statistics of Constructs (Pilot Testing)	83
Table 5. 1	Assumption of Linearity	88
Table 5. 2	Criteria to Evaluate VIF	89
Table 5. 3	Collinearity Statistics	89
Table 5. 4	Assessment of Normality	96
Table 5. 5	Frequency Distribution	97
Table 5. 6	Age	98
Table 5. 7	Position	99
Table 5. 8	Total Experience	99
Table 5. 9	Experience with Existing Organization	100
Table 5. 10	Social Interaction Items: Descriptive Analysis	101
Table 5. 11	Trust Items: Descriptive Analysis	102

Table 5. 12	Reciprocity Items: Descriptive Analysis	104
Table 5. 13	Shared goals Items Descriptive	105
Table 5. 14	Enjoyment in Helping Others Items: Descriptive Analysis	106
Table 5. 15	Extrinsic Rewards Items: Descriptive Analysis	107
Table 5. 16	Reputation Items: Descriptive Analysis	108
Table 5. 17	Web 2.0 Items: Descriptive Analysis	109
Table 5. 18	Tacit Knowledge Sharing Items: Descriptive Analysis	110
Table 5. 19	Absorptive Capacity Items: Descriptive Analysis	111
Table 5. 20	Innovative Work Behavior Items: Descriptive Analysis	112
Table 5. 21	Common Method Bias	113
Table 5. 22	Items Loadings	116
Table 5. 23	Reliability and Convergent Validity	117
Table 5. 24	Discriminant Validity (Fornell and Larcker Criterion)	119
Table 5.25	The Output of Cross-Loading Between Constructs and Indicators	120
Table 5. 26	Measurement of the Second-Order Constructs	124
Table 5. 27	Assessment of the Formative Measurement Model	124
Table 5. 28	Coefficient of Determination	126
Table 5. 29	Direct Relationships	129
Table 5. 30	The Effect of Social Capital on Innovative Work Behavior Through the Mediating Variable: Tacit Knowledge Sharing	130
Table 5. 31	The Effect of Extrinsic Motivation on Innovative Work Behavior Through the Mediating Variable: Tacit Knowledge Sharing	
Table 5. 32	The Effect of Enjoyment in Helping Others on Innovative Work Behavior through the Mediating Tacit Knowledge Sharing	131
Table 5. 33	The Effect of Web on Innovative Work Behavior Through the Mediating Variable: Tacit Knowledge Sharing	132

LIST OF FIGURES

Figure 1.1.	Conceptual Framework of the Study	7
Figure 1. 2.	Review of literature and Hypotheses Development	11
Figure 1. 3	Research Methodology and Data Collection	12
Figure 1. 4	Data Analysis and Interpretation	12
Figure 1.5 .	Road Map to Dissertation	14
Figure 2. 1	Data-Information-Knowledge –Pyramid	17
Figure 2. 2	The Organizational Knowledge Creation Spiral	23
Figure 2.3	Annual Publication Trends Based on Five Selected Contemporary Motivation Theories	29
Figure 2. 4	PRISMA Flowchart	42
Figure 2. 5	Project Map Based on Antecedents (Coded in NVivo)	45
Figure 2. 6	Outcomes of Tacit Knowledge Studied in the Literature	47
Figure 2.7	Tacit Knowledge Articles Published (Descending Y-Axis Value)	48
Figure 3. 1	Conceptual Framework	51
Figure 4. 1	Induction and Deduction	69
Figure 4. 2	Flowchart of Research Procedure	70
Figure 4. 3	Flowchart of Research Design	72
Figure 4. 4	Sample Size Online Calculator for SEM	74
Figure 4. 5	Relative and Formative Approaches	85
Figure 5.1	Scatter Plot of Social Interaction and Tacit Knowledge Sharing	90
Figure 5. 2	Scatter Plot of Trust and Tacit Knowledge Sharing	
Figure 5. 3	Scatter Plot of Reciprocity and Tacit Knowledge Sharing	91
Figure 5. 4	Scatter Plot of Shared Goals and Tacit Knowledge Sharing	92
Figure 5. 5	Scatter Plot of Reputation and Tacit Knowledge Sharing	92
Figure 5.6	Scatter Plot of Extrinsic Reward and Tacit Knowledge Sharing	93
Figure 5.7	Scatter Plot of Enjoyment in Helping Others and Tacit Knowledge Sharing	93

Figure 5. 8	Scatter Plot of Web 2.0 and Tacit Knowledge Sharing	94
Figure 5.9	Scatter Plot of Innovative Work Behavior and Tacit Knowledge Sharing	94
Figure 5.10	Scatter plot of Absorption Capacity and Tacit Knowledge Sharing	95
Figure 5. 11	Social Interaction Items: Descriptive Analysis	102
Figure 5. 12	Trust Items: Descriptive Analysis	103
Figure 5. 13	Reciprocity Items: Descriptive Analysis	104
Figure 5. 14	Shared Goals Items: Descriptive Analysis	105
Figure 5. 15	Enjoyment in Helping Others Items: Descriptive Analysis	106
Figure 5. 16	Extrinsic Rewards Items: Descriptive Analysis	107
Figure 5. 17	Extrinsic Rewards Items: Descriptive Analysis	108
Figure 5. 18	Web 2.0 Items: Descriptive Analysis	109
Figure 5. 19	Tacit Knowledge Sharing Items: Descriptive Analysis	110
Figure 5. 20	Absorptive Capacity Items: Descriptive Analysis	111
Figure 5. 21	Innovative Work Behavior Items: Descriptive Analysis	112
Figure 5. 22	Full Measurement Model	121
Figure 5. 23	Two-Stage Approach of the Study	122
Figure 5. 24	Higher-Order Formative Measurement Model	123
Figure 5. 25	Moderation Analysis for Absorptive Capacity Between Tacit Knowledge Sharing and Innovative Work Behavior	132
Figure 5. 26	Structural Equation Modelling	133

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Today's world needs to have a priori information in ever-changing businesses to confront unparalleled conflicts in the economy (Davenport & Prusak, 1998). Earlier aspects that were considered relevant in the business firms may face the possibility of being outdated. On the other hand, innovativeness is needed to alter world business surroundings and meet the requirements of a "globalizing economy" (Ferraris et al., 2017). Thus, the researchers today have focused on the original traditions, and the major focus is on knowledge significance and its indirect purpose to the work (Lin, 2007; Andreeva & Kianto, 2012; Santoro et. al., 2019; Davenport & Prusak, 1998; Suppiah & Sandhu, 2011; Wang & Noe, 2010; Amalia & Nugroho, 2011; Papa et. al., 2018; Bresciani et al., 2021). According to Nonaka & Konno (1998), knowledge can be classified into two categories, namely, explicit and tacit. "Tacit knowledge" (TK) is in the owners' minds, conceding to their rights; however, "explicit knowledge" (EK) is concrete and seen outside repositories. Knowledge cannot be a means of modification if the same is not used well (Yang & Farn, 2009).

Knowledge can be ascribed to the expertise of a person (Bartol & Srivastava, 2002). There are many significant sources of information and knowledge for business ventures. In these circumstances, knowledge management (KM) impacts the ability to "innovate" and the functioning of the firm (Andreeva & Kianto, 2012). KM aids in seizing business openings and reacting suitably to the "business models" vigor. The

flourishing KM traditions need additional accomplishment on its results and sequences, as its aids in the attainment of the growth in the economy (AlShamsi et al., 2018; Chumg et al., 2015; Göksel & Aydintan, 2017).

Numerous researchers have emphasized the competence seen by the tradition of efficient knowledge management and that it aids sustainable development and improves abilities in diverse functioning models (Leonard & Sensiper, 1998; Cummings & Teng, 2003; Wang & Noe, 2010; Tangaraja et al., 2015; Akhavan & Hosseini, 2016; Xiao et al., 2017; Jain & Gupta, 2019). The association between the KM and the organizations' competitive benefits are transparent, encouraged by an exhaustive investigation by many researchers (Lam & Lambermont-Ford, 2010; Martinez-Conesa et al., 2017). Knowledge sharing is a significant precursor of modernism and is "critical" to organizations' achievements (Del Giudice et al., 2015; Del Giudice & Maggioni, 2014; Thomas & Gupta, 2021a). As per Rutten et al. (2016), sharing knowledge and "knowledge capture" are needed to improve organisations' advancements and functioning levels.

To fulfill these goals, relating to the resource-based view and dynamic capability methods, non-reproducible, unusual, and expensive sources need to be extended. Presently, an organization worker needs to share their information. These activities are a competitive requirement. Thus, it is difficult to guarantee to share as information is produced or created and originally accumulated in the workers. The sharing of knowledge covers a set of attitudes that help in the replacement of obtained information. An organization is a "social community" that creates, shares, and transfers explicit and tacit information. Knowledge is a value-created advantage, and it is often viewed as a basis for authority (Goh, 2002).

Further, the sharing of TK, set in people or the structure of an organization and procedures, can be difficult and drain time and energy (Szulanski, 1996). The primary aim of KM is to alter a person's information into "organizational knowledge." TK is a person's internal knowledge and proficiency. To produce and preserve a supportive, competitive outcome, many organisations make considerable attempts to encourage sharing of TK by workers. Practically, however, tacit knowledge sharing (TKS) is very unusual between workers. There is a huge store of TK available to people (Novitasari et al., 2021; Thomas & Gupta, 2021a; Thomas & Gupta 2021b). This is difficult to reproduce, explain, and shift. Employees' TK provides advancement and supportive competitive results.

Knowledge forms the primary giver in accomplishing an organization's goals as per the knowledge-based theory of an organization (Grant, 1996). With this, knowledge management (KM) has become popular in businesses in current times (Alavi & Leidner, 1999; Zboralski, 2009). Organizations have to invest in KM ventures to achieve, generate, impart, and employ knowledge quickly and efficiently because advancement is dependent on creating novel information (Nonaka & Takeuchi, 2007). This helps people share their tacit and explicit knowledge in a creative style and avert the damage to precious information (Gupta and Chopra, 2018). Numerous researches confirm that efficient KM helps firms' and businesses' advancement and better functioning (Darroch & McNaughton, 2002; Del Giudice et. al., 2015; Oyemomi et The significant procedure for forming and advancing information is al., 2016). knowledge sharing (Ipe, 2003; Lin, 2007; Lin & Lee, 2006). For the creation of knowledge, balancing both TK and EK is essential. According to Nonaka et. al. (2000), a twisting change is needed to create information between EK and TK. Thus, it is vital to share both EK and TK to create knowledge and its improvement.

More research can be conducted on sharing knowledge at an individual's level as the individual is the most significant contributor (van Dijk et al., 2016). endorsement of knowledge sharing is the most critical subject in KM (Zhang & Jiang, 2015). At present, numerous researches focus on this occurrence at the "organizationlevel" to aid its dominance in the organizational environment and returns (Bock et al., 2005; Borges, 2013; Chang et al., 2017; Intezari et al., 2017). According to the study, a fulfilled and happy person's character focuses on sharing knowledge with friends (Cavaliere et al., 2015). It can be observed that sufficient information cannot be enforced or forced by incorporating an individual's character. It is essential to investigate how motivation and its level impact knowledge sharing (de Almeida et al., 2016; Stenius et al., 2015; Razmerita et al., 2016). Motivation has led to numerous conventional theories like the self-determination theory (SDT), but research on sharing knowledge is not much available in such literature (Wang & Hou, 2015). The SDT emphasizes individuals' inspiration and their intrinsic evolution affinities, inherent emotional requirements, and the termination of these aspects in aiding selfinspiration. Thus, the concentration is on "intrinsic motivation" in motivating human attitude (Ryan & Deci, 2000). In TK, sharing knowledge is considered a selfinspirational attitude, separated from any outside obstruction. In this study, the significance of SDT as a suitable hypothetical structure is considered. Motivational aspects are recommended as "expending" impacts on the sharing of knowledge attitude; literature also shows the main function played by motivation in this context (Wang & Noe, 2010). "Self-efficacy and enjoyment in helping others" are "intrinsic" inspirational aspects in knowledge sharing (Kankanhalli et al., 2005). Wasko & Faraj (2005) have pointed to "reputation" and the "enjoyment in helping" as a person's motivation. Other aspects have highlighted expected "extrinsic rewards" and "reciprocal relationships" and "sense of self-worth" (Bock et al., 2005). Social capital and technological factors are also considered important in this notion, viewing them as valuable in preserving communal associations and systems. It has also persuaded people to share their knowledge with team members (Nahapiet & Ghoshal, 1998). Therefore, in assisting TKS, a person's motivation and social capital are significant, as a person's sharing of knowledge can be impacted by their individual motivation and social associations (Wasko & Faraj, 2005; Hau et al., 2013).

1.2 Statement of Problem

To determine whether enablers (social capital, intrinsic motivation, extrinsic motivation, and web 2.0) have a major effect on TKS and to determine whether TKS serves as a mediator between enablers and innovative work behavior (IWB) and explore the moderating effect of absorptive capacity between TKS and IWB in Indian information technology (IT) organizations.

1.3 Objectives of the Study

This dissertation's all-encompassing aim is to investigate the impact of critical enablers on TKS, and as an outcome, on IWB. TKS acts as a mediator between enablers and IWB. This study will also test the absorptive capacity moderating function. The study's objectives are as follows:

1. To assess important enablers (social capital, extrinsic motivation, intrinsic motivation, web 2.0) and show that these influence the TKS of IT professionals.

- 2. To ascertain the impact of TKS in promoting innovative work behavior.
- 3. To assess the mediating effect of TKS between enablers (social capital, extrinsic motivation, intrinsic motivation, web 2.0) and IWB.
- 4. To assess the moderating effect of absorptive capacity between TKS and IWB.

1.4 Research Questions

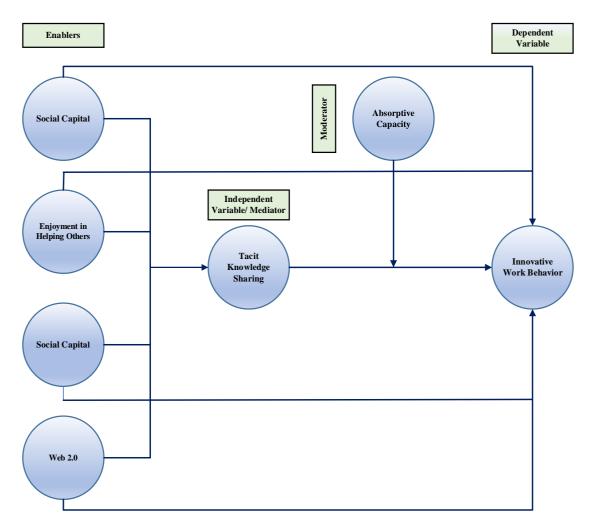
This present research study aims to address the gap, providing directions to foster and improve IT professionals, TKS, and IWB. The proposed questions of the study are as follows:

- 1. Is there any effect of enablers (social capital, intrinsic motivation, extrinsic motivation, web 2.0) on TKS of IT professionals in IT organizations of India?
- 2. Is there any effect of TKS on the IWB of IT professionals in IT organizations of India?
- 3. Does TKS act as a mediator between enablers and the IWB of IT professionals in IT organizations of India?
- 4. Does absorptive capacity act as a moderator between TKS and IWB of IT professionals in IT organizations of India?

1.5 Summary of Research Hypotheses and Conceptual Framework

There is less literature that concentrates on the aspects that promote TKS. A great deal of the composition on TKS is theoretical and has offered that "socialization" procedures are the most important in TKS (Brockmann & Anthony, 2002). Thus, concentrating on social capital and individual motivations as the main enablers of employees' TKS, this research practically aspires to explain the influence of technological factors, individual motivations, and social capital on IT professionals'

TKS. It is important to share knowledge with other employees in an organization to achieve innovative work behavior. Modern researchers have not clearly distinguished between the two kinds of shared knowledge, ie TK and EK, and have not investigated TKS, particularly as it connects to providing improvement in an organization. This research studies innovative work behavior as the result of TKS among IT professionals. The research also tests the role of absorptive capacity in moderating the interaction between TKS and IWB (Figure 1.1).



Source: Created by Author

Figure 1.1. Conceptual Framework of the Study

The following are hypotheses in the study:

- H1a: Social capital has a significant impact on TKS.
- H1b: Social capital has a significant impact on IWB.
- ► H1c: TKS mediates the relationship between social capital and IWB.
- H2a: Extrinsic motivation has a significant impact on TKS.
- *H2b: Extrinsic motivation has a significant impact on IWB.*
- ► H2c: TKS mediates the relationship between extrinsic motivation and IWB.
- H3a: Enjoyment in helping others has a significant impact on TKS.
- H3b: Enjoyment in helping others has a significant impact on IWB.
- ► *H3c: TKS mediates the relationship between enjoyment in helping others and IWB.*
- H4a: Web 2.0 has a significant impact on TKS.
- ► *H4b*: Web 2.0 has a significant impact on IWB.
- ► *H4c: TKS mediates the relationship between web 2.0 and IWB.*
- ► H5: TKS has a significant and direct effect on IWB.
- H6: AC moderates the relationship between TKS and IWB, such that an increase in absorptive capacity would strengthen the impact of TKS on IWB.

1.6 Research Scope

The research scope can be studied under the following heads:

1.6.1 Conceptual Scope

The research explores the association among critical enablers (social capital, extrinsic motivation, intrinsic motivation, and web 2.0) and TKS among IT professionals. The study also tests the effect of TKS on IWB and also assesses TKS. Finally, the analysis tested the moderation function of absorptive capacity between TKS and IWB.

1.6.2 Choice of Data Context

For this present study, data were collected from India's IT organizations. The focus of this study is on IT organizations and is dictated by the service sector's growth that gives India's growth process a new dimension of stability. Moreover, the IT business supports economic growth and stability, especially in developing and emerging markets. In the IT sector, the importance of knowledge, specifically TK, cannot be doubted. More the TK in the IT industry, more the creativity that leads to innovation. This further leads to IT organizations gaining a competitive advantage. India has the major IT capital of the contemporary world. In knowledge-based economies, the IT industry is vital to economic and social progress. Therefore, this work will be important to IT companies in developing countries like India. IT organizations are apprehensive about executing KM practices in their organizations. But, the willingness of IT professionals to share their TK depends intensely on factors that foster them to share their valuable TK. Thus, we intend to study the knowledge-sharing practices among IT organizations in India.

1.6.3 Scope of Study

The backdrop of this present study is the Indian IT organizations, aiming for factors that affect TK. The study aims to draw attention to the position of "motivational factors," "social capital factors," and "web 2.0" that lie beneath TKS in the direction of advancement from the viewpoint of KM in knowledge-concentrated organizations and innovation-oriented businesses in the Indian IT organizations. The targeted respondents were IT professionals.

1.6 The Significance of the Study

Research findings will add information and understanding to KM literature. The study's outcomes are threefold. First, this analysis examines how various important enablers influence TKS. Second, this study will examine the outcome of TKS. There is little literature (both national and international) available on aspects that impact knowledge sharing, particularly TK (Thomas and Gupta, 2021). This research will be performed on a few IT organizations in India. Thus, concentrating on social capital, individual motivations, and web 2.0 as the main enablers of employees' TKS, this research practically aspires to explain the influence of technological factors, individual motivations, and social capital on IT employees' TKS. It is important to share knowledge with other employees in an organization to achieve innovation. Modern researchers have not clearly distinguished between the two kinds of shared knowledge, ie TK and EK, and have not investigated TKS particularly as it connects to improvement in a firm. This research studies innovative work behavior as the result of TKS among IT professionals. There is less literature that concentrates on the aspects that promote TKS. A great deal of the composition on TKS is theoretical and has offered that "socialization" procedures are the most important in TKS (Brockmann & Anthony, 2002). To the author's knowledge, there is no research incorporating the same sample. The study will assist in increasing TKS awareness by acting as a medium for organisational innovativeness.

1.7 Contribution to the Research

The present dissertation has theoretical and practical contribution. This study helps in a better understanding of the various enablers that can influence TKS and the effects on organizational innovative work behavior. Ultimately, the study will examine the moderation effect of absorptive capacity between TKS and IWB.

1.8 Research Plan

This dissertation was divided into three phases to complete this investigation. The phases are depicted diagrammatically in Figures 1.2, 1.3, and 1.4.

Phase 1: Review of Literature

The first phase covers literature investigation. The existing literature was reviewed and a problem statement was prepared. The literature helped in identifying important elements of the research. The analytical arrangement concentrated on the investigation of literature.

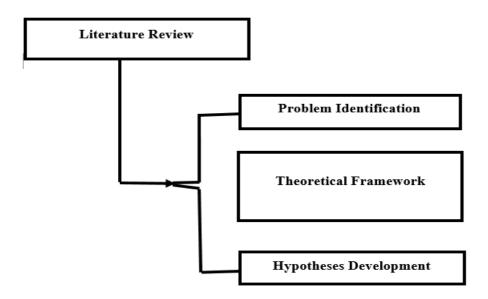


Figure 1.2. Review of literature and Hypotheses Development

Phase 2: Research Methodology

The second phase was based on a literature investigation where an argument relating to the issue was developed by analyzing the present literature. Literature also defined elements relevant to the report. The proposed conceptual framework was based on literature investigation.

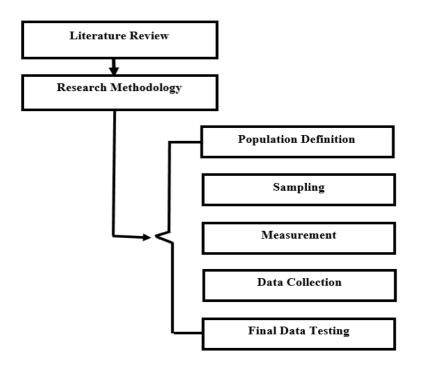


Figure 1.3. Research Methodology and Data Collection

Phase 3: Data Analysis and Interpretation

In the third phase, the investigation was done and analyzed in SPSS and Smart-PLS after selecting proper data. Results were interpreted and reported.

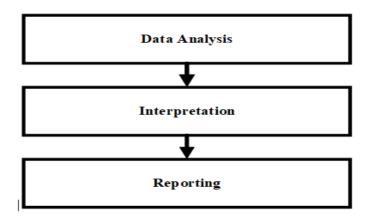


Figure 1.4. Data Analysis and Interpretation

1.8 Organization of the Dissertation Report

The following is the arrangement of the dissertation report:

Chapter 1: Introduction

Chapter one offers a study viewpoint. It highlights the research problem, research objectives, and research questions. The chapter also presents the study scope, study significance and contribution.

Chapter 2: Review

Chapter two examines the important theoretical underpinning, systematic literature review and the variables in this research. The chapter also explains the relationship between variables.

Chapter 3: Hypotheses Development and Conceptual Framework

Based on an extensive literature review, chapter three offers the conceptual research framework and research hypotheses.

Chapter 4: Research Methodology

Chapter four considers at length the research methodology, information on research philosophy, research nature, population, sample, measuring instruments, and data analysis procedures (Figure 1.5).

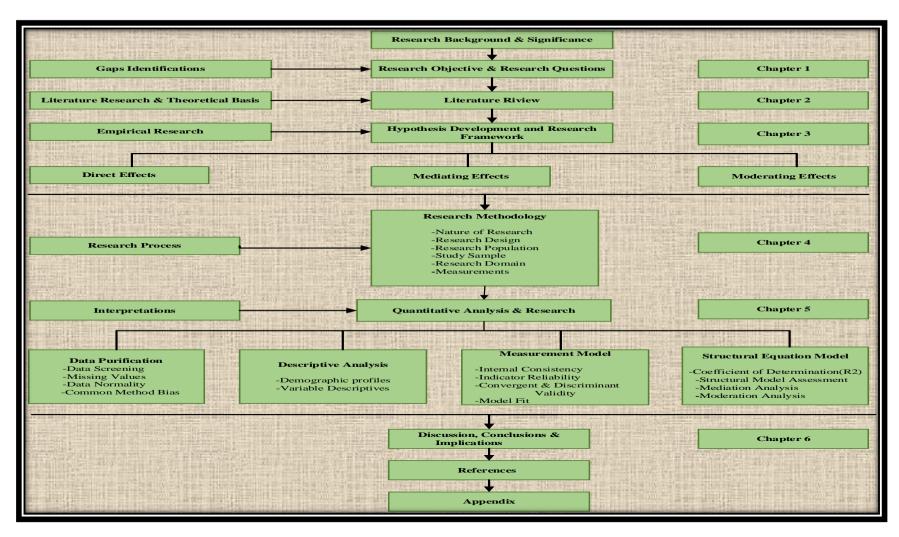


Figure 1.5: Road Map to Dissertation

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL BASIS

Introduction

The review of literature will examine the theoretical underpinnings of tacit knowledge (TK). From knowledge-sharing (KS) literature, enablers of tacit knowledge sharing (TKS) (social capital, intrinsic motivation, extrinsic motivation, and web 2.0), are identified and reviewed. Innovation literature is reviewed from a knowledge management (KM) perspective with a focus on the relationships between TKS and innovative work behavior (IWB). The chapter aims to discuss the following:

- (a) To provide the background of knowledge sharing concepts.
- (b) The study's theoretical background, wherein the author has provided the background of the theories that have been used in the KS literature and have been opted for this specific study.
- (c) The identification and description of KS (both TKS and explicit knowledge sharing [EKS]) enablers, ie social capital (social interaction, trust, reciprocity, and shared goals); Intrinsic motivation (enjoyment in helping others); extrinsic motivation (extrinsic rewards and reputation); and technology factor (web 2.0). This study also assesses the mediating effect of TKS between the enablers (social capital, extrinsic motivation, intrinsic motivation, and web 2.0) and IWB. Finally, to study absorptive capacity as the moderating variable.
- (d) A systematic review on TK.

2.1 Concepts Relating to Knowledge Sharing

2.1.1 Knowledge Conceptualization

Prior to comprehending and analyzing knowledge sharing, it is essential to know how knowledge is seen. From the classical Greek era, knowledge is considered as a broad and nonfigurative idea that has defined "epistemological debate" in the West. Knowledge is dissimilar to data and information as it exists in intellectuals' minds. Further, this research discusses distinct viewpoints on knowledge and the significant differences between explicit and tacit knowledge.

2.1.2 Knowledge, Information, and Data

Knowledge can be differentiated from information and data (Figure 2.1). Nothing is novel or attractive about managing knowledge if knowledge is not dissimilar to data or information (Fahey & Prusak, 1998). Generally, data consists of raw numbers and facts, information is all about processed data, and knowledge is validated information. Information, understood and fixed in the brain, is knowledge. Transferring knowledge from one individual to another is not easy as it depends on the personal description of knowledge (Osterloh & Frey, 2000). Data or information is not knowledge. Raw facts without context are data and data with context is information. To clarify this statement we can consider the number of 5,516,087 as data. But when the context of the phone number is added, data is converted to information. When this information is used and understood continuously, the same turn into knowledge. During the conscientious assessment, the existence of the assumption of a structure from different data to different information to different knowledge like context, utility, or interpretability is rare (Alavi & Leidner, 2001). The major differentiation between information and knowledge is not available in their substance, organization, correctness, or efficacy, but in the mind of individuals. Alavi & Leidner (2001) stated that once the information is developed in the minds of individuals it is changed to knowledge and knowledge turns into information once it is expressed and imparted in the form of wording, illustrations, or other figurative forms. Boersma & Stegwee (1996) and Spek & Spijkervet (1997) contend that knowledge can also be implanted in other entities besides human beings. Boersma recognized "mechanized knowledge" (where the knowledge to conduct a particular job or assignment is fitted in the machine hardware), "documented knowledge" (where knowledge is kept in the form of records, ledgers, books, charts, documents, instructions, design specifications, etc.), and "automated knowledge" (where knowledge is electronically stored and can be retrieved by different computer programs that support a particular task) besides "human knowledge" (where knowledge is in the organization members heads). This categorization is almost similar to Laseur's (1991) differentiation between "humanware," "hardware," and "paperware." According to Van Der Spek & Spijkervet (1997), knowledge can be "carried" by individuals, text (including computerized documentation), and technology.

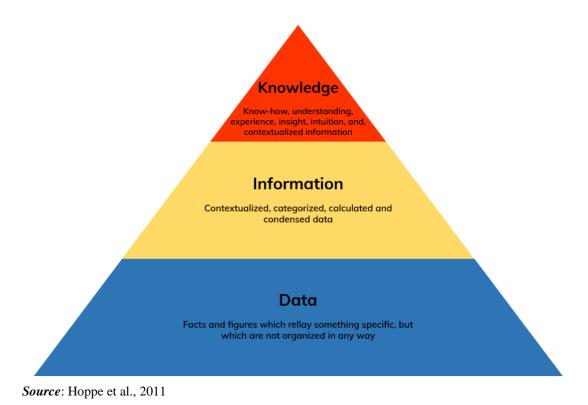


Figure 2.1: Data-Information-Knowledge – Pyramid

2.1.3 Viewpoints on Knowledge

There are diverse viewpoints on knowledge (Wasko & Faraj, 2000). Generally, knowledge is considered as an entity and defined as "justified true belief." In this, knowledge forms "an integral, self-sufficient substance, theoretically independent of the situations in which it is learned and used" (Brown, et al., 1989). It is presumed that knowledge can be codified and disconnected from the individual's mind. As per the description by Alavi & Leidner, this view on knowledge refers to information. According to a second viewpoint, knowledge could only exist in the mind of individuals and can be defined as "that which is known," i.e. knowledge being set in individuals (Polanyi, 1998). People can "know" and change "knowing" into action. Information can be changed into knowledge and new knowledge can be created by the act of thinking (McDermott, 1999).

2.1.4 Classification of Knowledge

Different viewpoints and categories have been developed on knowledge. This section presents different kinds, divisions, areas, importance, and level of features and representations of knowledge.

Types: There are four kinds of knowledge according to Anderson (1990). These are "declarative knowledge" (know-what), "procedural knowledge" (knowhow), "conditional knowledge" (know-when and know-why), and "situational knowledge" (know-where and know-which).

Divisions: As per Machlup (1980) there are five divisions of knowledge, namely, practical knowledge, intellectual knowledge (accepting scientific, humanistic, and cultural knowledge), pastime knowledge (news, gossip, stories, and others), spiritual knowledge, and unwanted knowledge.

Areas: Classification of knowledge is determined in areas that are helpful to business. Bertrams (2003) differentiates between "specialized knowledge" (knowledge needed to manufacture products or create services), "market knowledge" (knowledge relating to the present and possible markets, like players, providers, and customers), "client knowledge" (knowledge relating to customers' needs and their types) and "organization knowledge" (knowledge about the task, aims, approach, division of members of staff over dissimilar divisions, etc).

Importance: Three kinds of knowledge were discussed by Boersma (2002), based on their importance, namely, basic, specific, and crucial knowledge. Basic knowledge is innate, exists in all organizations, and is applied for running an organization. It is independent knowledge from the one present in an organization and is generally not part of the central capability of an organization or a company. Specific knowledge relates to a specific industry in which an organization or a company operates. Specific knowledge is required to examine and resolve particular issues. The knowledge that offers an organization or a company its competitive benefit and is hardly related to the central capability of the organization is crucial. If the knowledge in an organization is vital and specific, managers can check it better. Market expansions can direct to introduce new significant knowledge or discard old knowledge. This makes the typology comparative in character.

2.1.5 Explicit and Tacit Knowing

There are two kinds of knowledge: explicit and tacit. Explicit knowledge is easily transmitted. Placing a bid on eBay is an example of explicit knowledge. This knowledge can be turned into "explicit information" by codifying it using procedures, rules, policies, etc. (Stenmark, 2001). On the other hand, tacit knowledge is not easily

conveyed. Tacit knowledge is within an individual's mind and the same can be conveyed through actions. It is difficult to codify. Tacit knowledge includes the information of being aware of the right moment to increase the right bid on eBay. After several practices on eBay, the person becomes aware of this type of knowledge. It may not be easy to codify it. This is the most significant type of knowledge to describe and use, but it may be the hardest of both. Knowledge Management is not universally defined. It is essential for an organization to "know what it knows," but this is not the complete description of Knowledge Management. It is essential for an organization to put this knowledge in the layout so that employees can employ the same. Simply, put, tacit knowledge needs to be changed into explicit information by the organization. On the other hand, employees should use explicit information as to their knowledge and generate and share extra knowledge gained from it. The earliermentioned aspects of Knowledge Management allow the following definition in this study: "Knowledge Management is the process of acquiring knowledge from the organization or another source and turning it into explicit information that the employees can use to transform into their knowledge allowing them to create and increase organizational knowledge."

Categorization of knowledge plays a significant role in distinguishing between explicit and tacit knowledge and is significant in the Knowledge Management literature. Initially, this differentiation developed by Michael Polanyi (1983; 1998) and Nonaka (1991; 1994; 1995) publicized the idea of explicit and tacit knowledge after interpreting the work of Polanyi. This section talks about Nonaka's "spiral of organizational knowledge creation" and explains his differentiation between tacit and explicit knowledge (Figure 2). As per Brohm (2005), Polanyi's original differentiation

is more precious in comparison to the work of Nonaka, as Nonaka combines "explicit knowledge" with "codified knowledge."

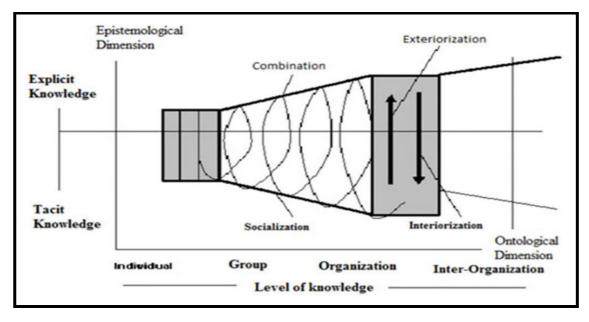
2.1.6. Spiral of Organizational Knowledge Creation

The creation and conversion of organizational knowledge is an incessant and lively relation between the changes of tacit knowledge into explicit knowledge employing four knowledge conversion forms (Takeuchi & Nonaka, 2008). These are the following four diverse styles or "modes" of interaction between tacit and explicit knowledge in which accessible knowledge can be changed into new knowledge.

- Socialization: Socialization means the adaptation from tacit knowledge to tacit knowledge.
- 2. Externalization: Externalization is the adaptation from tacit knowledge to explicit knowledge.
- Combination: Combination is the "conversion" from explicit knowledge to explicit knowledge.
- 4. Internalization: Internalization is the "conversion" from explicit knowledge to tacit knowledge.

As per Laudon & Laudon (2004), "As knowledge becomes an essential and strategic asset, organizational success increasingly depends on the company's ability to produce, gather, store, and disseminate knowledge." Individuals involved in it, convert this knowledge. According to Nonaka & Takeuchi (1997), mid-level management (task force leaders) creates knowledge by performing the two hubs' knowledge connection. They are the "strategic node that connects the top management to front-line managers" and facilitates the formation of organizational

knowledge. Nonaka & Takeuchi (1997) further states that the knowledge conversion process is spiral and starts at the "individual level" and lights up and expands communication between departments/divisions and firms. The organizational knowledge creation procedure involves two aspects; namely, an ontological (producers of information) and the second is epistemological (private information). These are presented in Figure 2.2. Nonaka's "spiral" model depicts the connection between the "epistemological dimension" and "ontological dimension" of the creation of knowledge. The basis for the epistemological dimension is a difference between "tacit" and "explicit" knowledge. As per Nonaka, tacit knowledge covers "cognitive elements" (like mental models, faith, and viewpoints so embedded that these are taken for granted) and "technical elements" (the type of ingrained informal, evasive skills described under the term "knowhow"). Individual and context-specific as well as difficult to formalize and converse means tacit knowledge. Whereas explicit or codified knowledge is the information that is communicable in proper, orderly language and records are available in libraries, records, and databases. The ontological one is depicted on the horizontal axis and shows the company's information. This aspect originates from the fact that individuals create knowledge and that an organization cannot produce knowledge. This helps in individuals created information expansion (Nonaka, 1997). The "ontological dimension" knowledge model deals with the level of communal communication. According to Nonaka, a person, an assembly of people, a firm, and even numerous organizations can hold the knowledge and that novel knowledge starts with the individual. The primary aim of a knowledge-creating organization is to make "personal knowledge" available to others. Knowledge expands when there are social contacts between people. "The organization supports creative individuals or provides a context for such individuals to create knowledge." The creation of organizational knowledge is a procedure which "organizationally" increases the creation of knowledge by people, and takes it as a part of the "knowledge network of the organization." (Nonaka, 1994). The epistemological dimension is depicted on the vertical axis and is present where the change of tacit knowledge to explicit happens. It is related to the way a person persuades communal actuality, offering realistic behaviors, depending on a particular analysis manner. A person reflects on the information created by him/her, regarding him/her, and on its real strength.



Source: Nonaka & Takeuchi (1997, p. 82).

Figure 2.2. The Organizational Knowledge Creation Spiral

2.2 Theoretical Basis/Underpinning Theories

2.2.1 Resource-Based View Theory

There is a need for identifying the means for sustaining viable benefits in today's competitive surroundings. Competitive benefits are created when difficult selections

about what we do and do not do are made (Porter & Cunningham, 2004). Competitive advantage or benefit refers to consistently earning returns on investment, which are higher in value than the industry average. (Porter & Cunningham, 2004). Barney (1991) depicts that an organization has a "competitive advantage" when applying a value-creating strategy that the present or possible competitors do not apply concurrently. Sustained competitive advantage or benefit refers to the state of brilliant functioning that an organization attains when planning and applying a "value-enhancing strategy" that is not applied concurrently by the present or capable contenders, and also when these organizations are not able to or are unwilling to provide advantages of this strategy (Barney, 1991). Sustainable competitive advantage comes from strategic advantages (Meso & Smith, 2000). Competitive advantage focuses on the research conducted on the market, organization arrangement, resource benefits, and firm plans (Mahoney & Pandian, 1992).

The organization's resource-based view administers the planned management writings and is applied to the management information system (MIS) literature (Priem & Butler, 2001). Resource-based people explained why organizations are different and "how it matters" (Barney, 1991; DeTienne et al., 2004; Wernerfelt, 1984).

The resource-based theory considers organizations as possible inventors of "value-added" abilities, and the firm's fundamental abilities cover observing the organization's benefits and sources from a knowledge-based perspective (Conner & Prahalad, 1996). It concentrates on the knowledge of "costly-to-copy" qualities of the organization as resources of trade profits and the ways to attain excellent functioning and "competitive advantage" (Barney, 1991; Conner & Prahalad, 1996).

An organization's capital includes all tangible and intangible, and individual and nonindividual benefits that are possessed or administered by a firm that permits it to express and apply "value-enhancing" plans (Barney, 1991; Wernerfelt, 1984). Exclusive instruments and skills are presented in many terms, like distinct skills, essential abilities, elusive possessions, outer assets, organizational capabilities, intrinsic knowledge, organizational environment, exceptional client knowledge and combinations (Von Krogh & Roos, 1995). Expensive, occasional, wrongly copied, and non-interchangeable expertise (Barney, 1991) and technologies are specific or dominant capabilities of an organization (Conner & Prahalad, 1996) and present a continuing competitive sharpness (Hitt et al., 2001). Intangible sources create more competitive benefits than tangible sources. Intangible organization-specific sources, information, permit organizations to enhance their worth to the external manufacturing elements (Hitt et al., 2001). It depicts an organization's planned advantages (Conner & Prahalad, 1996). This feature develops with time and is not easily copied. Barney (1991) believed that capital is achieved by an organization and aids the organization' to design and implement strategies that enhance its output and efficiency.

2.2.2 Knowledge-Based View Theory

Penrose (1959) suggested that a firm focuses variedly on allocated sources that produce a particular organization and that inner firm sources agree on the level of its expansion and course. Barney (2002) suggested that an organization's internal resources should be limited and tough for other organizations to copy for improving "competitiveness." The resource-based view further holds that causal uncertainty and social convolutedness are strategic resources. Causal uncertainty happens when equivocal conditions lead to the

probability of diverse clarifications on the circumstance that lead to "idiosyncratic" and unique interpretation and particulare knowledge (Grant, 1996). Social convolutedness refers to the degree to which resources are rooted in, and the relationships that the various members of the organization share. (Reus-Smit, 2004). Thus, it is important to know how interpretations and information are inserted in social associations and how information impacts organizational productivity. Thus, a firm's information increases its efficiency when the organizational knowledge capacity reveals TK in workers' associations (Darroch, 2005).

As per this theory, it is not entire organizations that create, store, and utilize knowledge, but indivuduals. Organizing and assimilating this information is tough for managers. According to Grant (1996), there are four methods for assimilating a person's specific information. These are as follows: "(1) rules and guidelines (procedures, plans, policies, and practices); (2) sequencing (time-set schedules); (3) routines (complex organizational behavior patterns); and (4) group problem-solving and decision-making (social communication involving discussion, sharing, learning, and then action)."

These four structures are based on "common knowledge." Common knowledge is associated with a particular information factor that every person in an organization needs to be conscious of. Common knowledge is significant in a firm because it allows individuals to communicate "uncommon knowledge." Related common knowledge types comprise speech, representative interaction (knowledge, skills, and technical programs), imparted knowledge and meaning (joint "metaphors, analogies, and stories"), and recognition and mutual modifications with other workers (Grant,

1996). In firms, complicated grades impact the exchange of common knowledge when information is held in distant gradings.

The work on knowledge-based theory focuses on "(1) leveraging organizational capacities, (2) developing new information capabilities, and (3) sharing knowledge processes inside knowledge-based (epistemic) societies" (Miles, 2012).

2.2.3 Motivation Theories

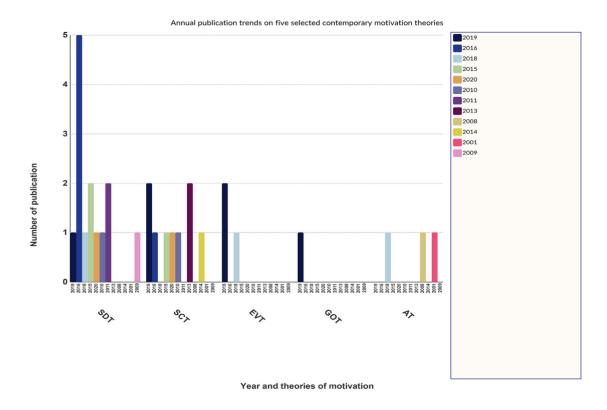
Motivation is significant since it influences one's actions and explains one's behaviour. Human motivation is explained by many theories (Cook & Artino, 2016), including the traditional theories such as Maslow's Hierarchy of Needs; Herzberg's Motivation Hygiene Theory (Maslow, 1970; Herzberg, 1968; Deci & Ryan, 1985; Udechukwu, 2009; Imlawi & Gregg, 2020; Sahibzada et al., 2020, 2020a, 2020b); and contemporary motivation theories such as self-determination theory (SDT), social cognitive theory (SCT), attribution theory (AT), expectancy value theory (EVT), and goal-oriented theory (GOT) (Cook & Artino, 2016). Nonetheless, it is evident that recent studies in KS have moved well beyond these traditional motivational theories (Bock et al., 2005; Ko et al., 2005; Chiu et al., 2006; Hsu et al., 2007; Chang & Chuang, 2011; Hung et al., 2011; Sedighi et al., 2016; Serenko & Bontis, 2016; Llopis & Foss, 2016; Eid & Al- Jabri, 2016; Zhang et al., 2018; Park & Gabbard, 2018. Cook & Artino, 2016). The table based on an extensive review, Table 2.1, tries to understand the role of contemporary theories in KS.

Table 2.1 Motivational theories and knowledge sharing constructs used in KS literature

	Self-Determination Theory (SDT)	Social Cognitive Theory (SCT)	Attribution Theory (AT)	Expectancy Value Theory (EVT)	Goal- Oriented Theory (GOT)
	Altruism	Knowledge Sharing Self- Efficacy	Cognitive Load	Attainment Value	Learning Orientation
	Autonomous Motivation	Outcome Expectations	Feedback Dynamics	Intrinsic Value	Performance orientation
	Enjoyment in Helping Others	Personal Outcome Expectation	Individually Focused Attributions	Moral Obligation Motivator	
	External Motivation	Team Related Outcome	Perceived Lack of Effort	Optimism	
nts	External Regulation	Perceived Team Efficacy	Perceived Low Ability	Perceived Compatibility	
Antecedents	Extrinsic Motivation	Self-Efficacy	Source Credibility	Perceived Relative Advantage	
ıte	Identified Motivation	Social Learning		Pessimism	
A.	Intrinsic Motivation			Reputation Motivator	
	Introjected Motivation			Self-Efficacy Motivator	
	Organisational Reward			The Helping Motivator	
	Reciprocity			Utility Value	
	Relative autonomy				
	Reputation				
	Knowledge Hiding	Knowledge Acquisition	Knowledge Sharing Behaviour	Knowledge Sharing	Knowledge Sharing
omes	Knowledge Sharing	Knowledge Contribution	Mutual Knowledge Problem	Knowledge Contribution	
Outcomes	Knowledge Sharing behaviour	knowledge Sharing	Sharing Unique Information		
0	Tacit Knowledge Sharing	Knowledge Sharing Behaviour			
		Knowledge Sharing Intention			

Source: Created by Author

The publication trend of contemporary motivation theories based on extensive literature review clearly shows that 2016 was the turning point under this theme, with leading publications on self-determination theory (SDT) and social cognitive theory (SCT) as shown in Figure 2.3.



Source: Created by Author (PhD published work)

Figure 2.3: Annual Publication Trends Based on Five Selected Contemporary Motivation Theories

In 2019, there was an increase in the number of researches in all-important contemporary theories like SDT, SCT, AT, EVT, and GOT. Thus, for this present study, the researcher has selected constructs based on SDT of motivation.

2.2.4 Self-Determination Theory of Motivation

Social-contextual conditions were studied by Ryan & Deci (2000). The SDT was undertaken to appreciate the creation of healthy psychological growth. The objective was to decide intrinsic and extrinsic motivation consistency. Table 2.2 lists literature based on the SDT used in the perspective of KS.

Table 2.1. Self-Determination Theory Used in Knowledge Sharing

Author(s)	Context	Country	Theory
Cavaliere, Lombardi, & Giustiniano, 2015	Knowledge intensive firms	Italy	SDT
Cockrell & Stone, 2010	Service industry	The USA	SDT
de Almeida, Lesca, & Canton, 2016	Telecommunication	The USA	SDT
Foss, 2009	MNC	Denmark	SDT
Gagné et al., 2019	Knowledge intensive firms	Australia	SDT
Hwang, 2011	College	The USA	SDT
Llopis & Foss, 2016	MNC	Denmark	SDT
Razmerita, Kirchner, & Nielsen, 2016	MSMEs	Danish	SDT
Reinholt, Pedersen, & Foss, 2011	Ramboll Company	Multiple Countries	SDT
Stenius et al., 2016	Public sector	Finland	SDT
Wang & Hou, 2015	Financial service	Taiwan	SDT
Zhang, Jinpeng, & Khan, 2020	Mixed industries	China	SDT
Zhao, Detlor, & Connelly, 2016	Information technology	China	SDT

Source: Created by Author (PhD published work)

The SDT (Deci & Ryan, 1985) differentiates between various motivations based on diverse causes or objectives that result in acts. The fundamental difference is between intrinsic motivation (doing something as it is fascinating or pleasant), and extrinsic motivation (doing something as it is directed towards a different result). Previous research has depicted that knowledge and presentation can be diverse when a person behaves in intrinsic versus extrinsic causes. Intrinsic motivation means doing an act for its innate pleasures instead of some different result. An intrinsically inspired person acts for pleasure or contest involved instead of outside urges, forces, or prizes. The occurrence of intrinsic motivation was recognized in animal behavior experiments. It was seen that many creatures are connected in investigative, lively, and inquisitive-driven attitudes even in lack of support or returns (White, 1959). These impulsive attitudes confer modified benefits on the creature, emerging as not

done for any cause, but an optimistic understanding linked with the use and enlargement of self-ability. The sharing of knowledge motivation can be examined from the extrinsic and intrinsic viewpoints (Bock et al., 2005; Kankanhalli et al., 2005; Ko et al., 2005; Wasko & Faraj, 2005; Hau et al., 2016; Shao et al., 2017). The intrinsic (internal) and extrinsic (external) aspects are means in the "motivation" to share knowledge. Instead of the motivations concluded from inducements or the replies to external forces, it is the "latent gratification and pleasure" that is obtained from assisting an individual or the longing to sense ability and self-value that leads to intrinsic motivation (Llopis & Foss, 2016; Park & Gabbard, 2018). Many researchers have identified intrinsic motivation's influence on the sharing of knowledge behavior attitude between workers and how it produces and motivates them to work individually in it (Tangaraja et al., 2015; Sedighi et al., 2016).

On the contrary, extrinsic motivation is concrete as it connects to the sharing of knowledge attitude for the attainment of goals like increment, incentives, advantages, movements, and additional benefits as in acknowledgement or status with the aid of direct or indirect promotions (Lam & Lambermont-Ford, 2010; Burnette, 2017; Park & Gabbard, 2018). Being tangible, extrinsic motivation forms the foundation for evaluating the price (attempt) and incurs an advantage (bonus) linked to the sharing of knowledge and is supported when the recognized profits are equal to or compensate for the price charged. To inspire workers to circulate information, many organizations have started prize traditions. Because of this, intrinsic and extrinsic inspirations are considered "major players or determinants" of the knowledge sharing behavior attitude in earlier researches relating to KS, as presented in Table 2.3. Thus, there are two extrinsic motivations, namely, extrinsic reward and reputation and one intrinsic

motivation ie, enjoyment in helping others that impact the sharing of TK between IT professionals in this present study.

Table 2.2. Intrinsic and Extrinsic Motivation Used in Past Studies

Literature Study	Year	Intrinsic Motivation	Extrinsic Motivation	Context
Bock et al.	2005	Sense of self- worth	Extrinsic reward and reciprocal relationship	KS intention
Chang & Chuang	2011	Altruism	Reputation	KS behavior
Hau et al.	2013	Enjoyment	Organizational reward and reciprocity	KS intention
Hung et al.	2011	Altruism	Economic reward, reputation, feedback, and reciprocity	Outcome of KS
Kankanhalli et al.	2005	Knowledge self- efficacy and enjoyment in helping others	Organizational reward, image, and reciprocity	Usage by knowledge contributors
Martin et al.	2017	Intrinsic reward	Extrinsic reward	KT
Park & Gabbard	2018	Altruism	Reciprocal benefit, Anticipated relationship and reputation	KS intention
Sedighi et al.	2016	Self-cognition, altruism, knowledge, and efficacy	Reciprocity, material reward, and reputation	KS and knowledge network
Serenko & Baontis	2016	Altruism and productive mode of social exchange	Negotiation, reciprocal, and generalized modes of exchange	KS behavior
Zhang, Jinpeng, & Khan,	2020	Enjoyment in helping others	X	KS motivation

Source: Created by Author

2.2.5 Social Capital Theory

According to the social capital (SC) theory, organizations must attain reasonable, sustainable benefits (Bhatti et al., 2020). Social capital is a precious advantage for society's safety and the authorizations of companies. The social capital concept is still vague and generally described as the reserves assembled via social associations

(Bourdieu, 1996; Burt, 1992). Interpersonal associations help individuals extend to other people and their information, and systems arrangements and relational characteristics are promoted in aid of the arrangement in organizing information across people (Burt, 1992; Hansen, 1999; Levin & Cross, 2004; Nahapiet & Ghoshal, 1998). Social capital plays a significant role in discussing companies' requirements and adds to their existence today. Thus, social capital helps in sharing knowledge, value formation, competitive benefits, improved and quicker functioning, and expanding a company (Abili, 2011; Allameh, 2018). Social capital has been considered in numerous circumstances varying from economics and sociology to political science (Adler & Kwon, 2002). According to Bourdieu (1985), social capital can be described as "the sum total of the existing or potential resources, which are associated with the possession of a stout network of somewhat institutionalized relationships of mutual acquaintances and recognition. Both actual and potential resources occur from upcoming social capital" (Bourdieu, 1986). The existing literature identifies the significant role of social capital in the formation of KS, mainly TK (Hansen, 1999; Nahapiet & Ghoshal, 1998). As per Nahapiet & Ghoshal (1998), social capital is an amalgamated pattern for accepting the formation of knowledge and KS in companies. There are three major aspects of social capital: structural, relational, and cognitive. Though these three are interrelated, each of these presents divergent views on capturing social capital.

The structural aspect talks about the complete model of associations in companies. It covers social relationships and networks that show ways of communicating with each other. The focus of structural aspects is on the traits of the arrangements of associations between members within a system. These traits cover connectivity, density, network patterns, and hierarchy. Structural capital depicts connection patterns between actors, ie "who you know and how you reach them" and is associated with

the impersonal arrangement of connections in a social arrangement (Villena et al., 2011). Social capital's structural aspects cover network associations, intensity, arrangement, and correctness; like the occurrence of contact between the members of a team and the intensity of these associations between them are the usual pointers (Nahapiet & Ghoshal, 1998). According to Granovetter (1983) the idea of the "strength of weak ties" forms the basis for the succeeding growth of "concepts of the structural dimension of social capital." The strength of weak ties shows that week ties aid in effective sharing of knowledge as the new information is easily accessible by linking other detached groups and people with strong ties. Associations help organizations to share information and in their advancement. This is possible only if the organization consider that value can be formed with the help of collaboration and the sharing of knowledge (Inkpen & Tsang, 2005; Yoo et al., 2016). Norms and rules between grouped actors augment informal or TK exchange (Chen et al., 2014). The idea of system closure was first presented by Coleman (1988). According to him "the closure network or social interaction" directs and checks the acts and attitude of the actors in the "network structure" by applying rules and restrictions. The formation of knowledge requires socialization and the development of TK happens through close social interactions and sharing of skills (Nonaka & Toyama, 2003).

The relational dimension talks about the kinds of associations between people in a company. It covers benefits attached to the associations concerning people. Nahapiet & Ghoshal (1998) suggested the reciprocity, trust, respect, norms, friendship, identification, and obligations typify social capital's relational dimension. Relational capital means the "effective component of capital" (Chow & Chan, 2008), which depicts the system associations relating to trust between people, collective standards, and recognition by individuals on the network (Cabrera & Cabrera, 2005). The relational dimension of social

capital impacts the sharing of knowledge and is considered as one of the primary drivers of the KS (Kim & Lee, 2010). For KS, trust forms a significant trait of social capital's relational dimension as it permits an open information exchange and helps maintain confidence in peoples' purposes (Inkpen & Tsang, 2005).

The cognitive dimension of social capital mentions the limit to which the individuals in a social can communicate a general viewpoint or consideration. It concentrates on the shared cognition formation between members of an organization. Cognitive capital covers the same visions, ambitions, and cultural values of people in a social structure (Tsai & Ghoshal, 1998). It supports the shared thoughtfulness growth and joint principles that are helpful for people to organize their substitutes and sharing of their thinking procedures (Carey et al., 2011). Table 2.4 shows the social capital dimensions used in the review of literature.

Table 2.3. Social Capital Dimensions Used in Past Studies

Literature	Year	Structural Dimension	Relational Dimension	Cognitive Dimension
Han et al.	2020	Task Interdependency	Trust, Friendship	Awarness of Expertise
Qi and Chau	2018	Social Network		
Kim	2018	Associability	Trust	
Akhavan et al.	2015	Social Interaction Ties	Trust	Shared Goals
Chumg et al.	2015	Social Network Ties	Trust	Shared Goals
Hau et al.	2013	Social Ties	Social Trust	Social Goals
Chang and Chuang	2011	Social Interaction	Trust, Reciprocity, Identification	Shared Language
Chiu et al.	2006	Social Interaction Ties	Trust, Norm of Reciprocity , Identification	Shared Language, Shared Vision
Inkpen and Tsang	2005	Network Configuration, Network Ties , Network Stability	Trust	Shared Goals , Shared Culture
Waski and Faraj	2005	Centrality	Commitment, Reciprocity	Self-rated Expertise , Tenure in the field

Source: Created by Author

2.3 Key Literature

Table 2.5 depicts some of the prior research studies that this present study has considered as a foundation, discussing variables taken as enablers (social capital, extrinsic rewards, enjoyment in helping others, and web 2.0), moderators (absorptive capacity) and outcomes (IWB).

Table 2.4. Key Literature

Literature Review	Independent Variables	Mediator	Moderator	Dependent Variable	Context	Country	Sample (N)
			Social C	Capital			
Göksel & Aydıntan, 2019	Structural, Relational, and Cognitive	X	X	Tacit Knowledge Sharing Behavior	Nursing	Ankara	106
Chowdhury et al., 2020	Internal Social Capital and External Social Capital	X	X	Knowledge Sharing Intention	Restaurants	India	523
Akhavan & Hosseini, 2015	Social Interaction Ties, Trust, Reciprocity, and Team Identifications	X	X	Knowledge Sharing Intention	R&D Team	Iran	230
Allameh, 2018	Structural, Relational, and Cognitive	X	X	Knowledge Sharing	Hotels	Iran	223
Bhatti et al., 2020	Social Capital	X	X	Knowledge Sharing	Pharmaceutical industry	Pakistan	258
Akhavan et al., 2015	Social Interaction, Trust, and Shared Goals	X	X	Knowledge Sharing Attitudes	High-Tech	Iran	257
Chang & Chuang, 2011	Social Interaction, Trust Identification, Reciprocity, and Shared Language	X	X	Knowledge Sharing (quality and quantity)	Virtual Community	Taiwan	282
Lasode & Ogunsola, 2018	Social Interaction, Trust, Social Identification, and Shared Language/Vision	X	X	Knowledge Sharing	Architectural Firms	Nigeria	104

Literature Review	Independent Variables	Mediator	Moderator	Dependent Variable	Context	Country	Sample (N)
Chow & Chan, 2008	Social Network, Social Trust, and Shared Goals	X	X	Attitude Towards Knowledge Sharing and Subjective Norms with Respect to Knowledge Sharing	Mixed Industry	HongKong	190
Ganguly et al., 2019	Relational, Structural, and Cognitive	X	X	Tacit Knowledge Sharing	Mixed Industry	India	187
			Extrinsic Me	otivation			
Nguyen et al., 2020	Reciprocity and Rewards	X	X	Online Knowledge Sharing	Telecommunicatio n	Vietnam	501
Bock et al., 2005	Anticipated Extrinsic Rewards	X	X	Attitude Toward Knowledge Sharing	Mixed Industry	Korea.	
Casimir et al., 2012	Expected Rewards	X	X	Attitude to Knowledge Sharing;	Mixed Industry	Malaysia	483
Chang et al., 2015	Organizational Rewards, Reputation, and Reciprocity	X	X	Knowledge-Sharing Intentions.	Computer Software	Mixed countries	349
Lasode & Ogunsola, 2018	Organizational Rewards	X	X	Knowledge Sharing	Architectural Firms	Nigeria	104
Abdelwhab Ali et al., 2019	Organizational Rewards	X	X	Knowledge Sharing Practice	Oil and Gas (OG) Industry.	Malaysia	203
Kankanhalli et al., 2005	Organizational Reward, Image, and Reciprocity		X	Knowledge Contribution	Public Organizations	Singapore	150
Lombardi et al., 2019	X		Extrinsic Rewards	Knowledge Sharing	Manufacturing firms	Italy	754

Literature Review	Independent Variables	Mediator	Moderator	Dependent Variable	Context	Country	Sample (N)
Lin, 2006	Expected Organizational Rewards and Reciprocal Benefits		X	Knowledge Sharing Attitudes and Intentions	Multiple Organizations	Taiwan	172
			Enjoyment in H	elping Others			
Lin, 2006	Enjoyment in Helping Others		X	Knowledge Sharing Attitudes and Intentions	Multiple Organizations	Taiwan	172
Akhavan et al., 2015	Perceived Enjoyment in Helping Others		X	Knowledge Sharing Attitudes	High-Tech	Iran	257
Lai & Chen, 2014	Enjoyment in Helping Others		X	Knowledge-Sharing Intentions	Online Communities	Taiwan	324
Kankanhalli et al., 2005	Enjoyment in Helping Others		X	Knowledge Contribution	Public Organizations	Singapore	150
Lasode & Ogunsola, 2018	Enjoyment in Helping Others		X	Knowledge Sharing	Architectural Firms	Nigeria	104
			Web	2.0			
Ali et al., 2019	Web 2.0		X	Knowledge Sharing Practice	Oil and Gas (OG) Industry.	Malaysia	203
Singh et al., 2018	Knowledge Sharing Attitude		X	Intention to Use Web 2.0	Healthcare Professionals	India	102

Literature Review	Independent Variables	Mediator	Moderator	Dependent Variable	Context	Country	Sample (N)
Soto-Acosta et al., 2014	Technological, Organizational, and Environmental Context		X	Web 2.0 Used for Knowledge Sharing	SMEs	Spain	535
	•	•	Innovative Wo	rk Behavior	•	1	•
Akhavan et al., 2015	Knowledge Sharing		X	Innovative Work Behavior	High-Tech	Iran	257
Akram et al, 2017	Social Capital		X	Employees Innovative Work Behavior	IT-Based Service Providers	China	235
Mura et al., 2013	Knowledge Sharing		Social Capital	Innovative Work Behavior	Hospice and Palliative Care Organizations	Italy	198
Phung, 2019	Knowledge Sharing			Innovative Work Behavior	Public Universities	Vietnam	785
Ye et al., 2021		Absorptive Capacity	X	Innovative Behavior	IT Companies (WJX)	China	311
			Absorptive	Capacity			
Song et al., 2020	Green Knowledge Sharing	Absorptive Capacity	X	Green Innovation	Manufacturing	China	247
Zhao et al., 2020	Inbound Knowledge Sharing and Outbound Knowledge Sharing	Absorptive Capacity	X	Organizational Innovation	Research Institutions and Universities	China	166
Ye et al., 2021	Innovation and Passion	Absorptive Capacity	X	Innovative Behavior	IT Companies (WJX)	China	311
Ali et al., 2018	Knowledge Sharing	Absorptive Capacity	X	Project Performance	Information Technology	Pakistan	133
Curado et al., 2015	Knowledge Sharing	Absorptive Capacity	X	Innovation	Multiple Industries	Portugal	141

Source: Created by Author

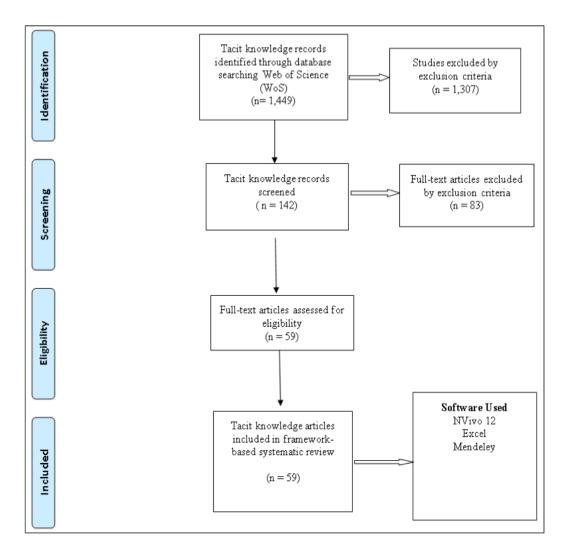
2.4 Systematic Literature Review

This study performs a detailed systematic and bibliometric analysis of TK literature that has helped develop a deeper understanding of the concept. For this research, the Web of Science database and keywords like "tacit knowledge sharing", "tacit knowledge transfer", "tacit knowledge", and "tacit knowledge acquisition" were considered. Figure 2.4 show the preferred reporting items for the systematic review (PRISMA) standard. The research papers were selected from peer-reviewed journals published in social science citation indexed only taken, which guarantees the high quality of the relevant studies. The literature from business and management was selected as this focus area has the highest probability for managerial contribution. Table 2.6 depicts the inclusion and exclusion criteria.

Table 2.5. Inclusion and Exclusion Criteria

Inclusion criteria	Exclusion criteria
Articles published in the research area: Management and Business	The article that was not written in English
Articles indexed listed in SSCI	Articles not referring to tacit knowledge
Document type: peered reviewed articles Publication year 2000-2020	Articles published in a book Duplicates studies

Source: Created by Author



Source: Created by Author

Figure 2.4: PRISMA Flowchart

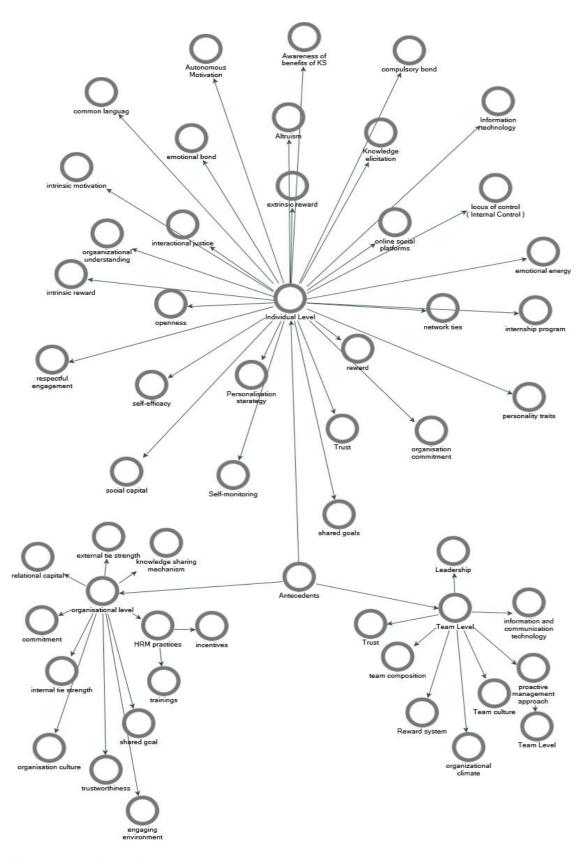
2.4.1 Enablers of Tacit Knowledge Sharing

Researchers have investigated the interaction between antecedents and barriers of TK for the creation of four kinds of knowledge: individual-tacit, individual-explicit, collective-explicit, and collective-tacit (Lam, 2000). TKS is dependent on a persons' readiness and ability to share and apply their knowledge (Holste & Fields, 2010). TK is the most important source for success for organizations as it is important on the

shop floor, where employees (unskilled) expand and apply TK in day-to-day activities (Novitasari et al., 2021). These activities are important features of effective manufacturing processes. It is also significant to process knowledge for an organization to flourish, but it is not identified as an important knowledge source (Nakano, et al., 2013). As per Akhavan et al. (2018), TK covers all components of "subsidiary personal knowledge" involved in the focal interpretation of EK (theoretical or practical). It is confounding to acquire and extract TK as a person who tries to clarify or comprehend his or her acts or know-how will have to shift his attention from focal to the subsidiary. As per Ranucci & Souder (2015), regular similarity can hasten the transfer of knowledge.

According to Zhang & He (2015), there are important components of TKS in an integrated project team for attaining success within combined project teams. They also investigated how these components impact TKS. They examined the interrelationship between important components and how these impacted TKS in the combined project team. According to them, trust influenced TKS. So, the outcomes presented five significant components that impacted TKS. These are "swift trust, information-based trust, identification-based trust, personal benefits, and lack of self-efficacy." Interpersonal trust aids the sharing of TK in the organization (Holste & Fields, 2010). To this, Joia & Lemos (2010) inserted other drivers, like "individual management of time, common language, relationship network, hierarchy, reward, type of training, knowledge transference and storage, power, and internal level of questioning." Studies also show that organizational culture impacts TKS attitude (Suppiah & Sandhu, 2011). Zhang et al. (2015) highlight the significance of

association between workers during TKM and the common understanding that external and internal ties are combined. Social web technology is an important enabler of TKS in the literature (Panahi et al., 2013). As per Shao et al. (2017), intrinsic motivation is an important mediator between "psychological safety climate" and TK sharing. According to them, intrinsic motivation partly mediates the association between psychological safety climate and TKS. According to Obrenovic et al. (2020), altruistic people feeling enjoyment in helping others are more enthusiastic to give out TK. People who are inspired essentially by the gratification of helping co-workers show a more optimistic behavior towards the group and are more eager to share information. Li et al. (2019) researched the intensity of honesty and trust in an organization and its impact on the sharing of TK, and observed that the ability impact, the early trust between coworkers, and the least honesty are essential in relation to the sharing of TK. A few TKS studies have recognized that results from training events or conferences are official, whereas others are unofficial as these result from interdepartmental workforces, relaxed communal associations, and worker's communications (Holste & Fields, 2010). Figure 2.5 illustrates the representation of all constructs that promote TK based on NVivo12-coded literature. As illustrated in the project map, antecedents in TK are based on the individual, the team, and the organisation.

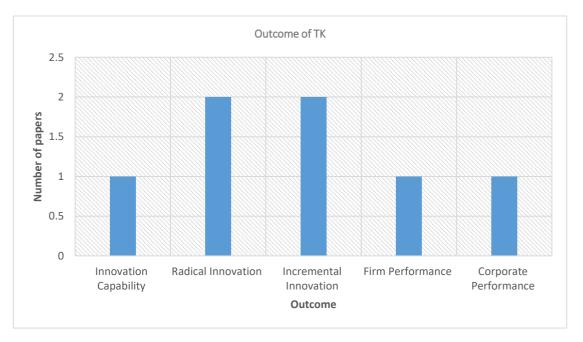


Source: Created by Author

Figure 2.5. Project Map Based on Antecedents (Coded in NVivo)

2.4.2 Outcome of Tacit Knowledge

Knowledge and intellectual capital are the main bases for "core competencies" and are crucial for performance. TKS significantly impacts the innovative capabilities (Ganguly et al., 2019; López-Cabarcos et al., 2020). Terhorst et al. (2018) researched the sharing of TK when the locus of innovation in social relationships covers diverse settings and organizational limitations. They emphasized the changes in substructure systems and actor-relation impact on how much of the information is tacit. Also, They observed that how much needs to be shared and received from outside with the help of people's autonomous motivation. The capacity for "local knowledge" to supply global innovation is also understood in the "learn local, act global" business plans of organizations like Toyota (Ichijo & Kohlbacher 2008). Le (2020) observed the collective culture's impact on workers' knowledge sharing and how the same is connected to radical and incremental innovation in Chinese firms. It was observed that collaborative culture optimistically nurtures workers' KS attitude for radical and incremental innovation. The study observed the mediating role of TKS and EKS. It disclosed that collaborative culture has an important influence on incremental innovation compared to the KS attitude that influences radical and incremental innovation. Hao et al. (2020) recognized that both explicit and tacit collaboration influence positively radical innovation, and this influence is dependent on "inter-firm technological diversity" and "environmental, technological dynamism" in a contrasting manner. Lei et al. (2020) also investigated the impact of ethical leadership on radical and incremental innovation through the mediating roles of TKS and EKS and observed that ethical leadership is associated with radical and incremental innovation positively. Also, TKS and EKS mediate the association between ethical leadership meaningfully. It was observed by Magnier-Watanabe & Benton (2017) that TK completely mediated the association between management innovation and firm performance. According to Pérez-Luño et al., 2019 found, there is a positive linear impact of TK on innovation and a curvilinear relationship between the sharing of knowledge, grouping, and innovation. They also observed a controlling impact of TK on the curvilinear relationship between the sharing of knowledge, grouping, and innovation (Figure 2.6).

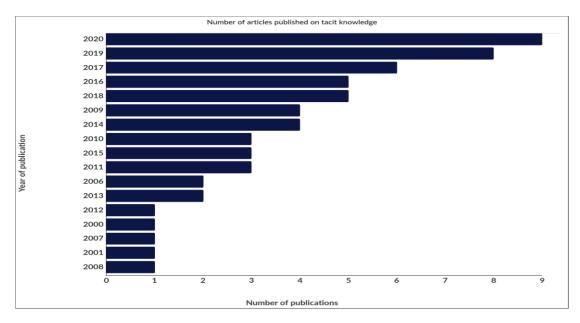


Source: Created by Author

Figure 2.6: Outcomes of Tacit Knowledge Studied in the Literature

2.4.3 Publications

Based on a systematic review focused on TK published in SSCI journals, it can be seen that very few studies have been published in this area over a decade.



Source: Created by Author (PhD published work)

Figure 2.7. Tacit Knowledge Articles Published (Descending Y-Axis Value)

2.4.4 Productive Countries

The number of articles published on TK globally brings forth China first, followed by the USA and the UK. India has published two research articles related to TK, as shown in Table 2.6. Table 2.7 gives an overview of publications between 2000 and 2020 regarding the study of TK across various countries, covering multiple industries and research approaches.

Most productive countries and total citation per country in TK research retrieved from the Web of Science from 2000 to 2020 Most productive countries Total citation per country Research Articles Average Article Position Country Frea SCP MCP MCP Ratio Position Country Total Citations Citations China 21 0.3333 13 0.381 USA 767 85.2 2. USA 0.1429 724 241.3 3. 0.0952 0.333 602 100.3 0.0635 0.250 China 398 0.0476 129 129 Brazil Malaysia 0.0476 0.667 Australia 23.5 Iran 94 Japan 0.0476 0.333 Brazil 88 29.3 0.0317 Iran 49 16.3 0.0317 0.500 Norway 32 32 10. 0.0159 10 15 15 11. Chile 0.0159 11 Turkey 14 14 12. 0.0159 India 13 12 Egypt 0.0159 13 10 10 13. Italy Korea 14. 0.0159 10 Korea 14 Spain 15. Malaysia 0.0159 0 15 Chile 8

Table 2.6. Most Productive Countries

Source: Created by Author

Norway

Pakistan

16.

17.

0

0

16

17

Egypt

United Arab Emirates

0.0159

0.0159

Table 2.7. An Avant-Garde Overview of Context, Research Method, Country, and Year of Publication

Year of Publication	Country Study	Research Method	Context of Study
2020	Malaysia	Quantitative Research	Local Government
2020	China	Quantitative Research	Multiple Firms
2020	China	Quantitative Research	High-Tech Firms
2020	India	Qualitative Research	Information Technology
2020	India	Quantitative Research	Multiple Firms
2020	China	Quantitative Research	Multiple Firms
2020	China	Quantitative Research	Multiple Firms
2020	Croatia	Quantitative Research	Knowledge Intensive Organizations
2020	China	Quantitative Research	R&D
2019	India	Quantitative Research	Multiple Firms
2019	Brazil and Indonesia	Quantitative Research	Information Technology
2019	Pakistan	Quantitative Research	Pharmaceutical
2019	Scotland	Quantitative Research	Multiple Firms
2019	Italy	Qualitative Research	Engineering Consultancy
2019	China	Quantitative Research	Vietnamese Firms
2019	China	Qualitative Research	International Firms
2019	Portugal	Quantitative Research	Industrial Organizations
2018	India	Qualitative Research	Laboratories
2018	China	Quantitative Research	Local Firms
2018	Australia	Qualitative Research	Food and Agriculture
2018	Iran	Qualitative Research	Health Care
2018	China	Qualitative Research	Software Firms
2017	Hong Kong	Review	Not Applicable
2017	Turkey	Quantitative Research	Health Care
2017	Japan	Quantitative Research	Multiple Firms
2017	Australia	Qualitative Research	Oil and Gas
2017	Spain	Quantitative Research	Innovative Firms
2017	China	Quantitative Research	Software Firms

Year of Publication	Country Study	Research Method	Context of Study
2016	China	Quantitative Research	Construction
2016	China	Qualitative Research	Factories
2016	Australia/The USA/Europe	Qualitative Research	Physicians
2016	Australia/The USA/Europe	Qualitative Research	Physicians
2016	The USA	Quantitative Research	Public Universities
2015	China	Quantitative Research	Software Firms
2015	The USA	Qualitative Research	Army Officers
2015	The USA	Quantitative Research	Firms Involved in M&A
2014	The UK	Qualitative Research	Franchise Organizations
2014	China	Quantitative Research	Automobiles
2014	Korea	Quantitative Research	Multiple Firms
2014	Not Applicable	Conceptual Research	Not Applicable
2013	Brazil	Qualitative Research	Glass Factory
2013	Not Applicable	Conceptual Research	Not Applicable
2012	The USA	Qualitative Research	Multiple Firms
2011	Malaysia	Quantitative Research	Multiple Firms
2011	Hong Kong	Qualitative Research	Physicians
2011	Not Applicable	Conceptual Research	Not Applicable
2010	Germany	Qualitative Research	Multiple Firms
2010	The USA	Quantitative Research	International Firms
2010	Brazil	Quantitative Research	Oil Companies
2009	Taiwan	Quantitative Research	Multiple Firms
2009	Arab	Quantitative Research	Energy Sector
2009	Not Applicable	Theory Paper	Not Applicable
2009	Norway	Qualitative Research	Information Technology (Cisco)
2008	Japan	Qualitative Research	Automobile Firm (Toyota)
2007	Taiwan	Quantitative Research	Service Industry
2006	Not Applicable	Conceptual Research	Not Applicable
2006	The USA	Qualitative Research	Multiple Firms
2001	Not Applicable	Theory Paper	Not Applicable
2000	Not Applicable	Conceptual Research	Not Applicable

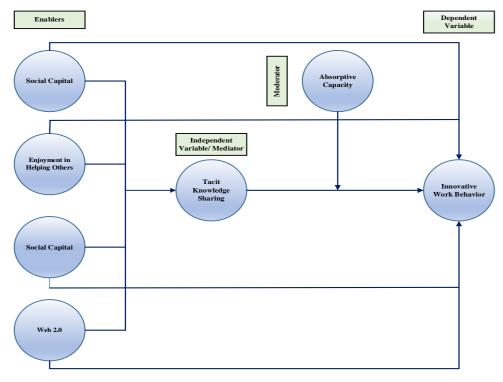
Source: Created by Author

CHAPTER 3

CONCEPTUAL DISCUSSION AND HYPOTHESES DEVELOPMENT

Introduction

The dependent variable of this present study is TKS. The impact of interpersonal relationships was observed through the SCT by applying SI (structural dimension), reciprocity and trust (relational dimensions), and SG (cognitive dimension) as antecedents that were presumed to have a significant impact on the "dependent variable." ER and reputation (EM) and EI (intrinsic motivation) with significant Web (technological factor) had a positive impact on the dependent variable. TKS has a significant impact on IWB. AC was a moderator that impacted the relationship between TKS and IWB (outcomes). Figure 3.1 presents the framework of this study.



Source: Created by Author

Figure 3.1: Conceptual Framework

3.1 Social Capital

There are many arguments to present why SC and KS between employees may be associated. In an organization, with intense social associations, employees have joint knowledge of the company's values and aims, while sharing of knowledge in an organization are such values and aims (Nahapiet & Ghoshal, 1998). Also, when there is an active interaction between employees, information can flow effortlessly and permit simple knowledge exchange. Social associations permit employees to approach their colleagues quicker with particular sets of information and proficiency (Ko, 2019).. This helps in enhancing employees' association and sharing of knowledge (Methot et al., 2018). The most precious resource in the social association is knowledge (Inkpen & Tsang, 2005). The traits of "social interaction" have a solid association with forming and sharing knowledge in a company (Borgatti & Cross, 2003). According to Reagans and McEvily (2003), a strong binding and a unified system helps the social capital's structural dimension characteristics to shift knowledge between the people covered in the system effectively. The main constituent of knowledge is TK, which cannot be shared or shifted without interacting socially (Kogut & Zander, 1996; Szulanski, 1996). A massive transfer or shift of TK can happen with close and recurrent social interactions (Krackhard, 1992; Sorenson et al., 2006).

Relational capital is the emotional association between people and aids in KS (Chang & Chuang, 2011). The "relational dimension" of social capital also impacts the sharing of knowledge and is one of the significant drivers of KS (Kim & Lee, 2010). Relational social capital is the emotional connection between people and helps in the exchange of knowledge. According to Wasko & Faraj (2005), relational capital

subsists when people trust a system. Social capital's advantages are not instantly gained after forming people's teams in organizations. These are formed based on trust between members and expectations of possible advantages (Tansley & Newell, 2007). Employees share knowledge when they trust their colleagues (Maurer et al., 2011). With this behaviour's existence, they will inquire for information and knowledge (Nahapiet and Ghoshal, 1998).

Trust refers to the faith that a coworker's word is dependable and that the coworker will accomplish his responsibilities in the association (Inkpen & Tsang, 2005). Trust is a key point in the readiness of KS. "Interpersonal trust" creates powerful bonding, which helps through good actions (McAllister, 1995). Trust-based associations and connections are associated strongly with knowledge sharing (Levin & Cross, 2004). As a result, developing trust and bonding with other people is based on whether employees have strong associations and interpersonal assistance at the workplace (McAllister, 1995). When there is excessive trust between people, they will probably connect to share knowledge (Nahapiet & Ghoshal, 1998). Thus, a person with strong trust ties will probably participate in social exchanges and supportive communication in sharing knowledge.

Inkpen & Tsang (2005) suggest that an environment of trust causes "relational embeddedness" amongst parties, allows opportunist attitude, and helps free sharing knowledge. The association that is trusted between parties connected in sharing knowledge is important for the formation of TKS (Nonaka & Von Krogh, 2009; Holste & Fields, 2010). As per a few researches, trust has a positive effect of trust on employees' sharing of knowledge (Quigley et al., 2007; Tsai & Ghoshal, 1998).

Davenport & Prusak (1998) state that an individual's time, force, and information are restricted. Thus, unless people find earnings in sharing information and knowledge, they are reluctant to share these limited reserves with other people. Reciprocity is a type of "conditional gain", meaning that people from their current acts anticipate future outcomes. Kankanhalli et al. (2005) applied the SCT to show reciprocity. Nahapiet & Ghoshal (1998) suggested that by applying information and its substitution by a firm's member, "a structured link" (structural capital) and an optimistic association (relational capital) appeared, and the sharing of knowledge came into existence. Bock et al. (2005) showed that anticipated reciprocal association had an important and positive impact on sharing knowledge. Tohidinia & Mosakhani (2010) researched the KS attitude in the Iranian oil industry and found that anticipated reciprocal association impacted the KS behavior.

Cognitive capital covers shared insights between employees (Chow & Chan, 2008). The cognitive domain includes the resources and offers the understanding and ideas shared between people. This depicts how employees understand the company's aims and worth and the level of their commitment to the situation (Abili, 2011). General recognition about how to interrelate with each other presents chances of sharing resources between employees without any misunderstanding (Tsai & Ghoshal, 1998). Similarly, amongst IT professionals, relating to job duties, aims, and foresight will help recognise the precise kind and place of knowledge and help build KS attitudes to attain the needed organizational results. According to Inkpen & Tsang (2005), shared vision and goals are a tied means that enable in an "intra-corporate network" to allocate and incorporate new information. Nonaka (1994) suggests that people share TK via exchange means like socialization, which need shared experience and

thoughtfulness. According to him, changing the knowledge covers shared skills and the procedure of thinking about each other. The socialization process of converting tacit knowledge to tacit knowledge requires peoples' joint circumstances, skills, and thoughtfulness that covers shared cognitive plans and aims (Nonaka & Toyama, 2003). According to researchers, "social capital" is essential for sharing knowledge in companies (Göksel & Aydıntan, 2017; Gupta & Govindarajan, 2000; Hau, Kim, & Lee, 2016; Levin & Cross, 2004; Schulz, 2001).

The association between SC and tacit KS is controlled in an incomplete structure as per Yang & Farn (2009). They studied the relational dimension of SC attitude. Göksel & Aydıntan (2018) discuss the complete SC aspects with sub-dimensions like structural, relational, and cognitive capital. According to Allameh (2018), structural, relational, and cognitive social capital positively shares knowledge. Kim et al. (2013) pointed that SC helps in contributing knowledge and sharing their knowledge by allowing employees to retrieve pertinent information, presenting an environment of reciprocal trust and common advantages, and permitting a joint arrangement between employees to understand and recognize the value of each other's information. Kim et al. (2013) further proposed that these three aspects promote TK conveyance in companies. Aslam et al. (2013) depict that the cognitive dimension of SC covers shared vision and language that act as forces for the sharing of knowledge. According to them, trust is a part of relational SC and is connected with sharing knowledge, which is not connected to structural SC. As per Chow & Chan (2008), social networks, trust, and shared vision are the main factors that enhance the sharing of knowledge.

According to Hau et al. (2013), earlier researches relating to the management of knowledge have shown that shared goals, social ties, and social trust are the main

forms that signify the three dimensions of SC, respectively. This shows that SC is a significant factor in forming and sharing knowledge, particularly TK (Yang & Farn, 2009).

As per the literature, expanding product innovation and improved human capital placements are examples of the positive results of "social capital" (Tsai & Ghoshal, 1998; Subramaniam & Youndt, 2005). As per Kristensen et al. (2007), organizational elements like work fulfilment, turnover and absence of workers, output, and client contentment are influenced by SC. There is a positive association between SC and workers' happiness. Moran (2005) observed the "relational and structural embeddedness" on the administrative advanced functioning and suggested that "relational embeddedness" is an important provider for the same. According to him, workers with close associations involve willingly in new notions. This helps these workers in gaining the self-assurance needed to implement new notions. Authors like Lu & Shyan (2004), Lavado et al. (2010), and Akram et al. (2017) suggested that SC is a "stimulator" and supports novel information creativeness and innovativeness. As per Akram et al., (2017), SC is significant for producing employees' advanced work attitudes in the present technological scenarios and plays an important role in the formation of purpose and attitude of KS (Chow & Chan, 2008; He, Chang, & Chuang, 2011; Akhavan & Hosseini, 2016). Thus, we propose:

- H1a: SC has a significant impact on TKS.
- H1b: SC has a significant impact on IWB.
- *H1c: TKS mediates the relationship between SC and IWB.*

3.2 Extrinsic Motivation

A cost-benefit analysis results in EM (Osterloh & Frey, 2000). If the perceived benefit is equivalent to or is greater than the costs, the process of sharing knowledge may happen (Kelly & Thibaut, 1978). In the literature relating to sharing knowledge, two important extrinsic motivators are referred to as reputation and rewards (Lin, 2007; Zhao et al., 2016). There is a need to inspire a worker to share knowledge as "knowledge is power." (Mati, et al., 2017; Ryan & Deci, 2000). Motivation influences workers to share knowledge (Hau et al., 2016; Tang et al., 2016). Thus, motivation is the most important interest of a firm (Bock et al., 2005; Kankanhalli et al., 2005; Wasko & Faraj, 2005). employees can be inspired either extrinsically or intrinsically. Individuals may also try to increase their advantages and reduce their price. Thus, sharing of thoughts and views with other people may be expensive. This means "trusting the interlocutors" and using time, authority, and position without any declaration that the attitude will be responded. Workers may choose to store their information for the time they are balanced. This depicts a usual attitudinal method of extrinsically motivated individuals, who conduct an action to please active requirements like security, fitness, riches, status, etc. In a few cases, these requirements can be completely fulfilled by wealth, which is the most widely employed inducements (Pinder, 2011). ERs also cover endorsements, rewards, admiration, advantages, and acknowledgment. Thus, work is an instrument to implement personal requirements with the ERs received by anyone (Frost et al., 2010). In an extrinsic motivation, observed values and the advantages of the act drive the attitude of a person. The primary aim of extrinsically inspired attitude is to gain remuneration from a firm or reciprocate advantages (Kowal & Fortier 1999;

Vallerand, 2001). According to Kankanhalli et al. (2005), a firm's rewards and reputation are EMs. These individual inspirations impact the information-sharing attitude based on the SET. A "desired reward can influence a person." As per Casimir et al. (2012) & Kankanhalli et al. (2005), organizational rewards positively impact information-sharing purposes. Individuals desire extrinsic benefits. According to Vroom (1964), people extended their attempts while working due to their belief in the work, incentives, and accomplishments. This means that when an organization provides desired incentives, it impacts the attitude of a worker. This is based on Bock et al. (2005) study, which showed that members perceive the rewards for supplying additional attempts and KS attitude. The exchange of knowledge motivates reputation (Wasko & Faraj, 2005). Reputation positively impacts KS purposes (Hsu & Lin, 2008; Huang et al., 2008; Park et al., 2014; Pi et al., 2013; Wasko & Faraj, 2005). According to Wasko & Faraj (2005), a person who observes that KS will improve his/her professional reputation will supply a useful reply to electronic networks of practice. Thus, knowledge may be shared by IT professionals to improve their status or reputation. This research describes reputation "as the perception of an increase in reputation from service KS." This is based on the definition of Kankanhalli et al. (2005). As argued by Donath (1999), reputation is a solid motivator for the contribution of knowledge.

According to researchers, extrinsic incentives like gratitude, endorsement, and presence at conferences will probably influence an individual's attitude (Tohidinia & Mosakhani, 2010). Usually, employees work in a way that is seen as rewarding by them. The sharing of knowledge can be influenced and aided, instead of being inflicted, as eventually, information is selective (Chang & Chuang, 2011). It may

support the employees of an organization for KS when there is a special incentive and gratitude procedure. Nobody can be influenced to do something but can be inspired and aided to share their knowledge (Tohidinia & Mosakhani, 2010). Though many researches have shown contradictory results relating to the impact that ERs can have on the KS attitude, a few researches showed that the purpose of sharing of knowledge had no impact on the probable proceeds (Lin, 2007c; Bock & Kim, 2002; Martin-Perez & Martin-Cruz, 2015; Sedighi et al., 2016). As per Kuo (2013), "reward" is the only significant factor in sharing knowledge in modern circumstances, but when there is trust, the impact of reward on the sharing of knowledge is reduced.

Professional ambitions of persons have provided significance to intrinsic office traits, like a person's status. As per Hsu & Lin (2008), reputation means the mark to which a person can improve impression and identification by adding information. To get support between co-employees, there is a need for knowledge sharing (Akhavan & Hosseini, 2016). Many researches stress the significance of the management of knowledge traditions as they compare an organization's individual character as significant in enhancing individual reputation in the organization (Wasko & Faraj, 2005). Thus, knowledge sharing is a means of raising a person's reputation, making people fall towards it in performance (Davenport & Prusak, 1998; Wasko & Faraj, 2005). Evidence from experiential research has established that the "contributors' volume and helpfulness of contribution" depend significantly on the status advice (ibid). According to Sedighi et al. (2016), reputation is important in the magnitude of contribution in an information system. This conclusion is constant with the hypothesis of Wasko & Faraj (2005). As per them, reputation feedback can augment the effectiveness of aids and the number of payments made. Chang & Chung (2011)

ascribed information inputs as the chosen aspect to increase the excellence of the sharing of knowledge, recognizing reputation not to augment the magnitude of the sharing of knowledge (Akhavan & Hosseini, 2016; Park & Gabbard, 2018). According to a few researchers, reputation has an insignificant impact (Kankanhalli et al., 2005). According to others, reputation positively impacts knowledge sharing and is important for KS (Wasko & Faraj, 2005; Hung et al., 2011; Park & Gabbard, 2018). Thus, the following hypotheses are suggested:

- ► *H2a: EM has a significant impact on TKS.*
- ► *H2b: EM has a significant impact on IWB.*
- ► *H2c: TKS mediates the relationship between EM and IWB.*

3.3 Enjoyment in Helping Others

Intrinsic motivation means to involve in an "activity for its own sake, out of interest, or for the pleasure and satisfaction derived from the experience." Thus, with knowledge sharing, employees can be contented to improve their information or self-assurance in their capability to offer helpful information to the organization. An intrinsically motivated person to share knowledge is likely to assist in sharing knowledge that is important to a co-employee. In reply to a demand for information from their communal surroundings, an encouraged person will supply more information than is asked for as knowledge-sharing is complete in itself (Constant et al., 1996). According to scholars, intrinsic motivation is a strong kind of inspiration to encourage the sharing of knowledge (Gagné, 2009). Instead of other outcomes, it typifies people who act for its innate contentment, pleasure, and attention. Earlier studies on EI show that individuals enjoy helping others. The important role of

intrinsic motivators is appreciated in justifying human attitudes in many areas, like sharing knowledge. "Altruistic" individuals are generally kind, positive, understanding, and excited to assist other people, and they are optimistic about KS (Matzler et al., 2008). Researchers also suggest that "knowledge workers," who are extremely motivated intrinsically, give importance to the sharing of knowledge for its benefit to promote information from other people and its succeeding additions and be more inquisitive and intimidated by novel and diverse observations (Zhou, 1998).

Similarly, Gagné (2009) mentions that "intrinsically motivated people will want to share knowledge simply out of their passion for their work and as an expression of themselves." Also, it is hard to determine the sharing of knowledge as it is determined by faithfulness, reciprocity, equality, and intrinsic motivation (Foss et al., 2015). This thought reverberates current studies Matzler et al., 2008; Cerasoli et al., 2014) proposing that intrinsic motivation impacts IT employees' TKS and IWB. Thus, the following hypotheses are suggested:

- *H3a: EI has a significant impact on TKS.*
- *H3b: EI has a significant impact on IWB.*
- ► *H3c: TKS mediates the relationship between EI and IWB.*

3.4 Web 2.0

Technology is the most significant and studied component in the sharing of knowledge. With the aid of technology, organizations expand trade procedures and help in KS. The implementation of KS is also affected by Information and Communication Technology (ICT). ICT instruments take care of KS in organizations (Schiuma et al., 2012). There is a need to codify knowledge for sharing, and technology helps quickly codify

knowledge (Vuks i_c et al., 2015) from TK to explicit knowledge. In this research, Web is considered. This study examines three Web services, namely, intranet, web blogs, and online communities and their impact on the sharing of TK and improving IWB of employees. O'Reilly Media introduced the term "Web 2.0" in 2004 (O'Reilly, 2005). It means a "perceived second generation of community-driven web services such as social networking sites, blogs, wikis, etc., which facilitate a more socially-connected web where everyone can communicate, participate, collaborate, and add to and edit the information space." (Anderson, 2007; Ankolekar et al., 2008; Pachler & Daly, 2009; Rollett et al., 2007). Web usually means the "social web." "Participation" is the main element of Web, which covers "open programming interface" allowing users to produce, collect, systematize (tag), place, and disclose content without restraint (Boulos & Wheeler, 2007).

Wikipedia talks about Web where persons work together to contribute, create, and revise knowledge in comparison to the usual encyclopedias where the data is stagnant and prearranged. Web's participatory nature is also depicted by the interactivity of blogs in comparison to personal websites. This nature is in contrast to the "access-control" in applications that are usually applied in firms.

An "open architecture" is provided by Web for the sharing of knowledge, with augmented bandwidth and calculating authority, which aids in lessening the hindrances to publishing and helping to link ideas between consumers (Weinberger, 2007). After the coining of the term Web, O'Reilly defines it as "the business revolution in the computer industry caused by the move to the internet as platform, and an attempt to understand the rules for success on that new platform. Chief among

those rules is this: Build applications that harness network effects to get better the more people use them." (Musser & O'Reilly, 2006). Several researches (Siau et al., 2010; Yan et al., 2016) depict that features like "face concern" impact the sharing of knowledge in ICT-facilitated surroundings. These variables originate from traditions and the sharing of knowledge is impacted by traditions (Hambrick et al., 1998). Web is a fresh technology of "community-driven web users" that covers "social networking, CoPs, and blogs". The purpose of Web shows great possibility for augmenting the sharing of knowledge on the web (Tee et al., 2009). Web's purposes and instruments can be applied in firms. Many of these are free of cost and some of these can be acquired by paying a small amount. Many new instruments were built that adjusted Web to the firm's surroundings and help in combining safety devices, fastened files, and connectivity to Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), and other applications used in an organization. This comprises Illumio, Koral, and iUpload (Spanbauer, 2006). In India, certain values like humility, wishing to keep face, and developing status can be "nonnegligible obstacles" to the KS attitudes online (Ardichvili et al., 2006). There is extensive education literature on the use of Web (Tyagi & Kumar, 2011) available in libraries (Agarwal et al., 2012). There are limited studies on the sharing of knowledge applying Web. Thus, the following hypotheses are suggested:

- ► *H4a: Web has a significant impact on TKS.*
- H4b: Web has a significant impact on IWB.
- *H4c: TKS mediates the relationship between Web and IWB.*

3.5 Innovative Work Behavior

In the earlier studies, it is recognized that imparting best practices and information may endorse the formation and application of novel concepts in information receivers (Nonaka, 1994; du Plessis, 2007). By imparting a best practice, people aid in forming information related specifically to an organization and its arrangement and rearrangement (Teigland & Washo, 2003). Imparting high-quality performances and errors, like in earlier incidences in resolving "coding," permitted the professionals to socialize the concept with coworkers and "create the field" to concentrate on its benefits; and then convert these novel concepts and the perception into a practical outcome (Mura et al., 2013). IWB denotes the degree to which a member behaves to create, promote, and implement new ideas in a group or organization (Janssen, 2000). The association between the sharing of knowledge and IWB was considered by researchers (Janssen, 2000). Earlier researchers have generated helpful indications for the association between the sharing of knowledge and IWB. Yu et al. (2013) examined the individual-level sharing of knowledge and advanced attitude of professionals and communications amongst a person's sharing of knowledge and the improvement in finance and insurance industries in Taiwan. The results depicted that sharing knowledge and collaborative attitude between staff members improved IWB and the capability to transform. A positive association was found between the sharing of knowledge and IWB. A research was conducted by Radaelli et al. (2014), who examined how professionals' sharing of knowledge influenced their IWB in healthcare firms. The outcome showed that people who shared knowledge were involved in producing, endorsing, and applying innovations. It suggested that "it is the act of knowledge recombination and translation" rooted in the sharing of knowledge that has the most positive impact on IWB. The impact of socio-psychological elements from diverse hypothetical viewpoints was investigated by Akhavan et al. (2015), and the same was directed towards the larger section of people's IWB in high-tech companies in Iran. It was found that peoples' KS behavior enhanced their IWB. The earlier-mentioned researches have emphasized the significant role of KS in enhancing people's IWB. Thus, we propose IWB as a significant outcome of TKS

► H5: TKS has a significant and direct effect on IWB.

3.6 Absorptive Capacity

This research talks about the study on innovation. It provides results on the TKS and IWB association by discovering AC as a reasonable instrument. Cohen & Levinthal (1990) offered the concept of AC, which was further extended and applied by other people (Zahra & George, 2002; Knudsen & Roman, 2004; Camisón & Forés, 2010). AC has a significant information-dispensing capability, which helps in the efficiency of information development and use. As a significant information-dispensing ability (Zahra & George, 2002), AC was investigated extensively in the past decades due to its significance to the usage of information and arrangement (Lane & Pathak, 2006). Zahra & George (2002) stated that AC includes a sequence of a firm's actions through which organizations gain, change, incorporate, and use the information to generate better functioning. AC is an important result of sharing knowledge (Davenport & Prusak, 1998) and is an important antecedent of innovation (Gebauer et al., 2012). As per Davenport & Prusak (1998), sharing knowledge enhances AC by expanding the foundation of information. According to Murovec & Prodan (2009), AC is a procedure that an organization produces profits. However, there is very little

information about the open moderating role of AC in the sharing of TK–IWB. AC results from the earlier information obtained by an organization's employees and explains the pace and broadmindedness of a firm to give consent to new information (Seshadri & Shapira, 2003). The procedures for attracting external information are important for innovation in organizations and getting familiarized with the modifications in the competitive surroundings (Camisón & Forés, 2010). The capability to incorporate novel information is augmented by the presence of the earlier information supplies, resulting in additional informative firms (Curado & Bontis, 2006). This is more effective than firms with lesser earlier information (Balogun & Jenkins, 2003). AC eases novel relationships and connections involving information (Yooet al., 2011) where AC is believed at the personal, group, and firm level.

The attitude of people engaged in the successful amalgamation of information is studied less and the limit to which these people act form associations of this knowledge in growing the novel work attitude. As per Cohen & Levinthal's (1990) definition of AC, there are three aspects of individual-level AC, namely, "individuals' ability to identify valuable knowledge external to the existing firm environment, individuals' ability to assimilate the external knowledge to existing organizational identity, and individuals' ability to advocate for the utilization of the external knowledge within an organization."

Absorptive capacity is associated with advancement as it enhances the pace, occurrence, and extent of innovation. The impact of AC on different features of modernization was focused on by many researchers (Cohen & Levinthal, 1990; Vinding, 2006; Murovec & Prodan, 2009). AC of an organization is an important

constituent of pioneering capabilities (Cohen & Levinthal, 1990), examining the association between AC and IWB. Earlier research (Liao et al., 2007; Roberts et al., 2012) identifies AC as a mediator between the sharing of knowledge and firms' outcomes (firms' functions and modernization); such an impact is the outcome of AC driving organizations to modernization (Smith et al., 2005; Subramaniam & Youndt, 2005; Kira, 2009; Wu & Shanley, 2009; Kostopoulos et al., 2011). Similarly, AC is likely to create effects at the individual level. The sharing of TK exposes people to novel information and AC aids in recognizing the worth and application of such information. Due to the significance of AC, it should be considered as a moderator between the sharing of TK and IWB. Due to this, the following hypothesis is proposed:

■ H6: AC moderates the relationship between TKS and IWB, such that an increase in AC would strengthen the impact of TKS on IWB.

CHAPTER 4

RESEARCH METHODOLOGY

Introduction

Research methodology is the type of quantitative or qualitative design that offers a particular direction to the research process followed in a research approach (Creswell, 2009). Simply put, research methodology presents the measures taken to reply to a set of research objectives and questions. The choice of methodology is important as it can direct the ways of the study and impact the worth of the study outcomes (Creswell, 2009). In this chapter, a detailed methodology is presented to examine the suggested hypotheses.

4.1 Research Philosophy

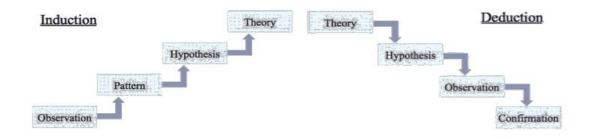
The present research focuses on the positivist research model. As per Blaxter et al. (2006), positivism research philosophy suggests applying research tools like questionnaires to grasp pragmatism. According to Greener (2008), this is a logical method as it aids in verifying the research hypotheses. As per Blaxter et al. (2006), the support of positivism is to diverse quantitative methods to validate the theoretical declarations stated in the hypothesis. Robson (2002) suggests five levels within which positivism appears. These cover the following:

- Hypothesis deduction is founded on the review of the literature.
- Proposing diverse hypotheses in workings that are testable and foreseeable.
- Examining the suggested hypothesis.
- Examining the outcomes of the hypothesis.
- If needed, the last stage is the alteration of the theory that is established on the research outcomes.

According to Easterby-Smith (2002), a study has diverse standards to complement the positivist method. Beginning with a wide review of the earlier literature, the elements were examined while considering ideas, their extent, and a collaboration of the elements with the "criterion variable" in the research. On the basis of the literature review, a theoretical structure was suggested, and hypotheses were framed. After the framing of the hypotheses, an examination was suggested and degree operationalized, information was gathered using questionnaires. After the information was collected, it was examined and understood to validate the hypotheses. The hypotheses examinations' outcomes were discussed after reflecting on the earlier researches.

4.2 Nature of Research

The hypothetico-deductive method forms the basis of this research as the deductive method as shown in Figure 4.1, and it is applied by the researcher to design the plan for this study to examine the hypotheses. The variables used in the study are qualitative, but to examine the respondents' behavior the variables are "operationalized and quantified" so that the respondents can react to the variables and the data is obtained and examined after applying diverse statistical methods to examine the suggested hypotheses.

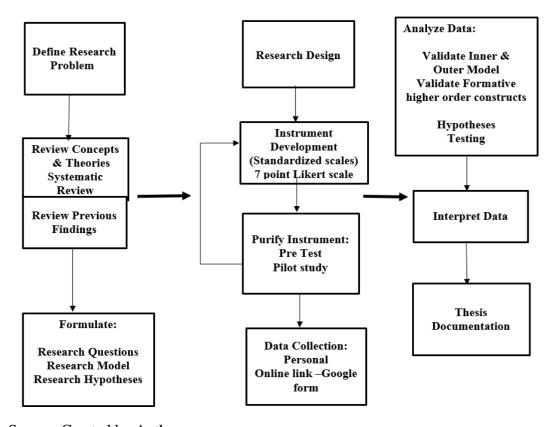


Source: Trochim and Donnelly, 2008

Figure 4.1. Induction and Deduction

4.3 Research Procedures

Research is a systematic and scientific investigation for relevant details which are subject-specific. It covers the procedure followed for "defining and redefining" the research problem; formulating hypotheses; collecting, organizing, and evaluating data; making deductions and reaching the end; and at last, checking the verdict to find the results of the hypotheses (Kothari, 2004). Figure 4.2 depicts the impression of the procedures executed during this research. In this research, the research processes are defined as the research problem in the beginning. This research creates "the problem statement" after reviewing and analyzing the literature associated with KS themes, particularly TKS. Based on this analysis, this research assumes that more knowledge is required to gain insight into the determinants/enablers and outcomes for TK sharing.



Source: Created by Author

Figure 4.2. Flowchart of Research Procedure

4.4 Research Design

Research designs can be grouped as "exploratory, descriptive and conclusive" (Malhotra & Dash, 2011). While exploratory research explores by queries and measuring procedures in a new light, the descriptive study precisely depicts individuals, procedures, and circumstances. This research tries to recognize the significant enablers and TKS results among the IT organization's professionals. For documenting and discussing numerous enablers and TKS outcomes, a systematic literature review was performed to complete the primary aim of the research. The study examines whether a particular set of enabler variables positively impacts TKS and whether TKS behaviors have a significant and positive impact on IWB by way of mediation effect among IT professionals. Social capital (social interaction, trust, reciprocity, and shared goals), extrinsic motivation (extrinsic reward and reputation), enjoyment in helping others (intrinsic motivation), and web 2.0 are all predictor variables in the first stage, while TKS is the dependent variable. The next stage involves predictor TKS and IWB as dependent variables. In the third stage, predictor variables include social capital, extrinsic motivation, enjoyment in helping others, web 2.0, and mediator variable TKS; and a dependent variable, IWB. Finally, the dissertation will investigate the moderating effect of absorptive capacity on the relationship between predictor variable TKS and dependent variable IWB of IT professionals working in IT organizations in India. Although primary data collection methods vary, the most common include questionnaires, interviews and observations. Among the various methods noted, the most frequently used is a questionnaire. This is because it can reach a large number of people in a short period of time and is significantly less expensive. This results in questionnaires being used in the study.

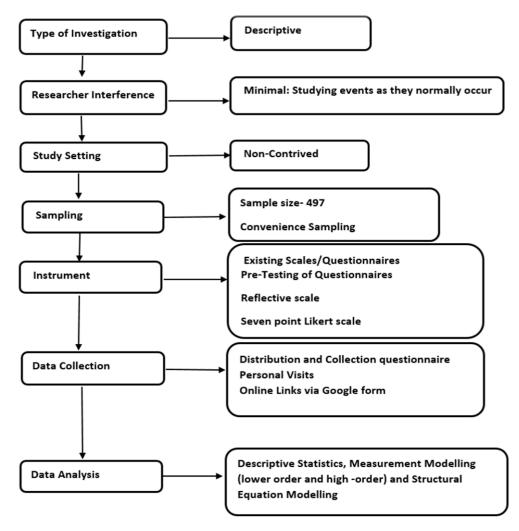


Figure 4.3 presents the current study research design.

Source: Created by Author

Figure 4.3. Flowchart of Research Design

4.5 Sample Study

4.5.1 The Population of the Research

The population of the study covers the Indian IT sector employees. India is one of the biggest IT sharing hubs, and top IT organizations are important in building the country's economy. Top Indian software and IT organizations offer conventional services and help redesign the world with the help of advanced technologies like the

Internet of Technology, Robotics, Cloud Computing, Augmented and Virtual Reality, Machine Learning, and Big Data.

4.5.2 Target Population and Sampling Frame

The target population in this research covers the IT companies listed in India Fortune 500. The top few IT companies are Infosys, Tata Consultancy Service (TCS), Larsen and Toubro InfoTech Ltd., Wipro Limited, Tech Mahindra Ltd., and HCL Technologies.

4.5.3 Sampling Technique

This study specifically focuses on the IT sector as it is in the forefront of adopting innovation and new technology. So, IT sector has been purposefully selected for this study. As the researcher could not give employees the same opportunity of being chosen in a proportion of their total population (Denscombe, 2007), probability sampling in terms of systematic, random, or stratified sampling has not been employed. Since there was no comprehensive population list, non-probability sampling was applied as a sampling method. In this research, there is no sampling frame of the employees and also because hypothetically all employees were possible respondents. So, it was hard to recognize the suitable participants, and as for sampling technique, convenience sampling was used.

4.5.4 Sampling Method

A total of 728 questionnaires were distributed for this investigation. The researcher received a total of 507 questionnaires in response to the 728 circulated; this represents a response rate of approximately 70%. After scrutinizing (based on data cleaning), ten responses were discarded due to not being properly filled. The total number of used questionnaires was 497. Data were collected with the assistance of Google forms. The respondents were contacted via personal visits, telephone calls, Google meet, emails, and LinkedIn. Forms

with Google links were forwarded to them and they were asked to complete these questionnaires. Reminders were sent to them, and 507 responses were gathered.

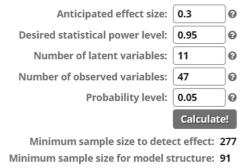
4.5.5 Representativeness of the Sample Size

The sample size was validated using two diverse approaches, namely, the rule of "10 times," ie the biggest number of structural paths guided towards a specific hidden concept in the structural model, as suggested by Hair et al. (2011) for PLS-SEM. Seven arrows point at a latent variable for TKS that leads to it and propose that a sample size of $70 (10 \times 7)$ is sufficient to examine the model. The second is with the help of an online sample size calculator (Soper, 2021), as shown in Figure 4.4. In this, we have taken the effect size as 0.3, which is moderate and of statistical power, which can be defined as "the probability of rejecting a false null hypothesis" of 95% and a significance level of 5%. The minimum recommended sample size for the present model was 277, which is lesser than the sample (497).

A-priori Sample Size Calculator for Structural Equation Models

This calculator will compute the sample size required for a study that uses a structural equation model (SEM), given the number of observed and latent variables in the model, the anticipated effect size, and the desired probability and statistical power levels. The calculator will return both the minimum sample size required to detect the specified effect, and the minimum sample size required given the structural complexity of the model.

Please enter the necessary parameter values, and then click 'Calculate'.



Recommended minimum sample size: 277

Source: Soper, D.S. (2021)

Figure 4.4. Sample Size Online Calculator for SEM

4.6 Method for Data Collection

Primary quantitative data are gathered in the research. These data are cross-sectional and are gathered over a period of 6 months (from October 2020 to March 2021) from diverse IT professionals. The data are accumulated by applying the survey method with a questionnaire. Survey research, a quantitative research process, was considered the most appropriate for empirically examining the developed model. The developed questionnaire was changed to a Google form, where the responders had to attempt all questions. The link of the Google form was forwarded to the participants (IT professionals) and their responses were gathered with the aid of a Google sheet.

4.7 Research Domain

For this research, data were collected from India's IT organizations. The focus in this study on IT organizations is dictated by the service sector's growth, which gives India's growth process a new dimension of stability. In addition, the IT industry provides the financial foundation for growth and stability in any economy, particularly in developing and emerging economies. In the IT sector, the importance of knowledge, specifically TK, cannot be doubted. The more the TK in the IT industry, the more creativity leads to innovation. This further led to IT organizations gaining a competitive advantage. India has the major chuck IT capital of the contemporary world. IT industry play a crucial role in a country's economic and social development in knowledge-based economies. Therefore, work will be important to IT companies in developing countries like India. IT organizations are apprehensive towards executing KM practices in their organizations. But, the willingness of IT professionals to share their TK depends intensely on factors that foster them to share their valuable TK. Thus, we intend to study the KS practices among IT organizations in India.

4.8 Questionnaire/Measurement Design

This study's underlying philosophy is positivism, which emphasizes the importance of testing relationships between variables through hypothesis formulation. To test those proposed hypotheses, data have been collected using questionnaires that include items for each construct in the conceptual model. There are twso sections in the questionnaires for collecting primary data from the targeted group of respondents. The first section gathers demographic data like learning, complete knowledge, know-how with the present firm, managerial status, etc. In the second section, there were eight independent variables (enablers of TKS) and the concluding section consists of the dependent variables (TK and IWB) and a moderator absorption capacity. A sevenpoint Likert scale was used on every variable for measuring independent variables' impact on the dependent variables. The prepared questionnaire was "pilot-tested" on 56 participants for checking primary scale traits. After this, reliability and validity checks were conducted. The procedure for confirming the questionnaire is discussed in the next chapter. A 45-item seven-point Likert scale final questionnaire was created and offered to participants, and they were told to rate the critical enablers and the sharing of TK results.

Earlier validated measures for theoretical constructs from the available literature were adopted in the present research. The complete validated and tested scales were preferred in this research. By applying standard validated scales, there is a high possibility of collecting high-value information. The measures comprise multi-item constructs from various researches that are altered as per the needs of the present research.

The questionnaire was prepared in this research in numerous stages.

- 1. The diverse items and constructs were recognized using a complete review of the literature.
- 2. Different experts authenticated these items.
- 3. A pilot survey process was used to examine the questionnaire. During the pilot survey, changes were made in the words of a few questionnaires. The modified questionnaire, after the pilot examination, was then employed for the collection of data.

Table 4.1: Overview of Instrument/Questionnaire

Variable	Dimension	No. of Items	Source	
Social Capital	Social Interaction	4	Chiu et al., 2006; Chang & Chung, 2011; Hau et al., 2014; Chow & Chan, 2008, & Hau et al., 2014	
	Trust	5		
	Reciprocity	4		
	Shared Goals	4		
Extrinsic Motivation	Extrinsic Reward	4	Lin, 2007; Wasko & Faraj, 2005; & Akhavan et al., 2015	
	Reputation	3		
Enjoyment in Helping Others		4	Lin, 2007	
Web 2.0		3	Ali et al., 2019	
Tacit Knowledge Sharing		7	Wang & Wang, 2012	
Innovative work Behavior		4	Akhavan et al., 2015	
Absorptive Capacity		4	Wang et al., 2017	

Source: Created by Author

4.8.1 Social Capital

Nahapiet & Ghoshal (1998) defined social capital in three dimensions. There are three types. They are structural, cognitive, and relational. Our study's social capital

constructs are social interaction, trust, reciprocity, and shared goals. Items for social interaction, a structural dimension of social capital, were adapted from Chiu et al. (2006). Relational social capital items for trust were adapted from Chang & Chung (2011), and Hau et. al. (2014), and for those reciprocity were adapted from Ganguly et al. (2019). The cognitive dimension social capital items for shared goals was adapted Chow & Chan (2008) and Hau et al. (2014). There were a total of seventeen items on the scale. The items that the scale included have been listed in Table 4.2.

Table 4.2. Social Capital Items

Scale Items- Social Capital

Social Interaction

I maintain close social relationships with some employees in my organisation.

I spend a lot of time interacting with some employees in my organisation.

I know some employees in my organisation on a personal level.

I have frequent communication with some employees in my Organisation.

Trust

Employees in my organisation will not take advantage of others even when the opportunity arises.

Employees in the organisation will always keep the promises they make to one another.

Employees in the organisation would not knowingly do anything to disrupt the conversation.

Employees in the organisation behave in a consistent manner.

Employees in the organisation are truthful in dealing with one another.

Reciprocity

I will be willingly contributing to sharing new ideas only if I sees other employees of my organisation reciprocating.

When I share my knowledge, I expect somebody to respond when I'm in need.

When I share my knowledge, I believe that my queries for knowledge will be answered in future.

I find that sharing knowledge can be mutually helpful.

Shared Goals

The employees in my organisation and I share the same goal that we should share our tacit knowledge.

The employees in my organisation and I share the same vision that we will share our tacit knowledge.

The employees in my organisation and I share the same value that tacit knowledge sharing is good.

The employees in my organisation and I are enthusiastic about the collective mission of tacit knowledge sharing.

4.8.2 Extrinsic Motivation

A cost-benefit analysis results in extrinsic motivation (Osterloh & Frey, 2000). If the perceived benefit is equivalent to or is greater than the costs, the process of sharing knowledge may happen (Kelly & Thibaut, 1978). In the literature relating to the sharing of knowledge, there are two important extrinsic motivators that are referred to as reputation and rewards (Lin, 2007; Zhao et al., 2016). This research focuses on these two extrinsic motivators. Items for extrinsic reward were adapted from Lin (2007) and items for reputation from Wasko & Faraj (2005) and Akhavan et al. (2015). Table 4.3 lists the seven items on the scale.

Table 4.3. Extrinsic Motivation Items

Scale Items-Extrinsic Motivation

Extrinsic Reward

I will receive a higher salary in return for my knowledge sharing.

I will receive a higher bonus in return for my knowledge sharing.

I will receive increased promotion opportunities in return for my knowledge sharing.

I will receive increased job security in return for my knowledge sharing.

Reputation

Sharing my knowledge improves my image within the organisation.

Sharing my knowledge improves others recognition of me.

When I share my knowledge, the people I work with respect me.

4.8.3 Enjoyment in Helping Others

Intrinsic motivation is a strong inspiration to encourage the sharing of knowledge (Gagné, 2009). The concept of "enjoyment in helping others" is an individual's inherent personality of having a positive outlook and compassionate thinking; some persons are glad to share their knowledge and do not anticipate any return favors (Davenport & Prusak, 1998). This satisfaction derived from aiding others can be linked to intrinsic motivation (Lin, 2007; Cho et al., 2010). Items for enjoyment in

helping were adapted from Lin (2007). Table 4.4 lists the four items on the scale.

Table 4.4. Enjoyment in Helping Others Items

Scale Items- Enjoyment in Helping Others

Enjoyment in Helping Others

I enjoy sharing my knowledge with employees of my organisation.

I enjoy helping employees of my organisation by sharing my knowledge.

It feels good to help someone by sharing my knowledge.

Sharing my knowledge with colleagues is pleasurable.

4.8.3 Web 2.0

Web 2.0 is a community-driven web user technology that includes social networking, CoPs, and blogging. As per Hester ,2016 web 2.0 is "the second-generation of internet connected computer, which facilitated the transfer from static web pages to more dynamic and interactive, user friendly web applications." Thus, organizations are enabled by web technology. Items for web 2.0 were adapted from Ali et al. (2019). Table 4.5 lists the three items on the scale. Table 4.5

Table 4.5. web 2.0 Items

Scale Items-Web 2.0

Web 2.0

Web 2.0 is a new technology of community-driven web users including social networking, CoPs, and blogs

I believe knowledge sharing in organization can be facilitated through Weblogs

I believe knowledge sharing can be facilitated in organization through computer network infrastructure (intranet)

4.8.5 Absorptive Capacity

Absorptive capacity is the ability with which an individual identifies, evaluates, digests, and applies new knowledge. Items for absorptive capacity was adapted from Wang et al., 2017. The scale had a total of four items. The items of the scale have been listed in Table 4.6.

Table 4.6. Absorptive Capacity Items

Scale Items- Absorptive Capacity

Absorptive Capacity

I can promptly evaluate new information and knowledge comparing with existing ones.

I am good at finding out required information and knowledge.

I can understand task-related information and knowledge well.

I can organize important data for future reference well.

4.8.6 Tacit Knowledge Sharing

Tacit knowledge is related with concepts like "skill,"know-how,"working knowledge," and "expertise," which convey knowledge about and capacity to do tasks. It is linked to informal and organisational learning (Collis and Winnips, 2002). Items for TKS were adapted from Wang & Wang (2012). The scale had a total of seven items. The items in the scale are listed in Table 4.7.

Table 4.7. Tacit Knowledge Sharing Items

Scale Items- Tacit Knowledge Sharing

Tacit Knowledge Sharing

Employees in my organization frequently share knowledge based on their experience.

Employees in my organization frequently collect knowledge from others based on their experience.

Employees in my organization frequently share knowledge of know-where or know-whom with others.

Employees in my organization frequently collect knowledge of know-where or know-whom with others.

Employees in my organization frequently share knowledge based on their expertise.

Employees in my organization frequently collect knowledge from others based on their expertise.

Employees in my organization will share lessons from past failures when they feel necessary.

4.8.4 Innovative Work Behavior

Innovative work behavior results in employees' "intentional actions" concerning the promotion, production, and awareness of new ideas to function effectively at the workplace (Janssen et al., 2004). Items for IWB were adapted from Akhavan et al. (2015). Table 4.8 lists the four items on the scale.

Table 4.8. Innovative work Behavior scale items

Scale Items- Innovative Work Behavior

Innovative Work Behavior

I usually introduce small innovations into my practice.

I often develop new procedures to improve my everyday practice.

I often succeed in transforming my innovative ideas into practical solutions.

I often develop new solutions to solve problems.

4.9 Pre-Test of Questionnaire

In the present research, expert groups consisted of researchers, professors, associate professors, and IT professionals from Poland, China, Italy, and India who were contacted because of their KM research skills. The participants were requested to remark on the research methodology and the questionnaire's design. Experts reviewed the items for their scope, content, and purpose. The pre-tests were performed for establishing the validity of the questionnaire's content. After discussing with experts, several items were eliminated, and new items were included. For the pilot testing, a new construct based on technology (web 2.0) was applied.

4.10 Pilot Study

The pilot survey is instrument's "dress rehearsal." There is a need for pilot research to be done for better evaluation and purification of the instrument with a tiny sample. Respondents who are alike to the original sample are involved in this. For employees, a sample of 100 was aimed at. From 100 samples, only 56 responses from the IT industry were obtained. The questionnaire's reliability was checked by measuring the value of Cronbach alpha. Table 4.9 depicts that all values exceed the threshold value of 0.7, demonstrating that the resultant questionnaire is reliable (Hair et al., 2006). After analyzing the pilot test findings and modifying the questionnaire in accordance with the results, the modified questionnaire was then circulated to 700 potential respondents who are IT, professionals.

The questionnaire's reliability was checked by measuring the value of Cronbach alpha during pilot testing on a sample of 56 respondents. Table 4.8 depicts that all values exceed the threshold value of 0.7, demonstrating that the resultant questionnaire is reliable (Hair et al., 2006).

Table 4.9. Reliability Statistics of Constructs (Pilot Testing)

S. No.	Construct	Cronbach's Alpha
1	Social interaction	0.893
2	Trust	0.896
3	Reciprocity	0.875
4	Shared goals	0.866
5	Extrinsic reward	0.884
6	Reputation	0.815
7	Enjoyment in helping others	0.797
8	Web 2.0	0.867
9	Tacit knowledge sharing	0.892
10	Innovative work behavior	0.857
11	Absorption capacity	0.814

Source: Created by Author

The Cronbach's alpha of all included constructs was found to be greater than 0.7 (social interaction: 0.896, trust: 0.882, reciprocity: 0.893, shared goals: 0.899, enjoyment in helping others: 0.863, extrinsic reward: 0.888, reputation: 0.841, web: 2.0 to 0.873, and absorption capacity: 0.898). Thus, it can be concluded in the study that internal consistency and reliability exists in the responses.

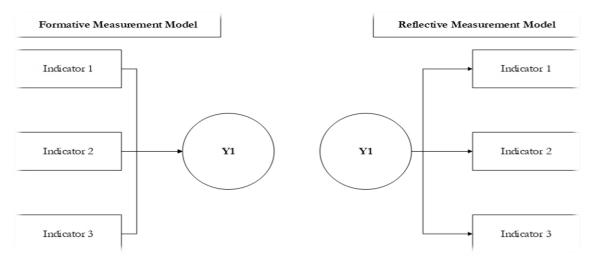
4.11 Analytical Methods

The data was analysed using PLS-SEM. Latent variable causality is examined using the second-generation statistical approach SEM. SEM has two approaches (Hair et al., 2014). These are covariance-based SEM and variance-based SEM (PLS-SEM). PLS is preferred by researchers because it may be used to control complex models with fewer constraints and better statistical power. It can be used to concentrate on predictions, theory development, exploratory research, and interaction terms. PLS is a method enabling the formative measurement of constructs. The technique is excellent for researchers attaining the best outcomes with predictive modeling. PLS-SEM was chosen for testing data that were quantifiable. PLS-SEM is a growing "knowledge-processing" technique that is employed in business and social science researches for administering sample size and "non-normal evidence" efficiently (Hair et al., 2014). This process is suitable for examining the accessible hypotheses and comprises complicated structural models (Fernandes, 2012; Ringle et al., 2018).

4.12 Reflective and Formative Measurement Models

When establishing constructs, researchers must consider two types of measurement specifications: reflecting and formative measurement models. Reflective measures propose that causation is obtained from "the construct to the measures." The reflective measures show that the indicators are the consequences and the items are jointly identical. This implies that all indicator items have identical connections and are extremely correlated. As far as formative measures are concerned, it is assumed that the indicators produce the constructs and the constructs become the consequences (Rossiter, 2002). The following query is: when do we assess formatively or

reflectively? This is decided by conceptualizing the construct and what the researcher wants to attain. In the reflective model, latent variables are measured reflectively. However, in a formative model, latent variables are measured formatively. In the present research, both reflective and formative measures are employed (Figure 4.5).



Source: Created by Author

Figure 4.5. Relative and Formative Approaches

The following reasons summarize the suitability of PLS-SEM for this study (Rolda'n & Sa'nchez-Franco, 2012):

- This study's focus is on dependent variable prediction.
- This study constructs include both formative and reflective;
- In this study, the constructs are operationalized as higher-order models;
- This study employs latent variables' scores;
- This model is characterized by complexity when it comes to the type of relationships in the hypotheses.

CHAPTER 5

ANALYSIS OF DATA AND ITS INTERPRETATION

Introduction

For the purpose of this study, the Smart PLS 3.3.3 software suite has been used. A majority of the latest studies in the field of KM field have made use of the PLS-SEM tool for the purpose of assessing data (Akhavan & Hosseini, 2015; Allameh, 2018; Casimir et al., 2012; Chang et al., 2015; Lai & Chen, 2014; Shujahat et al., 2019; Ganguly et al., 2019; Shujahat et al., 2018; Sahibzada et al., 2020).

The PLS-SEM involves a multi-stage analysis. Its various stages are mentioned below:

- First, evaluation using the measurement model, and then, evaluation using the structural model (Ringle et al., 2018; Wong, 2013). The use of the measurement model ensures that only the constructs having good indicator loading, convergent validity, composite reliability (CR), and discriminant validity are be considered in the structural model.
- Second, SEM is meant for evaluating path coefficients and testing their magnitude by putting to use the bootstrapping method. When it comes to mediation assessment, the Preacher & Hayes (2008) technique is used since it is a thorough method of testing mediating influences and is more suitable to use with the PLS-SEM technique (Hair et al., 2014; Hayes, 2009).
- Third, to evaluate the strength between endogenous and exogenous variables, Moderation test is used (Hayes, 2013).

In this chapter, we present an in-depth data analysis and the outcomes of the quantitative data collected for this research, and attempt to respond to the already-proposed research hypotheses. The chapter starts data screening, wherein the collected data have been checked for data screening and missing values have been detected with the help of Statistical Package for Social Sciences (SPSS) version 24.0. Then, demographic analyses have been conducted to provide the frequencies and percentages about the demographic variables of the study by using SPSS. What follows this is the evaluation of the measurement model by using Smart-PLS version 3.3.3 to test the reliability and validity of the data. The next stage involves an evaluation of the proposed hypotheses using the structural model. This evaluation has provided us with the path coefficients. The chapter concludes with the results of the proposed hypotheses.

5.1. Multivariate Analysis: Assumption's Analysis

The primary assumptions of multivariate analysis, ie whether the dataset can or cannot be used for multivariate analysis, were also examined. These assumptions relate to the missing data, homoscedasticity, normality, multi-collinearity, and linearity. They are as follows:

5.1.1 Missing Data

The data was confirmed for values that were missing to not create any issues in the analysis. The web survey was used to automatically check unfinished answers. This system accepts complete responses. Thus, the responses downloaded were concluded and there was no data that was missing.

5.1.2 Linearity

Another significant statement is the linearity of the dataset used for multivariate analysis. SEM can measure only linear relationships, so this assumption was tested using IBM SPSS. Using curve estimation, the test is conducted to check all kinds of relationships between the variables, whether linear, quadratic, growth, inverse, exponential, compound, cubic or logistic. The results of the analysis for linear relationships are shown in Table 5.1. The values of R-square, F score, and p clearly show that the variables are linearly correlated (All p-values are less than 0.05). According to the data, SEM can be employed as far as the condition of linearity is concerned.

No table of figures entries found.

Table 5.1. Assumption of Linearity

Equation	Model Summary		
Constructs	R Square	F	Sig.
Social Interaction	0.187	113.652	0.000
Trust	0.381	304.781	0.000
Reciprocity	0.221	140.617	0.000
Shared Goals	0.235	152.165	0.000
Extrinsic Reward	0.011	5.35700	0.021
Reputation	0.438	385.079	0.000
Enjoyment in Helping Others	0.531	559.906	0.000
Web 2.0	0.579	681.733	0.000
Innovative Work behavior	0.532	561.896	0.000
Absorptive Capacity	0.129	73.5600	0.000

Source: Created by Author

5.1.3 Multi-Collinearity

If the items of one construct are highly correlated with the items of another construct, multivariate analysis cannot be run. It is under this presumption—that there is no or

very little correlation between the two—that we move to calculate the relationships between constructs. The check for multi-collinearity is run for variables occurring at the same level. VIF values were generated by inserting one of the variables as independent and others as a dependent. This was done for each variable one by one. The reference range for VIF values is depicted in Table 5.2.

Table 5.2. Criteria to Evaluate VIF

The Rules of Thumb for the VIF Values	
VIF < 3	Not a problem
VIF > 3	Potential problem
VIF > 5	Very likely a problem
VIF > 10	Definitely a problem

Source: Created by Author

The VIF values of social interaction (SI), trust, reciprocity, shared goals (SG), reputation, extrinsic reward (ER), enjoyment in helping others (EI) web2.0 (Web), and absorptive capacity (AC) were analyzed and shown in Table 5.3

 Table 5.3 Collinearity Statistics

Constructs	Collinearity Statistics	
	Tolerance	VIF
Social Interaction	0.73	1.37
Trust	0.687	1.456
Reciprocity	0.66	1.516
Shared Goals	0.678	1.474
Enjoyment in Helping Others	0.532	1.881
Extrinsic Reward	0.892	1.121
Reputation	0.507	1.972
Web 2.0	0.464	2.153
Absorptive Capacity	0.837	1.194

5.1.4 Homoscedasticity

Homoscedasticity is an essential assumption for applying multivariate analysis to a dataset. A dataset can be called homoscedastic when an equal level of variance is depicted by the dependent variable for the predictor variable (Hair et al., 2010). There is a need for data to be homoscedastic for running and checking a regression analysis. Scatter plots of standard, predicted, and residual values were used to begin the homoscedasticity of the dataset. The scatter plots proposed that the dataset was homoscedastic and that regression analysis can be applied. Figures 5.1 through 5.10 depict the scatter plots that show homoscedasticity in the dataset.

1. Social Interaction

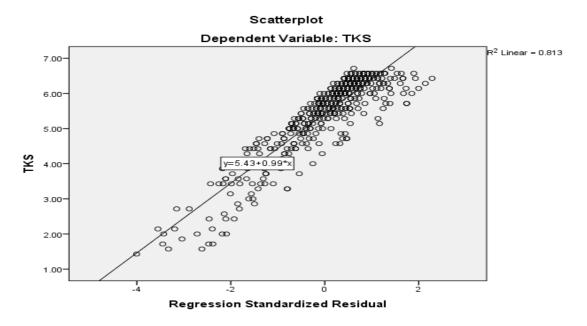
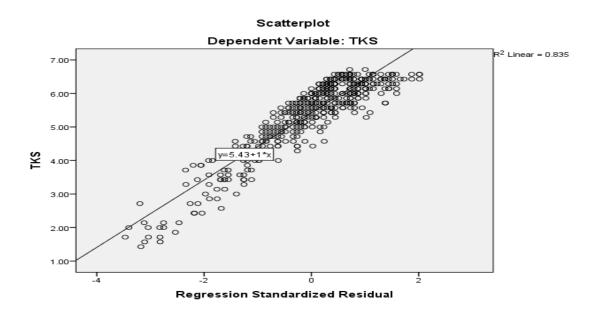


Figure 5.1: Scatter Plot of Social Interaction and Tacit Knowledge Sharing

2. Trust



Source: Created by Author

Figure 5.2. Scatter Plot of Trust and Tacit Knowledge Sharing

3. Reciprocity

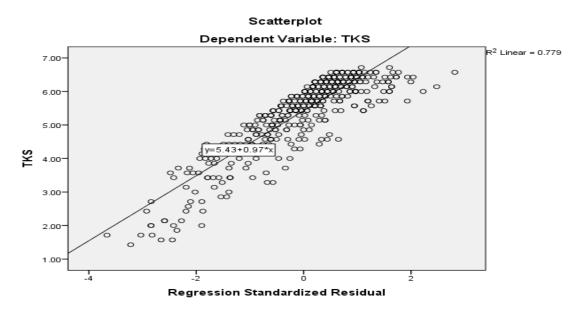
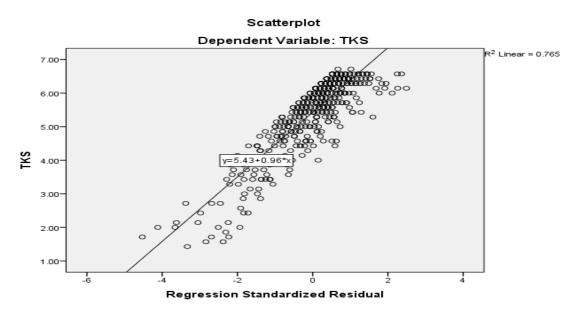


Figure 5.3. Scatter Plot of Reciprocity and Tacit Knowledge Sharing

4. Shared Goals



Source: Created by Author

Figure 5.4. Scatter Plot of Shared Goals and Tacit Knowledge Sharing

5. Reputation

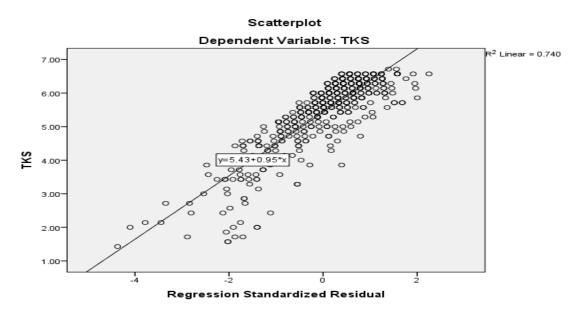
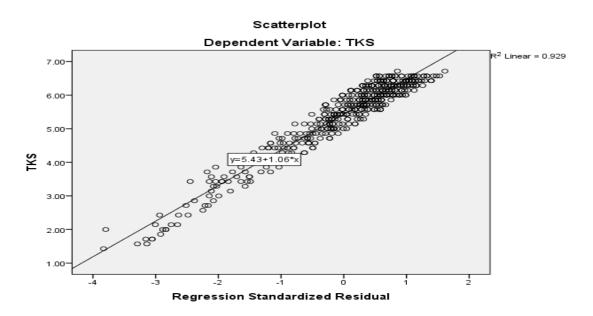


Figure 5.5. Scatter Plot of Reputation and Tacit Knowledge Sharing

6. Extrinsic Reward



Source: Created by Author

Figure 5.6. Scatter Plot of Extrinsic Reward and Tacit Knowledge Sharing

7. Enjoyment in Helping Others

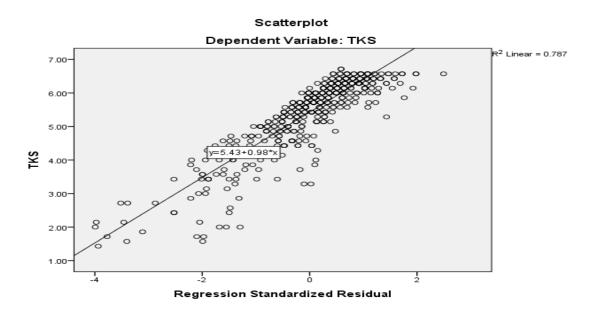
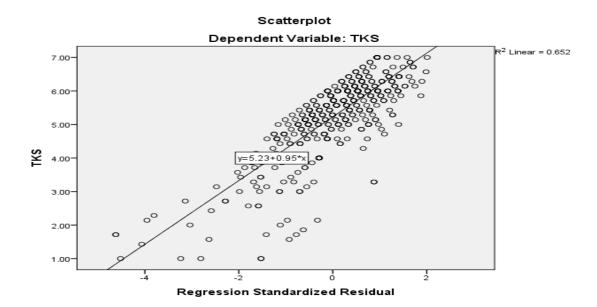


Figure 5.7. Scatter Plot of Enjoyment in Helping Others and Tacit Knowledge Sharing

8. Web 2.0



Source: Created by Author

Figure 5.8. Scatter Plot of Web 2.0 and Tacit Knowledge Sharing

9. Innovative Work Behavior

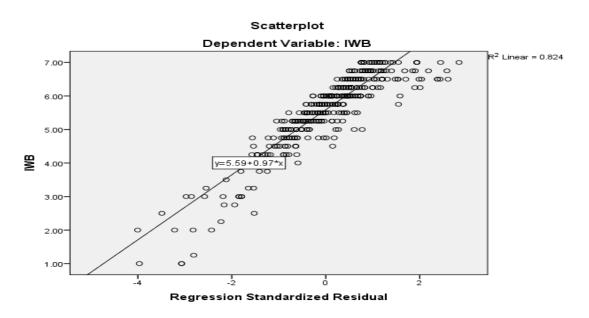
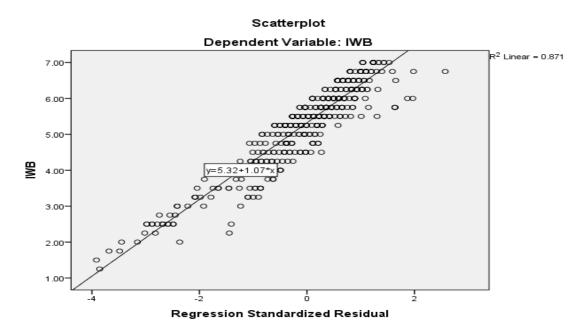


Figure 5.9. Scatter Plot of Innovative Work Behavior and Tacit Knowledge Sharing

10. Absorptive Capacity



Source: Created by Author

Figure 5.10. Scatter plot of Absorption Capacity and Tacit Knowledge Sharing

5.2 Test of Normality

For employing SEM analysis on a dataset, there is a need for normal data. Normality of a dataset is used to check the existence of skewness and kurtosis in the normal distribution curve of the dataset; the skewness of the curve shows the balance of distribution (if the distribution is on the left or the right side); whereas, its kurtosis signifies the flatness or peakness in the distribution (Hair et al., 2010). Table 5.4 depicts that the measures of skewness and kurtosis values are below the acceptable limits (skewness $<\pm3$ and kurtosis $<\pm10$) (Hair et al., 2010). Each item's distribution (univariate normality) and the distribution of items as a whole (multivariate normality) are explored on the measurement scale. Univariate distribution is studied using their "skewness and kurtosis" estimates. The multivariate normality is tested after applying the Mardia coefficient of kurtosis. Table 5.4 depicts the outcomes of the distribution analysis.

 Table 5.4. Assessment of Normality

Variable	Min	Max	Clear	Critical	Kurtosis	Critical
variable	Min	Max	Skew	Ratio	Kurtosis	Ratio
TRU5	1	7	-0.497	-4.523	-0.269	-1.226
AC1	1	7	-0.902	-8.210	0.326	1.482
AC2	2	7	-0.798	-7.265	-0.277	-1.259
AC3	2	7	-0.725	-6.600	-0.553	-2.516
AC4	1	7	-0.911	-8.289	0.147	0.671
WEB1	1	7	-0.781	-7.109	0.465	2.116
WEB2	1	7	-0.833	-7.583	0.91	4.143
WEB3	1	7	-0.971	-8.840	0.945	4.3
REP1	1	7	-0.833	-7.580	0.595	2.706
REP2	1	7	-0.839	-7.637	0.676	3.075
REP3	1	7	-0.846	-7.696	0.699	3.179
ER1	1	7	0.18	1.641	-0.834	-3.796
ER2	1	7	0.237	2.157	-0.745	-3.392
ER3	1	7	-0.048	-0.441	-0.803	-3.654
ER4	1	7	-0.139	-1.264	-0.692	-3.151
EH1	1	7	-0.688	-6.262	-0.097	-0.439
EH2	1	7	-0.761	-6.925	0.199	0.906
EH3	1	7	-0.675	-6.144	0.367	1.671
EH4	1	7	-0.753	-6.853	-0.019	-0.088
SG1	1	7	-0.891	-8.106	0.56	2.55
SG2	1	7	-0.569	-5.182	-0.181	-0.823
SG3	1	7	-0.650	-5.912	0.062	0.282
SG4	1	7	-0.786	-7.155	0.287	1.307
REC1	1	7	-0.874	-7.958	-0.170	-0.772
REC2	1	7	-0.910	-8.280	0.179	0.813
REC3	1	7	-0.865	-7.869	0.605	2.755
REC4	1	7	-0.847	-7.707	0.471	2.143
TRU1	1	7	-0.368	-3.351	-0.699	-3.182
TRU2	1	7	-0.275	-2.499	-0.688	-3.130
TRU3	1	7	-0.472	-4.298	-0.270	-1.230
TRU4	1	7	-0.373	-3.393	-0.288	-1.309
SI1	1	7	-0.987	-8.985	0.481	2.188
SI2	1	7	-0.888	-8.082	0.101	0.458
SI3	1	7	-0.877	-7.985	-0.029	-0.132
SI4	1	7	-0.947	-8.615	0.642	2.923
Multivariate					70.237	15.384

Table 5.4 shows each item's estimated values of skewness and kurtosis that represent knowledge sharing enablers in IT organizations. The outcome is that each item's skewness and kurtosis measures are less than the one, representing the response distribution close to normal. Further, the kurtosis Mardia coefficient indicator is approximately 70.237, which is less than the expected value of 100. Thus, it can be said that the survey responses have a normal distribution. The normal distribution shows the "external validity of the conclusions" in the research.

5.3 Descriptive Statistics

This section includes descriptive data about the study's variables and respondent profile. Data are described using descriptive statistics. Descriptive statistics are used to summarise and show data in an understandable manner. Descriptive statistics are data summaries that might be tabular, graphical, or numerical (Anderson et al., 2011). These statistics can also aid the researchers to detect sample characteristics that could influence their conclusions (Thompson, 2009).

5.4 Sample Demographics

1. Gender of the Respondents

The responses from male as well as female respondents are calculated. The frequency distribution of the gender of the respondents is shown in Table 5.5.

Table 5.5. Frequency Distribution

Gender	Frequency	Percentage
Males	264	53.10
Females	233	46.90
Total	497	100

2. Respondent Profile: Age

In terms of age, the biggest segment of respondents belonged to the age group of 31 to 40 years (65.6 %), followed by the age groups of 21 to 30 years (25.6%), and 41 to 50 years (7.2 %), as shown in Table 5.6.

Table 5. 6. Age

Age	Frequency	Percentage	Valid Percentage	Cumulative Percentage
21 to 30	127	25.6	25.6	25.6
31 to 40	326	65.6	65.6	91.1
41 to 50	36	7.2	7.2	98.4
50 <	8	1.6	1.6	100
Total	497	100	100	

Source: Created by Author

3. Respondent Profile: Position

The position at which an employee functions in an organization is instrumental in a number of factors that may have a bearing on the study. An employee's position affects not only the amount and level of resources he has access to, but also the amount of TK they possess. People occupying the higher ladders tend to possess more TK. Hence, it is significant to decode the sample based on position. The sample constitutes below-middle-level, middle-level, and top-level IT professionals from IT organizations in India. While middle-level managers constitute 68.6% of the entire sample, the below-middle-level professionals have a 23.3% representation in the sample, and top-level professionals have an 8.7% representation in the sample. This has been depicted in Table 5.7.

Table 5.7. Position

Position	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Below-Middle Management	116	23.3	23.3	23.3
Middle-Management	338	68	68	91.3
Top-Management	43	8.7	8.7	100
Total	497	100	100	

4. Respondent Profile: Total Experience

The total experience of an individual, over his entire career, would affect his perspective about KS. The higher-level managers are responsible for creating a KS culture, where knowledge is valued and its exchange is smooth. In this light, the total experience of the respondents was asked during the process of data collection. In this dataset, 156 respondents, ie 31.4% belonged to the lowest-experience bracket of 5 to 10 years, 65% respondents belonged to the 11 to 20 years' experience bracket, 53.5% respondents formed the 21 to 30 years' experience, and the remaining 5% belonged to the maximum experience group of more than 21 to 30 years. Only one respondent was

Table 5.8. Total Experience

Total Experience	Frequency	Percentage	Valid Percentage	Cumulative Percentage
< 5 Years	49	9.9	9.9	9.9
5 to 10 Years	156	31.4	31.4	41.2
11 to 20 Years	266	53.5	53.5	94.8
21 to 30 Years	25	5	5	99.8
31 Years <	1	0.2	0.2	100
Total	497	100	100	

5. Respondent Profile: Experience with Existing Organization

While total experience is significant to gauge an individual's overall knowledge, measuring the association with one organization throws light on a different set of variables. With association comes acquaintance, the longer the former, and the better the latter. Understanding of an organization's processes, procedures, and practices develops over a period of time. People who have been working in an organization for long have a deeper understanding of the above-mentioned factors and possess TK, which may not be visible unless explicitly asked. The current data set has a mix of employees belonging to three categories: less than 5 years, 5 to 10 years, and more than 10 years. As shown in Table 5.9, 47.1% (the maximum percentage) belonged to the first category, 38.8 % belonged the second category of 5 to 10 years' experience, and 14.1% belonged to the last group of more than 10 years of experience in the same organization.

Table 5.9. Experience with Existing Organization

Experience with Existing Organisation	Frequency	Percentage	Valid Percentage	Cumulative Percentage
< 5 Years	234	47.1	47.1	47.1
5 to 10 Years	193	38.8	38.8	85.9
10 Years <	70	14.1	14.1	100
Total	497	100	100	

Source: Created by Author

5.5 Variable Descriptive Statistics

Descriptive statistics are presented to describe the sample at hand. The descriptive analysis of the different constructs in the present study is presented in this section to highlight the trend of responses from the respondents. In order to describe the sample, the section presents the sample size, the mean deviation, and the standard deviation.

5.5.1 Social Interaction

In this study, SI is measured with the help of four statements. The descriptive analysis results applied to the different statements of the SI included in the study are depicted in Table 5.10.

Table 5. 10 Social Interaction Items: Descriptive Analysis

	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
SI1	5.26	1.587	-1.034	0.433	1	7
SI2	4.82	1.616	-0.810	-0.255	1	7
SI3	5.3	1.603	-1.156	0.933	1	7
SI4	5.4	1.425	-1.256	1.592	1	7

The results indicate that most of the respondents agree that they have frequent communication with some employees in their organization (mean score = 5.40). The respondents also highly agree that they know some employees in the organization on a personal level, which includes their colleagues, juniors, etc. (mean score = 5.30). The respondents agree that they maintain close social relationships with some employees in the organization (mean score = 5.26). The respondents have low levels of agreement on the time spent interacting with some employees in their organization. Normally, they do not have much time to interact with employees. The mean scores of the responses are shown in Figure 5.11.

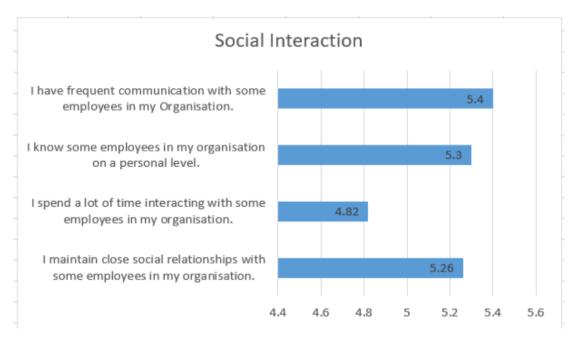


Figure 5.11. Social Interaction Items: Descriptive Analysis

5.5.2 Trust

In the study, trust is measured with the help of five statements. The results of the descriptive analysis performed on the various statements of trust contained in the study are displayed in Table 5.11, which summaries the findings.

Table 5.11. Trust Items: Descriptive Analysis

No of Statements	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Trust 1	4.67	1.539	-0.539	-0.475	1	7
Trust 2	4.93	1.462	-0.656	-0.083	1	7
Trust 3	5.02	1.433	-0.371	-0.740	2	7
Trust 4	5.19	1.355	-0.810	0.072	2	7
Trust 5	4.91	1.418	-0.502	-0.586	2	7

The results indicate that most of the respondents agree that the employees in their organizations behave in a consistent manner (mean score = 5.19). This means the respondents agree that people in their organizations are predictable. The respondents also highly agree that employees in the organization would not knowingly do anything to disrupt the conversation (mean score = 5.02). These observations have been depicted in Figure 5.12.



Source: Created by Author

Figure 5.12. Trust Items: Descriptive Analysis

5.5.3 Reciprocity

The reciprocity in the study is measured with the help of five statements. The descriptive analysis results applied to the different statements of reciprocity included in the study are depicted in Table 5.12.

Table 5. 12. Reciprocity Items: Descriptive Analysis

Number of Statements	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Reciprocity 1	4.93	1.781	-0.617	-0.918	1	7
Reciprocity 2	4.98	1.837	-0.779	-0.420	1	7
Reciprocity 3	5.25	1.596	-0.993	0.465	1	7
Reciprocity 3	6.11	1.385	-1.952	3.595	1	7

The results indicate that most of the respondents highly agree that sharing knowledge can be mutually helpful (mean score = 5.19). This means they agree that exchange of knowledge is beneficial and help each other. The respondents also agree that their queries for knowledge will be answered in future (mean score = 5.25). These observations have been depicted in Figure 5.13.

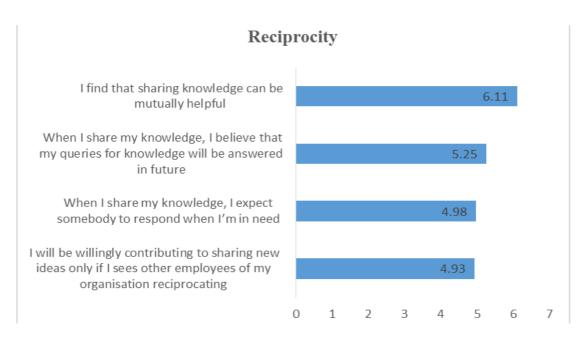


Figure 5.13: Reciprocity Items: Descriptive Analysis

5.5.4 Shared Goals

The shared goals in the study are measured with the help of four statements. The descriptive analysis results applied to the different statements of the share goals included in the study are depicted in Table 5.13.

Table 5.13. Shared goals Items Descriptive

Statements	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Shared Goals 1	4.89	1.41	-0.322	-0.514	2	7
Shared Goals 2	4.77	1.134	-0.140	-0.353	2	7
Shared Goals 3	4.88	1.269	-0.686	0.405	1	7
Shared Goals 4	5.02	1.343	-0.537	0.046	1	7

Source: Created by Author

The results indicate that most of the respondents highly agree that they are enthusiastic about the collective mission of sharing their TK (mean = 5.02). The respondents also agree that they should share the same goal (mean = 4.89) and the same values (mean= 4.88) when talking about TKS. These observations have been depicted in Figure 5.14.

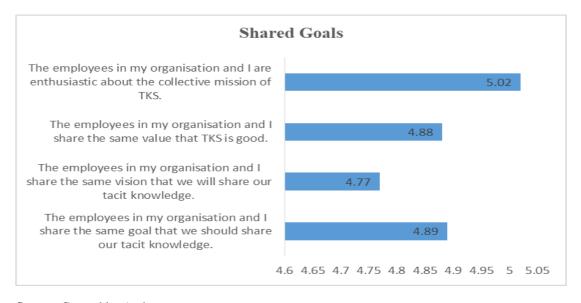


Figure 5.14. Shared Goals Items: Descriptive Analysis

5.5.5 Enjoyment in Helping Others

The EI in the study is measured with the help of four statements. The descriptive analysis results applied to the different statements of the EI others included in the study are depicted in Table 5.14.

Table 5.14. Enjoyment in Helping Others Items: Descriptive Analysis

Statements	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Enjoyment in Helping Others 1	5.26	1.482	-0.984	0.907	1	7
Enjoyment in Helping Others 2	4.89	1.22	-0.098	-0.025	2	7
Enjoyment in Helping Others 3	5.28	1.36	-0.843	1.063	1	7
Enjoyment in Helping Others 4	5.19	1.42	-0.897	0.965	1	7

Source: Created by Author

The results indicate that most respondents highly agree that they feel good to help someone by sharing their knowledge (mean = 5.28). Respondents highly agree on enjoying sharing their knowledge with employees (mean = 5.26) in their organization. These observations have been depicted in Figure 5.15.

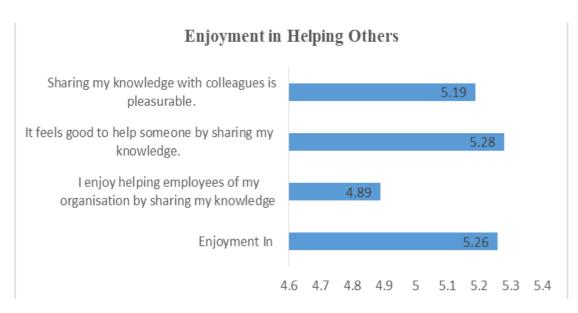


Figure 5.15. Enjoyment in Helping Others Items: Descriptive Analysis

5.5.6 Extrinsic Rewards

The ER in the study are measured with the help of four statements. The results of the descriptive analysis applied on the different statements of the ER included in the study are depicted in Table 5.15.

Table 5.15. Extrinsic Rewards Items: Descriptive Analysis

Statements	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Extrinsic Rewards 1	3.46	1.390	-0.051	-0.630	1	6
Extrinsic Rewards 2	3.68	1.391	0.017	-0.215	1	7
Extrinsic Rewards 3	4	1.500	-0.197	-0.788	1	7
Extrinsic Rewards 4	4.18	1.465	-0.245	-0.336	1	7

Source: Created by Author

The results indicate that most of the respondents agree that they will receive increased job security (mean = 4.18) and increased promotion opportunities (mean = 4) as compared to higher bonuses (mean = 3.68) and higher salaries (mean = 3.46) in return for sharing their knowledge, as shown in Figure 5.16.

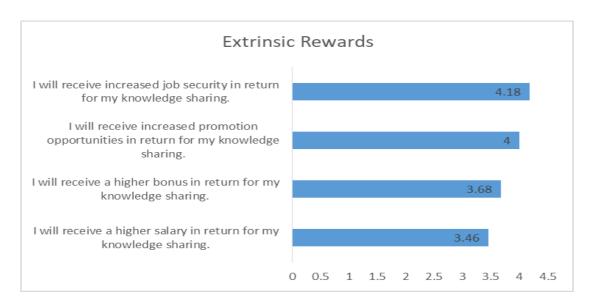


Figure 5.16. Extrinsic Rewards Items: Descriptive Analysis

5.5.7 Reputation

The reputation in the study is measured with the help of three statements. The descriptive analysis results applied to the different statements of reputation included in the study are depicted in Table 5.16.

Table 5.16. Reputation Items: Descriptive Analysis

Statements	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Reputation 1	5.32	1.256	-1.415	3.289	1	7
Reputation 2	5.26	1.218	-1.144	2.27	1	7
Reputation 3	5.47	1.197	-1.393	3.214	1	7

Source: Created by Author

The results indicate that most of the respondents highly agree the sharing knowledge with people at work will earn them respect (mean = 5.47). The respondents also agree that sharing knowledge will improve their image (mean = 5.32) and recognition (mean = 5.26), as depicted in Figure 5.17.

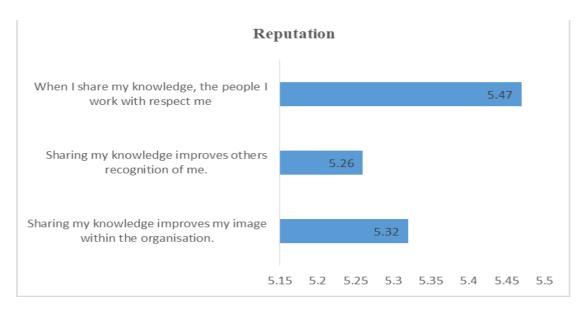


Figure 5.17. Extrinsic Rewards Items: Descriptive Analysis

5.5.8 Web 2.0

The Web in the study is measured with the help of three statements. The results of the descriptive analysis applied on the different statements of Web included in the study are depicted in Table 5.17.

Table 5.17. Web 2.0 Items: Descriptive Analysis

Statements	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Web 1	5.14	1.407	015	1.237	1	7
Web 2	5.63	1.248	-1.196	2.183	1	7
Web 3	5.58	1.309	-0.996	1.246	1	7

Source: Created by Author

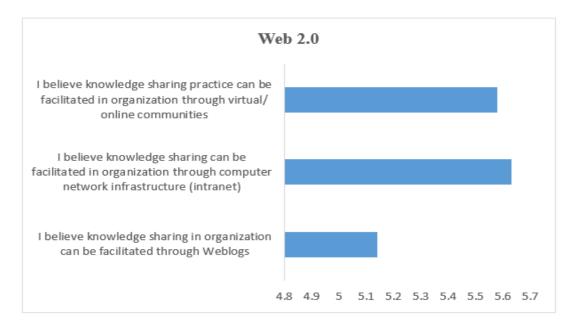


Figure 5.18. Web 2.0 Items: Descriptive Analysis

5.5.9 Tacit Knowledge Sharing

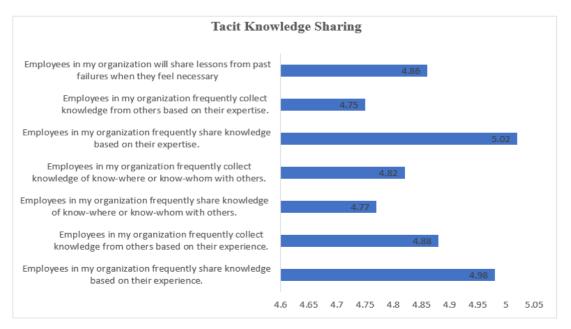
The tacit knowledge sharing in the study is measured with the help of seven statements. The descriptive analysis results applied to the different statements of tacit

knowledge sharing included in the study are depicted in Table 5.18.

Table 5. 18. Tacit Knowledge Sharing Items: Descriptive Analysis

Statements	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Tacit Knowledge Sharing 1	4.98	1.564	-0.899	0.432	1	7
Tacit Knowledge Sharing 2	4.88	1.44	-0.856	0.948	1	7
Tacit Knowledge Sharing 3	4.77	1.464	-0.862	0.57	1	7
Tacit Knowledge Sharing 4	4.82	1.453	-0.950	0.79	1	7
Tacit Knowledge Sharing 5	5.02	1.395	-0.850	1.102	1	7
Tacit Knowledge Sharing 6	4.75	1.607	-0.735	0.035	1	7
Tacit Knowledge Sharing 7	4.86	1.457	-0.609	0.223	1	7

Source: Created by Author



Source: Created by Author

Figure 5.19. Tacit Knowledge Sharing Items: Descriptive Analysis

5.5.10 Absorptive Capacity

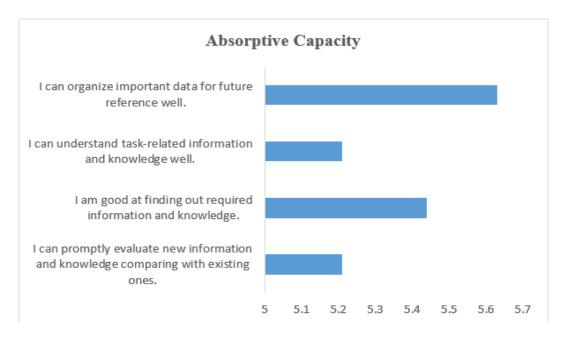
The absorptive capacity in the study is measured with the help of four statements. The results of the descriptive analysis applied on the different statements of absorptive

capacity included in the study are depicted in Table 5.19.

Table 5.19. Absorptive Capacity Items: Descriptive Analysis

Statements	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Absorptive Capacity 1	5.21	1.264	-0.743	0.884	1	7
Absorptive Capacity 2	5.44	1.15	-0.356	-0.703	3	7
Absorptive Capacity 3	5.21	1.25	-0.472	0.747	1	7
Absorptive Capacity 4	5.63	1.219	1.328	2.644	1	7

Source: Created by Author



Source: Created by Author

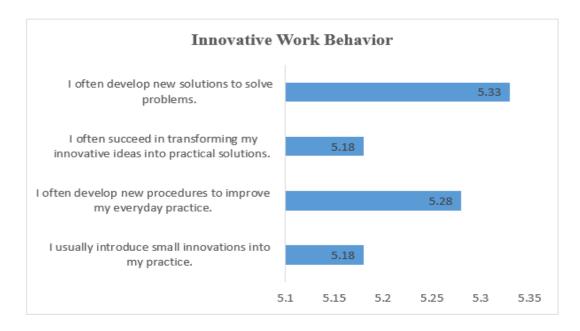
Figure 5.20. Absorptive Capacity Items: Descriptive Analysis

5.5.11 Innovative Work Behavior

The innovative work beahaviour in the study is measured with the help of four statements. The descriptive analysis results applied to the different statements of innovative work behaviour included in the study are depicted in Table 5.20.

Table 5. 20. Innovative Work Behavior Items: Descriptive Analysis

Statements	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Innovative Work Behavior 1	5.18	1.311	-0.879	0.865	1	7
Innovative Work Behavior 2	5.28	1.098	-0.757	2.802	1	7
Innovative Work Behavior 3	5.18	1.182	-0.823	1.812	1	7
Innovative Work Behavior 4	5.33	1.354	-0.863	0.891	1	7



Source: Created by Author

Figure 5.21. Innovative Work Behavior Items: Descriptive Analysis

5.5.12 Common Method Bias

After ensuring reliability and validity of the measurement model, the unfairness in the answers is examined using Harman's single factor method. Common method bias is the main source of measurement error and is a risk to the model's validity, especially in self-report research. Harman's single factor test is estimated using Exploratory Factor Analysis

(EFA) with the assumption of single factor extracted. An EFA was performed on all items that measure latent constructs with the help of principal axis factoring with factors extracted based on eigenvalues greater than 1. The result reported that Harman's single factor method's estimated value is 30%, which is less than the expected value of 50%, thereby confirming that the measurement model is free from biases.

Table 5.21 Common Method Bias

		Initial Eigenval	ues	Extract	ion Sums of Squ	ared Loadings
Component	Total	Percentage of	Cumulative	Total	Percentage of	Cumulative
		Variance	Percentage		Variance	Percentage
1	10.501	30.003	30.003	10.501	30.003	30.003
2	2.975	8.501	38.504			
3	2.656	7.589	46.093			
4	2.381	6.802	52.895			
5	1.938	5.539	58.434			
6	1.695	4.843	63.277			
7	1.526	4.361	67.638			
8	1.087	3.106	70.744			
9	0.855	2.444	73.188			
10	0.656	1.875	75.063			
11	0.611	1.747	76.810			
12	0.567	1.621	78.431			
13	0.532	1.519	79.950			
14	0.506	1.446	81.396			
15	0.486	1.389	82.785			
16	0.446	1.275	84.060			
17	0.435	1.243	85.303			
18	0.393	1.121	86.424			
19	0.384	1.096	87.520			
20	0.368	1.051	88.572			
21	0.354	1.010	89.582			
22	0.348	0.995	90.577			
23	0.329	0.940	91.517			
24	0.320	0.915	92.432			
25	0.317	0.904	93.337			
26	0.296	0.846	94.183			
27	0.287	0.820	95.003			
28	0.277	0.791	95.793			
29	0.248	0.709	96.503			
30	0.232	0.663	97.165			
31	0.223	0.638	97.804			
32	0.220	0.627	98.431			
33	0.199	0.568	99.000			
34	0.178	0.509	99.509			
35	0.172	0.491	100.000			
		Extraction Metho	d: Principal Con	nponent A	nalysis.	

5.6 Measurement Model

This study's research model uses partial least squares (PLS). To evaluate the measurement and structural model, Smart PLS 3.3.3 was applied. This programme evaluates the measurement model's psychometric qualities and calculates the structural model's parameters.

5.7 Reliability and Validity Analysis

The measurement scale representing the enablers of TKS consists of nine constructs, namely, SI, trust, reciprocity, shared goals, EI, ER, reputation, web 2.0, and AC. All the constructs are assumed to be zero-order constructs and reflective. These are measured using items that are covered in the questionnaire. This section discusses the result of reliability and validity of testing on the measurement scale. The reliability is examined with the help of Cronbach's alpha, which is expected to be more than 0.7 for each construct on the measurement scale. The Cronbach's alpha is the measure of internal consistency reliability, which indicates the relationship between the items included in the questionnaire. The outcome of the reliability analysis is reported in Table 5.22. After examining the internal consistency reliability on the measurement scale, the construct validity is investigated using the CFA method. Construct validity has two important factors, namely, convergent and discriminant validities. Convergent validity shows how closely the new scale is associated with other variables and measures of the same construct. Construct correlation is related to variables and it should not correlate with different and unrelated variables. Discriminant validity is a determination referred to the latter lines (de Vet et al., 2011). Construct validity was examined using the construct loading of each item, composite reliability of a construct, and average variance extracted (AVE) for each construct on the measurement scale. To determine convergent validity's presence on the measurement scale, the construct loading of each item should be greater than 0.7. The composite reliability of each construct on the measurement scale should be greater than 0.7. In addition to this, the value of the AVE indicator should be more than 0.5. Table 5.23 presents that all constructs have an AVE varying from 0.577 to 0.685, which was more than the suggested threshold value of 0.5. The outcome presents that the research measurement model has shown a sufficient convergent validity.

5.8 Convergent Validity

The convergent validity explains the relationship between the construct and its items. Table 5.23 reported the estimated value of construct loading, composite reliability, and AVE. The result indicates that the construct loading of included items on the measurement scale are found to be greater than 0.7, representing that the items have a significant and high correlation with the constructs.

The composite reliability of all the constructs is found to be greater than 0.7 (SI: 0.894, trust: 0.871, reciprocity: 0.886, SG: 0.897, EI: 0.860, ER: 0.864, reputation: 0.829, Web: 0.862, and absorption capacity: 0.893) indicating that the items representing the construct are higher. In addition to this, the AVE of all the constructs is also found to be greater than 0.5 (SI: 0.679, trust: 0.577, reciprocity: 0.661, AG: 0.685, EI: 0.606, ER: 0.616, reputation: 0.618, Web: 0.676, and AC: 0.677). Thus, the result supported the condition of convergent validity.

 Table 5.22. Items Loadings

	Absorptive Capacity	Enjoyment	Extrinsic Rewards	Innovative Work behavior	Reciprocity	Reputation	Shared Goals	Social Interaction	Tacit Knowledge Sharing	Trust	Web 2.0
AC1	0.843										
AC2	0.806										
AC3	0.806										
AC4	0.803										
EH1		0.870									
EH2		0.846									
ЕН3		0.808									
EH4		0.829									
ER1			0.821								
ER2			0.727								
ER3			0.780								
ER4			0.918								
IWB1				0.905							
IWB2				0.847							
IWB3				0.849							
IWB4				0.912							
REC1					0.831						
REC2					0.876						
REC3					0.888						
REC4					0.850	0.070					
REP1						0.873					
REP2						0.832					
REP3						0.882	0.00.7				
SG1							0.885				
SG2							0.861				
SG3							0.859				
SG4							0.888	0.005			
SI1								0.885			
SI2								0.838			
SI3 SI4								0.888 0.871			
TKS1								0.871	0.869		
TKS1									0.869		
TKS3									0.783		
TKS4									0.786		
TKS5									0.745		
TKS6									0.743		
TKS7									0.761		
TRU1							 		0.701	0.842	
TRU2							-			0.782	
TRU3										0.782	
TRU4							-			0.747	
TRU5							 			0.747	
WEB1							 			0.050	0.889
WEB1							-				0.845
WEB2 WEB3							-				0.843

 Table 5.23. Reliability and Convergent Validity

Constructs	Cronbach's Alpha	Composite Reliability	Average
			Variance Extracted
			(AVE)
Social Interaction	0.894	0.926	0.758
SI1			
SI2			
SI3			
SI4			
Trust	0.869	0.906	0.658
TRU1			
TRU2			
TRU3			
TRU4			
TRU5	0.005	0.020	0.742
Reciprocity REC1	0.885	0.920	0.742
REC1 REC2			
REC2 REC3			
REC4			
Shared Goals	0.896	0.928	0.763
SG1	0.090	0.928	0.703
SG2			
SG3			
SG4			
Extrinsic Rewards	0.863	0.887	0.664
ER1			
ER2			
ER3			
ER4			
Reputation	0.828	0.897	0.744
REP1			
REP2			
REP3			
Enjoyment in Helping Others	0.859	0.904	0.703
EH1			
EH2			
EH3			
EH4	0.050		0.504
Web 2.0	0.860	0.914	0.781
WEB1			
WEB2			
WEB3	0.800	0.020	0.622
Tacit Knowledge Sharing	0.899	0.920	0.623
TKS1 TKS2			
TKS3			
TKS4			
TKS5			
TKS6			
TKS7			
1 120 /			

5.9 Discriminant Validity

The discriminant validity on the measurement scale indicates whether all constructs on the measurement scale are different. It represents that constructs on the measurement scale have different meanings and purposes. The different constructs are expected to be observed in different manners by respondents in the research. The discriminant validity on the measurement scale is checked using the Fornell and Larcker criteria and by comparing the AVE with each construct's maximum shared variance (MSV). The discriminant validity is investigated using AVE and MSV of all constructs. To ensure the presence of discriminant validity on the measurement scale, the AVE of a particular construct should be more than its MSV. Also, as per the Fornell and Larcker criteria, the square root of AVE is evaluated with the correlation of different pairs of constructs. The result of construct validity is reported in Table 5.24. Figure 5.22 represents the measurement scale of the enablers of TKS. In the Fornell and Larcker criteria of discriminant validity, the square root of the AVE of a construct is evaluated with its correlation with other constructs. The results completely satisfy the criteria of the Fornell and Larcker criteria, thereby satisfying the discriminant validity criteria on the measurement scale.

Table 5.24. Discriminant Validity (Fornell and Larcker Criterion)

	Absorptive Capacity	Enjoyment	Extrinsic Rewards	Innovative Work behavior	Reciprocity	Reputation	Shared Goals	Social Interaction	Tacit Knowledge Sharing	Trust	Web 2.0
Absorptive Capacity	0.815										
Enjoyment	0.265	0.838									
Extrinsic Rewards	0.149	0.026	0.841								
Innovative Work Behavior	0.363	0.556	0.215	0.879							
Reciprocity	0.161	0.405	0.251	0.404	0.862						
Reputation	0.243	0.557	0.211	0.562	0.478	0.863					
Shared Goals	0.288	0.382	0.211	0.445	0.339	0.464	0.873				
Social Interaction	0.298	0.376	0.150	0.438	0.398	0.383	0.272	0.871			
Tacit knowledge Sharing	0.376	0.679	0.110	0.693	0.461	0.643	0.463	0.418	0.789		
Trust	0.268	0.417	0.118	0.473	0.285	0.355	0.452	0.318	0.615	0.811	
Web 2.0	0.320	0.611	0.138	0.598	0.489	0.607	0.372	0.451	0.741	0.442	0.884

The next valuation of discriminant validity considers the indicators' loadings regarding construct correlations. The Smart PLS algorithm function produces cross-loadings. A cross-loading of constructs and indicators is shown in Table 5.25. Also, as seen in Table 5.25, all measurement items loaded higher than their specified latent variable. Every block has a higher loading than blocks in similar lines and columns. The conceptual model separates the latent variable by loading. The cross-loading results satisfy the second appraisal of the measurement model's discriminant validity. So the measuring model has recognized its discriminant validity.

The measurement model's reliability and validity assessments are acceptable. The measuring model for this research is valid and suitable for use in estimating parameters in the structural model.

 Table 5.25. The Output of Cross-Loading between Constructs and Indicators

	Absorptive Capacity	Enjoyment	Extrinsic Rewards	Innovative work behavior	Reciprocity	Reputation	Shared Goals	Social Interaction	Tacit knowledge Sharing	Trust	Web 2.0
AC1	0.843	0.277	0.179	0.278	0.138	0.245	0.293	0.254	0.314	0.212	0.272
AC2	0.806	0.22	0.12	0.308	0.126	0.186	0.241	0.223	0.289	0.191	0.249
AC3	0.806	0.224	0.139	0.329	0.105	0.219	0.241	0.267	0.363	0.266	0.291
AC4	0.803	0.132	0.147	0.258	0.167	0.138	0.156	0.234	0.244	0.198	0.225
EH1	0.233	0.87	0.085	0.474	0.349	0.495	0.317	0.348	0.602	0.363	0.537
EH2	0.218	0.846	-0.007	0.455	0.336	0.423	0.333	0.329	0.579	0.374	0.503
ЕН3	0.201	0.808	0.038	0.464	0.321	0.498	0.297	0.274	0.551	0.322	0.503
EH4	0.235	0.829	0.057	0.471	0.359	0.454	0.339	0.319	0.543	0.34	0.507
ER1	0.137	0.027	0.821	0.177	0.225	0.151	0.17	0.1	0.086	0.114	0.1
ER2	0.083	-0.031	0.727	0.102	0.164	0.076	0.132	0.042	0.016	0.107	0.034
ER3	0.065	-0.002	0.78	0.144	0.188	0.12	0.166	0.101	0.059	0.097	0.094
ER4	0.197	0.074	0.918	0.273	0.249	0.318	0.226	0.219	0.182	0.083	0.208
IWB1	0.32	0.522	0.222	0.905	0.363	0.51	0.409	0.387	0.608	0.425	0.533
IWB2	0.264	0.439	0.201	0.847	0.321	0.469	0.355	0.333	0.573	0.422	0.461
IWB3	0.32	0.438	0.262	0.849	0.367	0.486	0.401	0.367	0.578	0.387	0.519
IWB4	0.364	0.545	0.21	0.912	0.372	0.512	0.399	0.442	0.669	0.432	0.581
REC1	0.147	0.315	0.218	0.291	0.831	0.363	0.27	0.305	0.346	0.19	0.413
REC2	0.094	0.319	0.242	0.321	0.876	0.368	0.257	0.318	0.352	0.21	0.372
REC3	0.162	0.359	0.267	0.403	0.888	0.482	0.318	0.34	0.426	0.286	0.46
REC4	0.148	0.394	0.191	0.366	0.85	0.431	0.321	0.396	0.454	0.288	0.435
REP1	0.213	0.471	0.235	0.471	0.407	0.873	0.404	0.297	0.541	0.292	0.521
REP2	0.175	0.468	0.251	0.457	0.371	0.832	0.343	0.294	0.532	0.295	0.478
REP3	0.24	0.502	0.209	0.526	0.466	0.882	0.458	0.408	0.591	0.333	0.573
SG1	0.236	0.316	0.211	0.385	0.298	0.388	0.885	0.227	0.374	0.402	0.287
SG2	0.251	0.324	0.162	0.348	0.254	0.354	0.861	0.213	0.38	0.36	0.298
SG3	0.22	0.317	0.199	0.433	0.297	0.444	0.859	0.222	0.421	0.411	0.353
SG4	0.296	0.376	0.226	0.385	0.339	0.439	0.888	0.278	0.439	0.404	0.362
SI1	0.295	0.345	0.138	0.394	0.356		0.242	0.885	0.384	0.283	0.411
SI2 SI3	0.234	0.273 0.351	0.204	0.377 0.379	0.337	0.299	0.261 0.219	0.838	0.295	0.273	0.343
SI3	0.292	0.331	0.137	0.375	0.311	0.351	0.219	0.871	0.41	0.308	0.397
TKS1	0.303	0.615	0.139	0.614	0.372	0.566	0.404	0.355	0.869	0.555	0.665
TKS2	0.338	0.561	0.13	0.544	0.412	0.547	0.367	0.373	0.783	0.457	0.597
TKS3	0.287	0.503	0.105	0.549	0.322	0.474	0.371	0.295	0.797	0.501	0.557
TKS4	0.329	0.538	0.109	0.549	0.387	0.529	0.323	0.363	0.786	0.455	0.591
TKS5	0.303	0.486	0.148	0.522	0.337	0.472	0.387	0.308	0.745	0.491	0.547
TKS6	0.29	0.533	0.085	0.509	0.354	0.456	0.305	0.335	0.778	0.478	0.572
TKS7	0.223	0.504	0.11	0.535	0.378	0.509	0.405	0.308	0.761	0.461	0.561
TRU1	0.25	0.334	0.057	0.366	0.243	0.28	0.345	0.272	0.506	0.842	0.372
TRU2	0.208	0.363	0.078	0.424	0.246	0.308	0.37	0.273	0.507	0.782	0.404
TRU3	0.227	0.382	0.067	0.364	0.238	0.297	0.381	0.257	0.502	0.83	0.354
TRU4	0.234	0.294	0.128	0.391	0.229	0.259	0.34	0.269	0.48	0.747	0.328
TRU5	0.169	0.316	0.115	0.379	0.212	0.298	0.397	0.21	0.501	0.85	0.335
WEB1	0.244	0.517	0.176	0.509	0.444	0.528	0.309	0.396	0.623	0.376	0.889
WEB2	0.254	0.491	0.176	0.501	0.412	0.505	0.309	0.416	0.581	0.342	0.845
WEB3	0.34	0.602	0.128	0.569	0.445	0.576	0.369	0.396	0.746	0.445	0.916

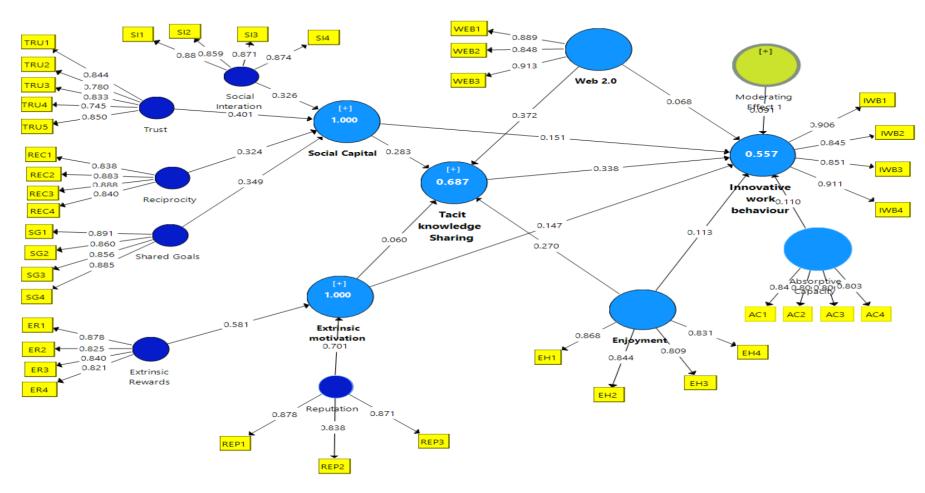
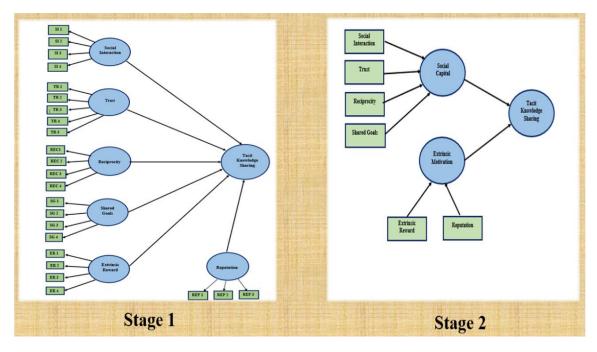


Figure 5.22. Full Measurement Model

5.10 Higher-Order Construct: The Two-Stage Approach

The model assessment is primarily focused on the reflective measurement models of the lower-order components, which, as previously stated, satisfy all relevant criteria such as internal consistency, convergent validity, and discriminant validity for all lower-order reflective constructs, namely SI, trust, reciprocity, SG, ER, and reputation.



Source: Created by Author

Figure 5.23. Two-Stage Approach of the Study

The second stage involves the creation and estimation of the stage-two model obtained from the latent variable scores (Sarstedt et al., 2019) of the lower-order components, as shown in Figure 5.23.

To achieve this, scores of all lower-order components have to be obtained, ie SI, trust, reciprocity, SG, ER, reputation, and added as new variable to the data set. The assessment of the stage-two results begins with social capital and extrinsic motivation's formative measurement model.

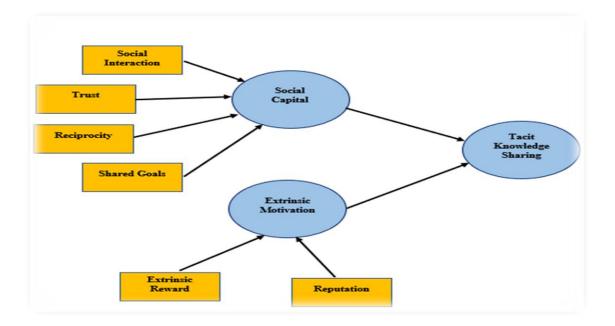


Figure 5. 24. Higher-Order Formative Measurement Model

Social capital was the higher-order construct in the study based on the four lower-order constructs, namely, SI, trust, reciprocity, SG, and extrinsic motivation; was the higher-order based on two lower-order constructs, namely ER and reputation (Bharati et al., 2015; Zhang et al., 2017). In addition to the literature, this study performed confirmatory tetrad analysis in PLS-SEM (Gudergan et al., 2008) to examine the measure of the construct. The result of confirmatory tetrad analysis reported that a majority of the probability values are found to be less than 0.05, indicating that both the second-order constructs are formative in nature.

5.10.1 Validating Higher-Order Constructs

Social capital was the higher-order construct in the research on the basis of the four lower-order constructs, namely, SI, trust, reciprocity, and SG, and extrinsic motivation was the higher-order based on two lower-order constructs, namely, ER and

reputation. Table 5.26 shows the measurement of the second-order constructs

Table 5. 26. Measurement of the Second-Order Constructs

Second Order Constructs	Composite Reliability	Average Variance Extracted (AVE)		
Extrinsic Motivation	0.714	0.585		
Social Capital	0.804	0.507		

Source: Created by Author

5.10.2 Validating Formative Indicators

1) Assessment of Formative Measurement Model for Collinearity

The formative measurement methodology does not assume high correlations between indicators. Collinearity between indicators is problematic because it affects the estimate of weights and their statistical significance. The Variance Inflation Factor (VIF) is used to analyze collinearity in PLS-SEM. Table 5.27 shows that all VIF values in our investigation are less than 3.3. A VIF value of 3.3 or above suggests a potential collinearity concern (Hair et al., 2011).

 Table 5.27. Assessment of the Formative Measurement Model

	Outer Weight	Factor Loadings	T Statistic	P Values	VIF
Social Interaction → Social Capital	0.288	0.645	13.361	0.000	1.261
Trust → Social Capital	0.529	0.826	28.93	0.000	1.335
Reciprocity → Social Capital	0.298	0.656	13.042	0.000	1.289
Shared Goals → Social Capital	0.265	0.684	13.457	0.000	1.346
Extrinsic Reward → Extrinsic Motivation	0.065	0.327	4.573	0.000	1.077
Reputation → Extrinsic Motivation	0.981	0.998	229.664	0.000	1.077

After calculating VIF value, the present study assessed the significance and relevance of formative indicators. When an Indicator's outer-weight is non-significant but its outer-loading is significant, as in case of this present study for extrinsic reward, the indicator should be interpreted as absolutely important, but not as relatively important. In this situation, the indicator would generally be retained (Sarstedt et al., 2019). Thus, in our study, all indicators are important and significant.

5.11 Model Fit

The standardised root means square residual (SRMR) value displays the difference between observed and predicted correlations. In mentioned models, all samples establish the threshold of 0.10 minimum and 0.08 maximum (Henseler et al., 2015). This study's SRMR is 0.050, indicating strong model fit.

5.12 Structural Equation Modeling

The results for the structural model in this study are divided into five parts:

- 1. First, the coefficients of determination (R^2) were assessed.
- 2. Second, structural model assessment was performed.
- 3. Third, the mediating and moderating effects were assessed.
- 4. Fourth, the predictive relevance of model was assessed.

5.12.1 Coefficient of Determination (R²)

A major part of structural model evaluation is the assessment of coefficient of determination (R^2). Threshold values of 0.25, 0.5, and 0.7 are often used to describe weak, moderate, and strong coefficients of determination, respectively (Hair et al., 2013). See table, 5.28.

Table 5.28. Coefficient of Determination

S. No	Variable	R2
1	Tacit Knowledge Sharing	0.705
2	Innovative Work Behavior	0.550

5.12.2 Structural Model Assessment

After compulsory evaluation of the measurement model, the structural model test was evaluated in the second phase. The research study makes an effort to examine the influence of the selected factors, namely, social capital, extrinsic motivation, EI, and Web on TKS, and finally, the influence of TKS on IWB. In the research, the structural model is built up to investigate the diverse association. In the structural model, social capital is assumed to be a second-order construct consisting of four zero-order reflective constructs: SI, trust, reciprocity, and SG. In addition, extrinsic motivation is also examined with the help of two zero-order reflective constructs, namely, ER and reputation. EI others is a zero-order construct.

Tacit knowledge sharing is an endogenous construct consisting of seven statements. IWB is also an endogenous construct influenced by TKS. The structural model is analyzed with the help of smart PLS software and a SEM approach. The following hypotheses are framed to be examined using the SEM approach. The hypotheses were examined in a sequence. First, the direct influence of social capital, extrinsic motivation, EI, and Web on TKS was analyzed. In the second phase, the direct influence of TKS on the IWB was analyzed.

Following are the enablers in the study:

- H1a: Social capital has a significant effect on TKS.
- H1b: Social capital has a significant effect on IWB.
- H2a: Extrinsic motivation has a significant effect on TKS.
- *H2b: Extrinsic motivation has a significant effect on IWB.*
- *H3a: EI others has a significant effect on TKS.*
- *H3b: EI others has a significant effect on IWB.*
- *H4a: Web has a significant effect on TKS.*
- H4b: Web has a significant effect on IWB.
- *H5: TKS has a significant positive and direct effect on IWB.*

Mediation

- ► *H1c: TKS mediates the relationship between social capital and IWB.*
- ► H2c: TKS mediates the relationship between extrinsic motivation and IWB.
- *H3c: TKS mediates the relationship between EI and IWB.*
- *H4c: TKS mediates the relationship between Web and IWB.*

Moderator

■ H6: AC moderates the relationship between TKS and IWB, such that an increase in AC would strengthen the impact of TKS on IWB.

The bootstrap resampling technique with 5,000 resamples (Ringle et al., 2005) was utilized to establish the significance of direct paths. Table 5.29 lists the test outcomes of hypotheses intended for direct associations. Finally, the influence of social capital, extrinsic motivation, EI, and Web, via the intervention of TKS as a mediator were tested. Table 5.30 shows the outcomes of the mediation assessment, while Table 5.31 shows the moderation results of AC.

5.12.3 Conclusion

- *H1a:* The results reveal a substantial influence of SC on TKS (β = 0.289, t = 3.294, p = 0.001), (β = 0.297, t = 7.969, p < 0.000). Therefore, H1a was supported. Please see Table **5.29**.
- *H1b:* The results reveal that there is a significant direct influence of SC on IWB $(\beta = 0.163, t = 3.083, p < 0.002)$ therefore H1b was supported. Please see Table 5.29.
- *H2a:* The results reveal a significant influence of EM on TKS ($\beta = 0.141$, t = 4.130, p = 0.000). Therefore, H2a was supported. Please see Table **5.29**.
- *H2b:* The results reveal that there is a significant direct influence of extrinsic motivation on IWB ($\beta = 0.135$, t = 2.818, p < 0.005) therefore H1b was supported. Please see Table **5.29**.
- *H3a*: The results reveal a significant influence of EI on TKS ($\beta = 0.235$, t = 6.710, p = 0.000). Therefore, H3a was supported. Please see Table **5.29**.
- *H3b:* The results reveal a significant direct influence of EI others on IWB (β = 0.100, t = 2.308, p < 0.021) therefore, H3b was supported. Please see Table 5.29.
- *H4a:* The results reveal a significant influence of Web on TKS ($\beta = 0.331$, t = 9.128, p = 0.000). Therefore, H3a was supported. Please see Table **5.29**.
- *H4b:* The results reveal that there is an insignificant influence of Web on IWB $(\beta = 0.072, t = 1.493, p = 0.135)$. Hence, H4b was rejected. Please see Table 5.29.

• *H5:* The results reveal a significant influence of TKS on IWB ($\beta = 0.317$, t = 4.974, p = 0.000). Therefore, H5 was supported. Please see Table **5.29**.

Table 5.29. Direct Relationships

	β	SD	T	P	Results
H1a: Social Capital → Tacit Knowledge Sharing	0.297	0.037	7.969	0.000	Support
H1b: Social Capital → Innovative Work Behavior	0.163	0.053	3.083	0.002	Support
H2a: Extrinsic Motivation → Tacit Knowledge sharing	0.141	0.034	4.13	0.000	Support
H2b: Extrinsic Motivation → Innovative Work Behavior	0.135	0.048	2.818	0.005	Support
H3a: Enjoyment in Helping Others → Tacit Knowledge Sharing	0.235	0.035	6.71	0.000	Support
H3b: Enjoyment in Helping Others → Innovative Work Behavior	0.1	0.043	2.308	0.021	Support
H4a: Web 2.0 → Tacit Knowledge Sharing	0.331	0.036	9.128	0.000	Reject
H4b: Web 2.0 → Innovative Work Behavior	0.072	0.048	1.493	0.135	Support
H5: Tacit Knowledge Sharing → Innovative Work Behavior	0.317	0.064	4.974	0.000	Support

Source: Created by Author

Mediation Analysis

- *H1c:* The results of a mediation analysis reveal that partial mediation was found for TKS between SC and IWB ($\beta = 0.094$, t = 4.174, p = 0.000), as shown in Table **5.30**.
- *H2c:* The results of a mediation analysis reveal that partial mediation was found for TKS between EM and IWB ($\beta = 0.045$, t = 2.983, p = 0.003), as shown in Table **5.31**.

• *H3c:* The results of a mediation analysis reveal that partial mediation was found for TKS between EI and IWB ($\beta = 0.075$, t = 3.907, p = 0.000), as shown in Table **5.32**.

H4c: The results of a mediation analysis reveal that full mediation was found for TKS between Web and IWB ($\beta = 0.105$, t = 4.524, p = 0.000), as shown in Table **5.33.**

Mediation

Total effect: The effect of independent variable on dependent variable without the mediator in the model

Direct effect: The effect of independent variable in presence of the mediator.

Indirect effect: The effect of independent variable on dependent variable through the mediating variable.

Table 5.30. The Effect of Social Capital on Innovative Work Behavior Through the Mediating Variable: Tacit Knowledge Sharing

Type of Effect	Standardized Path Coefficient	T Statistics	P Value	Remark
Total Effect				
(Social Capital → Innovative Work Behavior)	0.257	5.243	0.000	Significant Total effect found
Indirect Effect				
(Social Capital → Tacit Knowledge Sharing → Innovative	0.094	4.174	0.000	Significant indirect effect found
Work Behavior)				
Direct Effect				
(Social Capital → Innovative Work Behavior)	0.163	3.083	0.002	Significant direct effect found
Conclusion		Partial Me	diating Conclude	d

Table 5.31. The Effect of Extrinsic Motivation on Innovative Work Behavior through the Mediating Variable: Tacit Knowledge Sharing

Type of effect	Standardized Path Coefficient	T Statistics	P Value	Remark
Total Effect				S:: S:
(Extrinsic Motivation → Innovative Work Behavior)	0.18	3.763	0.000	Significant total effect found
Indirect Effect				
(Extrinsic Motivation → Tacit Knowledge Sharing → Innovative Work Behavior)	0.045	3.07	0.002	Significant indirect effect found
Direct Effect				G: :G . I
(Extrinsic Motivation → Innovative Work Behavior)	0.135	2.867	0.004	Significant direct effect found
Conclusion		Partial M	Aediating Con	ncluded

Table 5.32. The Effect of Enjoyment in Helping Others on Innovative Work Behavior through the Mediating Tacit Knowledge Sharing

Type of Effect	Standardized Path Coefficient	T Statistics	P Value	Remark
Total Effect				
(Enjoyment in Helping Others	0.174	4.003	0.000	Significant total
→ Innovative Work Behavior)	0.174	4.003	0.000	effect found
Indirect Effect				
(Enjoyment in Helping Others				
→ Tacit Knowledge Sharing	0.075	3.907	0.000	Significant indirect
→ Innovative Work Behavior)				effect found
Direct Effect				C: :C: . 1: .
(Enjoyment in Helping Others	0.100	2.209	0.021	Significant direct effect found
→ Innovative Work Behavior)	0.100	2.308	0.021	errect round
Conclusion		Partial M	ediating Co	ncluded

Table 5.33. The Effect of Web on Innovative Work Behavior through the Mediating Variable: Tacit Knowledge Sharing

Type of Effect	Standardized Path Coefficient	T Statistics	P Value	Remark
Total Effect (Web 2.0 → Innovative Work Behavior)	0.177	3.826	0.000	Significant total effect found
Indirect Effect (Web 2.0 → Tacit Knowledge Sharing → Innovative Work Behavior)	0.105	4.484	0.000	Significant indirect effect found
Direct Effect (Web 2.0 → Innovative Work Behavior)	0.331		0.132	Insignificant direct effect found
Conclusion]	Full Mediati	ng Conc	luded

5.12.5 Moderation Analysis

• *H6:* The results of a moderation analysis for AC between TKS and IWB reveal a significant influence of AC among TKS and IWB (β = 0.120, t = 2.596, p < 0.009). Hence, H6 moderation hypothesis was accepted in Table 5.31 and Figure 5.25.

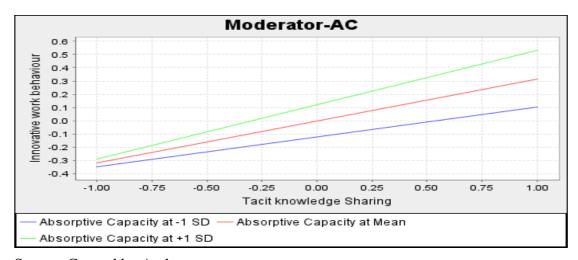


Figure 5.25. Moderation Analysis for Absorptive Capacity between Tacit Knowledge Sharing and Innovative Work Behavior

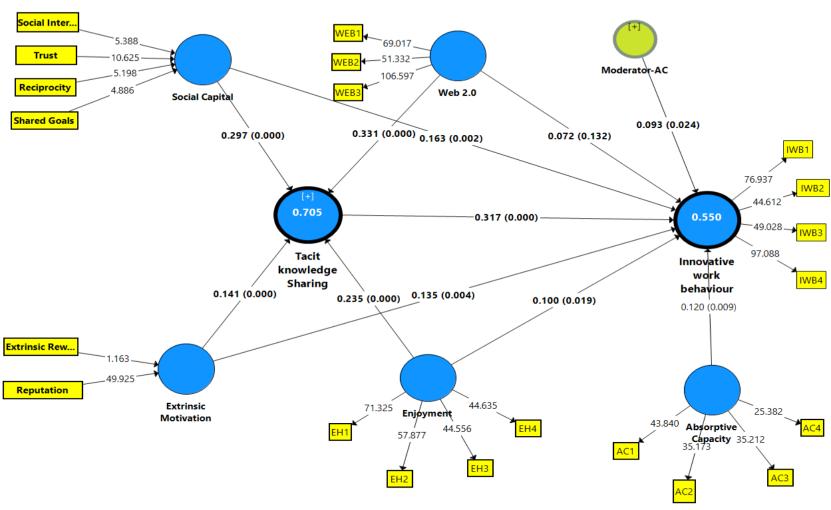


Figure 5.26. Structural Equation Modelling

5.13 Predictive Relevance: The Stone Geisser (Q-Square)

In this study, the predictive relevance of the PLS model is examined with the help of the blind-folding procedure. In the smart PLS software, the blind-folding procedure provides the estimated value of the Q-square. The Q-squares of the endogenous constructs are shown in Table 5.34 below. The result reported that the estimated values of Q-square are 0.436 for TKS and 0.416 for IWB, which indicates that the model has a very strong predictive relevance. In other words, if the model is applied in any external data set, the predictive relevance will be very high.

Table 5.34.

Endogenous Constructs	Result
Tacit Knowledge Sharing	0.436
Innovative Work Behavior	0.416

CHAPTER 6

DISCUSSION, CONCLUSION, AND IMPLICATIONS

6.1 Discussion

The present study investigate the effect of TKS enablers, i.e. SC, EM, EI, and Web on TKS; the direct influence of TKS on IWB; the influence of TKS as a mediator; and the moderating effect of AC between TKS and IWB in the Indian IT sector.

The result of this study shows that all dimensions of SC comprise SI, trust, reciprocity, and shared goals as the main prerequisite for employees' TKS. The association between SC and TKS shows that there is a greater upsurge in the earlier than the latter. The present research shows the significance of SC in Indian IT organizations. One possible reason for this significant influence is the fairly high level of cultural integration—the possibility of building SC is enhanced in organizations, and this leads to TKS. This trend can be confirmed in this study. The work culture in IT organizations demands high trust, reciprocity, and SG, which contribute to the building of SC, which is important for TKS that further leads to IWB. It is observed that SC has a direct and significant influence on IWB in IT organizations. The finding shows that Indian IT professionals have become more advanced in association with other people as they give importance to the term "social interaction." IT professionals want to share their knowledge with other associated coworkers and administration members, leading to an upgraded IWB. Also, SG and shared objective result in an IWB with high-quality trust, reciprocity, and social interaction.

As per the finding of this study, EM (reputation and ER) is significantly associated with TKS. This outcome was contrary to the outcome of researches where the extrinsic reward was not related to knowledge sharing (Lin, 2006; Bock et al., 2002). Reputation, as per Donath (1999), is an intense motivator for knowledge contribution. This research suggests that extrinsic motivation promotes TKS and trust that they will share their TK if they receive EM (ER and reputation). A possible explanation for this finding may be that the professionals working in IT organizations value organizational rewards and reputation and are motivated to indulge in TKS. The study found that EM factors among IT professionals, such as increased job security, increased promotion opportunities, and better reputation among the peer group, lead to TKS and significantly affect IWB. Numerous firms have employed organizational reward (Ba et al., 2001; Beer & Nohria, 2000; Hall, 2001) to create "pro-sharing norms" between their employees.

As per this study, employees' TKS was linked to their intrinsic motivation to share their TK. Employees who feel the desire for knowledge sharing, and thus helping others, are more inspired to share their TK with co-workers. The outcome shows that employees need to be competent and confident to involve in KS. This means that employees who can communicate their organisation knowledge are strongly inspired to share their knowledge with co-workers. As TKS helps other members solve their problems, a member who enjoys helping other members is likely to harbor a positive attitude towards sharing their TK, which is similar to previous results. Also, employees who enjoy communicating information and helping other people are more inspired to share TK among their peer-groups, which also increases IWB.

This study shows a substantial influence of Web on TKS. IT professionals have overwhelmingly expressed that TKS can be enhanced through an intranet, online/virtual communities, and blogs. As per the Nonaka and Takeuchi SECI model, the Web is significant as TK can be shared via socialization (Nonaka et al., 2005). The socializing procedure may not occur through face-to-face communications, as advanced technology aids employees' communication through socializing and interactions using technology. Web (online/virtual CoPs, weblogs) and intranet permit such communications.

It has been observed that the web is not influencing IWB directly, but there is a mediating influence through TKS. The effect of the web on IWB is completely transmitted with the help of the mediating variable, ie TKS.

Our finding also stresses on the partially mediating role of TKS in transforming the benefits of SC, motivation, and Web into IWB. The current research results deliver significant practical assessment about the mediating role of TKS among SC and IWB in Indian IT organization settings. On the whole, the conclusion of the current study indicates that TKS assists SC, EM, and EI regarding improved IWB in problemsolving and developing new procedures to improve everyday practices in organizations—which is inherited to IWB. In the case of Web, the current research results come out with an essential contribution as the findings reveal that the total effect, ie the effect of Web on IWB without the mediator TKS in the model, was significant. In contrast, the direct effect of the Web on IWB in the presence of the mediator, ie TKS, came out to be insignificant. Also, the indirect effect of Web on IWB in the presence of the mediator TKS is significant, which resulted in full

mediation in the context of Indian IT organizations, which means that the effect of Web on IWB is completely transmitted with the help of the mediating variable, TKS. Thus, this result is an important contribution to the literature.

Finally, this study also contributes to the AC literature, which has recognized the importance of the moderating role of AC. It is found that in the presence of AC, the relation between TKS and IWB is strengthened.

6.2 Conclusion

The COVID-19 pandemic has created an unstable atmosphere for enterprises, compelling them to increase their investment in all available resources, including land, technologies, capital, infrastructure, and emsployees. Employees' active knowledge sharing is even more important during a crisis since it allows businesses to be imaginative by supporting them in promptly recognizing and fixing difficulties (Chopra and Gupta, 2020). As a result, developing ways to enable open knowledge sharing among employees during times of crisis, as well as identifying key elements that support individuals in sharing their TK during such times, is crucial. Humans play a key role in knowledge generation and the maintenance of learning-based systems inside an organization, it should be noted. Employees are the source of an organization's knowledge. Staff employees' ability (TK) is currently recognized as the organization's knowledge. They've used "sets of generalizations (propositional claims)," the applicability of which is dependent on historically formed and combined knowledge and abilities, to demonstrate distinctions in the course of executing their job, particularly in reference to actual circumstances (Tsoukas and Vladimirou, 2001). Managing this element of knowledge shows that an organization must make an effort to keep tacit knowledge sharing successful.

Due to limited research literature available on TKS, the present research makes a useful contribution. The theory aids in the organizing of proposals, and the conceptual model suggested in this research is exclusive as it amalgamates elements like SC, EM, intrinsic motivation, Web, AC, TKS, and IWB, which were not considered together in the existing literature on this theme. The primary goal of the research is to comprehend and obtain different SC and motivations that affect TKS. The research outcome aids administrators and researchers to foster and embed TKS behavior in employees with the help of the critical enablers identified and studied. As a result, the employees will freely share their knowledge for the organisation's benefit (Anand & Walsh, 2016). Diverse social interrelations and networking help in building dependable surroundings. This can be imparted by conducting conferences, individual meetings, and requesting professionals to educate employees by imparting their "knowledge and experience" for improving the "social network links" between employees.

This research exposes the significance of social capital in organizations. It supports people and collection of people in a firm to "share their hard-won" and worthy TK. The social surroundings aid in social messaging and interaction. Suppose managers and team leaders help the formation of a social arrangement and "organizational climate". In that case, it will guarantee social messaging and interaction and help firms have the upper hand in TKS. Thus, the procedure of sharing peoples' TK with a big group can help both formal and informal means of sharing skills via meetings and conferences, enlarging processes for the coverage and recording of extraordinary happenings, regularizing ways of discovering answers to issues, mentioning a particular attitude for interrelating with employees or their relations, etc., along with tea/coffee breaks, dinners, and talks with coworkers that are employed extensively in

shifting TK and individual capabilities. It is also essential for organizations to identify and sort out "extrinsic rewards" to allow TKS behavior. A person who enjoys helping other people will have an optimistic behavior TKS (Kankanhalli et al., 2005; Jeon & Koah, 2011). From the earlier discussion, it can be inferred that the growing KS is an outcome of EI and can present an ambiance to grow organizations' innovation capabilities. The originality and innovative behavior literature have progressive "intrinsic" influence as the most significant device that is connected to individual innovation (Amabile, 1985, 1988; Janssen & Van Yperen, 2004). The Web can offer a sturdy base for a number of KS plans and is significant to TK. Web (online/virtual CoPs and weblogs) and intranet permit such communications and encourage TKS. The sharing of TK shows an increase in a person's and organization's IWB. It is important to appreciate how practitioners can advance the same and how practitioners can keep away from elements that reduce it. This research aims to show the significance of expanding a suitable motivation administration plan by focusing on the dimensions of SC and technology.

Finally, this research depicted that TKS results in better IWB of employees, like when TK is transferred or shared by an employee into explicit knowledge, it impacts the entire organization positively. This depicts that when a firm administers its enhanced information assets, the firm's performance will be better at organizational and individual levels. In this study, it can be concluded that the readiness of a person to share their TK with others will significantly increase and support IWB, and thus, add to a healthier place in the firm concerning long-term competitive benefits in complicated surroundings.

6.3 Theoretical Implications

This research suggests significant insights into investigators and academicians. It experientially examined a structure to join the sharing of TK enablers (SC, EM, intrinsic motivation, and Web) and the sharing of TK procedures (the sharing of TK), with a new work attitude as a result of the sharing of TK. The outcomes of the path analysis show massive confirmation for the majority of the associations put forward. The results in this research show significant inferences for practitioners and investigators to make firm choices that will aid in promoting innovative work behavior in their organizations. These results provide a hypothetical basis to examine the structural associations among TKS enablers, processes, and outcomes by employing an integrative model. This structure may be employed as a basis for future experiential studies on TK sharing in IT organizations.

6.4 Practical Implications

Research findings have significant inferences for specialists and researchers to make positive choices which will promote IWB in their firms. Practically, the data of 497 employees result in the empirical analysis and supply helpful suggestions for KM specialists. Thus, it is significant to make TKS amusing and pleasant and offer workplace surroundings where employees can feel satisfied with their TKS. Intrinsic rewards like amusement, happiness, and satisfaction help in promoting workers' optimistic outcomes towards TKS. There is a need for concentrating on ER to promote workers' TKS. This research shows that extrinsic outcomes like financial rewards or salary increments significantly impact workers' TKS. Thus, organizations need to apply numerous ways to aid the intrinsic motivations to endorse TKS.

Social capital comprises SI, trust, reciprocity, and SG, and is considered as the main prerequisite for employees' TKS. The influence of the structural aspect of SC on the sharing of knowledge is obvious. Given the great significance of the sharing of knowledge and employees for IT firms, it is suggested that IT firms show the significance of the interaction between employees. Firms need to produce "close interrelationships" between employees to support them in collecting and sharing knowledge. Thus, aspects like contact, inspirations, plans, and career guidance are needed to inspire employees towards creativity and sharing of knowledge. SC inspires employees to indulge in TKS. Thus, organizations should provide enough time and areas to help employees' SI and reinforce their SC in firms. The sharing of TK is a grave challenge for a firm.

The reinforced impact of trust and reciprocity (relational capital) on TKS aids in assisting employees and their knowledge and future involvement in joint efforts. IT managers may conduct face-to-face meetings to familiarize contributors with each other—this aids in SI and building trust. Also, reciprocity is mainly significant in the sharing of knowledge. According to this, joint information is efficient and important for IT professionals' issue-resolving procedures. Thus, IT professionals' observation of reciprocity needs to be improved by forming and preserving reciprocal surroundings at the workplace. For example, firms can appeal "helped" workers to pay other people back for their good deeds. They can also support workers to maintain healthy social associations by serving one another. This structure aids IT managers to enhance, develop, and establish effectual KS proposals in comparison to others by consolidating diverse SC elements and promoting workers' sharing of TK. Also, to improve the sharing of TK between IT professionals, administrators may allot

more resources to strengthen SC (structural, relational, and cognitive capital), aiding in the sharing of TK. Thus, IT professionals should be inspired to share their skills via meetings and conferences, and build processes for "reporting and recording of exceptional events"; regulating procedures of resolving issues; and coffee breaks, lunch/dinners, and communication between workers that helps in conveying TK and individual capabilities.

The top management needs to actively introduce Web technologies by discussing its benefits, achieving the organization's goals, and expressing its applicability in the firm's KM plans. For this, there is a need for the required training and rewards systems. The management needs to evade permission or implement the sharing of knowledge using the Web. Management can come up with rewards that are necessary for supporting the sharing of knowledge on the Web. Thus, organizations implementing Web need to initiate "soft rewards" like admiration and acknowledgement to support workers' participation. This means that organizations should have a "recognition program" where the "most active blog", "top-rated blog post", or "best wiki contribution" is broadcasted on the firm's intranet or is circulated through internal newsletters to identify the employees' inputs. EI significantly influences TKS among employees, and managers need to increase the enjoyment that IT professionals experience as they help one another through KS. This will also help in fostering their IWB. Mangers should combine EM (which is significant among IT professionals) with intrinsic motivation to help organizations emphasize ER (such as salaries, incentives, bonuses, promotions, or job security) as a primary TKS mechanism. Finally, managers should give importance to AC. Concern with absorptive capacity can be translated into hiring better educated and more experienced employees because, in general, employees who possess these traits are more capable of abstraction, i.e., they are better when it comes to identifying, combining, and applying knowledge that adds value to the organization, thereby influencing the generation of IWB with the help of TKS. Managers may acknowledge their involvement in inventive tasks, create a work climate that fosters innovation, give resources and creativity training, and encourage collaboration. The organization's support may influence employees' goal-setting and IWB processing.

6.5 Limitation and Future Scope

Rapid and efficient interaction, as well as technological advancement, are required as a result of globalisation and the COVID-19 pandemic. Currently, many businesses engage using web-based technology (a significant precursor) (Zutshi et al., 2021). New opportunities are required to confront the challenges posed by the pandemic and globalisation. Numerous facets of the exchange of TK via social media have yet to be investigated. There are unanswered questions that must be investigated across multiple social media platforms and organisations. It is possible to conduct study on the transfer and sharing of online TK across diverse cultures and businesses. Additionally, there is a need to explore Polanyi's theories about TK and their relevance and applicability in the current COVID-19 environment, which is driven by the digital platform. We must investigate whether tacit, experiential knowledge may also be digitized (Thomas and Chopra, 2020). Another noteworthy component of the systematic review is that the majority of studies examined antecedents. There are few studies demonstrating a link between seeing TK results. The majority of the studies studied focused on antecedents, with a few examining the outcome of TK. There is a need for extensive research to distinguish between sharing and transfer of traditional knowledge and to ascertain whether "drivers and barriers" are relevant in such a circumstance.

While this study conceptualized TKS as a single construct, future research may consider different TKS dimensions, such as TK donation and collection, as such understanding will be critical in the further understanding of TKS. The present study is more focused on the individual level. Thus future studies may consider examining other enablers at an organizational level, like leadership, organizational culture, and organizational climate. This is a cross-sectional study, and its sample was collected from IT organizations in India. Future researchers may wish to investigate the model in different industries and also conduct cross-cultural studies. This may be critical for enhancing our understanding of TKS enablers and also for generalization. Although the scales used for measuring this model are similar to the existing scales, further research might consider developing more elaborate measures to enable a richer convergence of the impact of various factors on TKS. Also, further research should use the mixed methodology to provide a more robust test and generalization.

REFERENCES

- Aalbers, R., Dolfsma, W., & Koppius, O. (2013). Individual connectedness in innovation networks: On the role of individual motivation. *RESEARCH POLICY*, 42(3), 624–634. https://doi.org/10.1016/j.respol.2012.10.007
- Abdelwhab Ali, A., Panneer selvam, D. D. D., Paris, L., & Gunasekaran, A. (2019). Key factors influencing knowledge sharing practices and its relationship with organizational performance within the oil and gas industry. *Journal of Knowledge Management*, 23(9), 1806–1837. https://doi.org/10.1108/JKM-06-2018-0394
- Abili, K., & Abili, M. (2011). Social Capital Management in Iranian Knowledge-Based SMEs. *Proceedings of the 3Rd European Conference on Intellectual Capital*, *June*, 17–23.
- Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept.

 **Academy of Management Review, 27(1), 17–40. https://doi.org/10.5465/AMR.2002.5922314
- Akhavan, P., & Mahdi Hosseini, S. (2016). Social capital, knowledge sharing, and innovation capability: an empirical study of R&D teams in Iran. *Technology Analysis and Strategic Management*, 28(1), 96–113. https://doi.org/10. 1080/09537325.2015.1072622
- Akhavan, P., Shahabipour, A., & Hosnavi, R. (2018). A model for assessment of uncertainty in tacit knowledge acquisition. *JOURNAL OF KNOWLEDGE MANAGEMENT*, 22(2), 413–431. https://doi.org/10.1108/JKM-06-2017-0242
- Al-Kurdi, O. F., El-Haddadeh, R., & Eldabi, T. (2020). The role of organisational climate in managing knowledge sharing among academics in higher education. *International Journal of Information Management*, 50(May 2019), 217–227. https://doi.org/10.1016/j.ijinfomgt.2019.05.018

- Alavi, M., & Leidner, D. (1999). Knowledge Management Systems: Issues, Challenges, and Benefits. *Communications of the Association for Information Systems*, *1*(February). https://doi.org/10.17705/1cais.00107
- Alavi, M., & Leidner, D. E. (2001). Knowledge Systems: Management Knowledge and Foundations Conceptual. *MIS Quarterly*, 25(1), 107–136.
- Ali, I., Musawir, A. U., & Ali, M. (2018). Impact of knowledge sharing and absorptive capacity on project performance: the moderating role of social processes. *Journal of Knowledge Management*, 22(2), 453–477. https://doi.org/10.1108/JKM-10-2016-0449
- Allameh, S. M. (2018a). Antecedents and consequences of intellectual capital: The role of social capital, knowledge sharing and innovation. *Journal of Intellectual Capital*, 19(5), 858–874. https://doi.org/10.1108/JIC-05-2017-0068
- Allameh, S. M. (2018b). Antecedents and consequences of intellectual capital: The role of social capital, knowledge sharing and innovation. *Journal of Intellectual Capital*, 19(5), 858–874. https://doi.org/10.1108/JIC-05-2017-0068
- Alqahtani, F. H., & Abunadi, I. (2016). Participating in the enterprise web 2.0 platform: The influence of trust. *Journal of Organizational and End User Computing*, 28(3), 31–48. https://doi.org/10.4018/JOEUC.2016070103
- AlShamsi, O., & Ajmal, M. (2018). Critical factors for knowledge sharing in technology-intensive organizations: evidence from UAE service sector. *Journal of Knowledge Management*, 22(2), 384–412. https://doi.org/10.1108/JKM-05-2017-0181
- Amalia, M., & Nugroho, Y. (2011). An innovation perspective of knowledge management in a multinational subsidiary. *Journal of Knowledge Management*, 15(1), 71–87. https://doi.org/10.1108/13673271111108701
- Anderson, J. R. (1996). 1995 Award Addresses. ACT: A Simple Theory of Complex Cognition. *American Psychologist*, *51*(4), 355–365.
- Andreeva, T., & Kianto, A. (2012). Does knowledge management really matter? Linking knowledge management practices, competitiveness and economic performance. *Journal of Knowledge Management*, 16(4), 617–636. https://doi.org/10.1108/13673271211246185

- ASHTIANI, A. V. (2014). a Study on Knowledge Sharing Practices and Innovation Capability: a Social Capital Perspective.
- Balle, A. R., Oliveira, M., & Curado, C. M. M. (n.d.). Knowledge sharing and absorptive capacity: interdependency and complementarity. *JOURNAL OF KNOWLEDGE MANAGEMENT*. https://doi.org/10.1108/JKM-12-2019-0686
- Balogun, J., & Jenkins, M. (2003). Re-conceiving change management: A knowledge-based perspective. *European Management Journal*, 21(2), 247–257. https://doi.org/10.1016/S0263-2373(03)00019-7
- Bapuji, H., & Crossan, M. (2005). Co-evolution of social capital and knowledge: An extension of the Nahapiet and Ghoshal (1998) framework. *Academy of Management 2005 Annual Meeting: A New Vision of Management in the 21st Century, AOM 2005, 1998.* https://doi.org/10.5465/ambpp.2005.18778410
- Bartol, K. M., & Srivastava, A. (2002). Encouraging Knowledge Sharing: The Role of Organizational Reward Systems. *Journal of Leadership & Organizational Studies*, 9(1), 64–76. https://doi.org/10.1177/107179190200900105
- Baruch, Y., & Lin, C. P. (2012). All for one, one for all: Coopetition and virtual team performance. *Technological Forecasting and Social Change*, 79(6), 1155–1168. https://doi.org/10.1016/j.techfore.2012.01.008
- Bhatti, S. H., Vorobyev, D., Zakariya, R., & Christofi, M. (2021). Social capital, knowledge sharing, work meaningfulness and creativity: evidence from the Pakistani pharmaceutical industry. *Journal of Intellectual Capital*, 22(2), 243–259. https://doi.org/10.1108/JIC-02-2020-0065
- Bian, X., Zheng, J., Xu, Z., & Zhang, R. (2016). Reliability analysis for serviceability limit state of pile groups considering pile length-diameter ratio and limiting tolerable settlement. *Zhongnan Daxue Xuebao (Ziran Kexue Ban)/Journal of Central South University (Science and Technology)*, 47(11), 3839–3845. https://doi.org/10.11817/j.issn.1672-7207.2016.11.030

- Bock, G.-W., Zmud, R. W., Kim, Y., & Lee, J. (2005). Behavuirak intention formation Knowledge Sharing: Examining the roles of extrinsic motivators, socuak-psychological forces, and organizational. *Special Issue on Information Technologies and Knowledge Management*, 29(1), 87–111.
- Borges, R. (2013). Tacit knowledge sharing between IT workers: The role of organizational culture, personality, and social environment. *Management Research Review*, *36*(1), 89–108. https://doi.org/10.1108/01409171311284602
- Brockmann, E. N., & Anthony, W. P. (2002). Tacit knowledge and strategic decision making. *Group and Organization Management*, 27(4), 436–455. https://doi.org/10.1177/1059601102238356
- Brockner, J., Flynn, F. J., Dolan, R. J., Ostfield, A., Pace, D., & Ziskin, I. V. (2006). Commentary on "radical HRM innovation and competitive advantage: The Moneyball story." *Human Resource Management*, 45(1), 127–145. https://doi.org/10.1002/hrm
- Brown, J. S., Collins, A., & Duguid, P. (2005). Situated cognition and the culture of learning. *Subject Learning in the Primary Curriculum: Issues in English, Science and Mathematics*, 288–305. https://doi.org/10.4324/9780203990247
- Bresciani, S., Puertas, R., Ferraris, A., & Santoro, G. (2021). Innovation, environmental sustainability and economic development: DEA-Bootstrap and multilevel analysis to compare two regions. *Technological Forecasting and Social Change*, 172, 121040. https://doi.org/10.1016/j.techfore.2021.121040
- Cabrera, E. F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *International Journal of Human Resource Management*, 16(5), 720–735. https://doi.org/10.1080/09585190500083020
- Camisón, C., & Forés, B. (2010). Knowledge absorptive capacity: New insights for its conceptualization and measurement. *Journal of Business Research*, 63(7), 707–715. https://doi.org/10.1016/j.jbusres.2009.04.022

- Camisón, C., & Forés, B. (2011). Knowledge creation and absorptive capacity: The effect of intra-district shared competences. *Scandinavian Journal of Management*, 27(1), 66–86. https://doi.org/10.1016/j.scaman.2010.11.006
- Campos-Climent, V., & Sanchis-Palacio, J. R. (2017). The influence of knowledge absorptive capacity on shared value creation in social enterprises. *Journal of Knowledge Management*, 21(5), 1163–1182. https://doi.org/10.1108/JKM-02-2017-0084
- Carayannis, E. G. (1999). Fostering synergies between information technology and managerial and organizational cognition: the role of knowledge management. *Technovation*, *19*(4), 219–231. https://doi.org/10.1016/S0166-4972(98)00101-1
- Carey, S., Lawson, B., & Krause, D. R. (2011). Social capital configuration, legal bonds and performance in buyer-supplier relationships. *Journal of Operations Management*, 29(4), 277–288. https://doi.org/10.1016/j.jom.2010.08.003
- Casimir, G., Lee, K., & Loon, M. (2012). Knowledge sharing: Influences of trust, commitment and cost. *Journal of Knowledge Management*, *16*(5), 740–753. https://doi.org/10.1108/13673271211262781
- Casimir, G., Ng, Y. N. K., & Cheng, C. L. P. (2012). Using IT to share knowledge and the TRA. *Journal of Knowledge Management*, 16(3), 461–479. https://doi.org/10.1108/13673271211238779
- Chai, S., & Kim, M. (2010). What makes bloggers share knowledge? An investigation on the role of trust. *International Journal of Information Management*, 30(5), 408–415. https://doi.org/10.1016/j.ijinfomgt.2010.02.005
- Chang, H. H., & Chuang, S.-S. (2011). Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator. *INFORMATION & MANAGEMENT*, 48(1), 9–18. https://doi.org/10.1016/j.im.2010.11.001
- Chang, W. J., Liao, S. H., & Wu, T. Te. (2017). Relationships among organizational culture, knowledge sharing, and innovation capability: A case of the automobile industry in Taiwan. *Knowledge Management Research and Practice*, *15*(3), 471–490. https://doi.org/10.1057/s41275-016-0042-6

- Chen, C. A., & Hsieh, C. W. (2015). Knowledge sharing motivation in the public sector: the role of public service motivation. *International Review of Administrative Sciences*, 81(4), 812–832. https://doi.org/10.1177/0020852314558032
- Chen, T. Y., Chen, Y. M., Lin, C. J., & Chen, P. Y. (2010). A fuzzy trust evaluation method for knowledge sharing in virtual enterprises. *Computers and Industrial Engineering*, 59(4), 853–864. https://doi.org/10.1016/j.cie.2010.08.015
- Chen, Y. H., Lin, T. P., & Yen, D. C. (2014). How to facilitate inter-organizational knowledge sharing: The impact of trust. *Information and Management*, *51*(5), 568–578. https://doi.org/10.1016/j.im.2014.03.007
- Chiu, C.-M., Hsu, M.-H., & Wang, E. T. G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. DECISION SUPPORT SYSTEMS, 42(3), 1872–1888. https://doi.org/10.1016/j.dss.2006.04.001
- Chiu, C. M., Hsu, M. H., & Wang, E. T. G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, 42(3), 1872–1888. https://doi.org/10.1016/j.ds s.2006.04.001
- Chopra, M. and Gupta, V. (2020), "Linking knowledge management practices to organizational performance using the balanced scorecard approach", *Kybernetes*, Vol. 49 No. 1, pp. 88-115. https://doi.org/10.1108/K-04-2019-0295
- Chow, W. S., & Chan, L. S. (2008a). Social network, social trust and shared goals in organizational knowledge sharing. *Information and Management*, 45(7), 458–465. https://doi.org/10.1016/j.im.2008.06.007
- Chow, W. S., & Chan, L. S. (2008b). Social network, social trust and shared goals in organizational knowledge sharing. *INFORMATION & MANAGEMENT*, 45(7), 458–465. https://doi.org/10.1016/j.im.2008.06.007
- Chowdhury, M., Prayag, G., Patwardhan, V., & Kumar, N. (2020). The impact of social capital and knowledge sharing intention on restaurants' new product development. *International Journal of Contemporary Hospitality Management*, 32(10), 3271–3293. https://doi.org/10.1108/IJCHM-04-2020-0345

- Chumg, H.-F., Cooke, L., Fry, J., & Hung, I.-H. (2015). Factors affecting knowledge sharing in the virtual organisation: Employees' sense of well-being as a mediating effect. *COMPUTERS IN HUMAN BEHAVIOR*, 44, 70–80. https://doi.org/10.1016/j.chb.2014.11.040
- Coleman, J. S. (2009). Social capital in the creation of human capital. *Knowledge and Social Capital*, 94(1988), 17–42. https://doi.org/10.1086/228943
- Constant, D., Sproull, L., & Kiesler, S. (1996). The Kindness of Strangers: The Usefulness of Electronic Weak Ties for Technical Advice. *Organization Science*, 7(2), 119–135. https://doi.org/10.1287/orsc.7.2.119
- Corrocher, N. (2011). The adoption of Web 2.0 services: An empirical investigation. *Technological Forecasting and Social Change*, 78(4), 547–558. https://doi.org/10.1016/j.techfore.2010.10.006
- Creswell, J. W. (2009). Editorial: Mapping the field of mixed methods research. *Journal of Mixed Methods Research*, 3(2), 95–108. https://doi.org/10.1177/155868 9808330883
- Croaker, P., Kessissoglou, N., & Marburg, S. (2016). Aeroacoustic scattering using a particle accelerated computational fluid dynamics/boundary element technique. *AIAA Journal*, 54(7), 2116–2133. https://doi.org/10.2514/1.J054260
- Cross, R. L., & Israelit, S. (2021). Absorptive Capacity: A New Perspective on Learning and Innovation. *Strategic Learning in a Knowledge Economy*, *35*(1), 57–86. https://doi.org/10.4324/9780080517889-9
- Csikszentmihalyi, ;, Lefevrecadi, D., Fave, Massimini, Rathunde, & Whelan. (1975). Can Be Seen From Scores of Empirical Studies in a Variety of Life Domains, Includ-Ing Work and Leisure. *The Journal of Social Psychology*, *39*(3), 355–368.
- Curado, C., & Bontis, N. (2006). The knowledge-based view of the firm and its theoretical precursor. *International Journal of Learning and Intellectual Capital*, 3(4), 367–381. https://doi.org/10.1504/IJLIC.2006.011747

- Curado, C., Oliveira, M., Maçada, A. C. G., & Nodari, F. (2017). Teams' innovation: getting there through knowledge sharing and absorptive capacity. *Knowledge Management Research & Practice*, 15(1), 45–53. https://doi.org/10.1057/kmrp.2015.8
- Curado, C., & Vieira, S. (2019). Trust, knowledge sharing and organizational commitment in SMEs. *Personnel Review*, 48(6), 1449–1468. https://doi.org/10.1108/PR-03-2018-0094
- Darroch, J., & Mcnaughton, R. (2002). Examining the link between knowledge management practices and types of innovation. *Journal of Intellectual Capital*, 3(3), 210–222. https://doi.org/10.1108/14691930210435570
- de Almeida, F. C., Lesca, H., & Canton, A. W. P. (2016). Intrinsic motivation for knowledge sharing competitive intelligence process in a telecom company.

 **JOURNAL OF KNOWLEDGE MANAGEMENT*, 20(6), 1282–1301.

 https://doi.org/10.1108/JKM-02-2016-0083
- Dewett, T. (2007). Linking intrinsic motivation, risk taking, and employee creativity in an R&D environment. *R and D Management*, *37*(3), 197–208. https://doi.org/10.1111/j.1467-9310.2007.00469.x
- Etezadi, V., & Katzen, B. T. (2013). Considerations in evaluating results of endovascular treatment. *Handbook of Endovascular Interventions*, 23(2), 27–47. https://doi.org/10.1007/978-1-4614-5013-9_3
- Fahey, L., & Prusak, L. (1998). The eleven deadliest sins of knowledge management. *California Management Review*, 40(3), 265–276. https://doi.org/10.2307/41165954
- Ferraris, A., Santoro, G. and Dezi, L. (2017), "How MNC's subsidiaries may improve their innovative performance? The role of external sources and knowledge management capabilities", *Journal of Knowledge Management*, Vol. 21 No. 3, pp. 540-552. https://doi.org/10.1108/JKM-09-2016-0411

- Frey, B. (2013). Motivation, Knowledge Transfer and Organizational Forms with Margit Osterloh. *Inspiring Economics*, *June 2014*. https://doi.org/10.4337/97818437 67121.00014
- Ganguly, A., Talukdar, A., & Chatterjee, D. (2019). Evaluating the role of social capital, tacit knowledge sharing, knowledge quality and reciprocity in determining innovation capability of an organization. *Journal of Knowledge Management*, 23(6), 1105–1135. https://doi.org/10.1108/JKM-03-2018-0190
- García-Sánchez, P., Díaz-Díaz, N. L., & De Saá-Pérez, P. (2019). Social capital and knowledge sharing in academic research teams. *International Review of Administrative Sciences*, 85(1), 191–207. https://doi.org/10.1177/002085231 6689140
- Gebauer, H., Worch, H., & Truffer, B. (2012). Absorptive capacity, learning processes and combinative capabilities as determinants of strategic innovation. *European Management Journal*, *30*(1), 57–73. https://doi.org/10.1016/j.emj.2011.10.004
- Giudice, M. Del, & Maggioni, V. (2014). Managerial practices and operative directions of knowledge management within inter-firm networks: A global view. *Journal of Knowledge Management*, 18(5), 841–846. https://doi.org/10.1108/JKM-06-2014-0264
- Giudice, M. Del, Peruta, M. R. Della, & Maggioni, V. (2015). A model for the diffusion of knowledge sharing technologies inside private transport companies. *Journal of Knowledge Management*, 19(3), 611–625. https://doi.org/10.1108/JKM-02-2015-0047
- Goh, S. C. (2002). Managing effective knowledge transfer: An integrative framework and some practice implications. *Journal of Knowledge Management*, *6*(1), 23–30. https://doi.org/10.1108/13673270210417664
- Göksel, A., & Aydintan, B. (2017). How can tacit knowledge be shared more in organizations? A multidimensional approach to the role of social capital and locus of control. *Knowledge Management Research and Practice*, 15(1), 34–44.

- https://doi.org/10.1057/kmrp.2015.22
- Granovetter, M. (1983). The Strength of Weak Ties: A Network Theory Revisited. Sociological Theory, 1(1983), 201. https://doi.org/10.2307/202051
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(SUPPL. WINTER), 109–122. https://doi.org/10.1002/smj.4250171110
- Gupta, A. K., & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal*, 21(4), 473–496. https://doi.org/10.1002/(SICI)1097-0266(200004)21:4<473::AID-SMJ84>3.0.CO;2-I
- Gupta, V. and Chopra, M. (2018), "Gauging the impact of knowledge management practices on organizational performance a balanced scorecard perspective", *VINE Journal of Information and Knowledge Management Systems*, Vol. 48 No. 1, pp. 21-46. https://doi.org/10.1108/VJIKMS-07-2016-0038
- Gupta, V. and Jain, N. (2017), "Harnessing information and communication technologies for effective knowledge creation: Shaping the future of education", *Journal of Enterprise Information Management*, Vol. 30 No. 5, pp. 831-855. https://doi.org/10.1108/JEIM-10-2016-0173
- Gupta, V., & Thomas, A. (2019). Fostering tacit knowledge sharing and innovative work behaviour: an integrated theoretical view. *International Journal of Managerial and Financial Accounting*, 11(3/4), 320. https://doi.org/10.1504/IJMFA.2019.104134
- Hafizi, A., & Malaysia), (Universiti Utara. (2006). Journal of Knowledge Management Practice, *Journal of Knowledge Management Practice*, *4*, 1–18.
- Han, S. H., Yoon, S. W., & Chae, C. (2020). Building social capital and learning relationships through knowledge sharing: a social network approach of management students' cases. *Journal of Knowledge Management*, 24(4), 921– 939. https://doi.org/10.1108/JKM-11-2019-0641

- Hansen, M. T. (1999). The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits. *Administrative Science Quarterly*, 44(1), 82–111. https://doi.org/10.2307/2667032
- Hao, B., Ye, J., Feng, Y., & Cai, Z. (2020). Explicit and tacit synergies between alliance firms and radical innovation: the moderating roles of interfirm technological diversity and environmental technological dynamism. *R and D Management*, 50(4), 432–446. https://doi.org/10.1111/radm.12390
- Hao, J., Zhao, Q., Yan, Y., & Wang, G. (2017). A Review of Tacit Knowledge: Current Situation and the Direction to Go. *INTERNATIONAL JOURNAL OF SOFTWARE ENGINEERING AND KNOWLEDGE ENGINEERING*, 27(5), 727–748. https://doi.org/10.1142/S0218194017500279
- Hau, Y. S., & Kang, M. (2016). Extending lead user theory to users' innovation-related knowledge sharing in the online user community: The mediating roles of social capital and perceived behavioral control. *International Journal of Information Management*, 36(4), 520–530. https://doi.org/10.1016/j.ijinfomgt.2016.02.008
- Hau, Y. S., Kim, B., & Lee, H. (2016a). What drives employees to share their tacit knowledge in practice? *Knowledge Management Research & Practice*, 14(3), 295–308. https://doi.org/10.1057/kmrp.2014.32
- Hau, Y. S., Kim, B., & Lee, H. (2016b). What drives employees to share their tacit knowledge in practice? *Knowledge Management Research & Practice*, 14(3), 295–308. https://doi.org/10.1057/kmrp.2014.32
- Hau, Y. S., Kim, B., Lee, H., & Kim, Y. G. (2013). The effects of individual motivations and social capital on employees' tacit and explicit knowledge sharing intentions. *International Journal of Information Management*, 33(2), 356–366. https://doi.org/10.1016/j.ijinfomgt.2012.10.009
- Hau, Y. S., & Kim, Y. G. (2011). Why would online gamers share their innovation-conducive knowledge in the online game user community? Integrating individual motivations and social capital perspectives. *Computers in Human Behavior*, 27(2), 956–970. https://doi.org/10.1016/j.chb.2010.11.022

- Hoffman, J. J., Hoelscher, M. L., & Sherif, K. (2005). Social capital, knowledge management, and sustained superior performance. *Journal of Knowledge Management*, 9(3), 93–100. https://doi.org/10.1108/13673270510602791
- Holste, J. S., & Fields, D. (2010). Trust and tacit knowledge sharing and use. *Journal of Knowledge Management*, 14(1), 128–140. https://doi.org/10.1108/13673271011015615
- Hsu, M. H., & Chang, C. M. (2014). Examining interpersonal trust as a facilitator and uncertainty as an inhibitor of intra-organisational knowledge sharing. *Information Systems Journal*, 24(2), 119–142. https://doi.org/10.1111/isj.12000
- Hu, L., & Randel, A. E. (2014). Knowledge Sharing in Teams: Social Capital, Extrinsic Incentives, and Team Innovation. *Group and Organization Management*, 39(2), 213–243. https://doi.org/10.1177/1059601114520969
- Huang, C. C. (2009). Knowledge sharing and group cohesiveness on performance: An empirical study of technology R&D teams in Taiwan. *Technovation*, 29(11), 786–797. https://doi.org/10.1016/j.technovation.2009.04.003
- Huang, M. C., Chiu, Y. P., & Lu, T. C. (2013). Knowledge governance mechanisms and repatriate's knowledge sharing: The mediating roles of motivation and opportunity. *Journal of Knowledge Management*, 17(5), 677–694. https://doi.org/10.1108/JKM-01-2013-0048
- Huang, Q., Davison, R. M., & Gu, J. (2011). The impact of trust, guanxi orientation and face on the intention of Chinese employees and managers to engage in peer-to-peer tacit and explicit knowledge sharing. *INFORMATION SYSTEMS JOURNAL*, 21(6), 557–577. https://doi.org/10.1111/j.1365-2575.2010.00361.x
- Hung, S. Y., Durcikova, A., Lai, H. M., & Lin, W. M. (2011). The influence of intrinsic and extrinsic motivation on individuals knowledge sharing behavior. International Journal of Human Computer Studies, 69(6), 415–427. https://doi.org/10.1016/j.ijhcs.2011.02.004
- Ichijo, K., & Kohlbacher, F. (2008). Tapping tacit local knowledge in emerging markets The Toyota way. *Knowledge Management Research and Practice*, 6(3), 173–186. https://doi.org/10.1057/kmrp.2008.8

- Indonesia, U. (2015). Investigating knowledge sharing behaviour on virtual community members: integration of technological, individual and contextual factors Achmad Nizar Hidayanto *, Arieffender Limupa, Kasiyah M. Junus and Nur Fitriah Ayuning Budi. 19(2), 180–204.
- Intezari, A., Taskin, N., & Pauleen, D. J. (2017). Journal of Knowledge Management Looking beyond knowledge sharing: an integrative approach to knowledge management culture Article information: For Authors. *Journal of Knowledge Management*, 21(2), 433. https://www.emeraldinsight.com/doi/pdfplus/10.1108/JKM-06-2016-0216
- Ipe, M. (2003). Knowledge Sharing in Organizations: A Conceptual Framework. *Human Resource Development Review*, 2(4), 337–359. https://doi.org/10.1177/1534484303257985
- Irani, Z., Sharif, A. M., Papadopoulos, T., & Love, P. E. D. (2017). Social media and Web 2.0 for knowledge sharing in product design. *Production Planning and Control*, 28(13), 1047–1065. https://doi.org/10.1080/09537287.2017.1329955
- Jain, N. and Gupta, V. (2019), "The impact of knowledge management system on student performance: A case study of the University of Delhi", VINE Journal of Information and Knowledge Management Systems, Vol. 49 No. 1, pp. 115-135. https://doi.org/10.1108/VJIKMS-07-2018-0065
- Jessica, M. R., Emily, R.-S., & Rutgers, A. G. (2016). Academy of Management Review
 The Network Architecture of Human Capital: A Relational Identity Perspective
 Academy of Management Review A RELATIONAL IDENTITY
 PERSPECTIVE Jessica R. Methot Rutgers University Emily Rosado-Solomon
 Rutgers University David G. Academy of Management Review.
- Jiacheng, W., Lu, L., & Francesco, C. A. (2010). A cognitive model of intraorganizational knowledge-sharing motivations in the view of cross-culture. *International Journal of Information Management*, 30(3), 220–230. https://doi.org/10.1016/j.ijinfomgt.2009.08.007

- Joia, L. A., & Lemos, B. (2010). Relevant factors for tacit knowledge transfer within organisations. *JOURNAL OF KNOWLEDGE MANAGEMENT*, *14*(3), 410–427. https://doi.org/10.1108/13673271011050139
- Kang, M., & Lee, M. J. (2017). Absorptive capacity, knowledge sharing, and innovative behaviour of R&D employees. *Technology Analysis and Strategic Management*, 29(2), 219–232. https://doi.org/10.1080/09537325.2016.1211265
- Kankanhalli, A., Tan, B. C. Y., & Wei, K.-K. (2005). Contributing knowledge to electronic knowledge repositories. *An Empirical Investigation*, 29(1), 113–143. http://www.scopus.com/inward/record.url?scp=28744434462&partnerID=8YFLogxK%0Ahttps://www.scopus.com/record/pubmetrics.uri?eid=2-s2.0-28744434462&origin=recordpage
- Khvatova, T., & Block, M. (2017). Exploring the role of task-related trust in intraorganisational knowledge sharing. *International Journal of Human Resource Management*, 28(2), 333–355. https://doi.org/10.1080/09585192.2016.1244908
- Kim, E., & Park, S. (n.d.). Employees' perceptions of organizational learning: the role of knowledge and trust. *KYBERNETES*. https://doi.org/10.1108/K-03-2020-0169
- Kim, N., & Shim, C. (2018). Social capital, knowledge sharing and innovation of small-and medium-sized enterprises in a tourism cluster. *International Journal of Contemporary Hospitality Management*, 30(6), 2417–2437. https://doi.org/10.1108/IJCHM-07-2016-0392
- Kim, S. (2018). Public Service Motivation, Organizational Social Capital, and Knowledge Sharing in the Korean Public Sector. PUBLIC PERFORMANCE & MANAGEMENT REVIEW, 41(1), 130–151. https://doi.org/10.1080/1530 9576.2017.1358188
- Kim, T. T., Lee, G., Paek, S., & Lee, S. (2013). Social capital, knowledge sharing and organizational performance: What structural relationship do they have in hotels? *International Journal of Contemporary Hospitality Management*, 25(5), 683–704. https://doi.org/10.1108/IJCHM-Jan-2012-0010

- Kmieciak, R. (2020). Trust, knowledge sharing, and innovative work behavior: empirical evidence from Poland. *European Journal of Innovation Management*. https://doi.org/10.1108/EJIM-04-2020-0134
- Knudsen, H. K., & Roman, P. M. (2004). Modeling the use of innovations in private treatment organizations: The role of absorptive capacity. *Journal of Substance Abuse Treatment*, 26(1), 51–59. https://doi.org/10.1016/S0740-5472(03)00158-2
- Ko, D. G., Kirsch, L. J., & King, W. R. (2005). Antecedents of knowledge transfer from consultants to clients in enterprise system implementations. *MIS Quarterly: Management Information Systems*, 29(1), 59–85. https://doi.org/10.2307/ 25148668
- Ko, M. C. (2021). An Examination of the Links Between Organizational Social Capital and Employee Well-Being: Focusing on the Mediating Role of Quality of Work Life. Review of Public Personnel Administration, 41(1), 163–193. https://doi.org/10.1177/0734371X19865996
- Kogut, B., & Zander, U. (2003). Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, 34(6), 516–529. https://doi.org/10.1057/palgrave.jibs.8400058
- Kuo, T. H. (2013). How expected benefit and trust influence knowledge sharing.
 Industrial Management and Data Systems, 113(4), 506–522.
 https://doi.org/10.1108/02635571311322766
- Lai, H. M., & Chen, T. T. (2014). Knowledge sharing in interest online communities: A comparison of posters and lurkers. *Computers in Human Behavior*, *35*, 295–306. https://doi.org/10.1016/j.chb.2014.02.004
- Lam, A., & Lambermont-Ford, J.-P. (2010). Knowledge sharing in organisational contexts: a motivation-based perspective. *JOURNAL OF KNOWLEDGE MANAGEMENT*, *14*(1), 51–66. https://doi.org/10.1108/13673271011015561
- Lasode, D. O., & Ogunsola, K. (2019). Predicting knowledge sharing by professional architects in architectural firms in Ibadan, Nigeria. *INFORMATION*

- DEVELOPMENT, 35(5), 749–766. https://doi.org/10.1177/0266666918793927
- Le, P. B., & Lei, H. (2018). Fostering knowledge sharing behaviours through ethical leadership practice: the mediating roles of disclosure-based trust and reliance-based trust in leadership. *KNOWLEDGE MANAGEMENT RESEARCH* & *PRACTICE*, *16*(2), 183–195. https://doi.org/10.1080/14778238.2018.1445426
- Le, P. B., Lei, H., Le, T. T., Gong, J., & Ha, A. T. (2020). Developing a collaborative culture for radical and incremental innovation: the mediating roles of tacit and explicit knowledge sharing. *CHINESE MANAGEMENT STUDIES*, *14*(4), 957–975. https://doi.org/10.1108/CMS-04-2019-0151
- Lee, J., Lee, H., Park, J.-G., Ochara, N. M., Kandiri, J., & Johnson, R. (2014). Information Technology & People Exploring the impact of empowering leadership on knowledge sharing, absorptive capacity and team performance in IT service" *People Iss Information Technology & Deople*, 27(3), 366–386. http://dx.doi.org/10.1108/ITP-10-2012-0115%0Ahttp://dx.doi.org/10.1108/ITP-01-2013-
- Lee, J., Park, J. G., & Lee, S. (2015). Raising team social capital with knowledge and communication in information systems development projects. *International Journal of Project Management*, 33(4), 797–807. https://doi.org/10.1016/j.ijproman.2014.12.001
- Lee, P., Gillespie, N., Mann, L., & Wearing, A. (2010). Leadership and trust: Their effect on knowledge sharing and team performance. *Management Learning*, 41(4), 473–491. https://doi.org/10.1177/1350507610362036
- LEONARD, D. (2000). The Role of Tacit Knowledge in Group Innovation1. In *Knowledge, Groupware and the Internet* (Vol. 40, Issue 3). Butterworth-Heinemann. https://doi.org/10.1016/b978-0-7506-7111-8.50013-5
- Levin, D. Z. (2002). The strength of weak ties you can trust. *Academy of Management Proceedings*, 1973, 1–39.

- Levin, D. Z., & Cross, R. (2004). The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management Science*, 50(11), 1477–1490. https://doi.org/10.1287/mnsc.1030.0136
- Levy, M. (2009). WEB 2.0 implications on knowledge management. *Journal of Knowledge Management*, 13(1), 120–134. https://doi.org/10.1108/136732 70910931215
- Li, H., Li, C., Wang, Z., & Li, X. (2019). Simulating the impacts of mutual trust on tacit knowledge transfer using agent-based modelling approach. *KNOWLEDGE MANAGEMENT RESEARCH & PRACTICE*, 17(2), 227–244. https://doi.org/10.1080/14778238.2019.1601506
- Liang, C., Chang, C. C., Rothwell, W., & Shu, K. M. (2016). Influences of organizational culture on knowledge sharing in an online virtual community: Interactive effects of trust, communication and leadership. *Journal of Organizational and End User Computing*, 28(4), 15–32. https://doi.org/10.4018/JOEUC.2016100102
- Liao, S. H., Fei, W. C., & Chen, C. C. (2007). Knowledge sharing, absorptive capacity, and innovation capability: An empirical study of Taiwan's knowledge-intensive industries. *Journal of Information Science*, *33*(3), 340–359. https://doi.org/10.1177/0165551506070739
- Lin, C.-P. (2007). To share or not to share: Modeling tacit knowledge sharing, its mediators and antecedents. *JOURNAL OF BUSINESS ETHICS*, 70(4), 411–428. https://doi.org/10.1007/s10551-006-9119-0
- Lin, C. P. (2007). To share or not to share: Modeling tacit knowledge sharing, its mediators and antecedents. *Journal of Business Ethics*, 70(4), 411–428. https://doi.org/10.1007/s10551-006-9119-0
- Lin, F., & Huang, H. (2013). Why people share knowledge in virtual communities? The use of Yahoo! Kimo Knowledge plus as an example. *INTERNET RESEARCH*, 23(2), 133–159. https://doi.org/10.1108/10662241311313295

- Lin, H. F. (2007a). Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *Journal of Information Science*, *33*(2), 135–149. https://doi.org/10.1177/0165551506068174
- Lin, H. F. (2007b). Knowledge sharing and firm innovation capability: An empirical study. *International Journal of Manpower*, 28(3–4), 315–332. https://doi.org/10.1108/01437720710755272
- Lin, H. F., & Lee, G. G. (2006). Effects of socio-technical factors on organizational intention to encourage knowledge sharing. *Management Decision*, 44(1), 74–88. https://doi.org/10.1108/00251740610641472
- Lin, W. B. (2008). The effect of knowledge sharing model. *Expert Systems with Applications*, 34(2), 1508–1521. https://doi.org/10.1016/j.eswa.2007.01.015
- Liou, D. K., Chih, W. H., Yuan, C. Y., & Lin, C. Y. (2016). The study of the antecedents of knowledge sharing behavior: The empirical study of Yambol online test community. *Internet Research*, 26(4), 845–868. https://doi.org/10.1108/IntR-10-2014-0256
- Liu, C. C., Lin, C. C., Deng, K. Y., Wu, Y. T., & Tsai, C. C. (2014). Online knowledge sharing experience with Creative Commons. *Online Information Review*, *38*(5), 680–696. https://doi.org/10.1108/OIR-12-2013-0280
- Llopis, O., & Foss, N. J. (2016). Understanding the climate-knowledge sharing relation: The moderating roles of intrinsic motivation and job autonomy. *European Management Journal*, *34*(2), 135–144. https://doi.org/10.1016/j.emj.2015.11.009
- Lombardi, S., Cavaliere, V., Giustiniano, L., & Cipollini, F. (2020). What Money Cannot Buy: The Detrimental Effect of Rewards on Knowledge Sharing. *European Management Review*, *17*(1), 153–170. https://doi.org/10.1111/emre.12346
- López-Cabarcos, M. Á., Srinivasan, S., & Vázquez-Rodríguez, P. (2020). The role of product innovation and customer centricity in transforming tacit and explicit knowledge into profitability. *Journal of Knowledge Management*, 24(5), 1037–1057. https://doi.org/10.1108/JKM-02-2020-0087

- Magnier-Watanabe, R., & Benton, C. (2017). Management innovation and firm performance: the mediating effects of tacit and explicit knowledge. *KNOWLEDGE MANAGEMENT RESEARCH & PRACTICE*, 15(3), 325–335. https://doi.org/10.1057/s41275-017-0058-6
- Maheshwari, B., Sarrion, M., Motiani, M., O'Sullivan, S., & Chandwani, R. (2020).
 Exploration of factors affecting the use of Web 2.0 for knowledge sharing among healthcare professionals: an Indian perspective. *Journal of Knowledge Management*, 25(3), 545–558. https://doi.org/10.1108/JKM-02-2020-0105
- Margaret Burnette, (University of Illinois at Urbana-Champaign, Urbana, Illinois, U. (2016). Article information: Tacit Knowledge Sharing among Library Colleagues: A Pilot Study. *Reference Services Review*, 45(3), 382–397.
- Martin-Perez, V., & Martin-Cruz, N. (2015). The mediating role of affective commitment in the rewards–knowledge transfer relation. *Journal of Knowledge Management*, 19(6), 1167–1185. https://doi.org/10.1108/JKM-03-2015-0114
- Martin, A. J., Ginns, P., & Papworth, B. (2017). Motivation and engagement: Same or different? Does it matter? *Learning and Individual Differences*, *55*, 150–162. https://doi.org/10.1016/j.lindif.2017.03.013
- Martinez-conesa, I., Soto-acosta, P., & Carayannis, E. G. (2017). *Journal of Knowledge Management*. https://doi.org/10.1108/JKM-09-2016-0403
- Matzler, K., Renzl, B., Mueller, J., Herting, S., & Mooradian, T. A. (2008). Personality traits and knowledge sharing. *JOURNAL OF ECONOMIC PSYCHOLOGY*, 29(3), 301–313. https://doi.org/10.1016/j.joep.2007.06.004
- Maurer, I., Bartsch, V., & Ebers, M. (2011). The Value of Intra-organizational Social Capital: How it Fosters Knowledge Transfer, Innovation Performance, and Growth. *ORGANIZATION STUDIES*, 32(2), 157–185. https://doi.org/10.1177/0170840610394301
- Mcdermott, R., & Mcdermott, R. (1999). Management. *California Management Review*, 41(4), 103–117.

- Media, S. (2012). Where is the library in the digital workflow of research? Research in the age of Social Media. *Solutions*, 18.
- Mooradian, T., Renzl, B., & Matzler, K. (2006). Who trusts? Personality, trust and knowledge sharing. *Management Learning*, *37*(4), 523–540. https://doi.org/10.1177/1350507606073424
- Mura, M., Lettieri, E., Radaelli, G., & Spiller, N. (2013). Promoting professionals' innovative behaviour through knowledge sharing: The moderating role of social capital. *Journal of Knowledge Management*, 17(4), 527–544. https://doi.org/10.1108/JKM-03-2013-0105
- Murovec, N., & Prodan, I. (2009). Absorptive capacity, its determinants, and influence on innovation output: Cross-cultural validation of the structural model. *Technovation*, 29(12), 859–872. https://doi.org/10.1016/j.technovation. 2009.05.010
- Nadeem, M. A., Liu, Z., Ghani, U., Younis, A., & Xu, Y. (2020). Impact of shared goals on knowledge hiding behavior: the moderating role of trust. *Management Decision*, 59(6), 1312–1332. https://doi.org/10.1108/MD-09-2019-1197
- Nahapiet, J., Stoplord, J., Moran, P., Hansen, M., Pascale, R., Boisot, M., Tsai, W.-P., Nohria, N., Willman, P., Hopwood, A., Ambler, T., & Waldenstrom, M. (1998). 1995) and several other authors (Boisot. ^ *Academy Ol Managemeni Review*, 23(2), 242–266.
- Nakano, D., Muniz, J., & Batista, E. D. (2013). Engaging environments: Tacit knowledge sharing on the shop floor. *Journal of Knowledge Management*, *17*(2), 290–306. https://doi.org/10.1108/13673271311315222
- Ng, K. Y. N. (2020). The moderating role of trust and the theory of reasoned action. *Journal of Knowledge Management*, 24(6), 1221–1240. https://doi.org/10. 1108/JKM-01-2020-0071
- Nguyen, M., Malik, A., & Sharma, P. (2020). How to motivate employees to engage in online knowledge sharing? Differences between posters and lurkers. *Journal of Knowledge Management*, 25(7), 1811–1831. https://doi.org/10.1108/JKM-08-2020-0649

- Nguyen, T. M., & Malik, A. (2020). Cognitive processes, rewards and online knowledge sharing behaviour: the moderating effect of organisational innovation. *Journal of Knowledge Management*, 24(6), 1241–1261. https://doi.org/10.1108/JKM-12-2019-0742
- Nonaka, I., & Lewin, A. Y. (1994). A Dynamic Theory of Organizational Knowledge Creation Dynamic Theory Knowledge of Organizational Creation. *International Journal of Technology Management*, *August 2015*.
- Nonaka, I., Toyama, R., Hirata, T., Bigelow, S. J., Hirose, A., & Kohlbacher, F. (2008). Leading the Knowledge-Creating Firm. *Managing Flow, December 1991*, 53–69. https://doi.org/10.1057/9780230583702_4
- Nonaka, I., Toyama, R., & Konno, N. (2000). SECI, Ba and Leadership: A Unified Model of Dynamic Knowledge Creation. *Long Range Planning*, *33*(1), 5–34. https://doi.org/10.1016/S0024-6301(99)00115-6
- Novitasari, D., Haque, M. G., Supriatna, H., Asbari, M., & Purwanto, A. (2021). Understanding the Links between Charismatic Leadership, Intrinsic Motivation and Tacit Knowledge Sharing among MSME Employees. *International Journal of Social and Management Studies*, 2(3), 1-13.
- Obrenovic, B., Jianguo, D., Tsoy, D., Obrenovic, S., Khan, M. A. S., & Anwar, F. (2020). The Enjoyment of Knowledge Sharing: Impact of Altruism on Tacit Knowledge-Sharing Behavior. *Frontiers in Psychology*, 11(July), 1–16. https://doi.org/10.3389/fpsyg.2020.01496
- Of, S. P., & Social, T. H. E. (2016). a Study of an Organization's Processes of the Social Sharing and Potential for Implementation of a Web 2.0 Principles: a Case of Service-X.
- Olatokun, W., & Nwafor, C. I. (2012). The effect of extrinsic and intrinsic motivation on knowledge sharing intentions of civil servants in Ebonyi State, Nigeria. *Information Development*, 28(3), 216–234. https://doi.org/10.1177/0266666912 438567

- Ouakouak, M. L., & Ouedraogo, N. (2019). Fostering knowledge sharing and knowledge utilization: The impact of organizational commitment and trust. *Business Process Management Journal*, 25(4), 757–779. https://doi.org/10.1108/BPMJ-05-2017-0107
- Oyemomi, O., Liu, S., Neaga, I., & Alkhuraiji, A. (2016). How knowledge sharing and business process contribute to organizational performance: Using the fsQCA approach. *JOURNAL OF BUSINESS RESEARCH*, 69(11, SI), 5222–5227. https://doi.org/10.1016/j.jbusres.2016.04.116
- Panahi, S., Watson, J., & Partridge, H. (2013). Towards tacit knowledge sharing over social web tools. *JOURNAL OF KNOWLEDGE MANAGEMENT*, *17*(3), 379–397. https://doi.org/10.1108/JKM-11-2012-0364
- Pangil, F., & Chan, J. M. (2014). The mediating effect of knowledge sharing on the relationship between trust and virtual team effectiveness. *Journal of Knowledge Management*, 18(1), 92–106. https://doi.org/10.1108/JKM-09-2013-0341
- Panteli, N., & Sockalingam, S. (2005). Trust and conflict within virtual interorganizational alliances: A framework for facilitating knowledge sharing. *Decision Support Systems*, 39(4), 599–617. https://doi.org/10.1016/j.dss.20 04.03.003
- Papa, A., Dezi, L., Gregori, G. L., Mueller, J., & Miglietta, N. (2020). Improving innovation performance through knowledge acquisition: the moderating role of employee retention and human resource management practices. *Journal of Knowledge Management*, 24(3), 589–605. https://doi.org/10.1108/JKM-09-2017-0391
- Park, J. G., & Lee, J. (2014). Knowledge sharing in information systems development projects: Explicating the role of dependence and trust. *International Journal of Project Management*, 32(1), 153–165. https://doi.org/10.1016/j.ijproman .2013.02.004

- Park, J., & Gabbard, J. L. (2018). Factors that affect scientists' knowledge sharing behavior in health and life sciences research communities: Differences between explicit and implicit knowledge. *Computers in Human Behavior*, 78, 326–335. https://doi.org/10.1016/j.chb.2017.09.017
- Park, S., & Kim, E. J. (2018). Fostering organizational learning through leadership and knowledge sharing. *Journal of Knowledge Management*, 22(6), 1408–1423. https://doi.org/10.1108/JKM-10-2017-0467
- Paroutis, S., & Al Saleh, A. (2009). Determinants of knowledge sharing using Web 2.0 technologies. *JOURNAL OF KNOWLEDGE MANAGEMENT*, 13(4), 52–63. https://doi.org/10.1108/13673270910971824
- Peralta, C. F., & Saldanha, M. F. (2014). Knowledge-centered culture and knowledge sharing: The moderator role of trust propensity. *Journal of Knowledge Management*, 18(3), 538–550. https://doi.org/10.1108/JKM-12-2013-0494
- Phong, L. B., Hui, L., & Son, T. T. (2018). How leadership and trust in leaders foster employees' behavior toward knowledge sharing. *Social Behavior and Personality*, 46(5), 705–720. https://doi.org/10.2224/sbp.6711
- Pinjani, P., & Palvia, P. (2013). Trust and knowledge sharing in diverse global virtual teams. *Information and Management*, 50(4), 144–153. https://doi.org/10.1016/j.im.2012.10.002
- Qi, C., & Chau, P. Y. K. (2018). Will enterprise social networking systems promote knowledge management and organizational learning? An empirical study. *Journal of Organizational Computing and Electronic Commerce*, 28(1), 31–57. https://doi.org/10.1080/10919392.2018.1407081
- Rafique, M., Hameed, S., & Agha, M. H. (2019). Impact of instrumental ties, tacit knowledge sharing and affective commitment on absorptive capacity—an empirical study of pharmaceutical companies. *Technology Analysis and Strategic Management*, 31(2), 125–139. https://doi.org/10.1080/09537325.2018.1490017

- Ravindran, S., & Iyer, G. S. (2014). Organizational and knowledge management related antecedents of knowledge use: The moderating effect of ambiguity tolerance. *Information Technology and Management*, 15(4), 271–290. https://doi.org/10.1007/s10799-014-0190-4
- Razmerita, L., Kirchner, K., & Nielsen, P. (2016). What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication. *JOURNAL OF KNOWLEDGE MANAGEMENT*, 20(6), 1225–1246. https://doi.org/10.1108/JKM-03-2016-0112
- Razmerita, L., Sudzina, F., & Kirchner, K. (2009). Personal knowledge management: The role of Web 2.0 tools for managing knowledge at individual and organisational levels. *Online Information Review*, *33*(6), 1021–1039. https://doi.org/10.1108/14684520911010981
- Razzaque, A., Eldabi, T., & Chen, W. (2019). Quality decisions from physicians' shared knowledge in virtual communities. *Knowledge Management Research and Practice*, 00(00), 1–13. https://doi.org/10.1080/14778238.2020.1788428
- Reagans, R., & McEvily, B. (2003). Network Structure and Knowledge Transfer: The Effects of Cohesion and Range. *Administrative Science Quarterly*, 48(2). https://doi.org/10.2307/3556658
- Reinholt, M., Pedersen, T., & Foss, N. J. (2011). Why a central network position isn't enough: The role of motivation and ability for knowledge sharing in employee networks. *Academy of Management Journal*, *54*(6), 1277–1297. https://doi.org/10.5465/amj.2009.0007
- Renzl, B. (2008). Trust in management and knowledge sharing: The mediating effects of fear and knowledge documentation. *Omega*, 36(2), 206–220. https://doi.org/10.1016/j.omega.2006.06.005
- Richards, D. (2009). A social software/Web 2.0 approach to collaborative knowledge engineering. *Information Sciences*, 179(15), 2515–2523. https://doi.org/10. 1016/j.ins.2009.01.031

- Rutten, W., Blaas Franken, J., & Martin, H. (2016). The impact of (low) trust on knowledge sharing. *Journal of Knowledge Management*, 20(2), 199–214. https://doi.org/10.1108/JKM-10-2015-0391
- Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67. https://doi.org/10.1006/ceps.1999.1020
- Ryan, R. M., & Deci, E. L. (2000b). When rewards compete with nature: The undermining of intrinsic motivation and self-regulation. *Intrinsic and Extrinsic Motivation*, 13–54.
- Santoro, G., Thrassou, A., Bresciani, S., & Giudice, M. Del. (2021). Do Knowledge Management and Dynamic Capabilities Affect Ambidextrous Entrepreneurial Intensity and Firms' Performance? *IEEE Transactions on Engineering Management*, 68(2), 378–386. https://doi.org/10.1109/TEM.2019.2907874
- Sarstedt, M., Hair Jr, J. F., Cheah, J. H., Becker, J. M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal (AMJ)*, 27(3), 197-211.
- Schiuma, G., & Schiuma, G. (2012). Managing knowledge for business performance improvement. *Journal of Knowledge Management*, 16(4), 515–522. https://doi.org/10.1108/13673271211246103
- Schneckenberg, D. (2009). Web 2.0 and the shift in corporate governance from control to democracy. *Knowledge Management Research and Practice*, 7(3), 234–248. https://doi.org/10.1057/kmrp.2009.17
- Schulz, M. (2001). The uncertain relevance of newness: Organizational learning and knowledge flows. *Academy of Management Journal*, 44(4), 661–681. https://doi.org/10.2307/3069409
- Seba, I., Rowley, J., & Delbridge, R. (2012). Knowledge sharing in the Dubai Police Force. *Journal of Knowledge Management*, 16(1), 114–128. https://doi.org/10.1108/13673271211198972

- Sedighi, M., Lukosch, S., Brazier, F., Hamedi, M., & van Beers, C. (2018). Multi-level knowledge sharing: the role of perceived benefits in different visibility levels of knowledge exchange. *Journal of Knowledge Management*, 22(6), 1264–1287. https://doi.org/10.1108/JKM-09-2016-0398
- Sedighi, M., van Splunter, S., Brazier, F., van Beers, C., & Lukosch, S. (2016). Exploration of multi-layered knowledge sharing participation: the roles of perceived benefits and costs. *Journal of Knowledge Management*, 20(6), 1247–1267. https://doi.org/10.1108/JKM-01-2016-0044
- Serenko, A., & Bontis, N. (2016). Negotiate, reciprocate, or cooperate? The impact of exchange modes on inter-employee knowledge sharing. In *Journal of Knowledge Management* (Vol. 20, Issue 4). https://doi.org/10.1108/JKM-10-2015-0394
- Seshadri, S., & Shapira, Z. (2003). The flow of ideas and timing of evaluation as determinants of knowledge creation. *Industrial and Corporate Change*, 12(5), 1099–1124. https://doi.org/10.1093/icc/12.5.1099
- Shao, B., Cardona, P., Ng, I., & Trau, R. N. C. (2017). Are prosocially motivated employees more committed to their organization? The roles of supervisors' prosocial motivation and perceived corporate social responsibility. *Asia Pacific Journal of Management*, 34(4), 951–974. https://doi.org/10.1007/s10490-017-9512-5
- Shao, Z., Feng, Y., & Wang, T. (2017). Charismatic leadership and tacit knowledge sharing in the context of enterprise systems learning: the mediating effect of psychological safety climate and intrinsic motivation. *Behaviour and Information Technology*, *36*(2), 194–208. https://doi.org/10.1080/0144929X.2016.1221461
- Simeonova, B. (2018). Transactive memory systems and Web 2.0 in knowledge sharing:

 A conceptual model based on activity theory and critical realism. *Information Systems Journal*, 28(4), 592–611. https://doi.org/10.1111/isj.12147
- Singh, J. B., Chandwani, R., & Kumar, M. (2018). Factors affecting Web 2.0 adoption: exploring the knowledge sharing and knowledge seeking aspects in health care professionals. *Journal of Knowledge Management*, 22(1), 21–43. https://doi.org/10.1108/JKM-08-2016-0320

- Smaliukienė, R., Bekešienė, S., Chlivickas, E., & Magyla, M. (2017). Explicating the role of trust in knowledge sharing: a structural equation model test. *Journal of Business Economics and Management*, 18(4), 758–778. https://doi.org/10.3846/16111699.2017.1317019
- Song, M., Yang, M. X., Zeng, K. J., & Feng, W. (2020). Green Knowledge Sharing, Stakeholder Pressure, Absorptive Capacity, and Green Innovation: Evidence from Chinese Manufacturing Firms. *Business Strategy and the Environment*, 29(3), 1517–1531. https://doi.org/10.1002/bse.2450
- Soto-Acosta, P., Perez-Gonzalez, D., & Popa, S. (2014). Determinants of Web 2.0 technologies for knowledge sharing in SMEs. *Service Business*, 8(3), 425–438. https://doi.org/10.1007/s11628-014-0247-9
- Stea, D., Foss, N. J., & Christensen, P. H. (2015). Physical separation in the workplace: Separation cues, separation awareness, and employee motivation. *European Management Journal*, *33*(6), 462–471. https://doi.org/10.1016/j.emj.2015.08.003
- Stenius, M., Hankonen, N., Haukkala, A., & Ravaja, N. (2015). Understanding knowledge sharing in the work context by applying a belief elicitation study. *JOURNAL OF KNOWLEDGE MANAGEMENT*, 19(3), 497–513. https://doi.org/10.1108/JKM-12-2014-0523
- Sun, Y., Zhou, X., Jeyaraj, A., Shang, R. A., & Hu, F. (2019). The impact of enterprise social media platforms on knowledge sharing: An affordance lens perspective. *Journal of Enterprise Information Management*, 32(2), 233–250. https://doi.org/10.1108/JEIM-10-2018-0232
- Suppiah, V., & Sandhu, M. S. (2011). Organisational culture's influence on tacit knowledge-sharing behaviour. *Journal of Knowledge Management*, *15*(3), 462–477. https://doi.org/10.1108/13673271111137439
- Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, *17*(SUPPL. WINTER), 27–43. https://doi.org/10.1002/smj.4250171105

- Tangaraja, G., Maimunah, I., Rasdi, R. M., & Samah, B. A. (2015). Fostering knowledge sharing behaviour among public sector managers. *Journal of Knowledge Management*, 19(1), 121–140.
- Thomas, A., & Gupta, V. (2021a). Social Capital Theory, Social Exchange Theory, Social Cognitive Theory, Financial Literacy, and the Role of Knowledge Sharing as a Moderator in Enhancing Financial Well-Being: From Bibliometric Analysis to a Conceptual Framework Model. *Frontiers in Psychology*, *12*(May), 1–16. https://doi.org/10.3389/fpsyg.2021.664638
- Thomas, A., & Gupta, V. (2021b). Tacit knowledge in organizations: bibliometrics and a framework-based systematic review of antecedents, outcomes, theories, methods and future directions. *Journal of Knowledge Management, ahead-of-p*(ahead-of-print). https://doi.org/10.1108/jkm-01-2021-0026
- Thomas, A., & Gupta, V. (2021c). The role of motivation theories in knowledge sharing: an integrative theoretical reviews and future research agenda. *Kybernetes*. https://doi.org/10.1108/K-07-2020-0465
- Tohidinia, Z., & Mosakhani, M. (2010). Knowledge sharing behaviour and its predictors. *Industrial Management and Data Systems*, 110(4), 611–631. https://doi.org/10. 1108/02635571011039052
- Tsai, M. T., Chang, H. C., Cheng, N. C., & Lien, C. C. (2013). Understanding IT professionals' knowledge sharing intention through KMS: A social exchange perspective. *Quality and Quantity*, 47(5), 2739–2753. https://doi.org/10.1007/s 11135-012-9685-4
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41(4), 464–476. https://doi.org/10.2307/257085
- Tsai, Y. H., Ma, H. C., Lin, C. P., Chiu, C. K., & Chen, S. C. (2014). Group social capital in virtual teaming contexts: A moderating role of positive affective tone in knowledge sharing. *Technological Forecasting and Social Change*, 86, 13–20. https://doi.org/10.1016/j.techfore.2013.08.015

- Tu, Y., Zhang, Y., Lu, X., & Wang, S. (2020). Differentiating two facets of trust in colleagues: How ethical leadership influences cross-team knowledge sharing. *Leadership and Organization Development Journal*, 41(1), 88–100. https://doi.org/10.1108/LODJ-06-2019-0260
- Uhl-bien, M., & Maslyn, J. M. (2003). Reciprocity in Manager-Subordinate Relationships. *Journal of Management*, 29(4), 511–532. https://doi.org/10.1016/S0149-2063
- Uzzi, B., & Gillespie, J. J. (2002). Knowledge spillover in corporate financing networks: Embeddedness and the firm's debt performance. *Strategic Management Journal*, 23(7), 595–618. https://doi.org/10.1002/smj.241
- Vallerand, R. J. (2004). Intrinsic and Extrinsic Motivation in Sport. *Encyclopedia of Applied Psychology, Three-Volume Set*, 427–435. https://doi.org/10.1016/B0-12-657410-3/00835-7
- Vinding, A. L. (2006). Economics of Innovation and New Technology Absorptive Capacity and Innovative Performance: A human Capital Approach. *Econ. Innov. New Techn*, *15*(45), 507–517.
- Wang, H. K., Tseng, J. F., & Yen, Y. F. (2012). Examining the mechanisms linking guanxi, norms and knowledge sharing: The mediating roles of trust in Taiwan's high-tech firms. *International Journal of Human Resource Management*, 23(19), 4048–4068. https://doi.org/10.1080/09585192.2011.654234
- Wang, J., Yang, J., & Xue, Y. (2017). Subjective well-being, knowledge sharing and individual innovation behavior: The moderating role of absorptive capacity. Leadership and Organization Development Journal, 38(8), 1110–1127. https://doi.org/10.1108/LODJ-10-2015-0235
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 20(2), 115–131. https://doi.org/10.1016/j.hrmr.2009.10.001

- Wang, W.-T., & Hou, Y.-P. (2015). Motivations of employees' knowledge sharing behaviors: A self-determination perspective. *INFORMATION AND ORGANIZATION*, 25(1), 1–26. https://doi.org/10.1016/j.infoandorg.2014.11.001
- Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS QUARTERLY*, 29(1), 35–57. https://doi.org/10.2307/25148667
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66(5), 297–333. https://doi.org/10.1037/h0040934
- Wiewiora, A., & Murphy, G. (2015). Unpacking "lessons learned": Investigating failures and considering alternative solutions. *Knowledge Management Research and Practice*, *13*(1), 17–30. https://doi.org/10.1057/kmrp.2013.26
- Wu, W. L., Lin, C. H., Hsu, B. F., & Yeh, R. S. (2009). Interpersonal trust and knowledge sharing: Moderating effects of individual altruism and a social interaction environment. *Social Behavior and Personality*, *37*(1), 83–94. https://doi.org/10.2224/sbp.2009.37.1.83
- Yan, Y., Davison, R. M., & Mo, C. (2013). Employee creativity formation: The roles of knowledge seeking, knowledge contributing and flow experience in Web 2.0 virtual communities. *Computers in Human Behavior*, 29(5), 1923–1932. https://doi.org/10.1016/j.chb.2013.03.007
- Yan, Y., Zha, X., & Yan, M. (2014). Exploring employee perceptions of Web 2.0 virtual communities from the perspective of knowledge sharing. *Aslib Journal of Information Management*, 66(4), 381–400. https://doi.org/10.1108/AJIM-08-2013-0070
- Yang, S.-C., & Farn, C.-K. (2009). Social capital, behavioural control, and tacit knowledge sharing-A multi-informant design. *INTERNATIONAL JOURNAL OF INFORMATION MANAGEMENT*, 29(3), 210–218. https://doi.org/10.1016/j.iiinfomgt.2008.09.002

- Yang, S. C., & Farn, C. K. (2009). Social capital, behavioural control, and tacit knowledge sharing-A multi-informant design. *International Journal of Information Management*, 29(3), 210–218. https://doi.org/10.1016/j.ijinfomgt. 2008.09.002
- Ye, P., Liu, L., & Tan, J. (2021). Influence of knowledge sharing, innovation passion and absorptive capacity on innovation behaviour in China. *Journal of Organizational Change Management*. https://doi.org/10.1108/JOCM-08-2020-0237
- Yen, Y.-F., Tseng, J.-F., & Wang, H.-K. (2014). Exploring the mediating role of trust on the relationship between guanxi and knowledge sharing: a social network perspective. *Asia Pacific Journal of Human Resources*, *52*(2), 173–192. https://doi.org/10.1111/j.1744-7941.2012.00034.x
- Yen, Y. F., Tseng, J. F., & Wang, H. K. (2015). The effect of internal social capital on knowledge sharing. *Knowledge Management Research and Practice*, 13(2), 214– 224. https://doi.org/10.1057/kmrp.2013.43
- Yoo, S. J., Sawyerr, O., & Tan, W. L. (2016). The Mediating Effect of Absorptive Capacity and Relational Capital in Alliance Learning of SMEs. *Journal of Small Business Management*, *54*, 234–255. https://doi.org/10.1111/jsbm.12299
- Yuting Xiao, Xi Zhang, & Pablos, P. O. de. (2017). How does individuals' exchange orientation moderate the relationship between transformational leadership and knowledge sharing? *Journal of Knowledge Management*. https://doi.org/10.1108/JKM-03-2017-0120
- Zboralski, K. (2009). Antecedents of knowledge sharing in communities of practice. *Journal of Knowledge Management*, 13(3), 90–101. https://doi.org/10.1108/13673270910962897
- Zhang, L., & He, J. (2016). Critical Factors Affecting Tacit-Knowledge Sharing within the Integrated Project Team. *Journal of Management in Engineering*, 32(2), 04015045. https://doi.org/10.1061/(asce)me.1943-5479.0000402

- Zhang, X. B., Lin, C. H., Chung, K. C., Tsai, F. S., & Wu, R. T. (2019). Knowledge sharing and co-opetition: Turning absorptive capacity into effectiveness in consumer electronics industries. *Sustainability (Switzerland)*, 11(17). https://doi.org/10.3390/su11174694
- Zhang, X. J., Jinpeng, X., & Khan, F. (2020). The Influence of Social Media on Employee's Knowledge Sharing Motivation: A Two-Factor Theory Perspective. *SAGE Open*, *10*(3). https://doi.org/10.1177/2158244020942495
- Zhang, X., & Jiang, J. Y. (2015). With whom shall I share my knowledge? A recipient perspective of knowledge sharing. *Journal of Knowledge Management*, 19(2), 277–295. https://doi.org/10.1108/JKM-05-2014-0184
- Zhang, Z., & Sundaresan, S. (2010). Knowledge markets in firms: Knowledge sharing with trust and signalling. *Knowledge Management Research and Practice*, 8(4), 322–339. https://doi.org/10.1057/kmrp.2010.22
- Zhao, J., Ha, S., & Widdows, R. (2016). The influence of social capital on knowledge creation in online health communities. *Information Technology and Management*, 17(4), 311–321. https://doi.org/10.1007/s10799-014-0211-3
- Zhao, L., Detlor, B., & Connelly, C. E. (2016a). Sharing Knowledge in Social Q&A Sites: The Unintended Consequences of Extrinsic Motivation. *Journal of Management Information Systems*, 33(1), 70–100. https://doi.org/10.1080/07421222.2016.1172459
- Zhao, L., Detlor, B., & Connelly, C. E. (2016b). Sharing Knowledge in Social Q&A Sites: The Unintended Consequences of Extrinsic Motivation. *JOURNAL OF MANAGEMENT INFORMATION SYSTEMS*, 33(1), 70–100. https://doi.org/10.1080/07421222.2016.1172459
- Zhao, S., Jiang, Y., Peng, X., & Hong, J. (2020). Knowledge sharing direction and innovation performance in organizations: Do absorptive capacity and individual creativity matter? *European Journal of Innovation Management*, 24(2), 371–394. https://doi.org/10.1108/EJIM-09-2019-0244

APPENDIX

REFERENCES

Details of Published papers

Details of Publications

Sno	Title of paper	Name of the Authors	Name of the Journal	Indexation/Ranking of journal	Published/Acce pted	Publisher
1	Tacit knowledge in organizations: bibliometrics and a framework-based systematic review of antecedents, outcomes, theories, methods, and future directions"	Asha Thomas and Vikas Gupta	Journal of knowledge Management	SSCI - indexed A-ranked journal (ABDC) ABS listed Impact Factor - 8.72	Published	Emerald Publisher
2	"The role of contemporary motivation theories in knowledge sharing: An integrative literature review and future research agenda"	Asha Thomas and Vikas Gupta	Kybernetes	SCIE –Indexed ABDC listed ABS listed Impact Factor - 2.23	Published	Emerald Publisher
3	Social capital theory, social exchange theory, social cognitive theory, financial literacy and role of knowledge sharing as a moderator in enhancing financial well-being: From bibliometric analysis to a conceptual framework mode	Asha Thomas and Vikas Gupta	Frontiers in Psychology	SSCI Impact Factor - 2.23	Published	Frontiers
4	Fostering Tacit Knowledge Sharing and Innovative Work Behavior: An Integrated Theoretical View	Vikas Gupta and Asha Thomas	IJMFA	ESCI ABDC- B ranked ABS listed	Published	Inderscience Publisher
5	Predictors of knowledge sharing in public sector organizations: a proposed model	Vikas Gupta and asha Thomas	IJPSPM	Scopus	Accepted	Inderscience Publisher

Participation in International Conferences

S. No	Complete Name of the conference	Organizers of conference	Date	Venue of conference
1	International Conference on Business and Management	DTU	29-30 March , 2019	DTU
2	Transforming Organizations through Flexible Systems Management "	GLOGIFT 17	11-13 December , 2017	DTU

List of Information Technology Organizations

Org Name	Fortune 500 Ranking			
Juniper Network	19			
Cognizant Technology Solution	9			
Capgemini Technology Services	110			
Accenture	279			
IBM	38			
Larsen & Toubro (L&T)	12			
Tech Mahindra	48			
MindTree	208			
Wipro Technology	29			
Tata Consultancy Services	8			
HCL Technology	28			
Infosys	18			
Credit Suisse	150			
UBS AG	125			
Mphasis	161			