

Developing Expertise & Expert Teams for High Performance: Utilizing the Expert-to-
Expert Practice Framework

by

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A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Approved January 2023 by the
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ARIZONA STATE UNIVERSITY

May 2023

ABSTRACT

The main purpose of this action research study was to understand the most appropriate methods to replicate expertise and expert performance in an ever-changing and dynamic global organization. It was also meant to empower team members in becoming more decisive experts within their respective fields/domains. In this study, ten (10) “snackable” videos were created to support microlearning on expertise. Interviews were conducted with experts across Microsoft spanning the United States, Latin America, and Europe. Using knowledge management theory, deliberate practice, and organizational learning theory helped create the framework. Phenomenological inquiry, narrative inquiry, and digital storytelling supported the enactment of the study. The Expert-to-Expert Practice Framework (E2EPF) is a capability that was created to connect outsider knowledge with internal requirements using sensemaking, knowledge creation, and team building. It was developed to address the many challenges of building and fostering expertise within a hybrid workplace. The study was conducted during a six-month period starting from March 2022 to September 2022. Ten Microsoft experts, six team members, and one leader participated in this study that included interviews, expert panel discussions, surveys, and the development of the next generation of expert profiles. The qualitative data from this study provides a much richer understanding of the phenomenon of expertise within a global workplace. Insider experts identified that the E2EPF was able to create a differentiated experience for their practice within a relatively short time frame. Four phenomenological themes and the essence of expertise emerged from the data which indicates the effective utilization of the practice framework.

DEDICATION

I would like to dedicate this dissertation to the many individuals who have supported me throughout my personal and professional journey. I would like to dedicate this dissertation to my immediate family: my loving and devoted spouse, Eronica, and our three children, Aronia, Shaun-Jay, and Sofoy. My family has always been there for me throughout the many sleepless nights where I have spent most of my time locked away inside the tech-office writing papers for hours. They truly have brought love and affection into my life and have cheered me on to keep going one day at a time.

I dedicate this dissertation to my nephews who have kept me motivated each time we speak about the next steps. This includes Tishoy Brown and Chris McLean. I dedicate this dissertation to my friends who have inspired me in so many ways throughout the years. Starting with Reeza Ali, Daniel Kore, Sally Kore, Fitzroy Roswell, Melbourne & Melvin Cunningham, and Garfield Samuels.

Finally, I dedicate this dissertation to the many coworkers and team members who have made it possible for me by providing their ongoing support. These individuals have been invaluable in helping me witness something unique and view the world from a different perspective. Many thanks to, my manager - Martin Hollinworth. And to all the folks that were there from the beginning which includes, Shrikanth Balla, Jill Brecheisen, Jana Elliott, Sunil Kaushik, Allen Mecum, Andrea Todd, and Adrian Vanreyk, just to name a few. I must also extend my thanks to the ten experts within Microsoft who participated in the intervention. In addition, I also want to thank the seven volunteers from AnswersHub including the LT member. I am truly grateful and honored to have had your support while I find my way.

ACKNOWLEDGEMENTS

These acknowledgments only begin to express my gratitude for all those individuals who have provided immeasurable support and encouragement throughout this doctoral experience. Certainly, I want to offer appreciation to my committee for their advice in this study and for taking the time to serve as committee members. Massive thanks go to my committee members, Dr. Leigh Graves Wolf, Dr. Allison Hall, and Dr. Mark Fitzloff. It has been an absolute pleasure to work alongside Dr. Wolf. Her calm temperament, grace, wisdom, expansive knowledge of qualitative methods and compassion for people have made a world of difference throughout my journey. She embodies what it means to be someone who just cares about another individual no matter what. I also want to say it has been great working with Dr. Hall who has been instrumental in sharing her expertise and experience with me. In addition, I feel honored to have had the opportunity to work with Dr. Fitzloff who has been a transformational, innovative, and thought-provoking leader. He has provided so many new and different perspectives that have allowed me to think on a much-elevated level about the outcomes and life in general.

I also want to thank other faculty members who have been there during the early stages. Thank you for your additional support, guidance, and motivation. Undoubtedly, it would not be a celebration without acknowledging the awesome gold cohort and the Dearest LSC group. You folks have been wonderful and generous with giving of your time and voice. I could not have survived so far without your push and support.

Special thanks to the reviewers and readers who have given so much of their time and effort. Many thanks to Sally Kore who has provided her guidance and inspiration on

this journey. You have written a wonderful note at the back of the document that I will always remember. To Srikanth Ayyagari, thank you so much for carving out your personal time to provide feedback and suggestions making this applicable to our organization.

To my family and friends. This dissertation was not created in isolation, nor was it a solo endeavor. Rather, it was supported by a massive cast of characters that worked in the background around the clock. To these people, I say a massive thank you for your uncompromising support and guidance. To my wife (Eronica) and children (Aronia, Shaun-Jay, and Sofoy), you have been the source of inspiration. Indeed, you have kept watch over me throughout these many years. I have conducted my backyard research and experiment with all of you. This has truly been a strong partnership between us. I also want to acknowledge my extended family, who have always believed in their little brother making a difference in this world. My friends across the globe have never stopped believing in me. To the great team at Microsoft, thank you for being part of this incredible journey that has brought joy and excitement to me.

TABLE OF CONTENTS

	Page
LIST OF TABLES	ix
LIST OF FIGURES	x
CHAPTER	
1 INTRODUCTION AND PURPOSE OF THE STUDY.....	1
Organization of this Dissertation.....	1
Local Context.....	3
Alignment to the Worldwide Learning (WWL) & Connected Communities....	5
Directives from Commercial Systems & Business Intelligence (CSBI).....	6
Situated Context.....	8
Challenges and Opportunities for Improvements	18
Larger Context	22
Digital Skills in the 21 st Century Knowledge Society & Digital Economy.....	23
Technology and Innovation Trends in the United States and Washington.....	24
New Technological Landscape for Knowledge Management (KM).....	25
Bridging the Gap with Knowledge Management and Knowledge Sharing.....	27
Critical Thoughts Influencing the Research Study	28
Previous Cycles of Action Research.....	32
Research Questions.....	37
Purpose of Study	38

CHAPTER	Page
2 SCHOLARLY LITERATURE AND THEORETICAL PERSPECTIVES	39
Introduction to Literature	39
Theoretical Framework Considerations	40
Knowledge Management Theory	41
Deliberate Practice	45
Organizational Learning Theory	49
Leadership & Coaching Principles	56
Phenomenological Inquiry Informing the Research Study	61
Aligning the Problem, Theory, and Intervention	67
3 RESEARCH METHODOLOGY	71
Action Research	71
Boundaries of the Inquiry	73
The Setting of the Research Study	76
Research Participants	77
Role of the Researcher	78
Intervention: Expert-to-Expert Practice Framework (E2EPF)	80
Data Collection	88
Data Analysis Approach & Procedure	94
Data Management Supporting the Research	96
Ethical Considerations	99

CHAPTER	Page
Timeline and Procedure	100
4 ANALYSIS AND RESULTS.....	103
Background Characteristics	104
Data Preparation Used for Analysis.....	109
Coding Using MAXQDA (including Codebook Creation)	118
Study Results	138
Explanation of Research Findings	174
5 DISCUSSION	184
Outcomes Related to Previous Research and Theory	185
Utility of the Expert-to-Expert Practice Framework (E2EPF)	197
Boundaries of the Study.....	203
Lessons Learned.....	206
Implications for Practice	210
Implications for Future Research.....	213
Conclusion	216
REFERENCES	219
APPENDIX	
A REQUEST TO CONDUCT THE RESEARCH STUDY.....	229
B INVITATION INTEREST FOR OUTSIDER EXPERT	231
C INVITATION REQUEST FOR INSIDER EXPERTS.....	233

APPENDIX	Page
D IRB RECRUITMENT CONSENT LETTER	236
E INTERVIEW QUESTIONS.....	239
F DIGITAL WEEKLY REFLECTION JOURNALS	242
G RESEARCHER SELF-REFLECTION JOURNAL	244
H INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS.....	246
I OUTSIDER SCHEDULING TABLE	249
J INSIDER EXPERT'S PARTICIPATION ACCEPTANCE.....	252
K MEMBER CHECKING.....	257
L LEARNING SERIES WORKSHOP SCHEDULE.....	267
M IRB APPROVAL.....	268

LIST OF TABLES

Table	Page
1. Data Collected Matrix.....	93
2. Research Data Sources Matrix.....	95
3. Tools for Data Management in the Research Study.....	97
4. Research Study Timeline.....	101
5. Outsider Experts Demographic.....	106
6. Insider Experts Demographic.....	108
7. Expert-to-Expert.mx22 Project Information.....	120
8. Composition on Expertise From the Microsoft Outsider Experts.....	128
9. Essence of Expertise and Learning Themes.....	170
10. From - To Exploration Expert Profile.....	199
11. Expertise Rating Scale and Definition.....	201

LIST OF FIGURES

Figure	Page
1. Microsoft is a Nested Organization Structure.....	4
2. Sphere of Influence Within MCAPS Ecosystem.....	8
3. 3 Ps - People, Process, Platform Framework.....	13
4. Action Research Cycle 1 Concurrent Model.....	35
5. Nonaka and Takeuchi's Knowledge Spiral.....	43
6. The Five Principles of Deliberate Practice.....	46
7. Four Elements of Organizational Learning.....	52
8. Microsoft Management Excellence Model.....	57
9. Microsoft Leadership Principles.....	58
10. Authentic Leadership Model.....	59
11. Phenomenological Interpretive Approach.....	62
12. Conceptual Map on Theoretical Perspectives.....	70
13. Action Research Stages.....	72
14. Expert-to-Expert Practice Framework (E2EPF).....	81
15. Codes Applied to the Onscreen Text.....	112
16. Poll Everywhere with Weekly Survey Questions.....	113
17. Expert-to-Expert Assessment in Qualtrics.....	114
18. Member Checklist List.....	116
19. Confirmation From an Outsider Expert.....	116

Figure	Page
20. Scrap notes During the Outsider Expert Interview	121
21. Profile Introduction Using Attribute Coding in MAXQDA	122
22. Code System Showing Phenomenological Analysis Within MAXQDA	124
23. Process Coding Applied to the Interview Data	126
24. Summary Explorer for the Outsider Experts Composite	127
25. Memos in MAXQDA Utilized by the Researcher	132
26. Code Cloud within MAXQDA for Defining an Expert	133
27. Two Cases Model Comparison for Code Landscaping.....	134
28. Logbook Entries Within MAXQDA.....	137
29. Expert-to-Expert Practice Framework with Deliverables.....	183
30. E2EPF Lived Experiences Numbers.....	198

GLOSSARY OF TERMS

This list provides the reader with important definitions that have been used throughout the research process and research study from the researcher's perspective.

Terminology	Definition
ADKAR change model	Awareness, Desire, Knowledge, Ability, and Reinforcement (ADKAR) is a popular change management model to facilitate the implementation of change (Hiatt, 2006). Within Microsoft, we have multiple change management teams who have embraced the model to allow them to accelerate various change motions.
Action Research (AR)	Action research is a systematic process of inquiry that allows researchers to investigate their local context in a collaborative manner (Mertler, 2019). The foundation of action research concentrates on change that can benefit those directly involved with the process. It can take both an iterative and cyclical process that entails four stages: planning, acting, developing, and reflecting. Each of these stages requires the researcher to work with individuals within their environment to find solutions that could potentially address problems and challenges.
Critical Theory (CT)	Critical theory is the philosophical way of critiquing society, culture, and systems of power. This study is being used as an approach to frame my thinking about the world and the political, economic, and social structures that support it.
Deliberate practice	A theoretical framework that explains the concept of expertise and experts within any environment. Deliberate practice is about an individual getting out of his or her comfort zone to learn a new idea or concept that might make them uncomfortable due to the nature of being stretched in the topic. In addition, it is about focus, goal setting, and driving towards high performance through dedication.
Digital economy	It is the infrastructure that allows for digital transactions to operate over the computer network supported by e-commerce and other information and communication technology (ICT) related services allowing businesses around the globe to engage in digital trade over the Internet.

Terminology	Definition
Digital transformation	The adoption of digital technologies across all aspects of an organization. During the period of technological revolution, businesses are finding different modes to integrate technology in every area to drive effectiveness and efficiency while counting on these to save cost and increase productivity. Microsoft is both leading and delivering digital transformational initiatives for the company and its thousands of enterprise and government customers around the world.
Expertise	A demonstrated skill or form of knowledge within a given domain. Expertise shows that an individual has mastered not only the fundamentals of the domain but also achieve significant competencies within a field. Exercising expertise also is deeply connected with providing trusted information and knowledge within a given environment.
Expert performance	The methods by which experts perform within their domain. The expectation is that through deliberate practice and commitment, experts can achieve immense high performance.
Full-Time Employee (FTE)	Employees who are full-time staff members within the organization. They are paid a bi-weekly (every two weeks) salary by the company. These individuals have accountabilities of diverse functions within their areas of expertise.
Global workforce	A workplace or work environment that is distributed across the world. Individuals operate and function through different mediums, such as remotely or physically, or they may have a combination (hybrid) approach to interacting to accomplish specific goals and objectives of the organization.
Information and Communications Technology (ICT)	ICT is the unification of telecommunication and computers working together to enable the digital economy using a litany of communication devices such as the internet, computers, and mobile phones. The advent of ICT brought about globalization and interesting forms of communicating with individuals and businesses around the globe.

Terminology	Definition
Intervention	A process or specific action that allows for a change to happen within the environment. Hence, intervention is about applying a different way of thinking of addressing problems of practice. In implementing the particular action, it is the intent to bring about some form of meaningful change for those individuals impacted by it.
Knowledge, skills, and abilities (KSAs)	KSAs are the competencies that experts within our organization exhibit. Across multiple disciplines, individuals aligned to a particular role will have a defined set of knowledge, skills, and abilities that they must gain through on-the-job training, learning by doing, learning from peers, and work experiences.
Knowledge society	The concept of how society is interlinked with information technology and science as a mechanism to foster societal changes and engagement. Within the knowledge society, information is the driving force that allows for improvement across different human conditions.
Knowledge worker	The modern-day worker is connected to a wealth of knowledge, skills, and abilities that enable them to drive business results. Knowledge is the main capital for these individuals who use this asset to accomplish their career aspirations and deliver business results. At the core would be learning and innovation for individuals who identified themselves as part of the knowledge workforce.
Lived experiences	A first-hand engagement and way of existing. Sharing lived experiences is about showcasing personal knowledge of a particular event or activity that links directly to how an individual might view, perceive, and interpret the story. In addition, it provides references to how people engage with the world around them.

Terminology	Definition
Objectives and key results (OKRs)	OKR is an industry standard for measuring success within an organization (Zhou & He, 2018). Objectives are created based on the priorities of the business and demonstrated through a set of key results of measurement criteria. OKRs have been the foundational tool for discussing the success of any program, initiative, or project across teams and organizations.
Remote workforce	An environment that entails individuals who are working predominantly from a location that is not within their main office/building. Most workers have decided to work directly from home or another secondary location. In a hybrid work environment, more and more workers are opting to work in a remote arrangement.
Subject matter experts (SMEs)	SMEs have demonstrated knowledge and experience within their respective area of expertise. Throughout Microsoft, we have SMEs that are aligned to specific technical domains, whereby they are responsible for providing relevant support to the business. People within the organization look to these individuals for guidance, leadership, direction, the decision on the way forward, technical knowledge, best practices, and influencing stakeholders on investment capacity and prioritization.

CHAPTER 1

INTRODUCTION AND PURPOSE OF THE STUDY

*The basic economic resource
– the means of production –
is no longer capital, nor natural resources, nor labor.
It is and will be knowledge.
~ Peter Drucker, Management consultant*

Organization of this Dissertation

In the era of the knowledge economy, companies are cognizant of the fact that expertise is an important asset for their overall success, competitiveness, and survival. Hence, the need to transform their environment to foster and mature individuals into becoming high-performing experts is necessary. This study explores the different ways in which an organization can promote expertise and expert performance that can be replicated through consistent behaviors and deliberate practice.

This five-chapter dissertation is structured as follows: In chapter one, background information provides both the local and global context of the research. Within this chapter, the situational context and significance of the study are explained in relation to the organization. Additionally, previous research cycles, research questions, and the problem of practice under exploration are discussed at length.

In chapter two, relevant scholarly literature and theoretical framework considerations are presented, which guide the study. An overview is provided for the theoretical framing from the perspective of: (a) knowledge management theory (KMT), (b) deliberate practice framework (DPF), and (c) organizational learning theory (OLT)

which are all theoretical components of the study. Phenomenological interpretive inquiry along with its relevance to my research study is discussed and contextualized. In addition, a discussion on the implications of previous research studies and how these might influence or impact this research study will be covered.

For chapter three, the focus is on the research methods, methodology, and design of the intervention. A roadmap is provided highlighting the purpose of using the action research method. The intervention is described along with the applicability in detail and reference to previously completed research cycles that have helped inform some of the essential decisions on the methods. Lastly, a discussion of how data collection and data analysis were conducted that is aligned with the research questions. Also, the timeline supporting the research study is discussed.

In chapter four, the research results are presented for analysis and interpretation. Within this section, data collection tools, and data analysis procedures applied in this study are discussed. The chapter addresses the primary data analysis techniques used for the phenomenological interviews and bracketing. In this section, information is provided on interviews, observations, reflections from participants and the researcher, Expert-to-Expert self-assessment along with general feedback received on the learning series.

Finally, chapter five provides an opportunity to solidify the entire research study from a conclusion perspective. In this section, exploration of bringing the theories together to further connect to the phenomenological explanations of expertise and expert performance. Reflection on the boundaries of the study, implications for practice, lessons learned throughout the research process, and opportunities for future research are highlighted.

Local Context

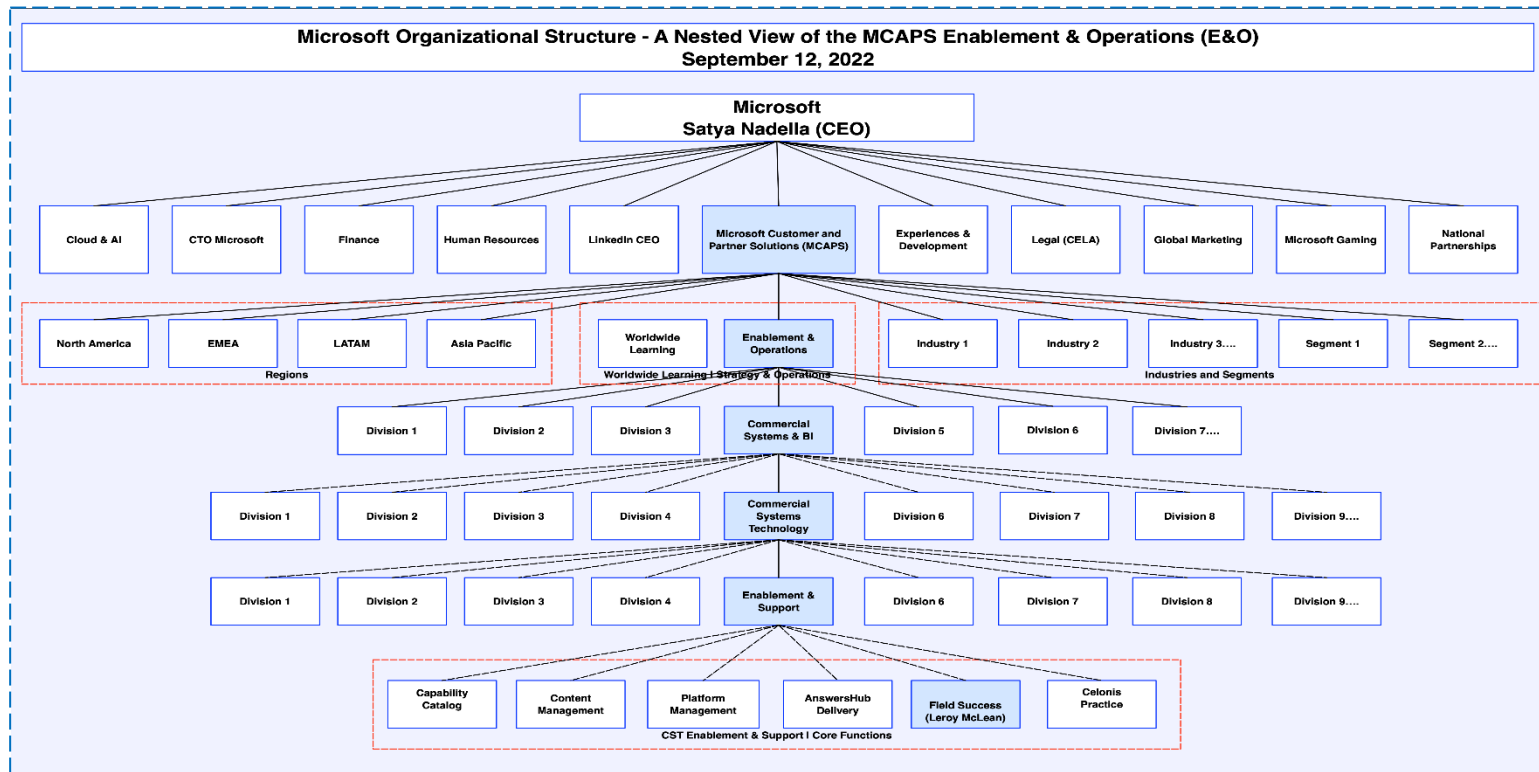
Microsoft—located in Redmond, Washington—is a multinational corporation (MNC) with offices in over 190 countries. The company has been in existence since 1985. They have been transforming over the last few years into becoming a learning organization whereby process, people, and technology are at the center (Microsoft, 2020). Like most MNCs, the internal organizations are mixed and nested with multiple leaders managing various objectives and key results (OKRs) as a method of achieving the overall goals of the company. In staying ahead of its competitors, the company has been very strategic in ensuring that knowledge and learning continue to be at the center for its customers, partners, and employees. To this end, several overarching readiness and learning initiatives operate at the global level and within individual organizations. Structurally, there is the parent company- Microsoft; one level down is Microsoft Customer and Partner Solutions (MCAPS) ¹and within this organization is Strategy & Operations²; this is followed by Commercial Systems & Business Intelligence (CSBI), which has a sub-division known as Commercial & Systems Technology (CST). Within the CST organization, there is CST Enablement & Support (CST E&S) which is responsible for the product and field support along with operational excellence on the ground; finally, within this organization is Field Success (see Figure 1) which I currently lead.

¹ Prior to July 12, 2022, the organization was extensively different. Industry Solutions was rolled up under MCAPS with the subdivision of Enterprise Operations. Under this structure, we had Business Excellence Operations (BEO) managed by a Vice President. Within the BEO organization, there was the Shared Business Operations (SBO) along with Modern Experience, Platforms, and Analytics (MXPA). MXPA Digital Operations was the old organization that my team aligned to before all the reorganization.

² As of September 12, 2022, The Strategy & Operations was moved into another org --- MCAPS Enablement and Operations.

Figure 1

Microsoft is a Nested Organization Structure³



4

³ The nested structure was first adjusted on July 12, 2022, which resulted in changes to the leadership and parent organizations for our division. Also, another reorganization occurred on September 12, 2022. The professional titles start with the CEO, then move down to EVPs - Executive Vice President, CVPs - Corporate Vice Presidents, VPs - Vice Presidents, and GMs - General Managers. Reporting to GMs are senior directors and directors. Reporting to directors would be other managers, and individual contributors (ICs).

Alignment to the Worldwide Learning (WWL) & Connected Communities

The reality is that we are dealing with five layers of a nested and interrelated organizational structure, with each having its different leaders, managers, and team structures. As one traverses through the organizational structure, readiness⁴, change management, and landing are critical for adoption and reinforcement of training to resonate with both employees and vendor resources. Once an individual becomes a full-time employee (FTE), they have a wealth of information and knowledge resources available throughout this massive global organization that they would have to learn in a relatively short amount of time. Most importantly, training is provided at various levels of the company to assist with the transition into the environment. For instance, at the corporate level, there is ongoing learning to address continued transformation, human resources development training, and compliance readiness conducted every quarter, along with numerous professional development training falling into both mandatory and optional categories. Indeed, this is about ensuring that Microsoft remains competitive by embracing ongoing learning that addresses the need for continuous improvements.

To keep track of all these various activities, employees (including our subject matter experts) must navigate multiple readiness tools such as Microsoft Viva Learning⁵, which is the company's centralized training tool. Moreover, there is also another division within MCAPS known as WWL which focuses on global communities, global technical

⁴ There are multiple resources available within the organization: AskLearning, Connected Communities, Docs.microsoft.com, Hackathon, MCAPS Academy, Microsoft Garage, Onboarding Buddy/New Hire Ramp, Viva Engage (recently announced as of July 2022), Viva Learning, and Viva Topics.

⁵ Infopedia was the readiness platform prior to June 30, 2022. During the start of the research study, Microsoft made the decision to upgrade their learning platform and solution.

learning, technical skills initiatives (TSI) aligned to employees, and other strategic learning efforts such as Learning as a Service (LaaS). In addition, WWL is also responsible for learning experiences for all employees through programs such as MCAPS Start ⁶(a global technical and sales event attended by thousands of employees, virtually or in-person), MCAPS Academy⁷, Learning Weeks, and Onboarding Reimagined.

Directives from Commercial Systems & Business Intelligence (CSBI), Commercial Systems Technology (CST), and CST Enablement & Support⁸

The direction and broader strategy for learning and readiness are established and owned by the WWL organization. However, due to scale and resource challenges, it is not possible for WWL to meet the unique business learning needs that are required within the other organizations in Microsoft. Thus, organizations such as CSBI⁹, the parent entity for CST Enablement & Support, have engaged in various initiatives around encouraging personalized learning, readiness, change management, and landing using industry-standard processes such as Awareness, Desire, Knowledge, Ability, and Reinforcement (ADKAR) model change management (Hiatt, 2006). Additionally, we have the CSBI Focus Fridays, allowing employees within the organization to use the last Friday of the month to engage in learning activities. These activities could be anything from a course

⁶ At the start of the new fiscal year beginning July 1, 2022, Microsoft made the decision to transition their readiness program. Prior to this though, the original name was Microsoft Ready which was also mainly an in-person event.

⁷ The MCAPS Academy was introduced around the July 12, 2022, time period. This is a global experience that provides employees with the opportunity to have a seamless onboarding experience into the company.

⁸ Prior to July 12, 2022, we were aligned to the Shared Business Operations (SBO), Modern Experiences Platforms & Analytics (MXPA), and MXPA Digital Operations.

⁹ The equivalent organization before July 12, 2022, was Shared Business Operations (SBO) as the parent entity for MXPA Digital Operations.

on digital mindset, understanding of robotic process automation (RPA) to learning about new cutting-edge technology such as blockchain. There is no set agenda or limits on what an individual can add to their learning plan. Aside from this, Learning Calls are hosted on a regular basis¹⁰ and are intended to highlight the work of team members. There are other parts of the company that offers opportunities to learn and grow, such as Connected Communities, CST Showcase & Learning¹¹, and Leading-Edge Delivery Learning.

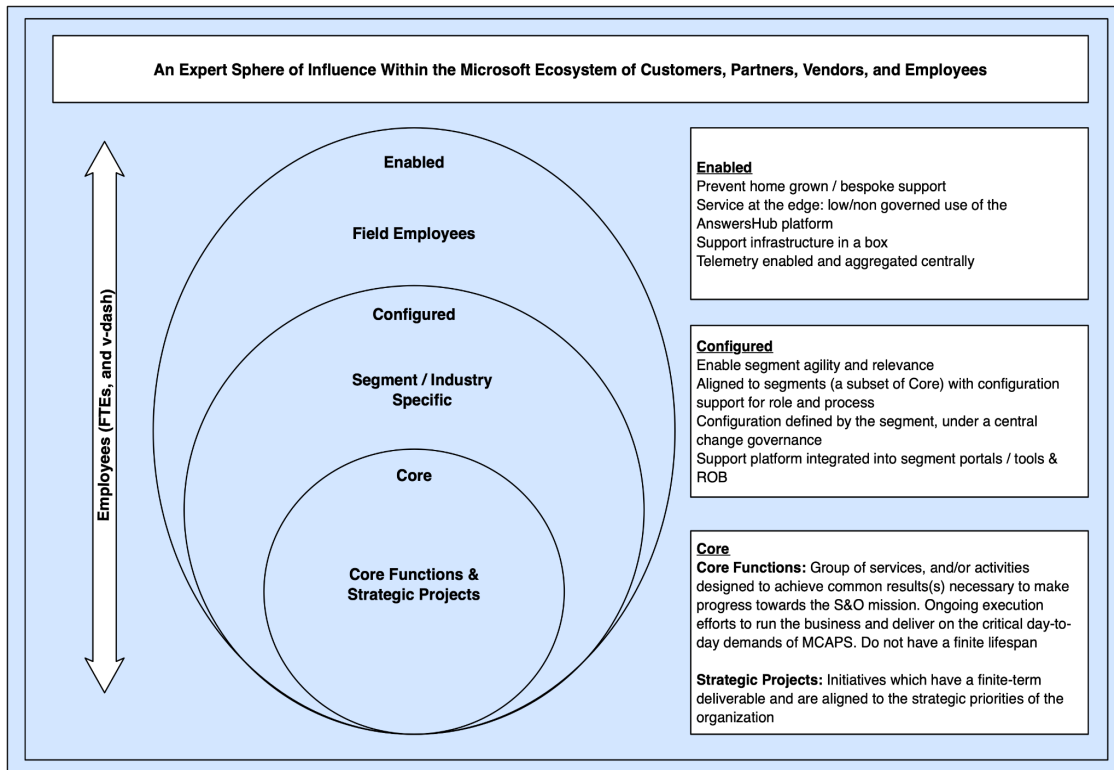
While most of the aforementioned opportunities are more planned learning and readiness, there are also unplanned and community-based learnings. As an example of a community of practice, the Service Center Learning Lab provides facilitated learning from within the team. Members are encouraged to share any new learnings or challenges within their job. The purpose of this learning lab is to foster innovative ideas through pilots, promote Show and Tell sessions, and generate a learning culture. Some of the challenges, though, include team members from Field Success and AnswersHub Delivery are not part of this community due to numerous factors, including organization boundaries and time-zone differences. Recently, we updated our operating and engagement model to be more responsive to global changes and new business initiatives. The result was the creation of the sphere of influence structure. See Figure 2 on the sphere of influence within MCAPS to get a better understanding of the interconnected nature of the organization along with partner relationships.

¹⁰ SBO Learning Calls were hosted on Wednesdays and provided the same level of experience and knowledge sharing.

¹¹ Prior to the extensive reorganization, the MXPA Learning included Show and Tell readout by experts and leaders.

Figure 2

*Sphere of Influence Within MCAPS Ecosystem*¹²



Situated Context

CST Enablement & Support¹³ is a global support organization within Microsoft that is accountable for delivering business impact and value through a structured series of capabilities: (a) transformational enablement, (b) self-help management, (c) incident mitigation and management, (d) problem management, (e) value optimization, and (f) field listening and engagement. While customer experience and delivering excellent

¹² The Sphere of Influence was designed by leaders within the CST Enablement & Support organization.

¹³ As of August 2022, the purpose is to be a strategic capability providing efficient & innovative operational support for MCAPS transformation that drives incremental customer experience. CST Enablement & Support has three big bets for FY23: (a) Single Support Model consolidation, (b) Single Capability Catalog with enabled process mining, and (c) Transformation Enablement to surface investment and prioritization opportunities to leadership.

service are top priorities for CST Enablement & Support, being able to keep up with the rapidly changing environment across people, processes, and platforms, including insights and analytics as an expert, is a real challenge. We are living in a period where expertise is required to: (a) achieve the goals and objectives, (b) increase value for the organization by leveraging insightful experts to achieve outcomes, and (c) increase value to stakeholders and end-users. Further, the organization relies on an extensive distribution of expertise to achieve business outcomes by using an onshore and offshore employee resourcing model. This design was done as a strategy for: (a) driving economies of scale, (b) tapping into the growing global technological skill market, and (c) saving costs for an ever-expanding support organization.

Currently, there are six team members spread across Canada and the United States who are part of the onshore staffing and consist of about 25% of the total employee population within the organization. The balance of the knowledge workers is based in India and the United Kingdom (UK). India is the central location where most of our team members and vendors currently reside. They provide support to a global audience from different locations (including Bangalore, Chennai, and Hyderabad), either physically visiting a nearby office or working directly from home. The reality of reproducing expertise, developing strong knowledge management, and fostering effective knowledge sharing (KS) is challenging not only for CST Enablement & Support but within the entire ecosystem of Microsoft. Specifically, for this organization, team members are in a constant struggle on balancing workload to staying ahead with both technical and soft skills. There are challenges around managing tacit and explicit knowledge within the organization, particularly knowing how frequently information can change. Most

importantly, while team members and specialists might be able to resolve issues, there are times the ‘why’ behind solving an issue for the customer is missing from the resolution. And while CST Enablement & Support was created for intellectual property (IP) retention and having knowledgeable experts to help resolve field issues, this is also a challenging area, too.

On the exterior, things are functioning within the organization due to the dedication and responsibility of the entire team. However, beneath this surface, what we find are numerous opportunities to bring: (a) decision-making skills, (b) critical problem solving, (c) collectively sharing with teammates, (d) ability to summarize complex problems, (e) focusing on business impact and outcomes, and (f) lessons learned analysis and best practices to the community along with replicating expertise. It has become clear to me as a leader that due to the nature of our business, we now operate in an agile and fast manner. Clearly, this is not sustainable and will eventually lead to new challenges with employee satisfaction, work/life balance, and the effectiveness of the team. It is from these perspectives that there is a need for urgent change. This change would come in the form of examining the problem from the viewpoint of different employees. Additionally, the key to combating the effectiveness of expertise is to facilitate learning through participation, which drives ideas and innovation.

Within CST Enablement & Support, we have team members, team leaders, people managers, and vendor resources with managers and specialists who are all aligned to different technological capabilities and functions in the organization. Currently, there are

six leaders¹⁴, including myself, 20 FTE team members, and approximately 150 vendor resources supporting 25 workstreams and services for a global audience of roughly 55,000 employees. The AnswersHub team is responsible for Tier 1 or what some would call “Level 1 support” for the field. This type of support requires interaction with end-users to resolve their reported issues and escalations. On an annual basis, AnswersHub generally resolves over 100,000 tickets ranging from simple, meaning the specialist can resolve within hours, to more complex tickets that could take days or sometimes weeks to get a resolution. The team needs to be extremely knowledgeable about the service and the associated ecosystem in which it operates and to have proficiency in problem-solving and troubleshooting skills.

Supporting a global organization requires highly skilled and competent individuals on staff. The subject matter experts (SMEs) distinction is extended to individuals who demonstrate high expertise and proficiency within a given domain. Irrespective of how one earned this accolade, it is crucial that SMEs function at a certain level to ensure that they can provide the best experience to the businesses that we support. In addition, senior leaders within the organization have decades of experience in leadership, collaboration, communication, and team development which allows them to navigate the complexities of teams’ functions that can contribute to the success of SMEs from a knowledge-sharing perspective. Individuals providing support must be elite in their field regarding leadership, decision-making, communication, interpersonal skills, KS, and bringing others along in the team. The reality, most times we have various

¹⁴ The reorganization that took place on July 12, 2022, brought about changes in the leadership structure. Two individuals were moved out of the organization and relocated elsewhere in the company. In addition, we also had another leader entering into retirement and leaving the team.

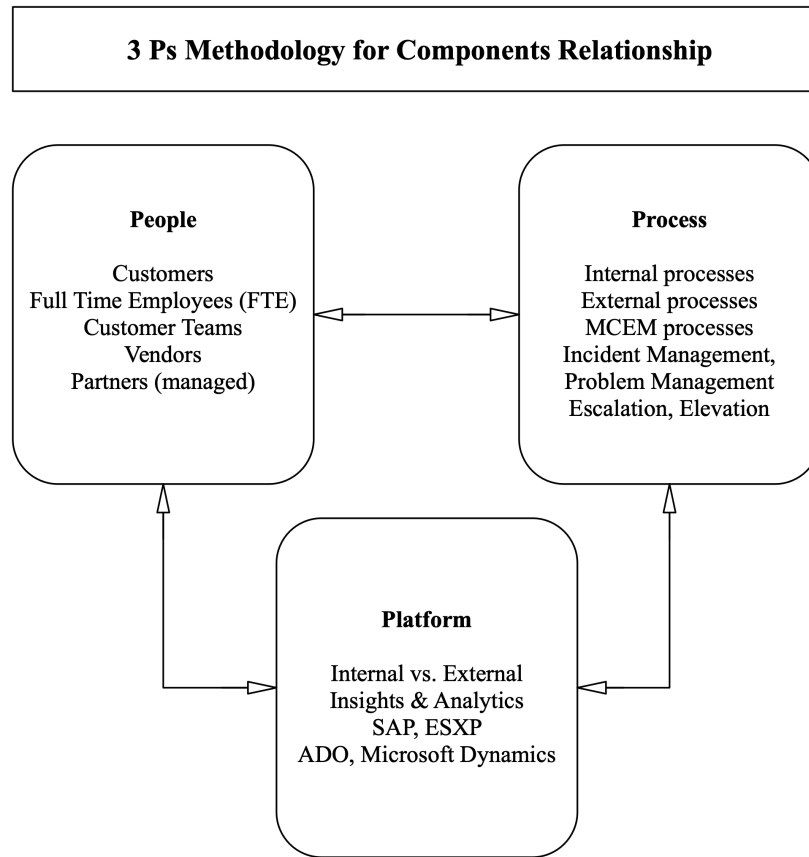
individuals operating at different altitude and the outcome of their work varies in quality and consistency.

Being part of the Microsoft family for over 18 years,¹⁵I have been observing the evolution of different individuals who have taken on the designation of being a “subject matter expert.” I have observed that they are not equal in competency level. They do not function in the same way, and there is no defined structure to how they think and operate, especially when it comes to making business-related decisions. Furthermore, there is a perception that being an SME means creating an insulated environment with your knowledge, working in silos, and limiting KS to protect your status. However, there is another side to this story that is being painted about SMEs. The environment they work in now fosters and provides the opportunity for them to thrive in all aspects of their personal and professional lives. Transforming an environment that lends itself to developing the requisite skills for SMEs around leadership, KM, KS, risk-taking, and application for practicing one’s skills to decision-making autonomy provides the best nutrient for growth and development (Edmondson, 2012). In Figure 3, the 3 Ps cover the landscape of people, processes, and platforms (Sari et al., 2019), the model can also be represented as people, process, and technology. The 3 Ps are used throughout the organization to provide a deeper understanding and appreciation of the interrelated components across our capabilities.

¹⁵ As a people manager and lead, I was proud to celebrate my 18th anniversary in July 2022 with a company that continues to redefine what it takes to meet the needs of our customers on a global scale.

Figure 3

*3 Ps - People, Process, Platform Framework*¹⁶



People

Most individuals have been utilizing the flexible hybrid model which means that we are able to work from our homes or in an office. Given the onslaught of the Covid-19 pandemic¹⁷, a majority of team members have been working remotely. There is flexibility in our work schedule whereby we have the option to perform according to the demands of our customers and specific projects. Both myself and the leader in Canada are ‘people

¹⁶ The diagram was modified with changes that occurred at the start of the new fiscal year in July 2022. Replacement of O2C, GCM, L2O with the Microsoft Customer Engagement Methodology (MCEM).

¹⁷ Covid-19 continues to impact individuals within the organization. Multiple individuals were impacted by the pandemic and had to take time off from work. It has also created new opportunities to work better leveraging cutting edge technologies as part of the new global hybrid workplace.

managers' within the organization. We each have a team of nine individuals who are mainly based out of India. They are the subject matter experts who are responsible for the complete support service life management.

Team members in India are responsible for maintaining and governing the intellectual property for AnswersHub Delivery and Field Success. There are multiple roles and responsibilities ranging from: (a) service program manager (SPM), (b) portfolio managers are responsible for maintaining forecast and budget accuracy, (c) core capability managers accountable for supporting the internal processes, and tools, and (d) field success managers are responsible for providing consultative field support, strategic leadership support, and value optimization.

Process

As an internal support organization, we provide support to our customer teams across the world. We have approximately 55+ different roles (e.g., Project Manager-PjM, Customer Success Account Manager-CSAM, and Cloud Solution Architect-Engineering-CSA-E)¹⁸. Also, there are several processes, procedures, and policies available within Microsoft that are part of our support remit and responsibility. Employees are using multiple internal processes that are part of the Microsoft Customer Engagement Methodology (MCEM),¹⁹ which include: (a) listen and consult, (b) inspire and design, (c) empower and achieve, (d) realize value, and (e) manage and optimize. In addition, they

¹⁸ The reorganization done in July 2022, brought about significant changes to roles, processes, and procedures across the entire MCAPS entity. Several roles within the organization were removed, updated, or merged. For example, the Account Delivery Manager-ADE was removed from the organization. As a result, individuals who had these roles were asked to apply for other jobs within the company. The Customer Engineer-CE role got merged into the Cloud Solution Architecture role.

¹⁹ The introduction of Microsoft Customer Engagement Methodology (MCEM) replaced multiple internal processes such as Lead to Order (L2O), Global Capacity Management (GCM), and Order to Cash (O2C).

require regular support that may be a result of: (1) user education, (2) knowledge gap, (3) issues with components that do not work as expected, (4) software bugs, or (5) systemic issues that need immediate attention. The existence of our organization is to provide subject matter expertise in addressing underlying issues and concerns reported by the end-users. For us to engage in any form of support, we leverage several internal resources and procedures. The Information Technology Infrastructure Library (ITIL)²⁰ on the practice of providing IT-related services management and asset management has been the standard for us.

There are numerous channels for getting support from our teams of experts. Typically, an end-user can access: (a) AnswersHub Portal, (b) in-built tool support, (c) Microsoft Teams using the Iris Virtual Agent, or (d) mobile device for their respective support assistance. In embarking on a digital-first experience, we are shifting the focus to more self-help by using Iris virtual agent technology. The process is that our end-users are required to first attempt to access self-serve capabilities, and if that is unsuccessful, then they can create a support ticket, which is routed to our specialists (L1) Assisted Support.

To support our end-users, we follow the necessary incident management processes, which involve working with them on addressing the reported issues. An Incident (INC) ticket is a form of an issue that has been reported to the support personnel. An incident that has an immediate break/fix requires some type of expertise to resolve. If

²⁰ For the new fiscal (FY23), the decision was made to align our capabilities within CST Enablement & Support against that of ITIL management practices. Hence, the introduction of Run at the translation layer, Tier 0, Tier 1, Tier 2, and Tier 3 at the transformation layer were introduced as the most effective way forward for simplification and rationalization of our business. ITIL is an industry-standard that the company decides on using as part of our process standardization.

a support specialist is unable to resolve an issue, then the process is for them to engage in an escalation or elevation. We normally convert an unresolved incident over to a Problem (PRB). Problem tickets are often created for systemic issues that need to be addressed by our capability and product groups²¹, or an engineering team. The process of refining the problem statement and making recommendations on pros/cons options is done within our Digital Problem Lifecycle Management (DPLM) process²². Problem resolution and management are routed through the Field Success Team. The Field Success Managers (FSMs) are responsible for centralized problem management, participating in strategic escalation, and consulting on addressing cross-functional problems.

Platform & Insights

It takes a significant amount of investment to operate the type of capabilities being delivered by the CST Enablement & Support group²³. We spend millions of dollars on an annual basis for the staff, external support, managed contracts, training, and tools. Likewise, we invest a considerable amount of money in providing the appropriate resources for the support behind running the digital operational capabilities. There are two different types of platforms support available within the ecosystem. The external platforms are those that have been built by various organizations within Microsoft, and our team provides the processes, and business issues support. The internal platforms

²¹ The Run/Solve motion was retired within the organization effective July 12, 2022. As a direct result, team members supporting this effort were moved to other parts of the CSBI organization.

²² The Digital Process Lifecycle Management (DPLM) was introduced within the organization as a way of streamline problem resolution and triaging. DPLM is intended for the team members to drive greater impact for our customers by addressing the most crucial problems reported that are blocking them from performing their jobs.

²³ A conscious decision was made in August 2022 to move away from the Digital Operations reference and pivot more to transformation enablement and support.

belong to the CST Enablement & Support team. These platforms are there to allow us to function effectively and efficiently in providing support to end-users. The internal platforms are operated and owned by the CST Enablement & Support Platform team, while the external platforms are supported by our teams and vendor resources.

A substantial number of tools that are part of the external platforms (e.g., Enterprise Resource Planning (ERP); Global Resource Management (GRM); OneProfile Management). Our primary focus is to provide support for business processes, rules, policies, and procedures embedded within these tools. We also provide minimum troubleshooting for some tools, but most of the critical issues are elevated to the engineering or other business product groups for their level of technical expertise. In the near future, the organization will be going through our version of digital transformation that focuses on customer, partner, and employee centricity which will likely occur at an accelerated pace. This would require updating, replacing, and retiring several of the existing tools. For instance, the business is currently exploring solutions to modernize deal management, update the resource management solution with more focus on resource agility, revolutionize the user experience and simplify the user journey. Throughout this transformation effort, SMEs within the company will have to be ready to upgrade and upskill, so that they can successfully support these new solutions, which require a higher level of technical expertise and knowledge. Indeed, the aptitude for continuous learning will be an enabler to foster growth and development which will allow individuals to adapt to ongoing changes.

The internal platforms (examples, ServiceNow – SNOW; Azure DevOps (ADO); AnswersHub Portal) are used to support our operational teams. Since we provide support

to external platforms, we use many tools and processes to do our jobs. Over the years, the list of tools, insights, and reports has been growing at a rapid pace. Today, we have a laundry list of tools available to our team members, specialists, and leaders that allow us to run the operational capabilities of the business. Consider these as our “bread and butter” toolkit that is relevant for us to do our job and without them, we would be flying blind in providing that top-notch support. The primary mode of communication includes emails running on the Office 365 platform and Microsoft Teams. Individuals often use the tools that are most commonly available and comfortable to them. All our team meetings are scheduled using Microsoft Teams’ communication and collaboration solution. We also leverage Microsoft PowerPoint to create and deliver professional-looking presentations for stakeholders.

Challenges and Opportunities for Improvements

Understanding the challenges are not about laying blame on leaders, managers, or SMEs. Instead, it is about assessing the situation collectively and finding a path to move forward whereby everyone can do their best work. Hence, it is crucial that I call out what would be feasible for exploration based on observations so that we can address them one by one through a united effort. What is also valuable to note is that due to the fast-paced digital transformation and changes within information technology, problems that we address today will likely manifest themselves into something different tomorrow. This concept of dealing with a wicked problem (Walls, 2018) stems from the fact that we have to constantly keep a continuous learning and improvement mindset (Hortovanyi & Ferincz, 2015) in order to stay ahead of the challenges and changes within our field. Likewise, even though technology is developing and maturing at an accelerated pace,

there will likely be the need to have humans in the mix over the next decade. Perhaps not at the scale and magnitude that we currently have today.

Some of the notable challenges that continue to resonate with the SMEs in the organization came from multiple internal conversations, meetings, and observations with team members, stakeholders, and senior leaders. A few of them are listed below:

- SMEs need to create an environment for themselves whereby they can do their best work. This would allow them to exercise autonomy and empowerment which would provide the ability to create, navigate, and share insightful, purposeful, relevant, and timely information.
- SMEs are hiding in their shells, and they need to learn when and how to speak up with authority (basically, influencing the room). Fostering and building an environment whereby individuals are not only branded as ‘experts’ but also are recognized within their own rights as ‘leaders’.
- SMEs would need to start to unlearn certain habits that prevent them from tapping into new career opportunities and capabilities within the organization. They should let go of the tactical mindset and invest time in a more strategic mindset which propels leadership growth.
- SMEs need the ability to make decisions without spinning their wheels and entering a zone of analysis paralysis. Developing the appropriate skills to ask the right questions and framing the problem without going in circles.
- SMEs also need to see themselves as leaders and not just as merely branded ‘subject matter experts’ within a specific domain. Creating the path for

themselves to act on two levels, being a talented SME while demonstrating the correct competencies as a leader within the organization.

- SMEs must demonstrate behaviors that motivate them and others to learn and grow. Exhibiting the attitude towards being a lifelong learner, and one who embraces the learn it all mindset.
- The environment must be known as a place where SMEs can take risks, be willing to fail, and learn quickly. In developing an environment whereby people feel comfortable to fail fast and develop quick learnings from their respective failures. Failing fast is the speediest method to ensure that we create a more durable and successful solution for everyone.
- Leaders in the organization need to transform the environment to develop new leaders. This would enable and support an ecosystem whereby we foster a climate of individuals who are autonomous versus a collection of subordinates.

Organizations like CST Enablement & Support rely on the knowledge and skills of SMEs to respond to challenges, innovative ideas, issues, and problems within the environment. Thus, these individuals must demonstrate that they can articulate the big picture, help make decisions, and create clarity for others while supporting the need to share their knowledge.

In my role, I am responsible for a team of experts that provide consulting and advisory services to the business by solving complex problems. In this capacity, I

collaborate with stakeholders across MCAPS to CSBI²⁴ in determining their challenges related to systemic problems that would require investment and capacity to solve. Through a competent team of nine individuals, we are responsible for successfully managing complex problems, and strategic escalations, and working with communities to better grasp the challenges with the tools and processes. We also partner with other teams throughout the organization on landing new changes that are brought through a structured onboarding and pre-production readiness framework. The greatest challenge would be for team members and specialists to keep up with rapid changes within and outside the organization and the company. AnswersHub is supported by a massive infrastructure of resources spanning self-help content, Digital Capability Catalog²⁵, portals, thousands of FAQs, hundreds of documentation and training materials. We also have the Virtual Agent, and other knowledge resources from quick reference guides, videos, demos, user manuals, built-in tools, training, knowledge articles, workarounds, and checklists.

²⁴ Prior to April 2022, the original organization structure was aligned to the Business Excellence Operations (BEO). In April 2022, we had another reorganization that shifted the leadership structure under Strategy & Operations (S&O). Again, another reorganization took place in July 2022. Thus, within the span of three months, we experienced two extensive changes to how we operate and deliver the support experience.

²⁵ At the end of our FY22 fiscal year (June 2022), we were able to soft-launch the MXPA Digital Catalog. By July 2022 due to the reorganization and branding, it was rebranded to the MCAPS Capability Catalog. This catalog is mainly to drive the discoverability of content and knowledge within the ecosystem.

Larger Context

There is a global trend occurring where organizations are pushing forward various plans to improve their KM and KS (Park & Kim, 2018) with the objective of becoming more competitive and relevant. Simultaneously and further complicating the need to stay ahead for individuals and organizations, “information and communication technologies (ICTs) continue to grow in number, sophistication, and complexity” (*Digital Skills Assessment Guidebook*, 2020). What is more, in a knowledge society where information travels at the speed of light, companies are demanding that employees demonstrate the appropriate level of knowledge, skills, and abilities (KSAs) to perform their responsibilities (*Microsoft*, 2020). Whenever these individuals are unable to locate the necessary resources, they frequently turn to SMEs to provide relevant information and assistance. Consequently, there is a high expectation that SMEs within any organization have the demonstrable knowledge and experience to deliver the necessary services and support. However, there is an invisible side to being a SME in a complex organization where your expertise is scrutinized daily. For instance, people expect that engaging a subject matter expert would result in them articulating the challenges, listening to the individual’s significant concerns, and finally summarizing and making recommendations to address the problem. While this might sound acceptable on paper, in reality, life and experience from the SME perspective are totally different. There are multiple hurdles that they face in delivering the necessary support to an end-user.

SMEs are struggling to stay afloat with the rapidly changing environments and knowledge requirements while trying to live up to the expectation of delivering high performance and thriving within their organizations. The reality is that individuals are

inundated with information and content from numerous sources. Thus, keeping up with the stream of data is becoming increasingly challenging—which relies on acquisition, sharing, and utilization of knowledge (Maier, 2007; Park & Kim, 2018). Within any organization or institution, individuals desire to acquire and retain knowledge from multiple informational sources. Additionally, there is the expectation that employees should exercise an interest to engage in KS, even though this might not always be the case (Barão et al., 2017; Park & Kim, 2018; Rowley, 2000; Yılmaz, 2012). While there are benefits in acquiring and sharing knowledge, organizations must also use knowledge to address problems and issues (Yılmaz, 2012). In short, knowledge is inadequate and useless if there is no opportunity to utilize it in some productive and effective manner.

Digital Skills in the 21st Century Knowledge Society & Digital Economy

Institutions such as the International Telecommunication Union (ITU) have published numerous reports on the current state of digital skills and knowledge within organizations in both developed and developing countries (ITU Digital Skills, 2020) and how having the appropriate digital skills in the 21st century is essential for survival in this knowledge society and digital economy. The institution reminds us that:

Digital transformation is rapidly driving changes in labor markets in almost every sector, as diverse as agriculture, education, environment, finance, health, trade, transportation, tourism, and among others, creating an increasing need for countries to develop a digitally skilled population to be competitive and employable in the global society and economy. (ITU Digital Skills, 2020, p. 57)

Digital literacy is necessary for knowledge workers to participate in the ever-changing landscape of digital skills (*Digital Skills Assessment Guidebook*, 2020; Hortovanyi & Ferincz, 2015; Yılmaz, 2012). Workplaces are demanding that employees have the digital

skills to perform their jobs using ICT. According to ITU, these digital skills “include not only technical skills but also cognitive skills as well as non-cognitive soft skills such as interpersonal skills and communication skills” (ITU, 2020, p. 3), thus making it a growing challenge for individuals to stay up-to-date. Furthermore, ITU articulated that digital skills will likely continue to increase in complexity for organizations and countries, and “given the pace of technology change and digital work opportunities, digital skills denote a broadening spectrum of skills, which changes over time” (ITU Digital Skills, 2020, p. 3). To this end, knowledge makes an organization more compelling and competitive, although keeping up with the rapidly changing terrain within the technological sphere is exceptionally demanding and challenging (Hortovanyi & Ferincz, 2015).

Technology and Innovation Trends in the United States and Washington

Many forces are shaping the technological landscape whereby learners are facing new and complex challenges daily. According to a recent report from the Computing Technology Industry Association (CompTIA), technology and innovation are the building blocks of a wave of changes taking place globally and more specifically, in the United States (CompTIA Cyberstates, 2020). In this new norm, digital transformation is being driven by artificial intelligence, emerging technologies, automation and integration, the Internet of Things (IoT), and workforce diversity growth (CompTIA Cyberstates, 2020). Certainly, this modern technological landscape is shaped by organizations’ willingness to stay competitive by designing a workforce of knowledge workers. As of 2019, the net tech employment in the United States was approximately 12.1 million

workers, and this continues to grow year over year. Tech industries such as Information Technology (IT) services and software services have experienced a growth rate of over +43% within that reporting timeframe (CompTIA Cyberstates, 2020). Moreover, the “outlook for technology employment points to a continuation of the growth trend” (CompTIA Cyberstates, 2020), into 2028 which would require a skilled workforce having the appropriate digital skills to support organizations. These trends will undoubtedly influence the economic composition of states such as Washington, which currently has a high concentration of tech workers at around 10.7%- just 0.8% below the leading state of Massachusetts (CompTIA Cyberstates, 2020). In the national snapshot report from CompTIA (2020), the state of Washington was ranked 11th in net tech employment, and 8th in the innovation score, with over 392,000 tech employment. As a result, Washington had an economic impact of 20.2% direct contribution from the tech sector to the economy, amounting to over \$103.5 billion (CompTIA Cyberstates, 2020). It is clear from these numbers that technology (e.g., Microsoft’s main office is located in the state of Washington) has a direct financial contribution to organizations and the overall economy.

New Technological Landscape for Knowledge Management (KM) and Expertise

To support the fast-paced technological landscape, companies will need to invest in KM, knowledge sharing (KS), and expertise, which are critical components and accelerators. The Technology Services Industry Association (TSIA), of which Microsoft is a member, released its research publication on the state of KM for 2019. In this report, TSIA acknowledges and reaffirms its stance on the value proposition that “a strong

knowledge-sharing culture is a critical driver for success” (*The State of Knowledge Management*, 2019); thus making KM and KS relevant for any organization wanting to survive in this digital economy. On this front, the recommendation is that “companies should be surveying employees to identify problem areas relating to knowledge-sharing culture, and continue to invest in the people, process, and technology of knowledge management” (TSIA, 2019, p. 3). In the report, over 32% of companies have started to track KM usage and return of investment (ROI) metrics as part of their operational reviews. Coupled with this, they also confirmed that “culture is a critical element for knowledge management success because KM programs are asking people to change behavior, i.e., document and share all their hard-earned knowledge” (TSIA, 2019, p. 6). This indicates the relevant connection between pushing forward for standardization in KM and a deeper connection to the fabric of the organization.

To support the advancement of this new technological landscape and knowledge society, organizations will have to significantly increase their investments in developing experts and expert performance while transforming their environment to support digital transformation. In numerous research studies, Ericsson et al. (2018) defined expert as having the skills, knowledge, and other characteristics that separate an individual from less experienced individuals. We are living in a society where expertise and experts are required to help advance the interest of groups and organizations. Ericsson et al. (2018) commented that “since the beginning of Western civilization there has been particular interest in the superior knowledge that experts have acquired in their domain of expertise” (p. 4). Today, we are in need of expert knowledge to help address issues related to products and services (Yarovoy et al., 2020), to increase the performance of

sports athletes (Macnamara & Maitra, 2019). The bottom line, expertise is required to help achieve organizational goals and objectives. Ericsson et al. (2018) remarked that “with the rapid changes in the relevant knowledge and techniques required for most jobs nearly everyone will have to be capable of continuing their learning and even intermittently relearn aspects of their professional skills” (p. 18), providing the pathway for us to better understand the investments required in supporting experts and expertise in a global environment.

Bridging the Gap with KM and KS Experiences

Transforming an organization into becoming a learning organization starts with a cultural shift through behaviors that are ingrained in KM and KS. One of the leading authorities on benchmarking, best practices, processes, and KM, the American Productivity & Quality Center (APQC)²⁶, released multiple reports on the state of KM and KS within the United States and across the world. In learning how to address KM and KS, APQC reminds us that “every organization has its challenges when it comes to knowledge, and each needs a different combination of tools and approaches to get knowledge where it needs to go” (APQC, 2018). Accordingly, KM is critical for the existence of many organizations, especially those that have been on a more service-oriented and intellectual property (IP) route within the global economy. To deal with the rapid changes within the industry:

Knowledge needs to be embedded in the flow of work so that employees can find it when and where they need it...KM is sustainable only if it’s easy for employees

²⁶ As of March 2022, from cost-saving and budget cutting measures, Microsoft made the decision to drop the membership and subscription investment into APQC.

to participate and they see a tangible return on the time they invest. (APQC, 2018, p. 6)

In general, the appreciation of the value proposition of KM allows organizations to remain competitive while at the same time evolving their culture and behaviors.

Additionally, we should not have the expectation that technology alone changes the behaviors of employees within an organization. Instead, focusing on ways to embrace best practices, lessons learned, and communities of practice might be a more incremental approach to transforming organizations. APQC noted that a community of practice could “help members build relationships and facilitate deeper levels of collaboration, knowledge sharing, and learning” (APQC, 2018, p. 10), which are all positive indicators of a learning organization.

Critical Thoughts Influencing the Research Study

We live in a world where inequality, inequity, indifference, and discrimination continue to increase and flourish, notwithstanding the massive changes that have occurred around the different political structures, economic advancements, and social/cultural inclusions. As research practitioners, it is important that we take a critical look at the existing structural components that continue to contribute to the ongoing status quo in society. There is no doubt in my mind that connecting to the various critical theories can provide immense insight and an analytical perspective that would allow us to examine the world around us from a more integral standpoint. Given (2012) commented that “critical theory is a foundational perspective from which analysis of social action, politics, science, and other human endeavors can proceed” (p. 2), which allows research practitioners to explore their respective environments from multiple dimensions in hope

of finding appropriate interpretations and solutions to ongoing challenges that plagued individuals. Similarly, Fleming (2018) discusses critical theory from the perspective of engaging with both powerful people and systems that perpetuate the social injustices and structural inequalities that tend to play out differently in society. Furthermore, borrowing from the ideas of Freire (2005), Fleming (2018) emphasizes that, “we can learn our way toward a better and more humanizing future” (p. 2), by taking a necessary position through the lenses of critical theories.

For the most part, expressions of critical thinking provide the mechanism by which we can engage in dialogues that move the needle for individuals who might sometimes feel powerless and voiceless against red tape and bureaucracy that frequently hinder progress. My research study was not done in a vacuum, and as a result, I took into consideration the internal and external factors surrounding diversity and inclusion. From this perspective, there was merit for me to speak with a critical voice about learning and education within the workplace and society in general. With this in mind, critical pedagogy and, more specifically, Paulo Friere’s Banking Education theory brought a crucial appreciation and approach to partnering with employees and leaders in the organization. Indeed, the banking model of education (Freire, 2005) posits the idea of moving away from the traditional way of teacher-student interaction. Rather than treating learners as not knowing anything, there is a paradigm shift morphing into the landscape of formulating a partnership between these individuals. Freire’s (2005) problem-posing approach to knowledge acquisition is about co-sharing in the universe of KM and learning where individuals can feel that they are part of the production of knowledge creation.

Generally speaking, embracing critical pedagogy provides an anchoring point whereby learning opportunities could be realized within the environment. In fact, Microsoft is already demonstrating tolerance to be inclusive on multiple issues and concerns that typically traverse the critical theory arena. For instance, all employees should be sensitive to using Artificial Intelligence (AI) in Microsoft. Responsible AI is about making sure that the technology does not “restrict, infringe upon, or undermine the ability to realize an individual’s human rights” (Microsoft, Standard of Business Conduct, 2021). As leaders, we must be conscious of the implications of technology on individuals and society, which means constantly examining it from a critical lens. Thus, as subject matter experts gain new knowledge within the rapidly changing environment, they must be cognizant of how certain behaviors influence society. More broadly, though, there was value to integrate critical thoughts into my body of work, especially given that I am a research practitioner who falls within a minority group. What is even more important is that I cannot pretend that my research topic and the considerations that constitute it are separated from who I am as an individual in a society divided by racial, discrimination, inequity, inequality, and injustice issues. In keeping the focus squarely on education, learning, and knowledge, my goal was to center on the restrictive nature of avoiding the inaccurate learning configuration for employees and leaders.

This research and by extension the dissertation encapsulated some elements of critical theory implicitly and explicitly. Personally, I was also drawn to the work of Kalsoom et al. (2020), stating that “critical pedagogy is an educational response to oppressive power relations and inequalities that exist in educational settings” (p. 28), which means that I did not put on blinders while examining this teaching-learning

environment surrounded by experts and leaders from varying backgrounds. Kalsoom et al. (2020), suggested that many researchers around the world have embraced Freire's banking model to understand the prevalent challenges in education in various environments. It should be noted that I did see the benefit in utilizing some elements of critical pedagogy with the work that was completed. In fact, not doing so would have pushed me into the realm of engaging in a form of covering up my identity to blend into an atmosphere that sends the incorrect signal to others, almost betraying the very idea of practicing authentic leadership.

MNCs like Microsoft have turned a page in their history around corporate social responsibility (Sehgal et al., 2020), which primarily involves the element of thinking about those individuals who might be oppressed for whatever reason. In addition, we have a global workforce that encounters different challenges around diversity and inclusion, and matters related to the topic should not take a backseat—the work we do impacts people, communities, and society. As I look more broadly, my work's influence on the individuals that participated in this research study was significant. These are future leaders that will shape their families, influence their friends, and inspire a new generation to rise up and secure the appropriate skills for the future. In short, the work was about integrating the appropriate perspective to ensure that as we embrace a digital future, we have a mindset of both the intended and unintended consequences associated with the technology that can impact society. Thus, I firmly believe that connecting to the critical pedagogy perspective allowed me to work with individuals in a transformational way to think about knowledge, learning, and education from the standpoint of problem-solving for a better tomorrow. In the end, critical thinking, along with critical pedagogy, was

about how best to transform and improve countless educational situations in society (Shih, 2018).

Previous Cycles of Action Research

As part of this research journey, I completed two previous research projects using the action research methodology. Certainly, framing the problem of practice through the lens of action research provided me the opportunity to examine the workplace environment with various participants across these two separate action research cycles. Engaging in the research process allowed me to gain additional insight and competencies as a researcher and practitioner. Indeed, certain research skills and practices were developed as part of the engagement process within the organization. The vast amount of information and knowledge from these action research cycles are localized and contextualized to the specific environment, which allows for a growing list of subject matter experts to also become knowledgeable on conditions to operate as one team.

Action Research: Cycle 0

The purpose of cycle 0 action research was more of an informant engagement whereby I was able to engage with the participants of the study to investigate the state of the problem of practice. One could also consider this as a form of reconnaissance with the staff (four team members) in the organization. The research study was conducted within the month of October 2020 with those who were able to join remotely. The decision to execute cycle 0 was more on understanding the perceived barriers to team members keeping up to date on KM and KS. Additionally, I also wanted to learn about what type of strategies and approaches that could assist the team in learning and growing within the organization.

The data analysis from cycle 0 revealed several themes and concerns by participants within the CST Enablement & Support ²⁷work environment. Individuals shared multiple concerns around: (a) confusing terms and lack of standardization, (b) knowledge being created from the wrong perspective, and (c) duplicate and obsolete information available within the organization. There were also ideas on how to address many of the concerns brought up during the cycle 0 investigation. Recommendations to conduct future breakout learning sessions, create a dedicated forum for sharing between team members, and implement more role context-driven KS content. Cycle 0 was instrumental in laying the groundwork for conducting cycle 1 several months later within the same environment but engaging with different participants.

Action Research: Cycle 1

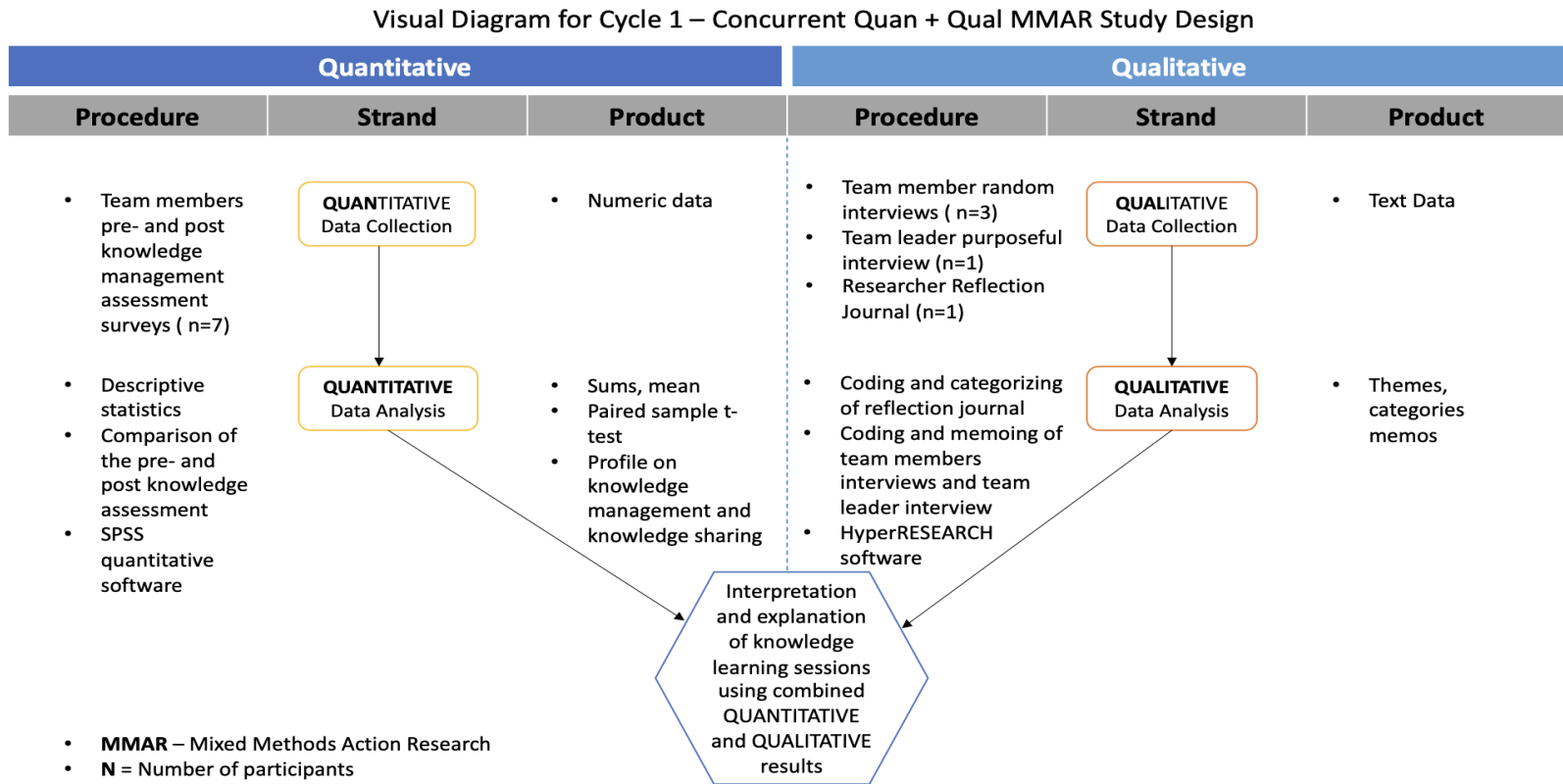
Conducting the follow-up cycle was meant to continue the discussion with team members and leaders within the organization. Coming out of cycle 0, I had gathered enough information to inform cycle 1 direction as it relates to adjusting the research questions, refining the theories, and updating the problem of practice. Cycle 1 was also considered as being a small-scale intervention with six to seven team members participating over a series of four weeks during the month of March 2021. The structure of this cycle brought a deeper connection with this small community of practice (or cooperative learning) to share their previous experiences on KS and KM within the organization. It was meant for participants to learn together and from each other. Since this was time-bound, resources were used judiciously throughout the research process. In

²⁷ The cycle 0 was done within the old organization structure - MXPA Digital Operations. Note the completion of this cycle, we had several individuals leaving and a few reorganizations.

Figure 4, action research cycle 1, outlines the concurrent model that was used throughout this cycle. In this design, a combination of the quantitative and qualitative datasets was used to complete the research study. In using this method provided the opportunity to practice and experience benefits of mixed method design within my environment.

Figure 4

Action Research Cycle 1 Concurrent Model



35

Note. Action research cycle 1 framework with quantitative and qualitative design.

In cycle 1 there were three different theories guiding the research process within my workplace. The first theory was the social learning theory (SLT), which has been promoted by the theorist Albert Bandura to explain how people behave and learn within different environments. SLT is the theory to support the foundation of the interworking of knowledge and learning. I also leveraged the OLT which employed techniques on how to integrate individuals within varying workplace contexts to engage in learning across different groups and team structures. The third theory that was used within cycle 1 was around the fundamentals of communities of practice (COP) and the different research studies that have utilized this approach to explain the social and mutual practices within organizations.

Similar to the experience gained and information shared by participants in cycle 0, this research cycle also produced a wealth of information that allowed me to acquire the necessary knowledge that would provide insight for future opportunities. What was most relevant for the cycle was the introduction of the intervention that addressed the perceptions and self-efficacy of individuals within the organization to use their KS skills and KM experiences. Most importantly, concerns were raised about the various mistakes made by leaders. For example, participants pointed out that many times leaders: (a) do not take the time to bond with team members, (b) set unrealistic expectations on something that can be delivered, (c) seemingly think of having a one-size-fits-all attitude towards change, and (d) manage conflict ineffectively.

The theories associated with these cycles of action research provided the canvas for understanding the underlying concerns within the ecosystem. Case in point, in using the OLT, I could see where learning by doing was important throughout the intervention.

Individuals were keen on following along and started sharing more broadly with others within the group. Additionally, the theories provided a blueprint to develop my analysis and interpretation which were later shared with the leadership team. In short, there was immense benefit to encapsulate the research study within the theoretical structure so that the result is worth its weight in gold.

Research Questions (RQ)

The Expert-to-Expert Practice Framework (E2EPF) consisted of two distinct phases: (a) phase 1 - engaging in open conversations with outsider experts, and (b) phase 2 - socializing the learnings from the outsider experts with the insider experts. Additionally, the E2EPF required the creation of ten “snackable” or microlearning videos along with participation in the SME Learning Series. As a result, the dissertation sought to discover the benefit and value proposition of the framework by answering these questions:

- RQ 1: How do subject matter experts ²⁸in a decentralized organization deliver high performance by using their knowledge, skills, and abilities (KSAs)?
- RQ 2: How do the motivations of employees²⁹ impact their ability to engage in deliberate practice?
- RQ 3: How do senior leaders ³⁰in de-centralized and fast-paced organizations coach and help others make sense so that they function as one expert team?

²⁸ Otherwise called **Producers** of knowledge (SME). Subject Matter Experts play an important role in shaping the capturing, consumption, and utilization of knowledge within an organization.

²⁹ In the 21st century, one can easily attribute employees to be the **Consumers** of knowledge. Interestingly, a SME can be both the producer and consumer of knowledge within an organization.

³⁰ Certainly, our leaders are the **Enablers** of knowledge. An important challenge is getting SMEs to become leaders who are capable of driving higher impact and connections within a learning organization.

Purpose of Study

The purpose of this project was to increase employees' learning and usefulness in dealing with complex problems, KM, and KS as subject matter experts by leveraging the E2EPF. The intervention was a series of workshops that allowed for discussions to be done openly and freely with SMEs about their experience in working with stakeholders and other team members in the company. In addition, during the intervention, best practices and lessons learned were shared around some foundational traits that are relevant for leaders to be successful within any organization. The duration of the intervention was for four weeks, and it was done remotely. The decision was made to host a remote version due to the current COVID-19 pandemic. SMEs participated in these sessions at least once a week for about one hour plus an additional 15 minutes for self-reflection and assessment.

The format of the intervention was built around exploring the various theoretical perspectives that support behaviors, learning, and development. At the end of the day, the broader goal was to ensure that SMEs within the organization felt a sense of empowerment and autonomy to continue honing their crafts and while developing leadership skills by learning from others. To ensure that they gained the necessary value from the intervention, it was structured as an interactive environment to solicit participation from everyone.

CHAPTER 2

SCHOLARLY LITERATURE AND THEORETICAL PERSPECTIVES

Knowledge management will never work until corporations realize it's not about how you capture knowledge but how you create and leverage it.
~Étienne Wenger, Swiss educational theorist, and practitioner

The previous chapter discussed the introduction of my study on SMEs and how they utilize KM and KS in a fast-paced and decentralized global organization. It also provided an overview of the research questions and the purpose of the research study. In this chapter, a review of the literature that supported the implementation of the intervention on expertise and expert performance within a corporate environment is highlighted. I proposed that expertise can increase employee learning and productivity as well as facilitate collaboration and coordination within a dynamic ecosystem.

Introduction to Literature

ICT organizations like Microsoft are finding it challenging to keep up with the rapid pace of change within the knowledge economy (Amin & Roberts, 2008; Brown & Duguid, 2001). As it relates to my problem of practice, there were three specific challenges: (1) keeping up with the latest information within the environment as a subject matter expert, (2) replicating expertise in a consistent and effective way, and (3) engaging in active and deliberate practice through knowledge communities. Employees are facing what can be easily classified as information overload due to the vast scale and pace of technological innovations within the industry (Ahmad & Karim, 2019; Maier, 2007;

Selen, 2000). Therefore, as part of this problem of practice, I explored different innovative ideas to improve the overall experience in addressing the challenges around developing expertise in a repeatable manner, knowledge sharing, and approaches to a community of experts that would foster greater collaboration and learning across a globally distributed team.

Scholars like Mertler (2019) recommend that researchers connect theory to practice for improving their respective environments and organization. In short, the researcher must establish a strong relationship with their situation and that of others, including the use of theories, which is the bridge that builds that relationship. KMT allowed me to see the connection with KS, which is an essential factor in influencing how experts and organizations transform themselves within the 21st century to remain competitive and relevant (Maier, 2007; Rowley, 2001; Zhang et al., 2020). The other two theories, (a) organizational learning theory (Bapuji & Crossan, 2003; Basten & Haamann, 2018), and (b) deliberate practice (Coughlan et al., 2019; Ericsson et al., 2018; Young et al., 2021), were meant to provide examples and best practices that informed the design of the intervention for this study.

Theoretical Framework Considerations

Three distinct theoretical approaches guided this research process and study. The objective here was to ensure that as a research practitioner I am using relevant theoretical frameworks and theories to guide the research questions, decisions, methods, and intervention all the way to interpreting the results. The selection of: (a) knowledge management theory (KMT), (b) deliberate practice framework (DPF), and (c)

organizational learning theory (OLT) provided the groundwork for proper exploration and analysis of the problem of practice. Let us turn our attention to the KMT, which provided the foundational underpinning and understanding of the problem of practice and intervention.

Knowledge Management Theory

To better appreciate KMT, it is beneficial to define two types of knowledge, which facilitates the foundation of the theory: tacit knowledge and explicit knowledge. Dalkir (2013) extended a definition of the two concepts by stating that “tacit knowledge tends to reside within the heads of knowers, whereas explicit knowledge is usually contained within tangible or concrete media” (p. 8). Furthermore, the properties of tacit knowledge entail experts knowing what they know which is predominantly inside their heads, while explicit knowledge involves organizing and systematizing ways of structuring knowledge within a given context and environment (Dalkir, 2013; López-Cabarcos et al., 2020).

The rise of KM began in the early 1990s as a mechanism for bridging the gap that exists from a scientific perspective (Ibrahim & Salleh, 2019). KM which deals with the structure of knowledge, knowledge processes, and practices, came into existence by scholars such as Nonaka (1991), Drucker (1998), Davenport & Hall (2002), and Leonard-Barton (1992) as a way of understanding the deeper connection between knowledge components and organizations (Ibrahim & Salleh, 2019). Maier (2007) concluded that “knowledge management produces expectable manageable improvements in the handling of knowledge” (p. 36). KM is crucial to the success of individuals and organizations that

are looking to capture, measure, monitor, and utilize knowledge as a competitive advantage (Hsiao & Huang, 2019). Being part of a systemic structure, KM entails knowledge goals, knowledge processes, knowledge economics, structures, content, ontology, and knowledge strategy (Maier, 2007) that works in a cohesive manner in any environment.

Irrespective of the multiple benefits and value propositions behind KM, it is not without flaws and criticisms. McAdam and McCreedy (2000) critiqued KM using a social constructionist model. They identified multiple definitions conflicting and contradicting each other at different levels, thus leaving it up to the reader for interpretation and understanding. The KM taxonomy is also extensive, making it difficult to label it within a given context properly. Furthermore, the authors identified glaring challenges with the theory, including how it ignores people's issues through the dissemination of knowledge and maximizes the process and technology within many organizations making it appear that “technology as the ultimate goal and try to design knowledge to suit the technology” (p. 164). Additionally, McInerney (2002) noted “the way knowledge is represented and codified may differ dramatically in different disciplines” (p. 1016), which would require practice to ensure that everyone is on the same page as it relates to KM and KS.

Related Research & Criticism and Direct Application to Study

KMT address the concerns with tacit, explicit knowledge (Kimble, 2013; Rowley, 2001; Yilmaz, 2012), thus allowing us to find out the fundamentals that are needed to be an expert within any environment. Indeed, this theory relates directly to the study since it

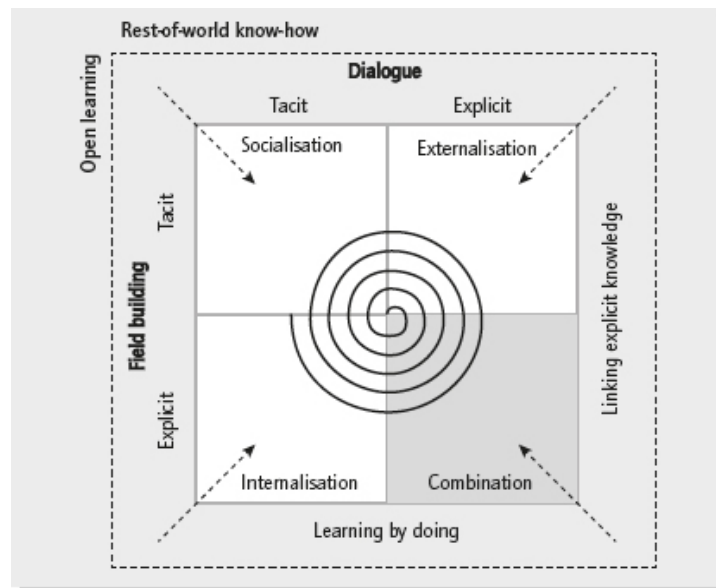
highlights the characteristics that must be drawn from the literature about the structural components of working in an environment where knowledge, KM, and KS are critical to the ecosystems.

The theory provides the building blocks for understanding the structural elements of knowledge, especially those related to disseminating it within an organization.

Theorists such as Nonaka and Takeuchi (1995) developed the knowledge spiral, which highlights the foundational construct for understanding the value of knowledge within any system (see Knowledge Spiral below).

Figure 5

Nonaka and Takeuchi's Knowledge Spiral



Note. Adapted from Nonaka, I. and Takeuchi, H., *The Knowledge-Creating Company*, Oxford University Press, 1995.

Nonaka and von Krogh (2009) addressed the power behind organizational knowledge creation and the contributing factors for knowledge conversion. In their paper on tacit knowledge and knowledge conversion, they concluded “organizational

knowledge creation is the process of making available and amplifying knowledge created by individuals as well as crystallizing and connecting it to an organization's knowledge system" (p. 635). Furthermore, creating and using knowledge in any organization requires that individuals become aware of the underlying benefits for themselves and the broader community. Muhammed and Zaim's (2020) article on peer KS summarized that effective KS is crucial for an organization to be competitive, remain innovative, and allow for efficiency.

Direct Application to Study

Incorporating the KM principles and practices in my study was meant to inform the problem of practice and intervention. In addition, building a community of experts requires that everyone uses the same taxonomy and definition whenever making references to knowledge within the environment. Thus, KMT provided the building blocks for connecting the concepts and terminologies that are linked to the different types of knowledge components that have become a standard within the Information Technology industry for subject matter experts. In sharing their perspective on the importance of knowledge, Asrar-ul-Haq and Anwar (2016) remarked that "knowledge is the lifeblood of an organization and it has been identified as a crucial element for the survival of organizations in today's dynamic and competitive era" (p. 2), indicating the reliance ensuring that there is a deep understanding of the role it plays within an ecosystem.

Integrating this theory into practice brought a sense of common appreciation for observing how personal knowledge and organizational knowledge, along with how

internal and external processes are interconnected to provide meaningful explanations and examples. Consequently, considerations were extended around the ways by which the study leveraged the KMT as the starting point in establishing the different relationships with organizational artifacts and contents such as lessons learned, tutorials, shared models, to critical reflections. In addition, the theory provided the framework to understand how KM and KS benefits experts within a dynamic and competitive organization. Finally, the theory was utilized to highlight concepts that got integrated into the workshop series, presentation, and other reference materials.

Deliberate Practice

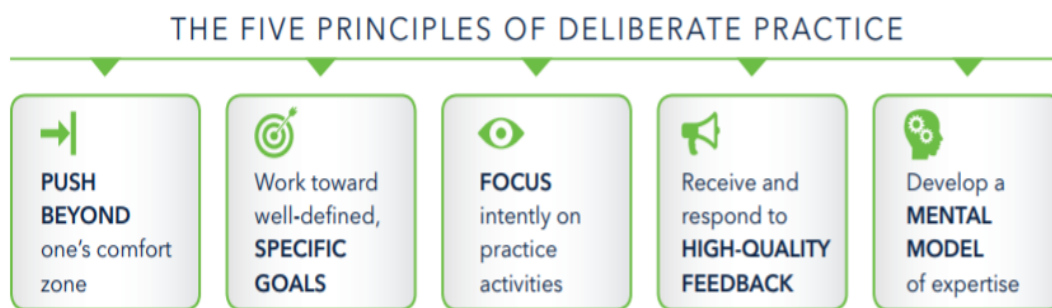
The theory of deliberate practice explores the characteristics of genuine expertise and how to evaluate the success of experts within an organization (Ericsson et al., 2007). In developing expertise within any institution, serious considerations must be given to the practice that can improve the overall performance of an expert. Ericsson et al. (2007) define deliberate practice as “it entails considerable, specific, and sustained efforts to do something you can’t do well—or even at all” (p. 3), which indicates an important mindset shift in how individuals apply their knowledge and learnings within a particular situation and context. This type of practice facilitates the development of expertise since it forces individuals to focus on the ideas, concepts, and knowledge that they do not know (Ericsson et al., 2007). The contemporary scholarly work of Coughlan et al. (2019) also identifies deliberate practice as increasing performance and being a critical factor in the development of expertise. Likewise, Young et al. (2021), writing in the *Journal of Expertise*, provide evidence that supports the deliberate practice framework as a

mechanism for exceptional performance in experts, skill acquisition, and talent development.

Since the release of the deliberate practice theory which was heavily promoted by Karl Anders Ericsson, scholars from numerous fields such as psychology, sports, education, and business management have embraced it as a standard to explain expertise performance, and effectiveness of experts (Ericsson et al., 2018). While Ericsson has led the charge into this particular field of study on experts embracing deliberate practice (see Figure 6), other notable scholars have also expanded on the idea of deliberate practice supporting expert performance. Scholars such as Robert Sternberg (1999), Richard Clark (1996), Benjamin Bloom (1985), and Herbert Simon (1987) have all increased the focus of the theory in their individual lines of study. A significant part of the theory is that expertise requires an individual to engage in their domain for about ten years or complete 10,000 hours of practice (Lehmann & Ericsson, 1997).

Figure 6

The Five Principles of Deliberate Practice



Note. The Deliberate Practice Model by Anders Ericsson (1997).

The fact that deliberate practice is highly connected to expert performance whereby there is always an upwards trend for the individual, indicates the theory's usefulness to explain ways by which we can engage in constructive and continuous learning. There is evidence that shows the value of using deliberate practice to improve performance for experts from scholars who have conducted extensive research across multiple disciplines, including business management.

Related Research & Criticism and Direct Application to Study

The effective connection of the deliberate practice framework to the research questions demonstrates some of the important tenets of this theoretical framing within this research study. Deliberate practice comes from the standpoint that individuals within their specializations exhibit the skills and abilities by practicing, which eventually leads to exceptional performance (Ericsson et al., 2018). Most importantly, the theory addresses the need for individuals to learn and unlearn, foster social practice, and develop the capability for sustaining learning within a particular experience and expertise. Young et al. (2021) concluded that “there is a remarkable absence of studies associating an expert advantage to motivational facets of DP” (p. 178). Furthermore, they also contend that there are controversies over whether engaging in deliberate practice is an enjoyable activity for the expert. In addition, it is also noteworthy that critics have called out deliberate practice as having too much of a nurturist perspective on how we understand expertise and experts within an organization (Young et al., 2021).

Coughlan et al. (2019) noted that “the accumulation of deliberate practice is thought to be a key factor in the development of expertise” (p. 298), which implies that

individuals would need to demonstrate the role that this plays with their skills and abilities. Ericsson et al. (2007), in their article on ‘The making of an expert’ written in the Harvard Business Review, noted that experts are not born but rather made. They provided examples of how authentic expertise is demonstrated through measurements and consistent high performance within an environment. What is even more striking is that expertise is never captured within a KM system, which means that organizations will have to find ways of disseminating knowledge to all employees.

Direct Application to Study

The deliberate practice model provided a medium to explore numerous aspects of expert performance and expertise within an environment such as Microsoft. The foundational principles and assumptions exist by which I was able to assess: (a) self-reflection and feedback, (b) self-regulation of experts to complete tasks and improvements, (c) self-monitoring through goal settings, and (d) their ability to focus on practicing with repetition. Leveraging the deliberate practice, allowed for the development of an expert framework that integrates elements of the different approaches by which I was able to gauge the success of experts within the environment. Ericsson et al. (2018) in their research studies outlined multiple ways by which expertise can be captured such as using techniques like questionnaires, surveys, reflection journals, and other repetitive tasks. A very important aspect of this action research was to explore a mechanism by which expertise can be replicable within our ever-changing and accelerating organization. Hence, utilizing the best practices from deliberate practice has potential to generate insights and knowledge that can be integrated into our ecosystem.

A basic design of the study was to integrate ideas in which we capture and rate the expertise levels of our team members. Indeed, I strongly believe that deliberate practice identifies the distinct characteristics of expertise within any domain and provides the pieces of evidence by which we can complete an assessment. In this study, I explored expert performance, expertise, and experts across multiple domains and disciplines and theorized the potential outcomes by using the literature, which inculcates confidence in the credibility of the research results with the various stakeholders. What is more, the deliberate practice theory was about promoting expert performance which is developed through constant practice of a particular skill. Experts within my environment benefited from the knowledge related to the theory and had a better understanding of what it took to continue improving and honing their respective skills.

Organizational Learning Theory (OLT)

Levitt and March (1988) discovered that organizational learning (OL) is built on three classical observations that originated from behavioral studies. These classical observations include: (1) behaviors are based on routines within the organization, (2) actions within an organization are historically dependent, and (3) organizations are motivated around meeting targets (Levitt & March, 1988). The primary concentration of OLT encompasses the principles of how teams, groups, and organizations consume learning over time. In expanding on the structure behind OL, Basten and Haamann (2018) pointed out that OLT consists of three domains with eighteen different process configurations. For instance, in the technology domain, the setup would entail knowledge repositories and virtual worlds. Similarly, the domain of people incorporates the chief

knowledge officer, dyadic relationships, events for informal interactions, job rotations, knowledge broker, knowledge manager, and skill management. While there have been various approaches to organizational theories, it is not without some amount of criticism. For example, organizational learning theories: (a) lack theoretical integration, (b) do not provide any valuable knowledge for practitioners, and (c) it is mainly applied in an analogous manner (Prange, 1999).

The stated considerations from the research show the intersection of individuals and teams working towards common goals and objectives within an organization. Moreover, “organizations are seen as learning by encoding inferences from history into routines that guide behavior” (Levitt & March, 1988, p. 320), which also forms the framework for members to bring their learning experiences. Fundamentally, OLT involves both positive and negative behaviors. For illustration, the authors conclude that “learning does not always lead to intelligent behavior. The same processes that yield experiential wisdom produce superstitious learning, competency traps, and erroneous inferences” (Levitt & March, 1988, p. 345), which are important factors to consider as an organization transitions into a real learning organization.

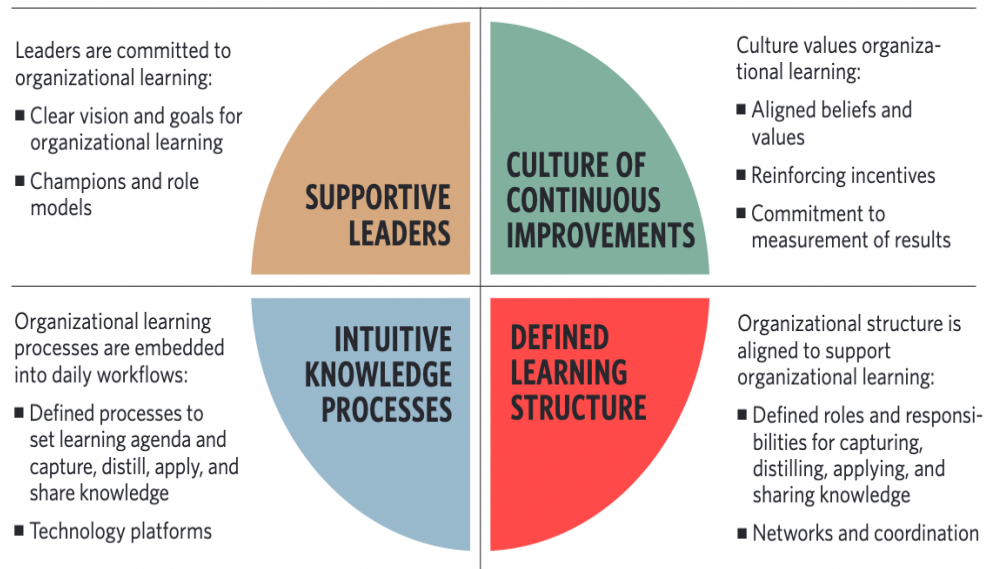
OLT has been popularized over the last several decades with empirical research studies from multiple interdisciplinary fields. However, there is still some amount of confusion in relation to the boundaries of the theory related to other concepts and frameworks. According to Bapuji and Crossan (2003), the boundaries around OLT are “often unclear and are shared with similar fields such as organizational knowledge, knowledge management, intellectual capital, and organizational memory” (p. 2),

suggesting the complexity within the theoretical perspectives itself. Generally, learning for an organization comes from: (1) within the organization or (2) reliance on other organizations. With these divisions of learning for an organization, several skills need to be acquired over time through: (a) trial and error expertise, (b) learning by doing, (c) secondhand learning, and (d) inherited learning (Bapuji & Crossan, 2003). Additionally, organizations are capable of learning from internal experience using methods such as KM and KS that facilitate a shared learning experience (see Figure 7). Certainly, OLT is tightly dependent on several factors spanning from culture, strategy, and structure that can contribute to accelerating ongoing learning. Significantly, “maintaining a balance between exploration and exploitation can help a firm to avoid learning traps” (Bapuji & Crossan, 2003, p. 15). In short, as researchers explore OL theories, they must be mindful of both the positive and negative viewpoints shared by scholars. Additionally, the world of knowledge workers will require us to exhibit a research mindset that promotes new knowledge, facilitates investigations, and seeks out new discoveries.

Figure 7

Four Elements of Organizational Learning

FOUR ELEMENTS OF ORGANIZATIONAL LEARNING



Note. Adapted from “The Challenge of Organizational Learning” by Katie Smith Milway & Amy Saxton (2011).

Contributing theorists of OLT include the likes of: (a) Cyert and March (1963) with a focus on OL being an adaptive behavior within an organization, and (b) Argyris and Schon (1978) promote OL as a process by which members detect errors and anomalies and (c) Nonaka and Konno (1998) on their work around a spiral knowledge learning model of organizational knowledge creation. There was relevance in using the theory as part of this study from the perspective of being able to properly frame the discussion on the evolution and components of a learning organization, especially as we attempt to cultivate an environment to foster expertise.

Related Research & Criticism and Direct Application to Study

Mishra and Uday Bhaskar (2011), in their study on the knowledge management processes for learning organizations, identified the overlap between knowledge management (KM) and organizational learning (OL). While both concepts are related to the foundation of learning, “OL is about managing the process of learning in an organization, while KM is aimed at building and applying stocks of knowledge” (p. 345). Likewise, Sanz-Valle et al. (2011) suggested that OL was positively connected to technical innovation and fostering of organizational culture. Notably, they concluded that “organizational learning allows the development, acquisition, transformation, and exploitation of new knowledge that enhances innovation” (p. 999), thus further solidifying the interconnection between OL and KM. There are also practical implications of these findings. For instance, managers now have relevant guidance on the different ways they can promote continuous innovation as part of OL. It should be noted that López-Cabarcos et al.’s (2020) research on the role of product innovation and customer-centricity suggests that both tacit and explicit knowledge contributed to an organization's sustainable competitive advantage. Moreover, they concluded that “product innovation and customer-centricity are both the result of organizational learning and knowledge creation” (López-Cabarcos et al., 2020, p. 1039), further expanding the relationship between the two concepts.

Related to OL are the concepts of knowledge acquisition, organizational wisdom, and experience. In the research paper on OL, knowledge, and wisdom, Bierly et al. (2000) noted the benefits of leveraging a framework that included multiple constructs on

data, information, knowledge, and wisdom as a way of explaining the different types of learning. Additionally, various processes also facilitate OLT, including: (a) transformational leadership, (b) organizational culture, and (c) knowledge transfer. The scholarly work endorsed by Argyris and Schon (1978) is also relevant to our understanding of OL. This is where the two types of OL single-loop and double-loop learning become crucial to the framework. According to Bierly et al. (2000), “single-loop learning is learning within a given framework, and double-loop learning is learning by changing the framework” (p. 598). Undoubtedly, the need for organizations to transition into being ‘learning organizations’ starts with some fundamental principles that are related to the internal and external experiences of managing different sources of knowledge.

Learning is a never-ending undertaking and organizations that tend to encounter uncertainties, rapid changes, and ambiguities must be willing to learn (Edmondson & Moingeon, 1996). Apart from this, Chatti (2012) anchored their research study on personal KM and networks within the theoretical perspective of OL, thus bringing to the foreground the concepts of a knowledge ecology within a complex adaptive system. Primarily, what we find here are numerous scholars (Bierly et al., 2000; Chatti, 2012; Edmondson & Moingeon, 1996; Mishra & Uday Bhaskar, 2011) taking the benefit of using OL theories to situate and contextualize their research studies through a structured theoretical framework. Leveraging OLT within the study created a greater understanding and examples of how organizations like CST Enablement & Support can transition from the current state into more of a dynamic learning environment. The insights gained from

this theory facilitated changes throughout the implementation phase of the intervention.

Knowledge locked away inside an individual's head has no significant value to an organization (Basten & Haamann, 2018). For knowledge to be useful then it must be shared with all within an environment. Put differently, converting the individual's knowledge to the organization is the essence of this process. OLT deals with the dissemination of knowledge within a complex organization where teams and groups consume learning. It also subscribes to the notion of implementing trial and error expertise to ensure that individuals can become competent in executing the goals and objectives of the organization.

Direct Application to Study

Leveraging the OLT within this study accommodated a more extensive understanding with examples of how global organizations can transition from their current state into more of a dynamic learning environment that allows subject matter experts to thrive on the job. The theory enabled the pathway to explore the research question from the perspective of extracting examples and explanations on how leaders and employees go about sharing their knowledge that benefits everyone (Vera & Crossan, 2004). OL plays a critical role in developing expertise within an environment. It is then coupled with learning by doing, secondhand learning, and inherited learning, which is vital for individuals to navigate complex institutions.

Understanding the complexity within a learning organization that has been theorized will help in sharing how to integrate expertise as a best practice. Using the theory to support this study, directly informed the intervention whereby I was able to

clearly understand and appreciate how best to explore experts and their ability to learn and grow while supporting learning interactions within the organization. As highlighted in the theory, collecting feedback from learners through feedback loops such as single or double loops (Blackman et al., 2004) provided the necessary insights and reflections on what might be working versus those components requiring attention and adjustment.

Leadership & Coaching Principles

Leaders in organizations are there to lead. They also provide and influence the vision and objectives while ensuring the path to achieving business outcomes. As leaders, we need to bring clarity and drive success in fulfilling the goals and objectives of the respective organization or institution. Ordinarily, this is accomplished through fostering leadership behaviors, collaborations, and relationships. Fundamental to this research study was for me to engage in demonstrating strong leadership qualities. The success of our people starts with leaders and managers within the organization. Leaders are required to deliver success through the empowerment of using the model, coach, and care management framework (see Figure 8) that is anchored on driving transparency and accountability within the company. Moreover, irrespective of a leader status and tenure within the company, they should also be living the Microsoft culture that has been built around the three layers of leadership principles: (a) create clarity, (b) generate energy, and (c) deliver success.

Figure 8

Microsoft Management Excellence Model

Model	Coach	Care
Live our culture Embody our values Practice our leadership principles	Define team objectives and outcomes Enable success across boundaries Help the team adapt and learn	Attract and retain great people Know each individual's capabilities and aspirations Invest in the growth of others

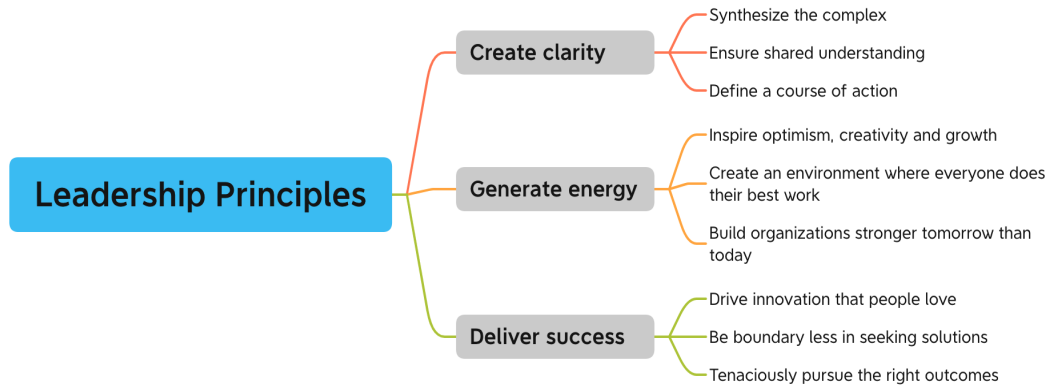
Note. The Microsoft Management Excellence Framework - supports a model, coach, and care mentality.

Leadership Principles

Leadership drives a culture of togetherness. It allows people to embrace our cultural transformation and support our customers, partners, and employees' success. Most importantly, leaders at Microsoft must live by example in how we conduct business and lead our teams throughout the organization. In expanding Microsoft's leadership principles, to create clarity, the leader must synthesize complex issues, ensure shared understanding, and define a course of action within the business (see Figure 9). As they do these core activities, a leader must also generate energy by creating a work environment whereby everyone is capable of doing their best work, and also build organizations and teams that are stronger in the future. Finally, in delivering success, leaders must drive innovation that people love, and in finding solutions to problems, they must be fearless while pursuing the appropriate outcomes for the organization, our customers, and our people (Microsoft, Leadership Principles, 2019). There is no doubt that these leadership principles are fundamental to building expertise within the organization.

Figure 9

Microsoft Leadership Principles



Note. The Microsoft leadership principles with additional detail on (a) create clarity, (b) generate energy, and (c) deliver success.

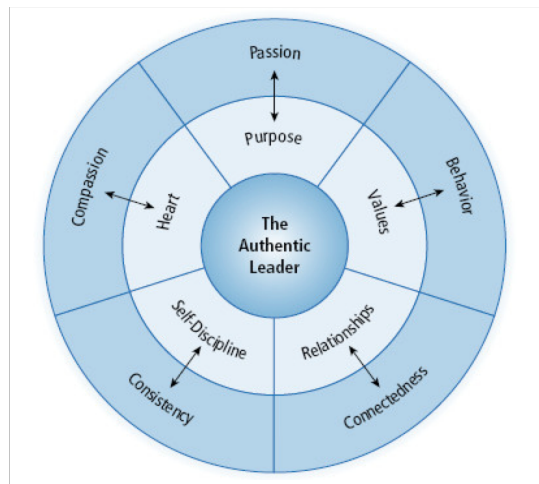
Authentic Leadership

While Microsoft's leadership principles set the foundation for how we operate as leaders, this can also be paired with other leadership traits such as authentic leadership (see Figure 10). Authentic leadership is about “a pattern of transparent and ethical leader behavior that encourages openness in sharing information needed to make decisions while accepting followers’ inputs” (Avolio et al., 2009, p. 423). Leadership is crucial to the success of any organization and its employees. Thus, embracing a particular leadership style allows individuals to function effectively within the boundaries of their respective knowledge, skills, and abilities. As a senior leader within Microsoft, I have always embraced a collaborative leadership style that is supported by integrity and authenticity. Navigating a de-centralized and fast-paced organization requires leaders to be their authentic selves. The leadership principles, the coaching techniques, and authentic leadership were critical ingredients to the success of this research study from

the perspective of sharing out with individuals and taking best practices to inform the direction forward.

Figure 10

Authentic Leadership Model



Note. Bill George’s Authentic Leadership Model is referenced by Northouse (2016).

Direct Application to Study

Integrating leadership principles and practices was essential to the research study and particularly during the stage of conducting the learning series workshops with the team members. As a senior leader within the organization, it was paramount for me to continue following the foundational leadership principles while executing the research process. Most importantly, sharing with team members some of the fundamentals of leadership and decision-making was beneficial. These leadership principles and coaching practices provided a springboard to help the team adapt and learn through various changes such as the implementation of a new intervention that would hopefully allow

them to think differently in driving greater business outcomes and strengthen their expertise.

The relationship between leadership and intervention in this research study is extremely pivotal, especially as it relates to understanding the ongoing benefits of developing and maturing expertise within the organization. Expertise is essentially based on the notion of skilled leaders. These principles serve as foundational instruments to exercise coach-like behavior and attitude while interacting with internal and external members of the organization. Furthermore, part of this research study was to establish the path for individuals to become more independent in their leadership style by embracing reflection, a growth mindset³¹, and KS that improves their level of expertise within any given domain. Hence, it was invaluable to bring the leadership, coaching model, and authentic leadership to the forefront of the research study.

Similarly, another layer of importance to this research was the integration of the different investigative techniques selected by me to situate the problem of practice, data collection, and analysis of the study. The central focus of this study is to explore and better understand experts, expert performance, and expertise within an ever-changing environment. Since expertise is a phenomenon, then the choice to leverage the phenomenological inquiry as a method for informing me was identified as part of the process. Additionally, it was the goal of this study to investigate the varying perspectives

³¹ It is about how an individual grow their abilities in life, recognizing that we can all improve irrespective of age, gender, ethnicity, background, etc. People having a growth mindset, believes that they can achieve anything and work smarter towards making that a reality. There is a willingness to embrace new challenges, explore uncharted territories, and implement different strategies to achieve a particular outcome. Furthermore, making a mistake is no longer viewed as being detrimental to their survival. Rather, mistakes are used as a learning opportunity to improve. The concept has been promoted by Carol Dweck, PhD.

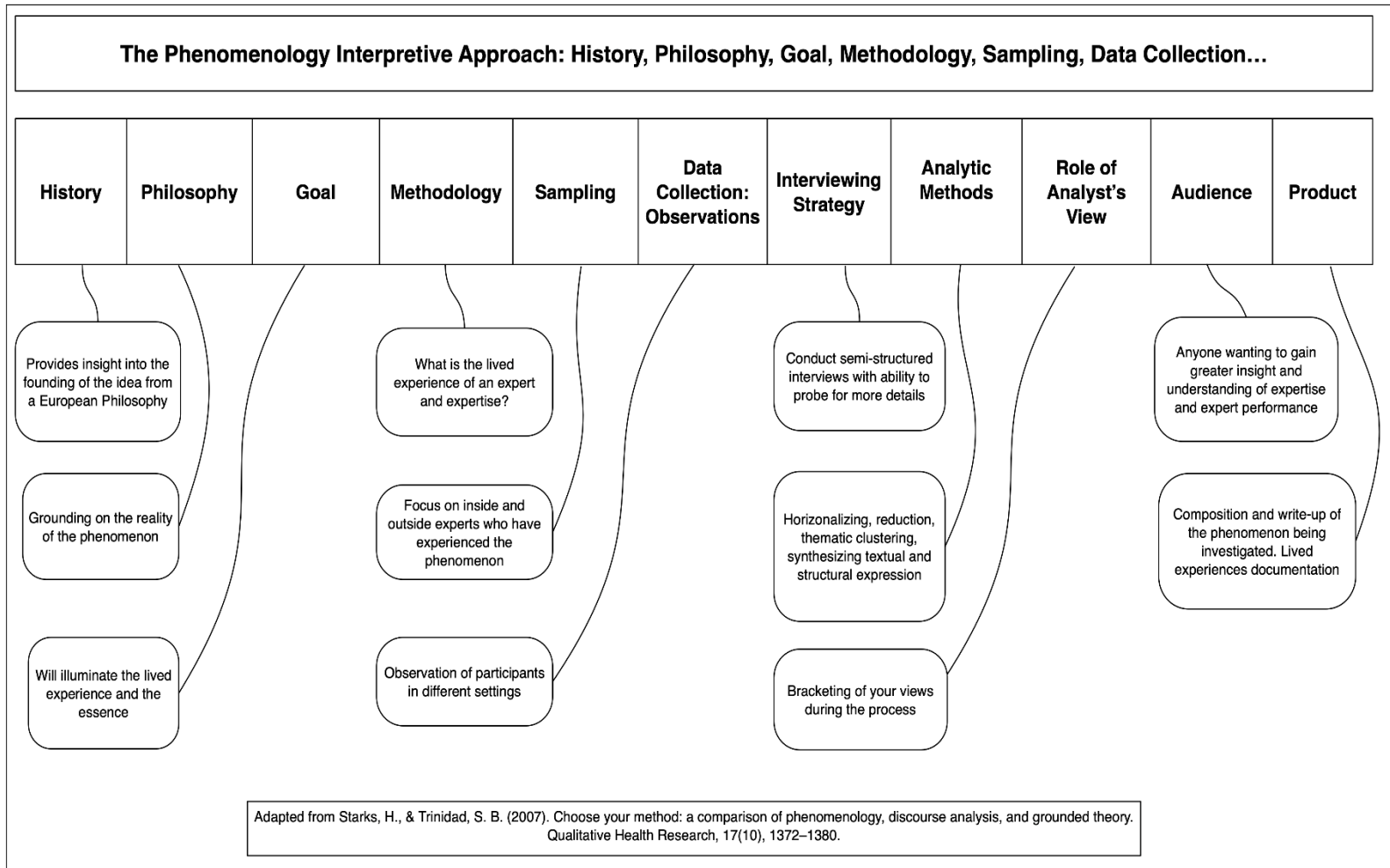
and lived experiences of multiple individuals. Hence, both narrative inquiry and digital storytelling provided the mechanism to explore these concepts in more detail by using interviews and observations with the participants of the study. The following section provides an overview of these methods that were paramount in defining the research methods.

Phenomenological Inquiry Informing the Research Study

Phenomenology provides a critical perspective for assessing lived experiences and human interactions by embracing different meanings from a subjective standpoint (Coughlan & Brydon-Miller, 2014). Furthermore, we can also agree that “through reclaiming day-to-day, subjective experience as a means through which knowing is created, phenomenology repositions the knower in his or her own world as central to that which is known” (Coughlan & Brydon-Miller, 2015, p. 2). Through the lens of a phenomenological perspective, an individual can view the world and human experiences through an interpretive frame. In Figure 11, the phenomenological interpretive approach has been modified to provide specific references related to this research study on expertise. The diagram was created to demonstrate the interlinking components from left to right that were used throughout the study. For instance, the role of the researcher and my perspective on expertise were bracketed to minimize any perceived biases that typically manifest themselves in these types of research studies. On that note, it is important to call out that conducting any qualitative research will be susceptible to biases, thus, it is more about being transparent throughout the entire research process rather than attempting to eliminate every single one of them.

Figure 11

Phenomenological Interpretive Approach



Numerous scholars (Andrade et al., 2017; Budd, 2005; Oberg & Bell, 2012; Pink et al., 2015) have situated their research studies using the phenomenological perspective, especially whenever it comes to explaining social phenomena, social construction, intentionality, and other subjective ideas that require in-depth exploration. The phenomenological interpretive approach has been around for several decades. Thus, there are thousands of articles and dissertations available that have used this approach for the analysis of a phenomenon. In analyzing multiple articles on the topic, I discovered that Pink et al. (2015) is very illuminating in showcasing the applicability of the methodology, investigation techniques, and write-up of the description of the phenomenon, which is all relevant and transferable to my research on expertise. For example, Pink et al. (2015), in an article on laundry as a thread and texture of everyday life, discusses the cultural connections and implications of observing a mundane task that brought about some enriching explanations. In the article, the authors conducted an extensive qualitative study whereby they interviewed several individuals in the UK who were able to provide their perspectives on the interplay and the significance of doing laundry (Pink et al., 2015). What they discovered was that the social practice of laundry took on new meanings and behaviors that would eventually transform the way it was viewed. In fact, Pink et al. (2015) mentioned that “laundry forms part of the rooms people inhabits, it is embedded in the everyday routines through which they make a sense of home, it is understood through embodied and unspoken ways of knowing” (p. 215). Generally speaking, the approach of phenomenology provides a barometer by which one

can examine the different experiences of individuals and place different meanings that can shape our understanding of them.

Most importantly, for us to get the depth of understanding and insight, then we need to step back and interrogate the world through different critical perspectives, which is squarely in the bullseye of phenomenology. A paper from Andrade et al. (2017) on information and communication technology identified areas by which phenomenological perspectives connect individuals, technology, and society. In sharing the significance of this interconnectedness, they concluded that “phenomenology recognizes that lived experiences arise from existence. These lived experiences are incessantly happening as we go about our lives” (Andrade et al., 2017, p. 3), further highlighting the relevance of the approach with the subjectivity of our experiences coming to the foreground.

It is clear that phenomenology can be a potent research asset to examine and explore the lived experiences of individuals within any institution or organization. It provides an analytical framework by which you can zoom in and out on exactly what might be happening within a given context and environment. In fact, it allows us to develop research questions that investigate the “whatness of things instead of the thatness of things. Revealing the whatness of things aims at presenting the pre-reflective, subjective experience, which ultimately constitutes the essence of the phenomenon” (Andrade et al., 2017, p. 5). This idea of the “whatness of things” speaks volumes and resonates with the standpoint of leveraging qualitative inquiry to properly unravel and critically assess the world that we inhabit.

In bringing this critical perspective of phenomenological inquiry into focus, I definitely see how it got integrated into the research approach to examine and discover

new meaning around expertise, expert performance, and developing subject matter experts within a global workforce. Indeed, expertise is one of those shifting phenomena within our society that would require a critical examination to determine all the workable components from: (a) how to develop an expert, (b) how we share knowledge to ensure learning, (c) what does it really mean to be an expert, and (d) how do we replicate expertise through someone's lived experiences. Undoubtedly, there is an essential line to draw whereby I have this approach to expand my understanding of the research outcomes further.

In a recent qualitative study exploring the Agile methods phenomenon (Oren, 2021), the phenomenological approach was conducted using open-ended questions to examine the Agile manufacturing challenges. The phenomenological understanding was done using 14 questions for nine interviews lasting one hour, each participant was asked to explain their experiences and perceptions of the phenomenon. Similarly, Bogard (2011) adapted the phenomenological approach for their qualitative inquiry on exploring domestic violence instructors in an intervention classroom. In gathering the participants' experiences and perspectives on the topic, the author was able to conclude the benefits of transformative learning requirements. Both scholarly articles serve as great examples due to the techniques used in implementing the phenomenological approaches within their respective qualitative research study. Specifically, Bogard (2011) made the decision to leverage the recommendation approach from Moustakas (1994) on conducting phenomenological inquiry using the chronological and systematic approach.

Narrative Inquiry

In assessing the phenomenon of expertise within my organization, the researcher within me was tempted to explore it from an “ins and outs” standpoint while drawing on multiple individuals to share their lived experiences and stories. Hence, leveraging a narrative inquiry supported by the infusion of digital storytelling was an excellent combination to showcase expertise, experts, and expert performance within an ever-changing and distributed environment. The narrative provides a mechanism where we were able to gain greater insight into the stories that have been documented from those who were willing to participate in the conversations to capture their knowledge (Kim, 2016). In fact, Kim (2016) noted that “narrative inquiry utilizes interdisciplinary interpretive lenses with theoretically, philosophically diverse approaches and methods, all revolving around the narratives and stories of research participants” (p. 6). Narrative inquiry is about developing and sharing a story that does not necessarily flow from a chronological order per se. Rather, it brings that unique perspective of the individual to the foreground where we can all relate to what is happening and is being shared from the lived experience standpoint. In a recent qualitative research using the narrative inquiry, Adams (2021) examined the stories and experiences through a pedagogical and technological lens to explore Google Suite for Education with Chromebooks in the classroom. Semi-structured interviews were conducted and digitally recorded along with being transcribed using Google Meet. The result was around gaining invaluable insights into the experiences and stories of the educators in their digital journey within the classroom.

Digital Storytelling

The use of digital storytelling (DST) is a method of tapping into the benefits and promises of technology which allows for the illumination of different experiences for an audience. DST relies on using multimedia (narratives, photos, videos, sounds, voice recordings, etc.) to share stories about the lives of individuals within a group or community. de Jager et al. (2017) indicate that “the process of creating digital stories and, in some cases, viewing them publicly is seen as transformative for participants and the broader community” (p. 2551). Certainly, it is through this transformative process that we can experience what individuals are willing to share with us. In an action research project by Olson-Stewart (2009), the researcher leveraged digital storytelling as a form of digital narrative to investigate the beginning teacher attrition issues that have been plaguing schools. Consequently, digital storytelling became the primary data collection method for the intervention in the study, whereby self-awareness and personal resiliency were highlighted using the method. With the relevance of digital storytelling and its immense benefits in shaping the essence being shared by individuals, it is only fitting that the method was integrated into this research initiative.

Aligning the Problem, Theory, and Intervention

Pulling together these three different theories allowed me to shape the research storyline along with improving the research experience. These theories highlight the importance of research practitioners to contextualize their research studies. Likewise, they provided some essential principles, ideas, assumptions, and guidance that were leveraged as part of the development of the intervention methods that were suitable for

the problem of practice. In reflecting on the environmental conditions under which I operate, it was important to consider how an understanding of the various theories influenced my approach to addressing the problem of practice.

All these theories crystallize building appropriate solutions and understanding the various implications related to the problem of practice. Certainly, establishing a meaningful connection between the theories and my practice allowed for a comprehensive assessment to be conducted and explanations reached that are supported by social science references. The KMT provided the foundational mechanism and framework by which I thought through the interrelationships and characteristics of learning and associated behaviors. It is unlikely that I would have been able to explain the challenges without first defining and framing the underlying principles of knowledge and learning. KM accommodates critical thinking from the perspective that we appropriately structure our thoughts from the standpoint of what it truly means to discover knowledge and the behaviors that must be demonstrated from the subject matter expert's position to consume and utilize it effectively within an organization.

Similarly, connecting SME within an environment that is conducive to learning is crucial for any development and growth. This is where OLT becomes essential to fostering the requirements needed to develop teams, groups, and organizations into becoming learning organizations. Noteworthy here, though, an organization is not capable of learning without the proper components related to the knowledge that must be in place (Bierly et al., 2000). While knowledge is critical to enable an organization to remain competitive and relevant, so is the ability to share such knowledge within and

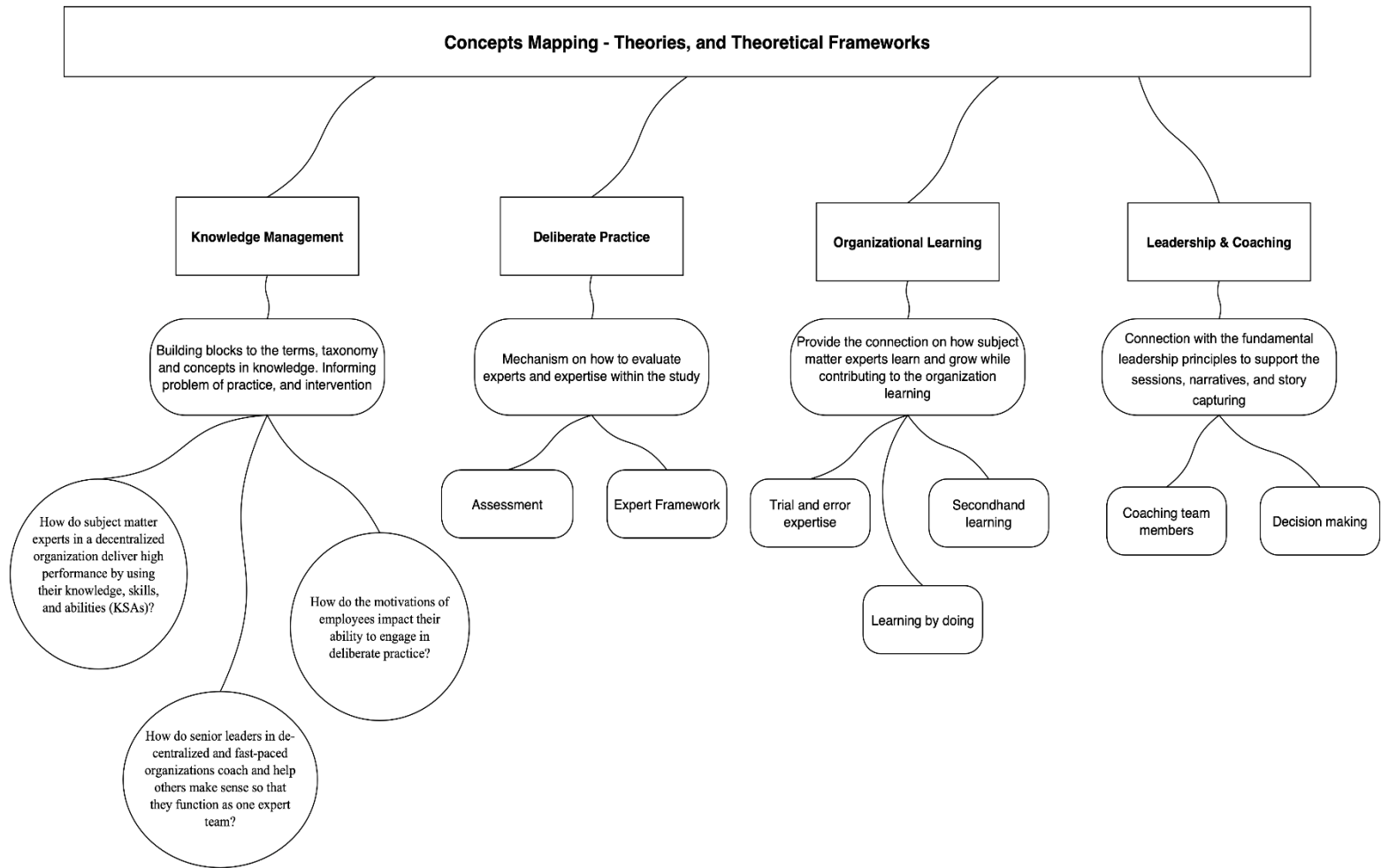
outside the organization (López-Cabarcos et al., 2020; Mishra & Uday Bhaskar, 2011). In the spirit of sharing and improving, this is often done by establishing a deliberate practice with mutual engagements and commitments towards a common goal (Ericsson et al., 2018).

Deliberate practice is then viewed as the interconnecting links between KM and OL. It is important for individuals to exhibit the characteristics of a leader and an effective expert who will be working within cross-functional teams, diverse communities, and complex environments that require ongoing continuous learning to generate high expert performance. Deliberate practice connected to the other theories to highlight how: learning and unlearning enhance expertise, people learn from each other to develop trial and error expertise, whereby organizations and individuals can foster a social practice and develop active participation through fundamental learning while embracing rapidly evolving knowledge.

This chapter started with the framing of the current state of KM, KS, and expertise within the knowledge economy. These theories highlight the importance of how research practitioners can contextualize their research studies. Evaluating these different theories (knowledge management, deliberate practice, and organizational learning) undoubtedly influenced and had implications for my profession. I was able to leverage similar research instruments, constructs, and methods to better understand the limitations within a particular discipline. All in all, there is more value in framing the body of research within the sphere of reliable and validated theories around deliberate practice, learning, knowledge, and expertise (see Figure 12).

Figure 12

Conceptual Map on Theoretical Perspectives



CHAPTER 3

RESEARCH METHODOLOGY

In today's environment, hoarding knowledge ultimately erodes your power. If you know something very important, the way to get power is by actually sharing it.
~Joseph L. Badaracco, Harvard Professor

The previous chapter provided the theoretical framing along with the three theories supporting this study. In this chapter, a description of the research methodology for this action research project is presented. The purpose of this action research dissertation was to explore the phenomenon of expertise within a distributed and fast-paced global organization and understand how leaders can cope with the ever-changing environment. Firstly, a brief introduction to the role of action research and its application is explored. Secondly, an introduction of the setting and participants, my role as a research practitioner, along with the data sources and data collection mechanisms, are depicted. Thirdly, an explanation of the E2EPF as the intervention that was used to explore experts and expert performance is examined. Finally, an overview of the data management, ethical considerations, timeline, and implementation procedures will be discussed.

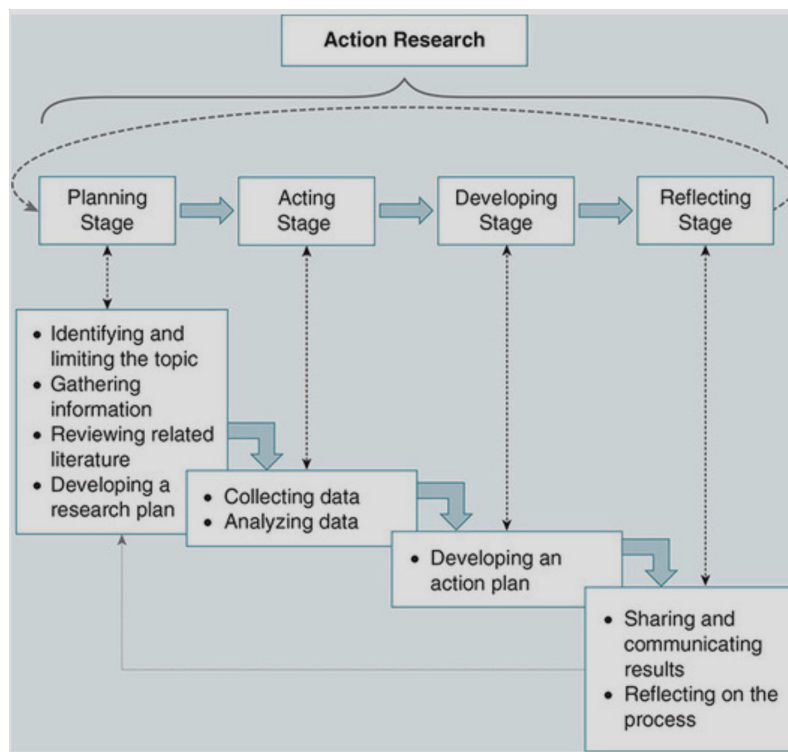
Action Research

Action research is a systematic process of inquiry that allows researchers to investigate their local context in a collaborative manner (Coghlan and Brydon-Miller, 2014). The foundation of action research is about concentrating on change that can benefit those directly involved with the process. It can take both an iterative and cyclical

approach that entails four stages: planning, acting, developing, and reflecting (Mertler, 2019). Each of these stages required that researchers work with individuals within their environment to find solutions that could potentially address the problem of practice (see Figure 13 for more details). Essential to action research is having the ability to also implement an ‘action’ that can address the underlying concern. The power behind this research method is that it requires that participants and researchers work together in investigating and solving problems.

Figure 13

Action Research Stages



Note. Action research stages have been referenced by Mertler (2019).

Action research centers around practitioner-based research, which focuses on the practitioner’s involvement in conducting research within their environments. Mertler

(2019) defines action research as a systemic inquiry that allows an individual to gather information about their environment with the intent of learning how it operates. The benefit of action research involves practitioners conducting assessments with the goal of understanding how to improve their respective organizations. The process of conducting action research consists of four steps: (1) identifying an area of focus/concentration, (2) researcher collecting the data, (3) analyzing and then interpreting the data, and (4) developing a plan to execute the particular actions.

Action research can help answer crucial questions and provide the guiding principles for fostering change. Mertler (2019) suggested that “the main goal of action research is to address local-level problems of practice with the anticipation of finding immediate answers to questions or solutions to those problems” (p. 14). There is a cyclical and reflective nature of inquiry with action research. In fact, research practitioners should not consider action research as a linear process. Bradbury et al. (2019) viewed action research as a catalyst of change for human creativity and a tool for addressing problems. Besides, Eden and Ackermann (2018) reminded us of the “action research cycle encompassing a series of interventions, where each intervention sought to be faithful to the concepts and theories of interest” (p. 1147).

Boundaries of the Inquiry

This research study relied heavily on the lens of the researcher and the lens of the participants to understand and interpret their lived experiences. Hence, the trustworthiness of this qualitative inquiry was primarily driven by individuals sharing their experiences in the most authentic way possible (Fossey et al., 2002). In maintaining the validity of qualitative studies, “qualitative researchers routinely employ member

checking, triangulation, thick description, peer reviews, and external audits” (Creswell and Miller, 2000, p. 124). Therefore, the trustworthiness procedures of this research included a multiplicity of methods such as member checking, triangulation, thick and rich descriptions, bracketing, and reflexivity.

For this study, my epistemological position was constructed around the principle that: (a) expertise is embedded within the minds of individuals inside and outside of an organization, and (b) due to this, I collected information from these individuals to better understand the phenomenon. Throughout the research process that involves exploration and interpretation of various individuals, it was important to position the study within the context of being trustworthy with the necessary rigor and credibility. Klenke et al. (2016), remind us that “for purposes of validity, phenomenology relies primarily upon the coherence of interpretations of the data. Findings are valid to the extent that they resonate with the experiences of others who have experienced the phenomenon in question” (p. 216).

Putting aside the multiple debates over whether qualitative or quantitative is better, I want to reassure you that for the purpose of this study, the most logical form of connecting with the lived experience of the participants is through understanding the social world from their perspective. Thus, qualitative research and the relatable tools provide the most effective way of understanding and deciphering the underlying meanings of expertise, experts, and expert performance. Tracy (2010) wrote about the eight big-tent criteria for excellent qualitative research and highlighting four of them in relation to this study would be invaluable.

Excellent qualitative research involves: (a) a worthy topic, (b) rich rigor, (c) credibility, and (d) sincerity (Tracy, 2010). In demonstrating the relevance of this study and the respective problem of practice on expertise, “good qualitative research is relevant, timely, significant, interesting, or evocative” (Tracy, 2010, p. 840). There is no doubt that the chosen topic elicited deep interest from within and outside the organization. Selecting the topic of expertise was meant to explore a phenomenon that brought about new knowledge and understanding that should inform the path forward from a learning and development perspective. Unquestionably, this study entailed rich rigor in identifying the theoretical frameworks, selection of the population, data collection, and analysis procedures.

Tracy (2010) indicates that credibility involves the thick description of the phenomenon under investigation, explication of the knowledge, and triangulation of member reflections. These techniques were definitely part of the study to ensure that I felt confident in the experience being showcased by the qualitative results. Finally, invoking sincerity within the study drew on many considerations such as being: (a) self-reflective, (b) acknowledging the existing biases, and (c) continuing to demonstrate transparency throughout the research process. Above all, ensuring the integrity and trustworthiness of the research, required me to engage in bracketing my ideas and opinions constantly. Klenke et al. (2016) point out that “bracketing not only means suspending prior knowledge about a phenomenon but is also a means of demonstrating the validity of the data collection and analysis process” (p. 217).

To conclude this idea of boundaries of the inquiry, I do realize that there will always be differences in how each researcher views the world based on their

epistemological and ontological stance. In the end, we must acknowledge our differences, biases, and subjectivity of the topic, but most importantly, bring the voices of those we are investigating to the forefront. The journey of this phenomenological inquiry was about bringing the lived experiences of the outside and insider experts along with mine to life. Furthermore, I am fully aware of the fact that “rigor and quality of a phenomenological study can be enhanced when the researcher maintains a constantly questioning attitude in search of misunderstandings, incomplete understandings, deeper understanding” (Klenke et al., 2016, p. 217). My desire for exploring expertise was to keep an open mind and let my curiosity lead the way. And as Moustakas (1994) rightfully summarizes the intent of the study, “phenomenology is committed to descriptions of experiences, not explanations or analyses” (p. 54). Hence, it was pivotal that the inquiry focuses on both the insider and outsider experts to describe their experiences with authenticity.

The Setting of the Research Study

This study was conducted from March 2022 to September 2022 within the CST Enablement & Support organization. We operate a support operation that functions twenty hours five days a week (24x5) with individuals working on policies, and procedures, along with troubleshooting complex issues that require a deep knowledge about the business and the underlying solutions. Both FTEs and vendor resources operate across three different time zones (Americas, Asia, and EMEA) across 15 regional areas known as the ‘A15’. The 24x5 operation provides flexibility for end-users to reach our support personnel based on these locations. As noted, individuals are assigned around the world such as in Canada, India, UK, and US. Indeed, providing product field support is

crucial for securing the investments needed for future business and technological solutions that can accelerate the digital transformation agenda.

Research Participants

The participants for this research study were selected using the purposive sampling method (Tongco, 2007). This type of non-probability sampling is appropriate in identifying both the insider and outsider experts for the study. The selection of participants was based on my judgment, along with the purpose of this research which was to investigate the experiences of experts and expertise. I was seeking individuals who had the necessary experiences related to the phenomenon of expertise and the time to dedicate to participate in the study. Given the scope and size of Microsoft as a multinational corporation, I had access to thousands of experts across the globe in multiple disciplines ranging from telecommunications, technology, education, operations, training, and readiness to learning.

The study collected information from individuals within Microsoft who are: (a) experts from outside of CST Enablement & Support, and (b) team members and leaders within the CST Enablement & Support organization. All team members are FTEs and have industry experience of being employed with either Microsoft or another company for an average of five years. These employees have been working within the organization as SMEs with deep institutional knowledge. Purposive sampling was used to choose participants for this study based on key characteristics agreed by me (Tongco, 2007). These individuals were selected based on their interest to learn more about KM, KS, and expertise. The study ended up with seven participants consisting of several team members and a leader. In the study were: (a) individuals who demonstrated an interest in

wanting to learn more about strategic leadership, (b) worked on several customer issues within the last three months, and (c) a leader who could provide their perspective and feedback on the intervention.

A participation letter (Appendix D) was used to confirm attendance from both the outside and insider experts. This was sent out prior to the start of the workshop series in the summer of 2022. Tracking was done to ensure that participants accepted or declined the invite. When the threshold was not met, new participants were contacted to ensure the baseline for the research. The expectation was to have: (a) minimum of about ten outsider experts, (b) minimum of five insider experts, and (c) at least one leader. In the end, ten outsider experts, six insider experts, and one leader were enrolled.

Role of the Researcher

The common saying that ‘knowledge is power’ resonates with billions of people around the world. We live in a society whereby knowledge has become the cornerstone of our development and evolution. In building the backbone of knowledge, I tend to connect with people to learn more about their lived experiences, perspectives on the world, and how they interact together to understand commonalities and differences. Gaining insight into how people relate to their environment, adjust their behaviors, and break down barriers is all about practicing ways by which we can share our knowledge, skills, and experiences.

My personal journey and experience have allowed me to see things differently, especially as it relates to connecting the dots within organizations and various group settings. Personally, there is an immense amount of fascination on my part that extends around numerous perspectives of learning and knowledge acquisition. Finding the

connection between an idea and a practical solution is a crucial step towards a destination where real-world challenges are addressed by building a shared community with individuals eager to learn, share, and grow.

Over the years, my work explores the relationship between seasoned professionals, leaders, and peers within a global organization on their decision-making competencies in different situations while solving problems. It echoes the need to connect with in-depth knowledge of individuals on knowing, acting, and observing within the environment. In exploring this journey of subject matter experts and expertise, one can see the connection between practice and breaking down artificial boundaries that prevent synergy and effective changes. Needless to say, the desire and passion for capturing the lessons learned and the voices of those who are influencing a new world of critical thinking are at the center of focus for expanding knowledge that would be accessible to all.

As the Field Success Team director for the organization, I also acted as the researcher and practitioner in this investigation. Additionally, I was responsible for the overall execution of the program. In this action research study, my role was to facilitate the conversations and deliver the sessions with the participants and analyze and reflect on the experience. During the Summer 2022 semester, I conducted expert exchange workshops (learning series) with the team members. All logistics for the program workshops were coordinated and completed by me. The intent was to make this an engaging and worthwhile experience for the participants so that there was a willingness to participate without feeling overwhelmed.

I collected data for the study in the form of administering interviews with outsider experts, group discussions, reflection notes, and other knowledge resources such as the leading-edge delivery white paper. Additionally, I shared with the participants some key information about KM practices, and expertise best practices while bringing in industry best practices.

Intervention: Expert-to-Expert Practice Framework (E2EPF)

The intervention on expertise is about integrating the knowledge from an outsider to an insider's perspective. A crucial part of this research study was also to pull from my lived experience and more than two decades of leadership within and outside of Microsoft. Indeed, this was viewed as a reflective practice in that I wanted to examine the situation to support expertise from all perspectives within the organization. Schön (1987), one of the renowned scholars in his field, shared that:

Reflection gives rise to on-the-spot experiments. We think up and try out new actions intended to explore the newly observed phenomena, test our tentative understandings of them, or affirm the moves we have invented to change things for the better. (p. 28)

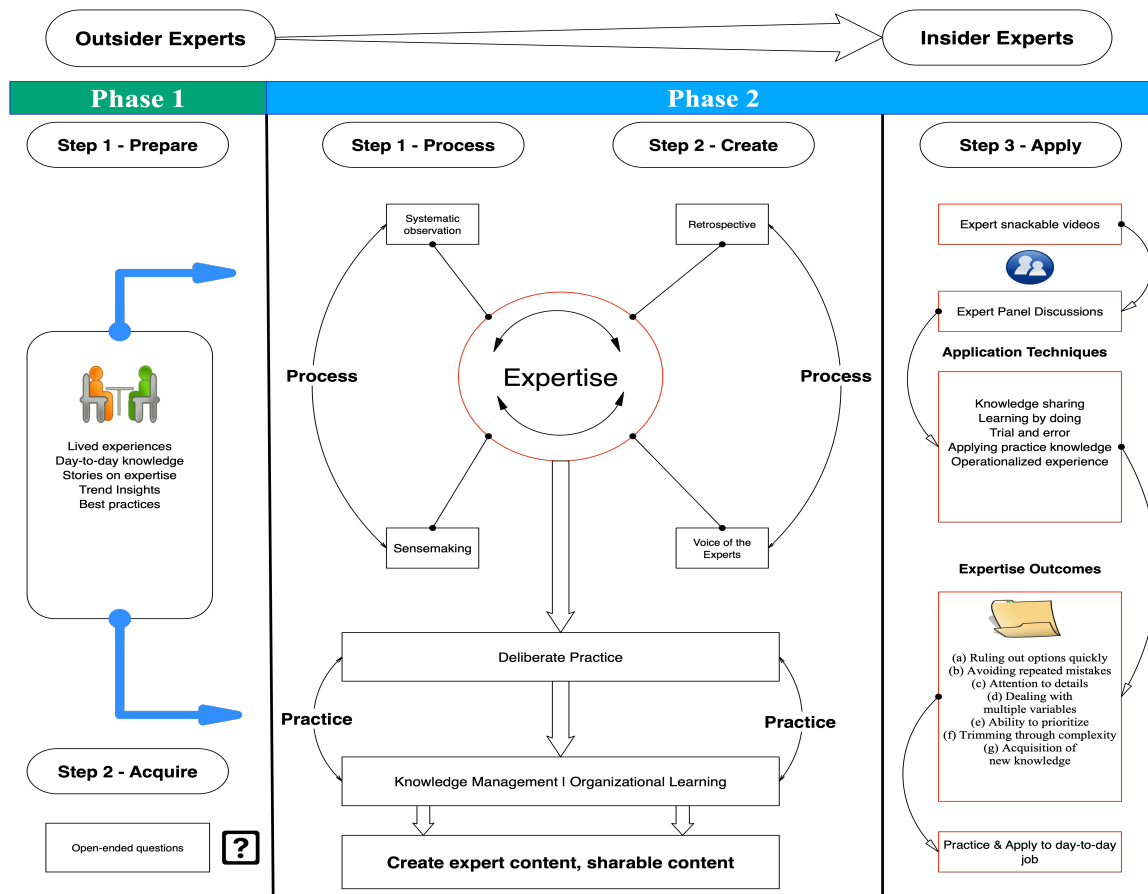
Certainly, the objective was for team members to reflect upon their understanding, conceptualization, and meaning of expertise. Additionally, they were empowered to demonstrate what it means to be an effective leader and an expert in an ever-changing global company.

To support E2EPF, the intervention examined experts from both inside and outside of the organization (see Figure 14). In addition, one of the central aims was to identify at least five leadership strengths that I knew were either from the literature or within our environment that would form the basis for exploring the phenomenon within

our organization. There were two separate phases to this intervention: (1) Phase 1 - The Outsider Lived Experiences & Trend, and (2) Phase 2 - The Insider Reflective & Deliberate Practice. Each phase provided a unique and insightful perspective in unpacking the phenomenon around expertise. The combination of these two distinctive phases provided an opportunity for me to properly assess the different elements of the expert-to-expert practice framework that could support the replication of expertise.

Figure 14

Expert-to-Expert Practice Framework (E2EPF)



Note. In phase 1 there are two steps that relate to the acquisition of knowledge from outsider experts. These experts would be sharing their knowledge and lived experiences using a semi-structured interview. Phase 2 included three steps that were directly related to insider experts and how the acquired knowledge is created and shared with them.

Techniques for capturing expert performance and knowledge have been adapted from the work of Ericsson et al. (2018). As a result, phase 1 of this intervention leveraged a retrospective approach and qualitative interviews. As it relates to phase 2, the intent was to engage in systematic observation and digital diaries that collect reflection information from the insiders. The practice activity was collected from the lens of narrative inquiry and digital storytelling while using phenomenological inquiry to understand the real meaning of expertise.

Phase One - The Outsider Lived Experience & Trend

The first phase of the intervention was about engaging in an inquiry with outsider experts who were asked to share details of their lived experiences from the perspective of being an expert while delivering high performance. In addition, the examination strived to extrapolate the essence and meaning of expertise from the viewpoint of these different individuals. There is no doubt that the mission of acquiring domain knowledge and expertise varies from one individual to the next. Therefore, everyone would have had a unique perspective to share as it relates to their individual journey while also demonstrating many commonalities that exist, which then influence the way we think about developing expertise. To that end, the idea here was fundamental in leveraging these outsiders and their years of experience as part of the central tenets in developing the narrative on fostering expertise.

In using both narrative inquiry and digital storytelling techniques, the intervention provided relevant details from the experts that were packaged into reusable learning materials for others to consume. What was indispensable during the discussion with the

outsider experts was their illustration of how they conceptualize the meaning of experts, expertise, and expert performance within their domain. Certainly, gathering their perspective and expression of what are the essential behaviors and skills of an expert informed phase 2 of the intervention process. Furthermore, capturing the understanding of the leadership skills that every expert should possess within a global organization shed light on the transferability of knowledge related to expertise within a community of experts. The expectation is that engaging in a dialogue with outsider experts who are normally elite performers within their own communities can influence the insider experts and their future performance.

The strategy for phase 1 intervention was mostly to investigate expertise by interviewing experts that are outsider of our immediate organization. Having these individuals participate in Microsoft Teams interviews generated a wealth of knowledge that was then reshared with the insiders. Hence, these conversations ultimately created some relevant information on our understanding of what are the qualities and traits of becoming an expert that engages in high performance within the workplace. Significant to this phase was the selection of experts, which was crucial to hearing the ‘voice of experts’ as part of the discussion. The selection process entailed identifying experts within the company with different leadership and technical backgrounds who were willing to speak with me. The approach involved using open-ended questions as part of the interview process to better understand their lived experiences. Open-ended questions provided the mechanism to ask follow-up and probing questions to elicit deeper meaning.

As part of the interview process, a narrative inquiry created an environment in which the outsider experts were able to share their experiences freely with me as part of a

natural conversation. In addition, the use of DST allowed details of these interviews to be captured for: (a) professional development, (b) educative briefing, and (c) knowledge translation (de Jager et al., 2017). The benefits were multifold for us in that these conversations:

1. Provided an understanding of how trends are occurring within the specific domain for the expert and how these can inform the insiders on future direction,
2. Captured the latest thinking on expertise using a retrospective analysis,
3. Brought in a new perspective around leadership skills and expertise techniques into the organization,
4. Shared the meaning of expertise and expert performance,
5. Collected best practices and lessons learned on expertise,
6. Captured and documented new knowledge to be used with our insiders on improving their expertise, and
7. Gained a greater depth of experience being shared by the experts.

The structure to facilitate the extrapolated knowledge from outsider experts required both an understanding of the relevant inputs and outputs of the extraction process. From an input perspective, I was prepared to have: (a) researched the approach to interviewing experts, (b) developed subject areas relevant questions, and (c) gathered a pool of experts in subject areas. As it relates to the outputs of this process, I was able to walk away with: (a) an understanding of essentials around expertise, (b) best practices on expertise, (c) a definition of experts and expertise, and (d) snackable videos with interviews from the outsider experts. All in all, the methods employed in this phase are

about (1) defining the subject to be covered, (2) identifying experts to participate in the process, (3) coming prepared with questions for the experts, (4) conducting the interview (focus on essential information, facts, and expert's opinions), listen, capture, follow up, and (5) finally transcribing and summarizing (summary document) (Kumar, 2012). One of the most germane deliverables of this exercise was to create those snackable videos through digital storytelling techniques. The expectation was to have two to five minutes of videos from outsider experts that would be used during the second phase of the intervention process. In the end, the final product was more around creating videos that were an average of 12 minutes per topic. While my intent was to leverage existing resources such as our communication team to help produce high-quality multimedia content for this intervention, this did not materialize due to multiple reorganizations.

Phase Two - The Insider Reflective & Deliberate Practice

Developing expertise requires individuals to engage in both reflective behavior and deliberate practice. Mumford et al. (2018) concluded that “understanding how experts perform and perform exceptionally, is not only of theoretical interest, it is a program of research with practical implications for the real world” (as cited in the text by Ericsson et al., 2018, p. 291). The second part of the intervention is about the acquisition of expertise and maintaining expertise while engaging in activities that solicit a reflective and deliberate practice mindset. This phase of the intervention used the materials collected from the outsider experts to facilitate conversations on expert persona building through workshops with the team of SMEs. The technique for developing expert persona definition leveraged the work of Kumar (2012) on defining user personalities that address

how we can broaden our mindset, facilitate storytelling, and inspire ideation. In addition, the expert persona/profile deliverable was directly connected to Microsoft's newly launched job architecture initiative which brought the profession, discipline, and roles in line with other companies. Since the purpose of this research is to understand expertise as a phenomenon, I wanted to ensure that participants were comfortable assessing the idea from various perspectives.

The second phase of the intervention took the form of conducting a series of workshops to allow for the dissemination of information from outsider experts, facilitating group discussions, and role-play exercises to explore expertise and expert performance from the participants' lived experiences. In addition, the intervention was conducted in a way that allowed team members to first watch the snackable videos from the outsider experts and then document their thoughts and feedback. The purpose of this exercise was to ensure that the reflective and comparable elements of expertise were taken into account by these insider experts. Indeed, I did anticipate that the workshop could be done over four weeks involving the different team members. I did not want to have any drawn-out activities, especially given the nature and context of the work being performed by the team.

Sharing the outcomes from outsider experts was the utmost goal within phase two of the intervention. During this phase, the primary product was sharing the results of the phenomenon with the team members. The experts' snackable moments provided relevant insight as part of the KS and KM experience. Sharing the knowledge captured from the outsider experts with the team, solicited a deeper understanding of expertise from an

outsider's perspective that allowed them to also reconcile with their lived experience. This second part of the intervention primarily focuses on the notion of sharing through an interactive experience. The experts that are internal to the CST Enablement & Support team had an opportunity to listen and watch others shared insightful information about their roles and responsibilities within the company and how developing their expertise allowed them to drive impactful business decisions and results.

Expertise can be developed through deliberate practice that requires individuals to come out of their comfort zone and try something that they have never done before. Furthermore, this purposeful engagement of expertise means that the unique experience that has been shared by others can create an atmosphere of learning by doing. I had multiple conversations with the team to gain additional insight about: (a) their perception of the outsider experts, (b) sharing any new learning, and (c) providing any details on their own lived experience. Indeed, this was a form of just-in-time learning for experts whereby professional development is a crucial component of the experience being promoted within the intervention. There were multiple benefits to engaging in this second phase of the intervention in that it highlighted some essential functions for experts, preferential skills that enable expertise, and levers that can be implemented to achieve expert performance.

There were four interexchange expert sessions as part of the framework that was conducted over four weeks with each session lasting for one hour. The main outcome of phase 2 was for the insider experts to learn from others. Through work that was done by the insider experts, the expectation was for them to focus on functions that enhance

expertise, such as: (a) ruling out options quickly, (b) avoiding repeated mistakes, (c) attention to details, (d) dealing with multiple variables, (e) ability to prioritize, and (f) trimming through the weeds to get to the issue. Furthermore, skills such as the ongoing quest for learning, summarizing issues, self-reflections, observation techniques, and KS were crucial during the sessions and in their role as SMEs. One of the main levers had to do with embodying a training mindset since the “key factors distinguishing experts from non-experts are largely the result of training” (Ericsson et al., 2018, p. 257). Above all, the expectation was that insider experts would engage in sensemaking from the knowledge being shared by outsiders. Sensemaking is about taking what they have learned and applying it to their day-to-day environment, thus empowering themselves from a practical perspective (Schildt et al., 2020).

Data Collection

Data for this research study were collected from multiple sources as part of the intervention on expertise. It should be noted that the primary sources of data came from experts inside and outside of the organization. Hence, data sources included unstructured in-depth phenomenological interviews, reflective researcher’s journals, process documents, field notes, expert panel discussions, expert reflective activity statements, meeting recordings, memoing, and snackable videos. Utilizing multiple sources of data for this research strengthens the outcomes being sought for the organization. The following provides a more comprehensive view of the data collection methods:

- **In-depth phenomenological interviews:** These required conducting listening sessions to gather information and insight from experts within the company.

- Outsiders - FTE individuals within the organization who have demonstrated expertise in various domains within the company and across different industries.
- The sessions were conducted using Microsoft Teams with outsider experts and lasted around 55 to 60 minutes.
- Ten experts participated in the phenomenological interview sessions.
- Sessions were recorded with the consent of experts. Prior to starting the recording, the experts also got another reminder of the recording process.
- Microsoft Teams Transcription service was enabled to capture the transcription during the interviews.
- **Expert Panel Discussions:** This was mainly to foster multiple perspectives from the insider experts through conversations.
 - Facilitated conversations with team members who are SMEs in the organization. These individuals reviewed the snackable videos and discussed the implications to their practice. They also created expert personas/profiles which were directly connected to different ways of problem-solving.
 - Learning from other experts' insights were gathered from the team members. They engaged in group discussions to highlight key learnings that applied to their role and domain expertise.
 - Completed reflections on what would allow them to become better experts within the environment.

- Facilitated leadership discussion and observation as part of the conversation.
- The activities by these individuals were conducted as part of the Microsoft Teams meeting.
- There were four sessions, one hour each week. Additionally, experts were required to complete out-of-band work whereby they updated the expert personas and profiles document.
- **Meeting recordings (insiders and outsiders):** All meetings were recorded using Microsoft Teams.
 - Insider expert discussions were recorded using Microsoft Teams. The main goal was to leverage the technology that is already part of the daily flow of work for myself and the experts.
 - Outsider expert interviews were recorded using Microsoft Teams while having the transcription service enabled for the recordings.
- **Reflective researcher's journals:** Provided the ability to capture notes, ideas, and thoughts that I had throughout the research study.
 - I documented the key processes and decisions that were made throughout the action research stages.
 - Captured important information and brainstormed ideas on approaching the research with the participants.
 - Provided a repository of documentation within Microsoft OneNote.
 - Enabled ad-hoc documentation which means that if important thoughts arise throughout the research process, they were documented by me.

- **Process documents:** Collected any documents relevant to understanding the expertise and expert performance within the organization.
 - The Leading-Edge Delivery (LED) document served as important content that helped inform the direction of core delivery principles and methodologies used within Industry Solutions Delivery.
 - Collected the CST Value Realization document that contains relevant information on delivering impact within our organization as experts.
- **Fieldnotes:** Observation notes from various insider experts during their interactions were documented.
 - Captured important information from the conversations with the different team members and people outside of this organization.
 - Observational notes throughout the experience were documented as a way of capturing how the participants were interacting with each other.
- **Expert reflective activity statements:** Documentation done by the insider experts on their overall experience of engaging in the intervention process.
 - Each expert was asked to write up a document on how they were feeling about the experience.
 - Captured the essence from their personal perspective and in their wording.
 - Digitally documented the information from the team members.
 - Relevant information such as what they thought about the experience, and what type of improvements could be made were part of the free form section.

- **Memoing:** Memos were critical documents that provided immense feedback and insight into the intervention.
 - Codes were created as part of a process to assess the collected data from the experts inside and outside the organization. Code memos were used to keep track of the code definition, examples of the code, and comments related to all codes within the dataset.
 - Categories and Themes formed the final narrative within the exploration of expertise, experts, and expert performance. Crucial to supporting these themes within the research were memos as part of the audit trail. The thematic memos provided insight into the purpose, assertion, and any decision used to narrow down to a certain number of themes.
 - Freeform memos on the documents collected throughout the research process were created within MAXQDA. The expectation was to capture memos at any time based on the type of data being collected and analyzed.
- **Snackable videos:** Multimedia was a critical part of disseminating information as part of the research experience.
 - The use of snackable videos as part of the intervention allowed for easy consumption of the content.
 - Twelve-minute videos were created and made available for the insider experts to consume as appropriate to the intervention.

See Table 1 for a summary of the data collection process and how it connects to research questions.

Table 1

Data Collected Matrix

Research Questions	What data was collected?
RQ1: How do subject matter experts in a decentralized organization deliver high performance by using their knowledge, skills, and abilities (KSAs)?	<ol style="list-style-type: none">1. Expert Panel Discussions2. Expert reflective activity statements3. In-depth phenomenological interviews4. Meeting recordings (insiders and outsiders)5. Memo writing6. Reflective researcher's journals7. Snackable videos
RQ2: How do the motivations of employees impact their ability to engage in deliberate practice?	<ol style="list-style-type: none">1. Expert Panel Discussions2. Expert reflective activity statements3. Fieldnotes4. Researcher's Digital Journal
RQ3: How do senior leaders in de-centralized and fast-paced organizations coach and help others make sense so that they function as one expert team?	<ol style="list-style-type: none">1. Fieldnotes2. Process documents3. Reflective researcher's journals4. Snackable videos

Data Analysis Approach & Procedure

The phenomenological exploration for this research study took the form of an explication of the data (Groenewald, 2004). For this intervention, the data analysis effort used an adaptation of Creswell & Poth (2016), Hycner (1985), Moustak (1994), and Yüksel & Yıldırım (2015) models to ensure that I had a consistent and accurate approach to understanding the extensive volume of data gathered from the insider experts, outsider experts, and documents.

The data analysis process kept evolving and was very much iterative (Bhattacharya, 2017). Therefore, I had to go back and forth throughout the different phases of analysis with the dataset to ensure that a full representation of the essence of expertise and expert performance was brought to the foreground.

The integrity of the data analysis process heavily depended on me ‘bracketing’ my perspective on the phenomenon. According to Moustakas (1994), this is a process by which an individual reserves any judgment related to the phenomenon under consideration by them and their participants. In addition, it was paramount that I familiarize myself with the data that were collected from both the insider and outsider experts. This meant reading the data multiple times so that I became extremely comfortable with what was shared. Throughout the data analysis process, documentation in the form of analytical memoing was critical to capture important decisions, examples, and challenges. As noted previously, multiple memos were created throughout the process which was of great benefit for the final outcomes of the study.

Following the simplified version proposed by Creswell and Poth (2016), it allowed for a more thorough understanding of applying the principles that are rooted in analyzing a phenomenon within our environment. Their version included: (a) describing my personal experiences about the phenomenon that is being investigated, (b) developing a list of significant statements about the phenomenon, (c) grouping the significant statements into broad categories/units/themes of information, (d) create a description of the what for the participants (both insiders and outsiders experts), (e) create a description of the how the experience occurred for them, and (f) write up a composition description of the phenomenon. I created a blended model from the work of Creswell & Poth (2016) and Moustakas (1994) which allowed me to have a complete understanding of how to execute the various analytical activities that were involved in the research (see Appendix H). In addition, the perspective of Yüksel & Yıldırım (2015), where also leveraged which provided a grouping of the activities.

Table 2 provides a summary of the data that were collected and plans for analysis.

Table 2

Research Data Sources Matrix

Data Collection Instrument	Analysis Procedures and Techniques
Expert panel discussions	Analytical insights from the interactions of team members. Documented as field notes for analysis and coding.
Expert reflective activity statements	Interpretative phenomenology analysis (see Appendix H for details on the method that was leveraged across expertise competencies).

Table 2 continued

Research Data Sources Matrix

Data Collection Instrument	Analysis Procedures and Techniques
In-depth phenomenological interviews	Interpretative phenomenology analysis (see Appendix H for details).
Field notes, memo writing, reflective researcher's journals	First Cycle and Second Cycle coding process (Saldaña, 2021). The memoing information was captured as part of the research process.
Snackable videos	Analyzing the content from the outsider experts and making decisions on included narratives for the videos. Captured notes on the development process and applied descriptive coding (Saldaña, 2021).
Process documents	Content analysis with a first and second coding.

Data Management Supporting the Research

The importance of data management for both the data collection and data analysis phases of this research was extremely critical. Indeed, without having the appropriate data management structure in place then the probability of producing low-quality research that is susceptible to errors and poor data would be high. Outlined below are the various steps that were taken to manage the digital data. Providing the details behind these different data elements for this research, allows others to be aware of the importance that organization plays within the integrity of the research process (see Table 3 for more breakdown explanation).

Table 3*Tools for Data Management in the Research Study*

Data Instrument	Purpose and Usability
OneNote	A digital note management system. The data for this is stored within a secure cloud storage platform hosted by Microsoft for their customers. OneNote was used to document the reflexivity journals, ideas, observations, and any other notes that would be relevant to the research. The notes were titled, and time-stamped, along with the relevant content for that specific topic or issue being documented. The notes were stored in OneNote and were also exported as PDFs. The export of these notes was completed and imported into MAXQDA for data analysis to be done on them.
Microsoft Teams	The conference solution allowed for video and voice conferencing with participants that were also recorded with their permission. All sessions were recorded and hosted virtually using the Microsoft Teams product. This is a secure solution that only individuals with the specific invitation were able to join. This platform provided a consistent method to facilitate communication between participants in the research study.
Transcription (MS Teams)	The transcription of the interview sessions and discussion calls from both insider and outsider experts were done using the Microsoft Teams transcription service capability. These files from the transcription service were exported from the Microsoft Stream Service and stored within OneDrive. All files that were exported had the appropriate label based on the transcribed content.

Table 3 continued

Tools for Data Management in the Research Study

Data Instrument	Purpose and Usability
Visual Diagram & Management	Visualization and representation played an important role throughout the entire research experience. Diagramming throughout the process was documented using the Visual Designer. The files from this program were stored on the cloud storage to ensure consistency with the rest of the dataset within the research study.
Microsoft Word and Google Docs	For documentation of the content required for this research, both Microsoft Word and Google Docs were part of the process. Most of the draft documents were started with Google Docs and the final versions were completed using Microsoft Word. The documents were also stored across multiple cloud services to ensure proper redundancy.
Cloud storage (examples, Google Drive, iCloud, and OneDrive)	All files associated with this study were stored within one or both cloud storage providers. The cloud storage was only accessible by me. The Google Drive files were shared with the LSC committee members for research purposes only.
XMind mapping	Brain mapping is a powerful technique used to capture ideas and thoughts uniquely. Throughout the research process, multiple documents were created and stored within the XMind application. The files were hosted on the cloud storage platform.
Backup strategy	Created multiple sources on different cloud providers, local copies on a computer, and another on encrypted flash drives (i.e., Western Digital 5TB drive).
MAXQDA data management	CAQDAS (Computer-Assisted Qualitative Data Analysis Software) programs provide the analytical engine for assessment. The MAXQDA was used for the coding of the qualitative data. The coding of the imported data from the various data sources was saved into the project file which then was hosted on cloud storage. All the metadata including the memos on the phenomenology approach to coding, codebook, and themes were directly saved within the program.

Ethical Considerations

Conducting ethical research requires that I use informed consent within the research study. Along with this is the commitment to not harm the participants. The expectation was that voluntary participation being a fundamental right of the research study. Secondly, wherever necessary based on recommendations from participants to maintain anonymity was taken into consideration. Finally, avoid deception and dishonesty throughout the research process with both the insiders and outsiders who shared their experiences with me as the research practitioner.

The positionality of my role was one area that could not be overlooked within this qualitative research. Consequently, the study had to embrace cooperation and collaboration (Herr and Anderson, 2012) which involved myself, the outsider experts, and the insider experts. Likewise, Gibbs (2012) concluded that “all research causes some harm or imposes a cost. At the very least it relies on people's goodwill to allow you access to their lives and give you time to interview them” (p. 12), which as a researcher, I committed myself to not abuse for this study.

Timeline and Procedure

This intervention consisted of four weeks of expert panel discussion workshops. As the research practitioner, I helped to facilitate these sessions, and enrolled team members (insider experts) to lead the discussions with their peers. The main purpose of the second phase was to facilitate a conversation with the inside experts. The insider's experts watched the snackable videos before entering the more formal discussions with their peers. In addition, they worked on a specific deliverable around building the expert persona/profiles that would be leveraged for future work scope within the organization.

Table 4 summarizes how the data were collected throughout this research study.

Table 4

Research Study Timeline

Activity	FY22 Q3	FY22 Q4	FY23 Q1	FY23 Q2	FY23 Q3	FY23 Q4
Months	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
Recruitment strategy & participant approach	■					
Prepare intervention resources and assets		■				
Pre-intervention assessment		■				
Conduct phase 1 intervention - Outsiders Sessions			■			
Develop phase 2 expert contents			■			

Table 4 continued

Research Study Timeline

Activity	FY22 Q3	FY22 Q4	FY23 Q1	FY23 Q2	FY23 Q3	FY23 Q4
Months	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
Conduct phase 2 intervention - Insiders Sessions						
Data Analysis				Oct		
Report Written				Nov-Dec		
Dissertation Defense					Jan	
Share-out to organization / Presentation on Findings						May

CHAPTER 4

ANALYSIS AND RESULTS

*Knowledge is like money: to be of value it must circulate,
and in circulating it can increase in quantity and, hopefully, in value
~Louis L'Amour, American author*

The previous three chapters provided the description of the problem of practice, the purpose of the study, the local and larger context of the study, an overview of the different theoretical frameworks, leadership principles supporting the study, and the intervention based on the E2EPF along with the associated methodology of the project including ethical considerations. The primary focus of this chapter will be the results of implementing and utilizing E2EPF within the workplace. Thus, in this chapter, the data analysis will be shared from using the various qualitative data collected as part of the study.

The information presented here is organized into three sections. The first section covers the fundamental structure and data collection methods. The qualitative data included: (a) phenomenological interviews, (b) process documentation, (c) expert panel discussions, (d) reflection journals, and (e) expert assessments and surveys. Interviews lasted approximately 60 minutes with the outsider experts. There are over 600 minutes of recorded interviewing data available. Ten expert interviews were coded and analyzed. The second section deals with the processing of the data along with the critical findings related to each of the research questions. To complete the analysis, the first cycle coding and second cycle coding methods from Saldaña (2021) were used in the study. In this

procedure, process coding was used against the transcripts of the interviews, field notes, learning sessions, and process documentation. The chapter concludes with a discussion of the key findings. The qualitative data in this study connects to themes extracted from the lived experiences of both the outsider and insider experts along with some relevant quotations.

Background Characteristics

Participants for this research study were all experts within Microsoft and full-time employees (FTE) with decades of experience across multiple verticals and domains. All participants volunteered their time without any form of monetary compensation. Across both groups of participants, they were extremely gracious in sharing their knowledge and experience during the time we spent together.

Profiling the Outsider Experts

Prior to the interviewing of participants, the invitation and recruitment process had to be completed in a timely manner. Email communication was sent to 40 experts that were aligned to the Americas (including the United States, Canada, and Latin America) and European time zones (see Appendix B). The initial list of divisions included: Cloud & AI; Finance; Human Resources; Strategic Missions & Technology; LinkedIn; Experience & Development; Microsoft Gaming; Global Marketing; Chief Technology Officer (CTO) Microsoft; Security, Compliance, Identity, & Management (SCIM); Customer Transformation & Innovation (MCAPS); and Complex Delivery and CTO (MCAPS).

A set of criteria were created to ensure the proper selection of experts from the final list. Having the defined criteria provided the opportunity to narrow down the number of experts who would be later recruited into the study. The following outlines the criteria:

- Senior members within their group/organization
- Experience in engineering, program management, product management, and/or process management
- Exposure to learning and development in Microsoft
- Over five years in the industry, business, or technical experience
- Multiple disciplines, professions, roles, and responsibilities
- Individuals had the availability to participate in the study

Final availability was secured with the experts from ten different divisions within the company (see Table 5). To ensure diversity and inclusion, these individuals represent a very diverse internal sample that included multiple roles, different business and technical divisions, several geographical regions, and years of experiences within the company. The final list of divisions excluded experts from Strategic Missions & Technology; LinkedIn; and Global Marketing. The average number of professional working experiences is 17 years. All experts that participated in the study had a minimum of a bachelor's degree. The outsider experts were interviewed during the period of March 2022 to April 2022.

Table 5*Outsider Experts Demographic*

Name	Job title	Division	YE	GN³²	Ed. level	Location / Coverage³³	People Mgr.³⁴	Date of Interview³⁵
Nick Anderson	Software Engineer	Microsoft Gaming - Xbox	5	1	MA, MS. etc.	Redmond	0	3/23/22
Daniel Briozzo	Director of Finance	Microsoft Finance	10	1	MA, MS. etc.	LATAM ³⁶	1	3/25/22
Ed Cutrell	Senior Principal Research Manager	Microsoft Research & Development	22	1	MA, MS. etc.	Redmond	1	3/21/22
Raj Gopalakrishnan	Director, Modern Work Transformation Engineering	Microsoft Experiences & Development	13	1	BA, BS, etc.	Redmond	1	4/6/22
Kalyan Kaki	Principal PM Manager	Microsoft Cloud & AI	17	1	BA, BS, etc.	Redmond	1	4/5/22
Manoj Kumar	Digital Strategist	Industry Solutions Delivery (ISD)	9	1	MA, MS. Etc.	Boston	0	4/13/22
Jose Nunez	Digital Advisor Manager	Customer Transformation & Innovation	18	1	BA, BS, etc.	LATAM	1	4/6/22

³² For this research study, outsider experts identified as either “1” Male, or “0” Female.

³³ Location/Coverage indicates that an expert could be living in the United States but supporting LATAM region(s). They are also bilingual, speaking both English and Spanish.

³⁴ People managers are responsible for managing other employees within the company. The People Manager flag = 1 means that the individual has direct reports in this organization.

³⁵ The interviews for this research were conducted over a four-week period. One interview session was an average of one hour with the outsider expert.

³⁶ LATAM = Latin America countries.

Table 5 continued*Outsider Experts Demographic*

Name	Job title	Division	YE	GN	Ed. level	Location / Coverage	People Mgr.	Date of Interview
Outsider Experts Attributes\Stefani Okamoto	Director, Learning & Development	Microsoft Human Resources (HR)	22	0	BA, BS, etc.	Redmond	1	4/12/22
Outsider Experts Attributes\Ciara O'Donnell	Senior Business Program Manager	Microsoft Industry Solutions - Complex Delivery	25	0	BA, BS, etc.	Ireland	0	4/1/22
Outsider Experts Attributes\Tim Sinclair	Principal Program Manager	Microsoft Security & Identity (SCIM)	30	1	MA, MS. etc.	Redmond	0	4/4/22

Profiling the Insider Experts

Selection of the insider experts was done through an open invitation sent to 18 members of the CST Enablement & Support organization (see Appendix C). The invitation provided an opportunity for anyone either on my team or the other people manager to volunteer. Within less than one hour of sending the invitation, I received 11 responses. As part of the selection process, one requirement was to accept the first seven individuals (using the first in-first-serve approach) into the study. An acceptance notification was sent out on July 14, 2022 (see Appendix J). There were five team members who had to be placed on the waiting list. The future plan is to share some of the results with them along with the learning series videos. Insider experts were given a copy of the recruitment document which included their consent to participate (see Appendix

D). All insider experts gave their approval over email, acknowledging that they will participate freely.

There was an evenly distributed list of participants of delivery managers and field success managers (see Table 6). Many of these individuals are new hires with CST Enablement & Support organization. Fortunately, I did get a strong representation of males and females. The expert panel discussions and learning series were conducted from August 15, 2022 - September 5, 2022, with the seven insider experts (including one leader) and me. In the end, the insider experts sample comprised of a single country, two locations, four different roles and three divisions of the organization.

Table 6

Insider Experts Demographic

Name	Job title	Division	YE ³⁷	GN	Ed. level	Location
Participant 1	Delivery Manager	AnswersHub	1	1	MA, MS. etc.	Hyderabad
Participant 2	Performance Manager	AnswersHub	1	1	BA, BS, etc.	Hyderabad
Participant 3	Management Lead	Enablement & Support LT ³⁸	1	0	BA, BS, etc.	Bangalore
Participant 4	Field Success Manager	Field Success	1	0	MA, MS. etc.	Hyderabad
Participant 5	Field Success Manager	Field Success	2	1	MA, MS. etc.	Hyderabad

³⁷ The year of employment is specifically counting how long the individual has been working with the CST Enablement & Support organization. Note that the individual might have been working with Microsoft much longer or even have several years of industry experience.

³⁸ LT = Leadership. This individual is part of the CST Enablement and Support leadership team.

Table 6 continued

Insider Experts Demographic

Name	Job title	Division	YE ³⁹	GN	Ed. level	Location
Participant 6	Field Success Manager	Field Success	<1	0	MA, MS. etc.	Hyderabad
Participant 7	Delivery Manager	AnswersHub	1	1	BA, BS, etc.	Hyderabad

Data Preparation Used for Analysis

Data preparation and collection started immediately after completing the dissertation proposal and IRB approvals in February 2022 (see Appendix M). This qualitative study was broken up into multiple phases to allow for the proper assembly, creation, and analysis of data from both types of experts. The primary data sources were: (a) in-depth phenomenological interviews, (b) reflective researcher's and insider journals, (c) process documents, (d) field notes, (e) expert panel discussions, (f) expert reflective activity statements, and (g) meeting recordings, memoing, videos, MAXQDA 2022 (22.2.1) qualitative software, Microsoft Teams, and OneNote for additional documentation.

Phenomenological Interviews with Outsider Experts

After receiving the acknowledgments from all ten outsider experts, the scheduling process started with them (see Appendix I on scheduling). The intent was to create a very authentic experience whereby the experts were comfortable enough to share without

³⁹ The year of employment is specifically counting how long the individual has been working with the CST Enablement & Support organization. Note that the individual might have been working with Microsoft much longer or even have several years of industry experience.

overthinking what they wanted me to know about their professional lives. The open-ended questions allowed for freestyle conversations between the experts while probing where applicable.

Prior to starting each interview, I welcomed the outsider experts: (a) thanked them for their participation and time, (b) provided a brief overview of the research study, and (c) allowed them to introduce themselves. In fact, before recording of a session, I spent a moment sharing a little about myself given the fact that we were meeting face-to-face for the very first time. Also, I did ask for verbal confirmation from the outsider experts before proceeding with the recording. Interview transcripts were read multiple times and cleaned up, especially where the technology translated words incorrectly. For example, Microsoft Teams would reference ‘male’ when the individual in context meant ‘mail’.

To ensure consistency throughout these phenomenological interviews, an interviewing protocol (see Appendix E) was used to drive the conversations. These leaders were able to share perspectives that shaped their professional careers and personal journey. Throughout the discussion, experts revealed that they too must be vulnerable to grow and develop. The vast range of topics that were discussed provided an opportunity for these outsider experts to share an immense amount of knowledge on how best to improve performance and develop leadership skills that help cultivate expertise. There were a few interviews that went over the allotted 60 minutes. They wanted to spend more time-sharing different examples about their lived experiences. So, they just kept the conversation alive.

Engaging with these experts provided a great opportunity to strengthen the foundation of expertise. These individuals were willing to share their knowledge freely

and made recommendations on how to increase mindshare within the team, along with how to change our behaviors as we work. Special ‘Thank you’ notes were sent to each of the interviewees. Once the interviews were over, it was time for me to think about the composition of the content that would support phase 2. As part of the member checking process to validate accuracy and representation of the experts’ perspective, copies of the snackable videos were distributed (see Appendix K). Several of the outsider experts provided additional insights and guidance which were incorporated into the final edited versions of the interviews.

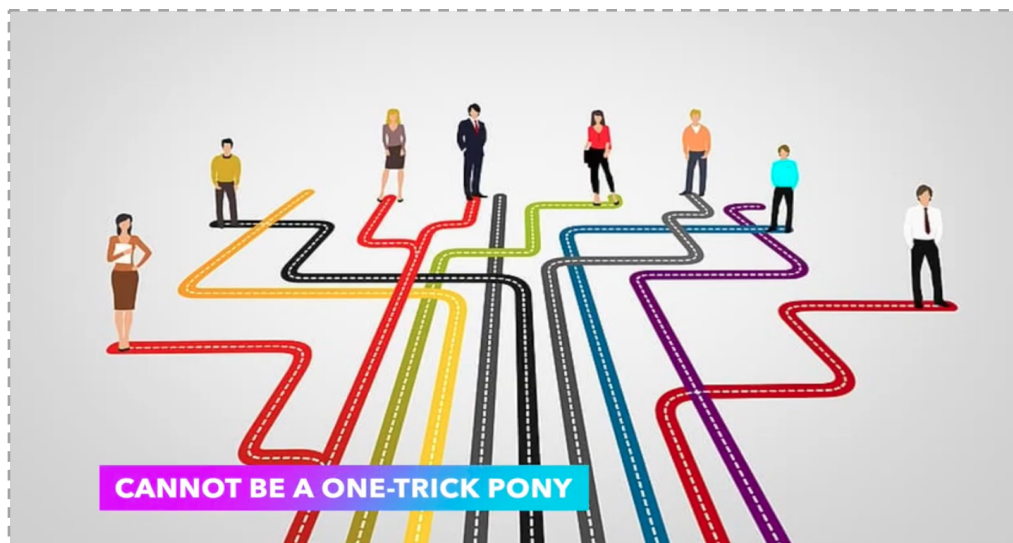
Content Preparation and Development

Completion of the phenomenological interviews was the first phase of the intervention. The ten hours of video recording and transcripts were crucial input into phase 2 which involved both the processing and creation elements. A core part of the intervention was the creation of expert content in the form of shareable videos that were used during the expert panel discussions. The processing of the interviews took place using the approach described in the E2EPF in that I was able to engage in systematic observations, retrospectives, sensemaking, and applying the voice of the expert.

Codebook Creation. The video production process required connecting multiple layers of content related to the interviews, KMT, DPF, and OLT into a seamless experience. Prior to starting the compilation of the videos, it was necessary to create codes that would be used throughout the video creation process. Coding was essential to help share the different perspectives from the outsider experts. For instance, in creating the codes, they provided a way to be included as part of the different transition points throughout the videos. The simultaneous process of starting coding while engaging in the video creation was meant to accelerate and elevate the quality of the final product. Over 200 codes were used across the ten videos in production cut 1 and production cut 2. The process to create these codes has been documented to ensure consistency and repeatability (see Section on - Coding using MAXQDA). Throughout these videos, the viewers will see codes that have been created as tickers or text-insert prompts on the screen (see Figure 15).

Figure 15

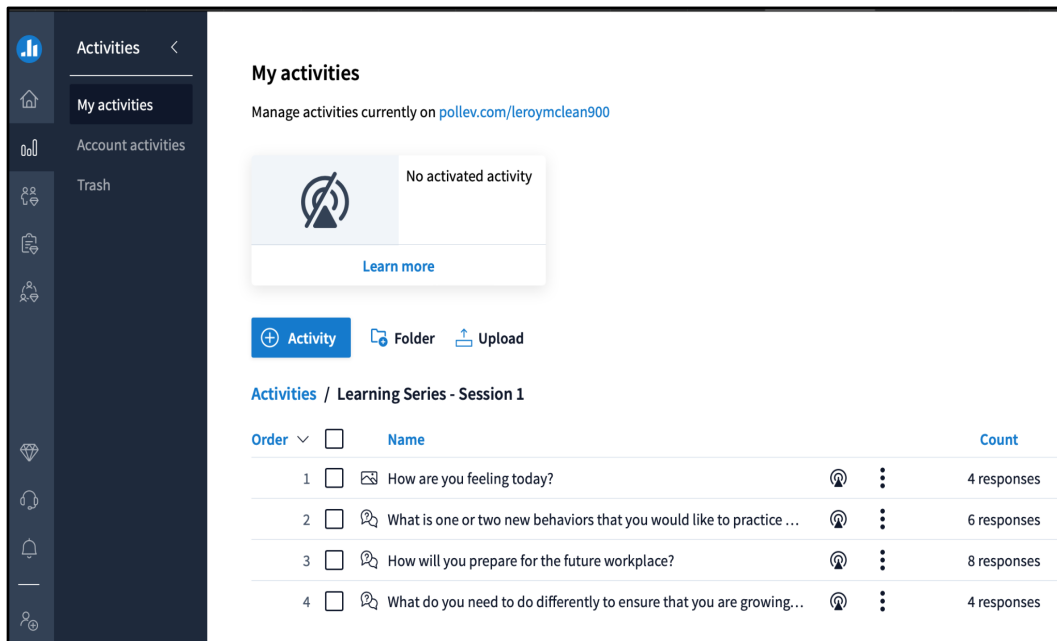
Codes Applied to the Onscreen Text



Poll Everywhere. An important lesson learned that was shared from the previous action research cycle (see chapter 1) had to do with making sure to have an engaging experience for the participants. Thus, steps were taken in designing the learning series to allow for interactions throughout the workshop. Instead of having me present the results from the outsider experts, it was felt that providing options where the participants interacted with each other would be a more effective way of listening and learning. A short URL was also created for the insider experts to use during the expert panel discussions. This was set up to redirect to Poll Everywhere which has all the short surveys for the participants to complete (see Figure 16).

Figure 16

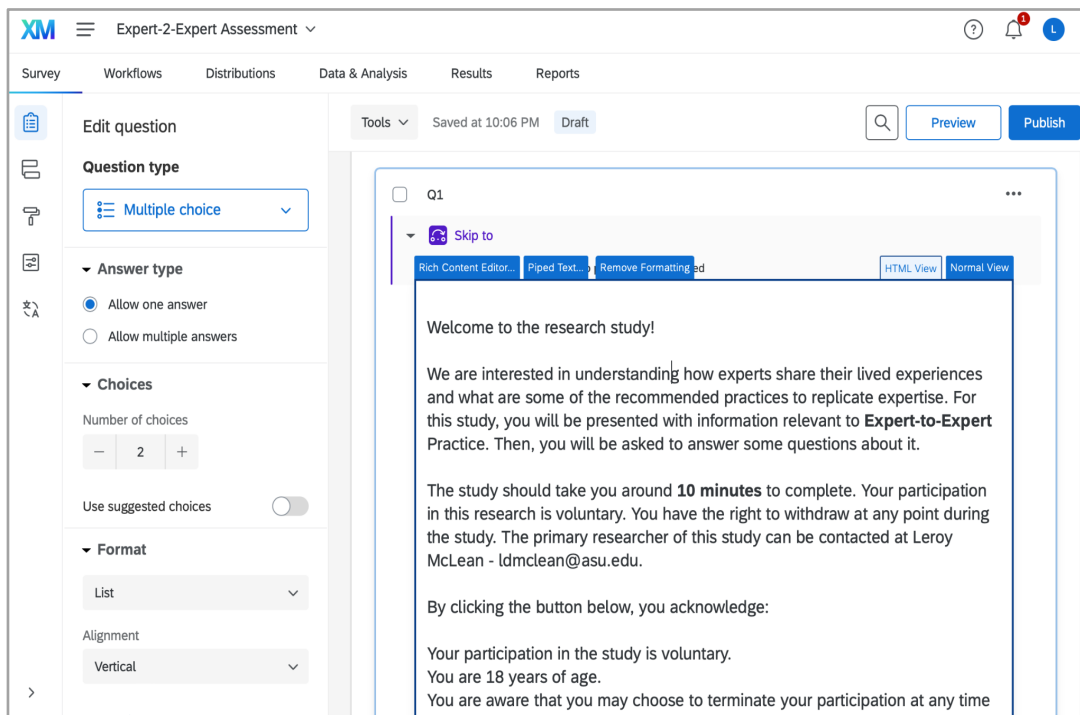
Poll Everywhere with Weekly Survey Questions



Qualtrics for Self-Assessment and Weekly Journaling. The weekly reflection journals were created using Qualtrics software. Indeed, I wanted an easy way to capture the weekly experiences of the insider experts after completing the expert panel discussion. The creation of these journals was meant to provide insights from the participants as they engaged with the learning materials and with each other. They were asked to document their expectations along with what they experienced throughout that session. In addition, a self-assessment expert survey was created to collect additional insights. The design of the survey was done to capture the definition of an expert, demographics, and employment information (see Figure 17). Leveraging Qualtrics for the surveys provided a great interactive experience for everyone.

Figure 17

Expert-to-Expert Assessment in Qualtrics



Member Checking for Accuracy and Validation. In following the recommendations from Creswell and Miller (2000), member checking was leveraged as a way of validating the content created from interviews. For all the videos that were developed as part of phase 1, the outsider experts were given the opportunity to provide their feedback and recommendations for change. A document was created outlining the video name, link on YouTube, description, the type of focus question, along with the name of the outsider expert (see Figure 18).

The scope of the member checking process entailed the following:

- First production cut without much editing was sent as part of the member checking and validation.
- Second production cut was sent for them to validate the perspective of their knowledge and experience on the videos.
- Personal communication was sent about the experience and the continued support of the project.

The expectation was for the experts to review the content and share their thoughts as part of the member checking and validation process. The email was sent out to the outsider experts requesting that they validate the content. All the experts sent back an acknowledgment of completing the request. They were appreciative for participating in this research study as an expert. One outsider expert, Raj, provided his feedback stating that it was a fantastic piece of work (see Figure 19).

Figure 18

Member Checklist




SR #	Video Info.	Link	Description	Focus Question	Who's in the video
1	Defining an Expert	Defining an Expert 	<ul style="list-style-type: none"> The content in the video will focus on the definition of an expert 	Could you share with me how you define an expert?	<ol style="list-style-type: none"> Ciara O'Donnell Daniel Briozzo Ed Cutrell Jose Nunez Kalyan Kaki Manoj Kumar Nick Anderson Raj Gopalakrishnan Stefani Okamoto Tim Sinclair
2	The Expert toolbox of skills and knowledge	Expert toolbox of skills and knowledge 	<ul style="list-style-type: none"> This video will focus on the knowledge, skills and abilities that experts should possess in any environment 	What knowledge, skills, and abilities do you believe that every expert should have in their toolbox?	<ol style="list-style-type: none"> Ciara O'Donnell Daniel Briozzo Ed Cutrell Jose Nunez Kalyan Kaki Manoj Kumar Nick Anderson Raj Gopalakrishnan Stefani Okamoto Tim Sinclair
3	Experts across Microsoft sharing their lived experiences	Experts sharing their lived experiences 	<ul style="list-style-type: none"> The video will provide information from the experts sharing their perspectives and lived experiences on what it s like being an expert 	What has been your experience being an expert in Microsoft?	<ol style="list-style-type: none"> Ciara O'Donnell Jose Nunez Kalyan Kaki Raj Gopalakrishnan Stefani Okamoto

Figure 19

Confirmation From an Outsider Expert

A conversation with Raj Gopalakrishnan

Hi Leroy,

Hope you had a fantastic weekend. Thanks for sharing back this! Fantastic work bringing so many insights into such an easy to consume format! I enjoyed listening to a variety of thoughts/perspective. Very cool project!

Loved the text you are displaying through out the video, and how you managed audio i.e., I think you muted your audio and it renders a very clean, clear rendition. Very thoughtfully done.

BTW, if you need a more standard title for me, it is Director, Strategic Customer Engineering, Modern Work Transformation Engineering, or, just Director, Modern Work Transformation Engineering if you run out of space 😊

You've created excitement on waiting for part 2 and more of this series 😊

--Raj

Learning Series Workshop

The expert learning series were a critical component of the overall intervention. Appropriate time was spent defining the approach for the series which had an interactive experience at the center. The design of the workshops was more around ensuring that a forum existed to convey the crucial knowledge from the outsider experts and provide a mechanism for the team members to exchange ideas and ask questions. Personally, I wanted to be more of a facilitator rather than someone who was driving every single conversation. What this meant was that participants had to interact with each other to get the benefit and value. The inclusion of several interactive activities, conversations, and role-playing expert profile development tasks cemented the real purpose of the workshop sessions.

Designing the Workshop Using two Modalities and Learning Objectives. As part of the development exercise, I had to decide on the modality of the session. Both asynchronous and synchronous were chosen to accommodate the different needs. Pre-week learning and post-week closure were designed to be asynchronous. In the pre-week learning, the participants were provided with an overview of the learning series (see Appendix L). The post-week was about addressing close-out and commitment to continue learning. The synchronous mode was applied to all four weeks of the expert panel discussions as part of the learning series. Leveraging these two modalities provided the participants with more flexibility to learn and digest the materials without feeling overwhelmed.

Bloom's Cognitive Taxonomy (Nkhoma et al., 2016) was used to define the learning objectives. Generating learning objectives allowed for a consistent way of socializing what the participants would expect within the sessions. The taxonomy included definitions such as recall, examine, apply, analyze, evaluate, and create which were all relevant to identifying the learning objectives. In addition, the inclusion of group activities, curious questions, and participants' expectations were all part of the final design.

Coding Using MAXQDA (Including Codebook Creation)

The straightforward way to understand how the data was coded is to provide a quick explanation of the data categorization in this study. To that end, there were two main categories of data used in the research. The first category is what is labeled as the *phenomenological experience*. In this classification, the decision was made to use the interpretative phenomenology analysis which has multiple stages and is supported by

scholars such as Creswell & Poth (2016), and Yüksel & Yıldırım (2015). The second category is the *amalgamation experience* which included panel discussions, field notes, process documentation, memos, and journals. For this category of data, Saldaña's (2021) first cycle and second cycle coding processes were applied consistently across the dataset.

As a rule, all the data used in this research study were analyzed using the line-by-line coding method recommended by Saldaña (2021). The data analysis was primarily conducted using MAXQDA 2022 (22.2.1). MAXQDA is a powerful qualitative and mixed methods analysis tool that provides rich insights, analytical memoing, and reporting capabilities. As a result, gaining familiarity with MAXQDA required me to complete several online workshops. In addition, I took the time to: (a) watch videos on the MAXQDA website, (b) review YouTube how-to videos from other researchers, (c) read the online manuals, and (d) read books on research techniques and qualitative research methods. While this was an arduous undertaking, it was also extremely rewarding and beneficial.

Within this study, the data were analyzed using various methods from Saldaña (2021) including descriptive coding (p. 96), In Vivo coding (p. 37), attribute coding (p. 112), process coding (p. 96), and code landscaping (p. 286). As a reminder, the qualitative data collection methods used were from Creswell & Poth (2016), Hycner (1985), Moustak (1994), and Yüksel & Yıldırım (2015); Saldaña's methods of first and second cycle coding were applied to different segments of the data. The creation of the codebook allowed for extensive analysis and comprehensive interpretation to be accomplished on the data. Over 801 codes were created along with 1646 coded segments

(see Table 7). These codes were applied across the collected data from the interviews, process documentation, and the learning series.

Table 7

Expert-to-Expert.mx22 Project Information

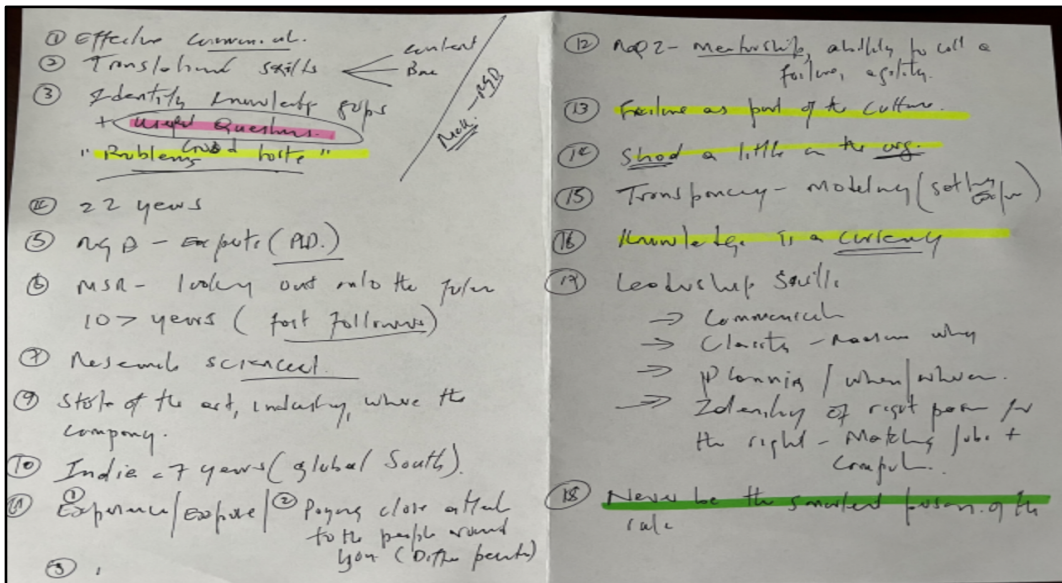
Documents Summary	Codes Summary	Memos Summary	Variables Summary
Document groups: 101	Codes: 801	Memos: 637	Document Variables: 42
Document sets: 1	Coded segments: 1646	Document memos: 6	Code Variables: 0
Text documents: 235	Paraphrased Segments: 0	In-document memos: 311	Internals links: 1
PDF documents: 29	Focus Group Contributions: 0	Code memos: 299	
Image documents: 8	Code sets: 1		
Table documents: 2			

Phenomenological Experience

Before starting the phenomenological coding process, I spent a considerable amount of time reading the transcripts, reviewing the scrap notes taken during the interviews (see Figure 20), and watching the interview videos multiple times. It was pivotal to get intimately familiar with the data prior to actively applying any form of coding. The first major coding began with mining the data for attributes related to the demographic information of the outsider experts. To ensure that triangulation was feasible for this research study, the attribute assessment was completed on May 1, 2022, with the outsider experts' profiling information. The attributes were extracted from Microsoft Excel and imported into MAXQDA where further codes and variables were set up for analysis.

Figure 20

Scrap Notes During the Outsider Expert Interview



Taking the approach to leveraging the attributes of the experts provided an additional layer of thick data description for analysis (see Figure 21). The available knowledge from the attributes was used to generate descriptive details and other relatable analyses that helped answer the research questions. Immediately after completing the attribute coding for the outsider participants, I started working on creating variables within MAXQDA that were used in supporting the background and profiling information. Once the attribute coding was completed, it was time to focus on using the process coding on the phenomenological interview dataset.

Figure 21

Profile Introduction Using Attribute Coding in MAXQDA

● Profile Introduction Attribute Coding	RQ	0
▼ ● Manoj Kumar Profile (9+ years)	L	0
● Industry architect within our healthcare service line		1
● Culture shock moving from Nokia to Microsoft		1
● Digital advisor in customer transformation and innovation team		1
● Had to grow into the role of consulting architect		1
● Up-skilled into genomics over the years		1
● Spent five years in MCS as a business architect honing craft		1
● Achieved his Masters in Computer Science and MBA		1
● Managing 24 people at Nokia Devices division		1
● Software engineer background with BA in computer science		1
● Got a position in Microsoft Consulting Services (MCS)		1
● Joined Microsoft as part of the Nokia acquisition		1
● Manoj has over 9 years experience with Microsoft		1

Process Coding on Phenomenological Interviews. The phenomenological analysis required that I first spend the time understanding the data that were collected from the participants. It was important for me to read and review the transcripts from the interviews. Moreover, becoming familiar with the lived experiences, phrases used to explain ideas and new concepts, and sentiments of the interviewees through the documents were all important to building a strong understanding of the underlying data.

Phenomenological Reduction. The first major step in developing a phenomenological analysis was ensuring that horizontalizing was completed. This meant listing all relevant expressions from the outsider experts. As part of the phenomenological reduction, the extraction of significant statements from the outsider experts had to be effective and efficient. As a direct result, time was spent focusing on eliminating repetitive and duplicative statements. In working with these data which can also be classified as horizons, equal value and weight were given to all the participants' statements. Above all, the reduction process in phenomenological research was primarily about making sure that people's voices had been heard and that no preference was given to one individual over another.

Early in the process, I had to ensure the suspension of judgment during the data analysis phase. Taking this specific action, allowed for the voices of the experts to be more visible. While biases are inevitable in research, engaging in a form of bracketing whereby one's perspective, opinion, and feedback are temporarily suspended provides for a higher quality research result. Creating the relevant codes and documenting memos were crucial parts of the analysis process. In applying the process coding by using gerunds (-ing words) to describe the specific action or objective of the study participant was primarily considered to be relevant for the interviewing data. Process coding provided a more dynamic and elemental experience throughout the coding cycle (see Figure 22). In the end, it allowed for deeper insight and meaning into the action orientation being examined within the research. This is more valuable than using descriptive codes with the same data components (Saldaña, 2021, p. 96).

Figure 22

Code System Showing Phenomenological Analysis Within MAXQDA



The first interviewee in the study, Ed Cutrell, was selected as a starting point. The process coding technique was applied after watching their recording and reading the transcript multiple times. Codes were created based on the statements, lived experiences, and other background information shared by the experts. In addition, as more time was spent with the data, these codes evolved and were refined according to the new understanding and meaning being extracted from the data. Hundreds of codes were created that connected to the information shared by the experts. In the end, what was left is what would be classified as horizons (Moustakas, 1994) or textual meanings of the phenomenon being evaluated in this study.

Clustering the horizons into themes was an important activity. The grouping of the significant statements into broad categories/units/themes of information was an essential activity as part of the coding that was completed on the phenomenological experience. It was important to break the translated data into meaning units. Ideally, this

is the grouping of the significant statements into broader units. Relevant themes were developed that included information on the phenomenon.

Comparison of multiple data sources to validate the themes and meaning units was a crucial part of the analysis process. The necessary steps were taken to compare themes that derived from experts with other data sources. During the analysis phase, an exercise was conducted to compare multiple data sources including the researcher's observation; field notes from multiple stakeholders; and expert panel discussions. Finally, I was able to construct individual textual descriptions of participants which are the narrative that explains the perceptions of the phenomenon. Within MAXQDA, hundreds of memos were created that describe the experiences of the outside experts using excerpts from the discussions and interviews (see Figure 23). Moreover, the documentation that was created provides an explanation of meaning units from the outsider experts completed by using a narrative format.

Figure 23

Process Coding Applied to the Interview Data



Imagination Variation. An extensive activity was completed where descriptions were created of what the participants experienced as part of their journey. The construction of individual structural descriptions which is related to the “what” of the experience was properly documented as part of the phenomenological analysis. I was able to capture what happened including precise examples from outsider experts. Furthermore, the creation of composite structural descriptions was captured and insights into “how” the experience happened for the individuals were fully documented within MAXQDA using the “Summary Grid” capability. The Summary Explorer was used to document a comprehensive explanation of how the phenomenon occurred for the different outsider experts (see Figure 24 for more details).

Figure 24

Summary Explorer for the Outsider Experts Composite

Stefani Okamoto (1 Document, 4 Summaries)	Daniel Briozzo (1 Document, 4 Summaries)	Kalyan Kaki (1 Document, 5 Summaries)	Raj Gopalakrishnan (1 Document, 3 Summaries)
<p>In building your experience with an organization there is always the opportunity to reinvent yourself. Being able to explore and try new adventures should be part of the learning and development process for an expert. What is important, they should never feel intimidated by others. The bottom line, they should speak up whenever there is the chance to voice your concern, perspective, or suggestion. Phase 1 - Outsider Experts > Interviews Coded > Stefani Okamoto, Phenomenological Analysis Process Coding\Learning from lived experiences and vulnerabilities</p> <p>Experts can develop different experiences by reinventing themselves. The opportunity is always there to embrace new ways of thinking about developing expertise. Reinventing yourself is about knowing where you want to be as part of the career journey. Phase 1 - Outsider Experts > Interviews Coded > Stefani Okamoto, Phenomenological Analysis Process Coding\Learning from lived experiences and vulnerabilities\Developing different experiences</p> <p>Irrespective of how you might view the world around you as an expert, it is important that your voice is heard. Thus, removing self doubt that creates barriers for growth should always be a priority. In building the confidence to act, an expert should demonstrate authenticity through experience. Phase 1 - Outsider Experts > Interviews </p>	<p>The experience you gain over time should be able to shape your perspective of the environment and your expertise. Further, as an expert, you must embrace a growth mindset which can accelerate the learning process. Phase 1 - Outsider Experts > Interviews Coded > Daniel Briozzo, Phenomenological Analysis Process Coding\Learning from lived experiences and vulnerabilities</p> <p>As an expert you should always seek to have different experiences to help solidify your expertise within the organization. Additionally, experts must remember to have a voice even if it makes them uncomfortable. Phase 1 - Outsider Experts > Interviews Coded > Daniel Briozzo, Phenomenological Analysis Process Coding\Learning from lived experiences and vulnerabilities\Developing different experiences</p> <p>New experiences allow an expert to practice their craft. They are able to perform while learning which is a good sign of applying the knowledge on-demand. Phase 1 - Outsider Experts > Interviews Coded > Daniel Briozzo, Phenomenological Analysis Process Coding\Learning from lived experiences and vulnerabilities\Activating practice through new experiences</p> <p>As an expert, supporting a growth mindset provides them with the tools to continuously scan for ways to build on previous experience.</p>	<p>Part of learning to overcome vulnerabilities would be to embrace new learning opportunities. Experts should engage in deliberate practice where they are able to bring in past expertise and marry up with new experiences in this ever-changing environment. As part of embracing this continuous learning mindset, they should avoid being branded as a one-trick pony. Hence, trying out new experiences on a frequent basis will allow them to continue to develop and grow. Phase 1 - Outsider Experts > Interviews Coded > Kalyan Kaki, Phenomenological Analysis Process Coding\Learning from lived experiences and vulnerabilities</p> <p>Diversification is about knowing how to evolve expertise and career development. Experts should avoid being label as having a single track mind. Spreading across multiple domains and having breadth are important assets to extend expertise. Phase 1 - Outsider Experts > Interviews Coded > Kalyan Kaki, Phenomenological Analysis Process Coding\Learning from lived experiences and vulnerabilities\Developing different experiences</p> <p>Having a rounded perspective is about building experience in multiple areas. Therefore, you should always be exploring ways to expand your domain expertise which will benefit you and others down the road. Phase 1 - Outsider Experts > Interviews Coded > Kalyan Kaki, Phenomenological Analysis Process Coding\Learning from</p>	<p>Working in any organization will require you to keep updating your level of expertise. You have to be ready to transition from one state to the next. There is a very unique position for an expert to gain the necessary knowledge of the customers and products, and then translate their requirements into an actual plan. Phase 1 - Outsider Experts > Interviews Coded > Raj Gopalakrishnan, Phenomenological Analysis Process Coding\Learning from lived experiences and vulnerabilities</p> <p>Experts exist in environments that constantly change around them. Through the heart and skills of adaption, experts have to adjust to survive and become more effective. Phase 1 - Outsider Experts > Interviews Coded > Raj Gopalakrishnan, Phenomenological Analysis Process Coding\Learning from lived experiences and vulnerabilities\Developing different experiences</p> <p>Expertise is about building the appropriate connections and fostering the right relationships. Through domain knowledge, you are able to create a better experience for yourself and others. Phase 1 - Outsider Experts > Interviews Coded > Raj Gopalakrishnan, Phenomenological Analysis Process Coding\Learning from lived experiences and vulnerabilities\Fostering deep expertise across domains</p>

Essence. Translating the essence of expertise and expert performance was a pivotal part of completing the phenomenological analysis for this research. A complete comprehensive write-up of the lived experience of all the participants was conducted within MAXQDA. The synthesis of the textual and structural statements into expressions allowed for capturing of the underlying essence of the topic (see Table 8). Furthermore, narratives for participants of the study including the “what” and the “how” of the occurrences were developed to ensure that as part of the dissemination of the information to the insider experts, the original intent that was conveyed would be retained and this was done through the leveraging the Member Checking process.

Table 8

Composition on Expertise from the Microsoft Outsider Experts

Stefani's Composition on Expertise	Daniel's Composition on Expertise
<p>Supporting expertise and expert is primarily about ensuring that you have a voice and seat at the table. Experts need to ensure that they are working in an environment that fosters learning. It is always good to anchor against a set of core principles such as model-coach-care which provide a mechanism for them to excel. Individuals need to always remember that authenticity is the key to success. Above all, as one grows within their expertise, one should always be checking out for blind spots.</p>	<p>Experience and practice are different sides of the same coin. An expert must drive self-awareness through planning and bringing clarity for themselves and their team. They should be mindful of what matters and spend time working on their weaknesses. To be successful, experts need to understand their impact story. Finally, what will surely set an expert apart is being able to translate for others. Translation of a complex message to something that others can appreciate and relate to supports the overall strength of an expert.</p>

Table 8 continued

Composition on Expertise from the Microsoft Outsider Expert

Kalyan's Composition on Expertise	Raj's Composition on Expertise
<p>The journey of expertise begins with an expert who is clear on how the systems work together. They must be confident in their ability to put the pieces together so that everyone is on the same page. Having an openness to scanning their environment can lead to greater learning opportunities. Avoid being that single-minded individual since this can limit potential. They should also be deliberate in promoting knowledge through peer mentoring and other more meaningful forums. And supporting the overall growth and development by tapping into their mindshare of others should also be a priority.</p>	<p>Expertise is not static. It is a very dynamic concept that evolves. Therefore, an expert should be ready to transition and embody that learn-it-all mentality to be impactful. To be different, they must be willing to listen to their customers, end-users, and stakeholders. In bringing this together, they must exercise humility which is a defining characteristic for an expert. In addition, as an expert, being open to new learning opportunities that push them out of their comfort zone should always be something on top of their mind. They must be scanning the market, industry, and competitors.</p>
Nick's Composition on Expertise	Ed's Composition on Expertise
<p>Attitude is everything in being an expert. If you are very sociable, then people will have no reservations about approaching you for support. However, if you display any form of hostility, they will likely look for an alternative source of information and knowledge. As you look to develop your expertise, you must admit where you need help and seek it. People are willing to render assistance, but you first must act. Everyone can contribute to the success of others and in so doing brings success to the organization.</p>	<p>The story of expertise and expert delivering high performance starts with knowing that individuals need to contribute to the success of others. Irrespective of how knowledgeable you are in the organization unless you can share that knowledge it is all meaningless. Drive effective communication and capable to translate complex scenario. In general, for an expert to be successful, they must rely on the collective knowledge of the group. To support expertise, people need to exercise humility and not be the smartest ones in the room.</p>

Table 8 continued

Composition on Expertise from the Microsoft Outsider Expert

Tim's Composition on Expertise	Jose's Composition on Expertise
<p>The simplest form of understanding expertise is knowing that the individuals behind the concept are real. These are people who are approachable and have the willingness to share their knowledge and experience with the rest of the organization. They are eager to learn new things and support the success of others. In developing new experiences, they constantly challenge their own abilities and the status quo. Experts in an ever-changing organization have the awareness to manage up and down the leadership ladder. They take care in making sure that everyone is brought along for the journey.</p>	<p>At the most fundamental level of expertise is about taking people from one point to the next. With the additional knowledge, skills, and abilities, an expert can take individuals along the most successful road. They are keen on bringing others along and ensuring that everyone has the proper alignment. Above all, they exercise immense gratitude and humility as they work through difficult situations. As part of development and aspiration, they leverage feedback to improve their performance and execution.</p>
Manoj's Composition on Expertise	Ciara's Composition on Expertise
<p>Expertise is not about limiting yourself. Do not try to place limitations on your ability to learn and grow. To support learning, then you must have a learn-it-all mindset that invites others to help accordingly. Further, it requires building your network where people will reach out to share and leverage your expertise. As part of development, people should not engage in micromanagement since this causes individuals to underperform and waste valuable resources. If someone is uncomfortable, they need to acknowledge that reality and quickly find a path to change the narrative.</p>	<p>Expertise is not just about having that subject matter knowledge but also entails being able to connect the dots and people. Part of what makes a competent and talented expert is their ability to bring the right people to the discussion. They understand their limitations and seek appropriate help to solve the problem at hand. These individuals are not afraid to ask for help from any source. Experts own up to their mistakes and learn from them. They know how to exercise humility and kindness in everything they do. The reality is that we are working with people, not just technology.</p>

Amalgamation Experience

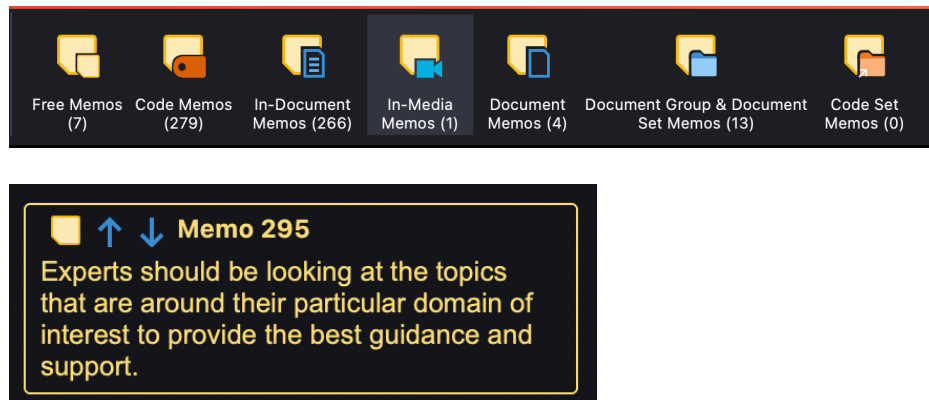
The panel discussions, field notes, process documentation, memos, and reflection journals were all part of the second category of data that were coded using the First Cycle and Second Cycle coding process (Saldaña, 2021). Applying both first cycling and second cycling codes provided a deeper understanding and vast interpretation of the data analysis. All the data within the amalgamation experience category were imported into MAXQDA into the Document System. The imported data were organized into unique document folder structures which provided another layer of organization.

First Cycle Coding Methods. For the first cycle, two categories of coding were selected: grammatical coding methods using attribute coding, and elemental coding methods which included descriptive coding, In Vivo coding, and process coding (Saldaña, 2021). This first cycle required that I watched the recorded expert panel discussions that were done using Microsoft Teams. Simultaneously, reading the transcripts of each of the insider experts was an important activity. Documenting comments, memos and applying the process coding based on what has been shared by the insider experts. The In Vivo codes were created and MAXQDA was used to help import the documents such as the expert panel recordings, and the transcripts. Within MAXQDA, the Code System was used to create the initial codes, and then organize these according to the categories emerging from the research questions. Methods of theming the data were done using the same phenomenological approach. This was important because it provided the opportunity to leverage structured techniques in explaining the phenomenon. Analytical memos and comments were incorporated within MAXQDA to

ensure proper documentation of questions, concerns, or even quick observations (see Figure 25).

Figure 25

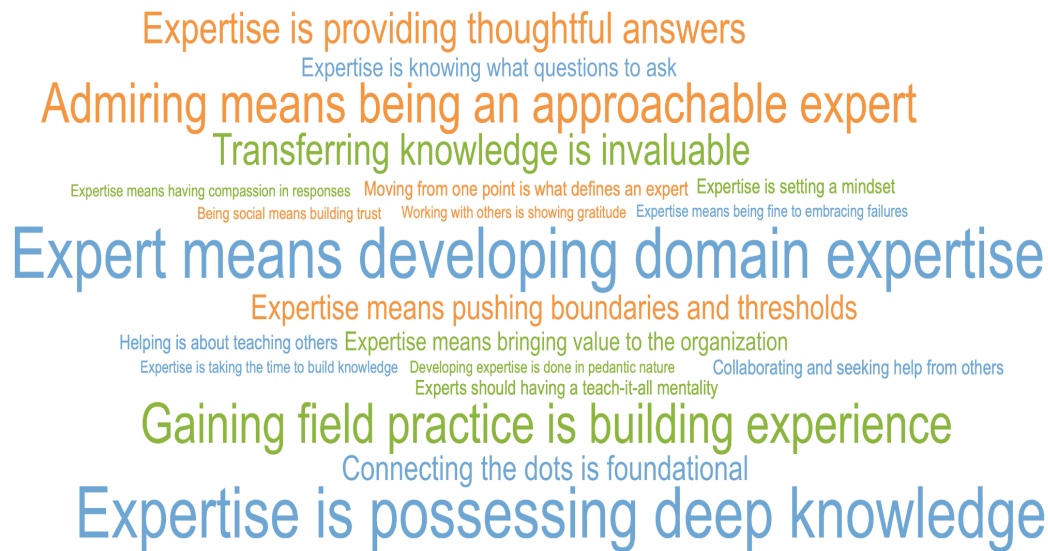
Memos in MAXQDA Utilized by the Research Process



Code Mapping and Landscaping. Code mapping and landscaping were about how I manually organized and assembled the codes before moving on to the second coding cycle. Code mapping involved bringing meaning and structure to the data. The codes were moved into categories as part of the iterative code mapping process. Saldaña (2021) remarks that "code mapping also serves as part of the auditing process for a research study. It documents how a list of codes gets categorized, recategorized, and conceptualized throughout the analytic journey" (p. 285). Time was spent engaging in code landscaping which organized the codes for textual and visual analysis. Application of the visual technique of tagging the data across frequent words and phrases (Saldaña, 2021) was done across various datasets within the study. Put differently, this is about applying the code cloud technique to the data (see Figure 26).

Figure 26

Code Cloud within MAXQDA for Defining an Expert

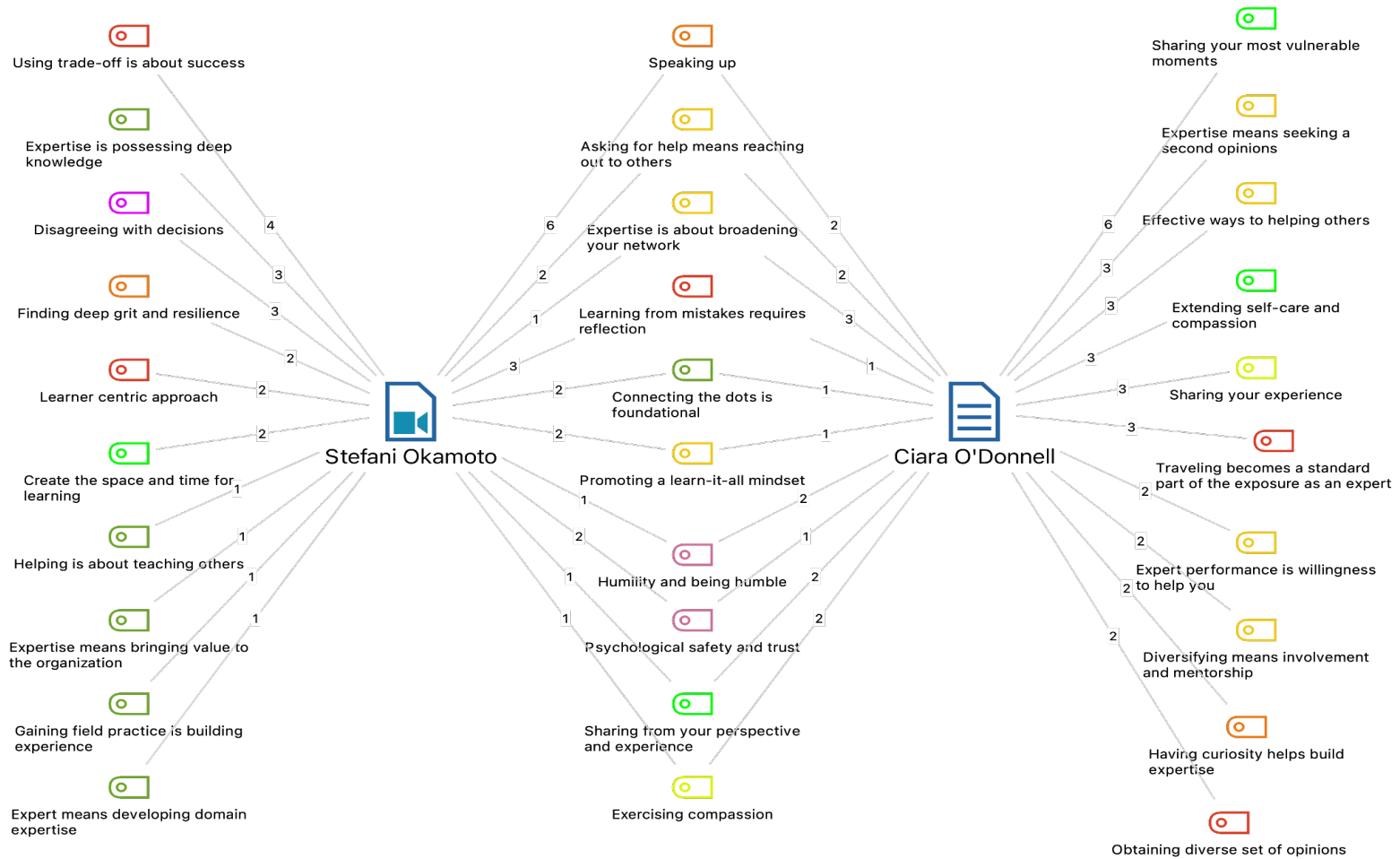


Post-Coding Transitions. Post-coding transitions sit between the first cycle coding and the second cycle coding. It is a coding exercise that is applied to the data as I prepared to develop a comprehensive analysis. According to Saldaña (2021), there are several post-coding heuristics available: Counting code frequencies; Categorizing codes or themes; Recoding numerous ‘splitter’ codes into fewer ‘lumper’ codes; and Codeweaving in analytic memos. Saldaña in citing Robert E. Stake's (1995) stated "Good research is not about good methods as much as it is about good thinking" (p. 57). The codes within this study were refined using several of the techniques recommended by the author (see Figure 27).

Figure 27

Two Cases Model Comparison for Code Landscaping

Two-Cases Model - Stefani vs. Ciara



Second Cycle Coding Methods. The transition into the second cycle of coding brought to the point of expanding the coding methods available. The second cycle focuses on bringing deeper understanding and analytical skills to the foreground. In using this coding method, I was able to refine the categories and themes from the first cycle. In the second cycle of coding methods, the grounded theory coding category was selected which included using the '*focused coding*' technique. Over 60 categories were created to ensure that I captured the lived experiences and remained authentic to the participants. During the second cycle phase, it was more about refining the coding and the categories along with the various themes that helped explain the essence of expertise and expert performance. As part of the coding exercise being undertaken, I quickly realized that there was an opportunity to further tweak some of the codes against transcripts to ensure consistency for the readers.

There is a major difference between Simultaneous Coding and Subcoding. What has been observed during a second scan of the coded data is that there were instances where application of the Simultaneous Coding was completed on a particular section of the data which became confusing as the analysis of the coding continues. Thus, there was an opportunity to adjust the coding to ensure that passages were properly coded to avoid duplicates, overlaps, and repeats. Hence, it was paramount for me to focus on capturing the essential part of the data that must be coded and eliminate repeated sections which would appear that I was uncertain of the coding techniques and their application to the study.

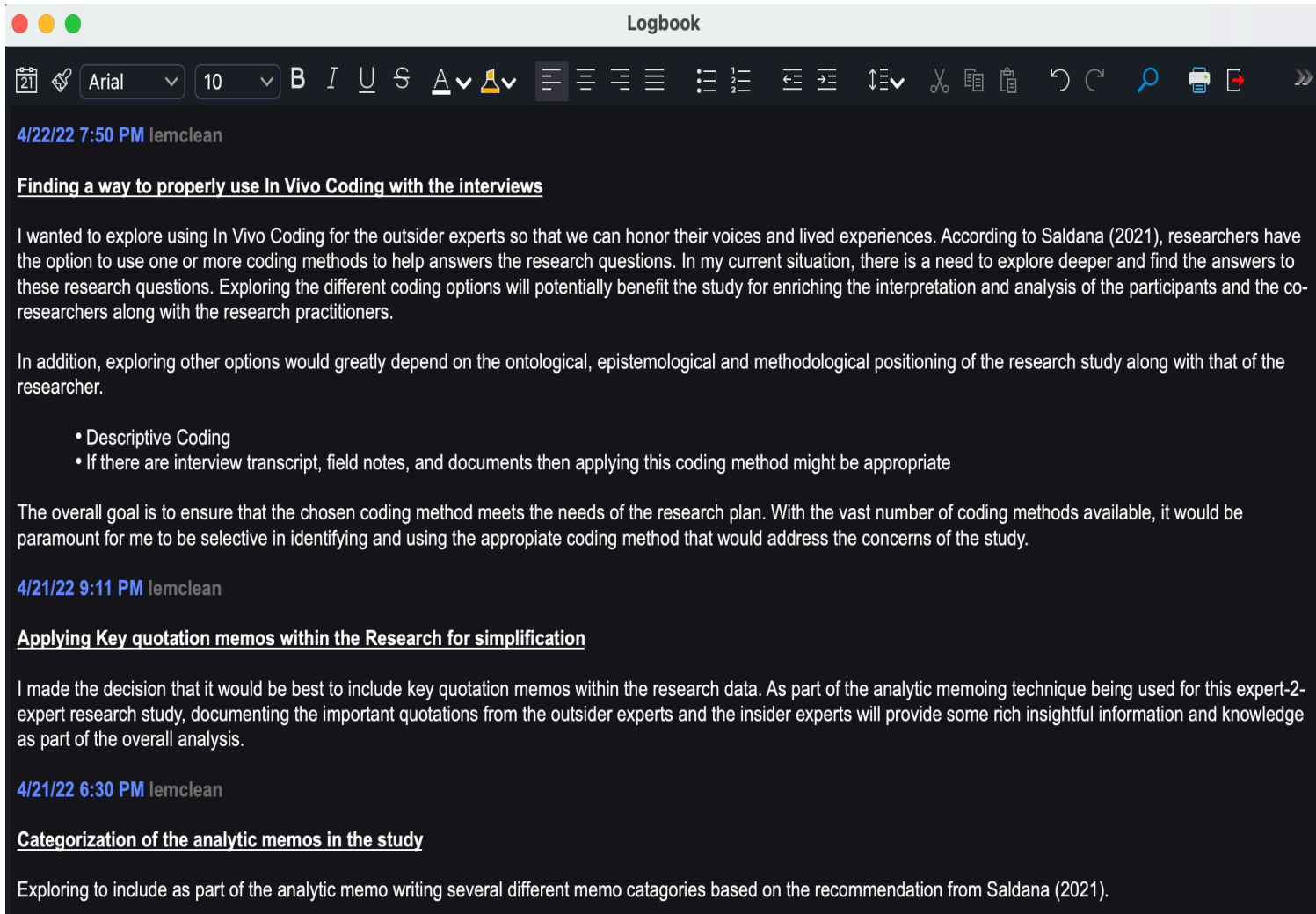
Reflective Key Takeaways on Coding

Indeed, it has been an evolving and iterative process (Bhattacharya, 2017) to ensure a high-quality analysis of the collected data. Engaging in this type of motion represents a unique way of interacting with the phenomenological data from the outside experts, but also provides a strong canvas to support the discussions from the various team members and leaders. The coding exercise represented a fusion of activities that brought together sensemaking of the phenomenon shared by these experts across Microsoft. Throughout the coding process, I leveraged the majority of the resources available with MAXQDA and other assets to share a compelling narrative of expertise.

One such resource was the MAXQDA logbook (see Figure 28). The logbook allowed for additional ‘in-the-moment’ analysis and documentation of thoughts that got percolated to the surface during the interpretation process. During the data analysis phase, I had the opportunity to get closer to the data by capturing the problems, follow-ups, and other important notes related to how things were progressing while unpacking and understanding the collected data.

Figure 28

Logbook Entries Within MAXQDA



As an important reflection, I decided that it would be best to include key quotations and memos within the research data. As part of the analytic memoing technique being used for this Expert-to-Expert research study, documenting the important quotations from the outsider experts provided additional insightful information and knowledge as part of the overall analysis. Indeed, engaging in the coding process created an opportunity for me to get closer to the data, the participants, and the phenomenon under exploration.

Study Results

Multiple instruments were available to solicit valuable information from the insider experts on their experience of observing outsider experts and their participation in the expert panel discussions which facilitated the exchange of ideas and perspectives between teammates and leaders. The results of these different methods were then analyzed. In this section, the outcomes have been provided to support answering the three research questions.

Research Question 1 (RQ1)

How do Subject Matter Experts in a Decentralized Organization Deliver High Performance by Using Their Knowledge, Skills, and Abilities (KSAs)?

Research question 1 was the foundation for understanding who an expert is and how people define expertise within their respective fields. It provided relevant insight to better comprehend how to replicate this phenomenon. The question was based on extrapolating the relevant details related to the knowledge, skills, and abilities (KSAs) that experts should possess to deliver high performance. All ten experts across multiple

disciplines provided input to answer this question. Also, the seven team members from the CST Enablement & Support division shared their recommendations on how these KSAs could benefit them within the organization.

To showcase how the research question is interconnected with the phenomenon, analyzing the various inputs from the different sources allowed me to formulate narratives that describe the perceptions of the participants. The outcome from the interactions over several weeks allowed me to describe the experts' experiences by using excerpts from the discussions, interviews, and observations. In addressing the research question, there were several explanations of meaning units by using a narrative format. Four broader themes emerged from investigating expertise and the relationship between delivering high performance:

- Theme 1: Defining an expert having the depth of knowledge
- Theme 2: Expert utilizing knowledge and skills from their toolbox
- Theme 3: Learning from lived experiences and vulnerabilities
- Theme 4: Strategies for delivering high impact and performance

An interesting activity in phenomenological reduction is to engage in thematic clustering to create core themes around the phenomenon. Certainly, after spending time listening, documenting, reviewing, and listing all the relevant expressions, meanings of units, and experiences from the experts, these four broader themes related to research question 1 were evident throughout the content. The narratives from these themes drove meaningful insight into how different experts were able to construct their meaning of expertise and experts within a fast-paced environment.

Theme 1: Defining an Expert Having the Depth of Knowledge. All the outsider experts were asked the same question related to understanding expertise as a phenomenon. There were four interview questions connected to research question 1. The first question was about knowing their definition of an expert. The interview question: **Could you share with me how you define an expert?** It was interesting to observe many responses were very similar, but they often used slightly altered terminologies or expressions.

Stefani was open and fluid in her definition of an expert. From her perspective, she viewed an expert as an individual who has many years of lived experience and is in a position to share their knowledge with others. Moreover, an expert must have deep knowledge of their particular domain or topic. They are comfortable talking about the details of their respective areas and can quickly share with others while highlighting the interconnected knowledge or periphery around expertise. All in all, an expert should feel comfortable understanding others. Furthermore, she argued that an expert is someone who has *“Lived it. We know what the culture has been, has changed to and we can help others who are new and onboarding to the company by saying, hey, it's not always an easy place to come to. But here I can help you navigate the matrix.”*

The response from Raj also struck a similar chord that resonated with everyone. He shared his perspective that an expert is someone who has a depth of experience in a particular area of focus. What is important though is understanding that expertise changes over time. Hence, an individual who is an expert today will need to ensure that they are up-to-date with their knowledge and practice. Above all, we need to view expertise as a mindset that must be adjusted along the way. For this to happen, then people need to

ensure that they have a ‘learn-it-all’ attitude. He pointed out that “*because expertise is going to change from time to time. If there is one thing that's clear in technology, change is the only constant.*” Hence, people need to remain flexible to the fluidity of expertise and being an expert.

The team members that participated in the four-week learning series spoke about how they interpreted who is an expert, and how to define expertise properly. Similar to the outsider experts, they had definitions that resonated with them. Being an expert is not about how much knowledge you have, but instead having the ability to quickly locate information and help in getting answers. Possession of knowledge is only part of the equation. It is our ability to deal with complex situations that have become normalized within today’s knowledge economy.

The definition of an expert is extremely fluid. Everyone will at some point come up with the parameters that fits their understanding of the concept. During the discussion, team members were expressive in sharing their perspectives and how they were using the changing characteristics of experts. Participant 5 commented that in their view an expert is one “*(a) Who is willing to experiment every day with the knowledge, (b) Who puts knowledge into practice, (c) Who have seen different nature of success, and (d) Who has seen the different level of failures.*” In addition, one of the participants went even further by articulating that “*expertise is a daily practice,*” and as such had to be managed regularly with care to ensure that learning is being brought to the foreground for action.

Irrespective of the definition that jumps to mind around expert and expertise, it is clear that individuals tend to share similar approaches to classifying the terms. In the end, it is mainly about understanding what it means to you as a practitioner within your

respective domain/field. Essentially, it is not worth worrying about the variations related to the terms. People will discover what relates to them and anchor on those thoughts appropriately. Manoj reminds us that an expert is an individual who is always willing to learn and share their knowledge. They do not put any artificial cap on their capabilities and expertise. Experts are always ready to challenge the status quo to ensure that they are being fed with the latest knowledge to improve their experience and practice.

Theme 2: Expert Utilizing Knowledge and Skills From Their Toolbox. While it is good to build one's expertise within an organization, you need to know what are the underlying knowledge, skills, and abilities (KSAs) that must be 'always on' to engage in high-impact behaviors while having the capacity to also transform into an expert team. An expert does not exist in a vacuum. Rather, this individual must utilize certain capabilities to perform the functions related to expertise. In trying to determine exactly what those might be in this investigation; I was able to ask a specific question to the outsider experts. The interview question: **What knowledge, skills, and abilities do you believe that every expert should have in their toolbox?** This question was asked to all the experts within the study. Developing these skills over time can be the difference between someone who is just an expert versus one who exhibits the appropriate qualities to lead.

Experts like Jose were unyielding in sharing the crucial list of KSAs that every expert should be carrying around with them. Fundamental to the strength of an expert is having the capacity to explain to others. They should be able to modulate their perspectives and recommendations depending on the individual. Further, they should be

competent enough to share a simple view of the world around them without losing touch with the end outcome. He remarked that you must not only have “*deepness, you know, in a very fresh and simple way,*” which means you must be competent to explain to their given audience without being overly complicated. At the core of their expertise is the ability to bring simplification to the front line. Experts must be able to translate complex challenges so that anyone can understand them. Thus, communication becomes effective whenever expert teams can bring others along by utilizing their translation capabilities.

The ever-expansive list of knowledge, skills, and abilities for an expert will continue to grow exponentially. Rather than thinking about this as a fixed inventory, experts would need to pivot their mindset to more of a dynamic experience. As such, Ciara was clear in sharing that every expert should acknowledge that they do not have the answers to everything. They should be willing to seek help at the appropriate time without delaying too long. In building their network, they have somewhere to bounce ideas and get second opinions where necessary. Ciara pointed out that “*I think everyone needs to have a network right to be able to ask questions.*” As an expert, they should have the desire to help others irrespective of the organizational boundaries. There is nothing wrong with asking for help. Getting support from another expert demonstrates the learn-it-all mindset that helps develop expertise.

During the panel discussion, the insider experts also provided their perspectives on the skills and knowledge that every expert should have to remain competitive with the changing landscape of today’s digital economy. Participant 1 concluded that you need to “*use your knowledge or use the expertise that you have gained over the period of time,*” which should help with learning and bringing others together. Moreover, the environment

must be there to ensure that experts can utilize the appropriate tools to support them effectively.

Expertise is something that travels with the individual. Therefore, if they should move from one team to the next or even change an entire organization, their skills and knowledge will always be there with them. Thus, understanding the fluidity in switching between different dimensions can also be of benefit to the expert willing to try despite changes around them. Above all, experts should also be thinking about what are the tangible components that would make them successful. Participant 1 continued with their thoughts on this topic and shared that “*We should have that flexibility to fail,*” allowing for greater adaptability within an environment to drive expertise.

Certainly, expertise is about spanning multiple dimensions and topics. An effective expert must be able to stretch across broadly and at the same time go deep whenever it is necessary to translate complex scenarios. Likewise, having the appropriate knowledge, skills and abilities provide the first level of direction for an expert. In short, expert teams should always be scanning the environment to ensure that they are closing the knowledge gaps. Being able to provide additional context to a situation when needed is an important contribution as part of developing your expertise.

Theme 3: Learning From Lived Experiences and Vulnerabilities. Having the fundamental knowledge of expertise is just part of the battle in delivering impact. Experts are always facing new challenges and obstacles within their respective work environments. Being able to share and deal with vulnerabilities is never an easy experience for an expert. As a consequence, most experts find themselves wrestling with the problem of how best to navigate difficult situations. For this reason, it was important to learn more from the outsider experts on how they have dealt with challenging scenarios that push them to their breaking point. As a result, the interview question: **What has been your experience being an expert in Microsoft?** Asking this question provided me with the opportunity to listen and learn from seasoned experts with decades of experience under their belts.

The openness to share their lived experiences along with all the vulnerabilities truly made this a remarkable exploration of understanding expertise within a global organization such as Microsoft. These experts during the phenomenological interviews were very expressive and shared details of their adventures in building and sustaining expertise. Daniel was open in discussing what are the factors that have shaped his journey. He spoke about the experience you gain over time should be able to shape your perspective of the environment and your expertise. Further, as an expert, you must embrace a growth mindset that can accelerate the learning process. For that reason, new experiences allow an expert to practice their craft. They can perform while learning which is a good sign of applying the knowledge on-demand. He pointed out that *“learning while performing,”* is a foundational skill to hone as an expert in this era.

In building your experience with an organization there is always the opportunity to reinvent yourself. Being able to explore and try new adventures should be part of the learning and development process for an expert. What is important, they should never feel intimidated by others. The bottom line, they should speak up whenever there is a chance to voice their concern, perspective, or suggestion. Tim was able to share many stories of his journey in Microsoft. He also had personal experiences that brought about a change in direction. In his view, every expert should know their limits. Tim concluded that *“I’m good at knowing how far I can go, and I got pretty nervous when I crossed that red line and at that point in time.”* Hence, experts should be willing to call on others for support and help them navigate challenging situations. Understanding how far you can go brings confidence for stakeholders. An asset would be for them to connect the dots and people.

People are willing to share what did not work vs., what did. They are open to sharing insight into their lived experiences to help others avoid the same mistakes or even improve on what has been done before. The insider experts were engaged after watching the learning series video on vulnerabilities experienced by others within Microsoft. They too were open in providing examples of things that are working and those that needed attention within the organization. Participant 2 spoke about how *“People fear more about from their peers, not from the leader,”* which often prevents them from moving forward and taking risks. Others were also concerned about the environmental factors such as psychological safety that need to be there to ensure we exist in a fearless organization (Edmondson, 2018). Indeed, psychological safety is important for us to simply trust others and have a nontoxic environment where no one feels threatened.

As we continue to build the appropriate workplace environment, experts need to be cognizant of the others in the room. Participant 4 pointed out that “*We don't know what is going on at the back of the person's mind.*” Our ability to work within a hybrid work environment requires that we rethink how to deal with our emotions, feelings, and behaviors. We must become more self-aware and adjust accordingly to accommodate those who are different from us. Overcoming fear in the workplace is knowing that you can speak up without feeling out of place. Participant 5 encouraged others to speak their truth, they mentioned that “*We wanted to encourage a short burst of informal meetings and people can open up and they have more receptive things.*” For the most part, it is about ensuring that we can create a platform for people to express themselves in a safe and respectful environment.

Developing different experiences as part of your expertise is knowing that you will never be on one thing forever. The flexibility in transitioning through experiences is what makes a great expert. As an expert, you must demonstrate some form of curiosity in understanding the broader picture and the environment. Putting your hand up for help is a sign of an experienced expert. As a rule, one must always remember to put yourself forward which is a sign that others can connect with your expertise. Overall, knowing that expertise feeds off the people around us. There are going to be times when we need to leverage our existing experts for their experience and knowledge. It is about how we position our ability to connect and share with others.

Theme 4: Strategies for Delivering High Impact and Performance. High impact appears to be one of those concepts that fall into the subjective and unattainable realm. Unless you are plugged into the business priorities and understand what the success factors are then achieving high impact and performance can be a tricky undertaking for an expert. Nevertheless, the experts within Microsoft were extremely vocal in providing their perspectives on how best to approach achieving this goal. The interview question: **Can you describe how you have been able to: (a) rule out options quickly, (b) avoid repeated mistakes, (c) attention to details, (d) deal with multiple variables, (e) ability to prioritize, and (f) trimming through the weeds to get to the particular issue?** It was asked to solicit feedback on the most appropriate way to dealing with high impact and high performance.

Many experts within Microsoft have already found techniques and approaches that have worked for them in delivering high impact within their respective domain/field. Over the years, they have worked to streamline and seamlessly integrate these into their daily routine whereby it has become more habitual practice than anything else. Nick opened up during the interview to share how he deals with delivering high impact. He mentioned that solving problems highly depends on an expert understanding of all the moving parts related to that situation. They must make sense of what is happening with the different components and come up with potential solutions that are cost-effective and reasonable to achieve. He remarked that *“Knowing kind of the ultimate goal is where I can kind of start from there,”* which provides that springboard to driving impact within the business. Unless we are clear on the goals and objectives then it is difficult to understand the final key results.

Part of developing expertise is knowing how to check in on the market and industry. Balancing our time as experts is about knowing how to prioritize what matters most, especially pulling information from multiple sources to make a decision. As a transformational leader, Raj was clear on these perspectives. He noted that finding ways to deliver on high impact is based on the understanding that experts have a good relationship with their customers and users. They must make the customers and end-users a critical part of the solution. Furthermore, *“Trying to find out what are the requirements of some key movers in the industry,”* allows an expert to know how their respective work is driving impact within the organization.

For the insider experts finding the appropriate strategies to deliver impact and high performance starts with having empowerment to do the right thing within the business. People need to know that they can be trusted by their peers, managers, and leaders. Once they are empowered, then they will likely make the decisions that drive the best outcomes for everyone. In addition, individuals must have a clear understanding of what needs to be done so that they can develop the plan accordingly. Participant 2 indicated that *“acceptance of feedback while planning,”* is the first step in ensuring that you are on the right track. Experts also need to know what are the things that they do not want to accomplish within the organization. Instead of trying to boil the ocean, they must put their hands up and say something about the assignments that might not be aligned with their aspirations and commitments.

One of the fundamental understandings would be that experts are now working in more complex and dynamic environments. They need to adjust on the fly, moving from one point to the next in a rapidly changing context. As a result, they need to constantly be

scanning for the latest and making sure that they are focusing on the right challenges within their team. Participant 3 concluded that experts need to “*Solve the problem that needs to be solved,*” which are often the ones that have been prioritized by leaders within the organization. In addition, they must also know the impact levers. Participant 6 pointed out that “*Creating high impact is how much of a difference it is making for others like creating that difference.*” Ultimately, we must be tuned into what is happening around us. Our ability to adjust based on changes within the organization is deeply connected to driving high impact and high performance.

Part of developing expertise is being able to engage in lifelong learning. Learners are capable of making a difference by constantly remaking and reinventing themselves. The 21st workforce is where we must invest in the career development of every single learner within an organization. Learners need the space and time to practice and develop their expertise. For expertise to thrive, then career development, upskilling, and continuous learning must always be a priority.

Research Question 2 (RQ2)

How do the motivations of employees impact their ability to engage in deliberate practice?

The second question was all about getting a sense of what are the factors that must be in place for individuals to continue learning and developing their expertise within an organization and in their respective teams. This research question allowed me to dive deeper into the lived experiences of outsider experts to understand how they operate, think, learn, and educate themselves while performing. In trying to unravel the

motivations behind their successes and failures, I wanted to gain insight on how best to approach future challenges and opportunities in a very dynamic and global organization. Hence, capturing what happened including verbatim examples from the individuals (both outsiders and insiders) was a central focus of this question.

Knowing that the Producers of Knowledge (SMEs) must always be in a learning and teaching mode, the exploration of this question is about developing the knowledge on how best to accomplish those specific tasks. Above all, the motivations of employees do play an important role in determining the level of commitment and investment into practicing and honing their craft. Thus, the concept of deliberate practice and taking a learner-centered approach becomes even more pronounced in finding the recommended practices that can support replicating expertise within any organization. There were three foundational themes under exploration and directly connected to RQ2:

- Theme 1: Growing expertise in any environment
- Theme 2: Coming out of your comfort zone
- Theme 3: Promoting knowledge sharing for greater impact

Having the ability to learn from others allows for acceleration of knowledge diffusion and these three themes illustrate that objective. The data collected were related to the phenomenological interviews, expert panel discussions, observations, field notes, and theories. Unless there is a clear understanding of how these experts can remain on top of their respective fields, then reproducing what they do is not attainable. Sharing their how-tos and whatness (Andrade et al., 2017) behind their thinking and execution makes it more attractive to put things into practice.

Theme 1: Growing Expertise in any Environment. The evolution of expertise is highly dependent on the transformative nature of the concept to influence new behaviors and routines within an organization. This idea of growing expertise in any environment is based on the premise of understanding what exists today and how transforming the current practices will result in higher performance in the future. As a knowledge society, organizations must constantly be ready to manage changes within their environment to accommodate the generational differences in the workplace and new learning styles. Experts that shared their perspectives were absolutely clear on what considerations must be taken to facilitate growth and development. The interview question: **What environmental factors do you see must be in place to support the growth and development of a subject matter expert?** This question was shared with the experts as part of them telling their lived experiences and providing recommendations on maintaining a different environment.

The organization's culture must have strategies to support both reactive and proactive work. Likewise, an expert should be mindful of pulling the plug for something that is not working as planned instead of wasting multiple cycles. All these are the foundational principles for growing expertise within any organization. Ed, a senior researcher within Microsoft shared his perspectives and lived experiences on how to effectively deal with rapid changes happening around the world and in companies such as Microsoft. He concluded that expert teams should be working with the knowledge of knowing when to back away from situations that are doomed. They should have the ability to navigate failures within their ecosystem. As such, he believes that effective mentorship can certainly transform an environment to ensure that world-class experts are

available. Ensuring that high-quality mentorship is institutionalized provides the opportunity for people to learn and grow. In Ed's words, *"I can think of numerous examples in my own experience where good mentorship led to really excellent outcomes and bad mentorship created just brick walls."* In addition, experts through experience should know when it is necessary to separate from an original plan, especially if there will be a potential failure that can be avoided.

Growing expertise within any environment has been impacted by the onset of the pandemic. Experts must be creative in how they engage and learn within the ever-changing environment. There is no doubt that expertise can grow in any environment by establishing a peer mentoring system. According to Kalyan, *"Peer mentor is where we are deliberate and allocating mentors for every individual...subject matter experts are paired with someone who is wanting to learn."* In providing the natural path for people to learn and grow, they will capitalize on the resources available to them. Experts need to engage in constant practice to improve their knowledge and skills. Above all, they must understand how to foster success for others. Contributing to others to make them successful is an important tenet of being an expert.

A majority of the insider experts who participated in the learning series were outspoken in sharing their personal experiences about how we need to transform for the future workplace. It is about how we grow expertise in an ever-changing environment and at the same time deal with the need for resilience. Participant 5 articulated that:

The future workplace is all very transient in nature. It's all project based. And it's a project to project where you have to come to deliver value and move on. It doesn't have that longevity or stickiness like the way it used to be. So, it's context changes, it's all about how quickly you prepare and being responsive to

that new ecosystem. It's just short-lived projects and then moves on. So, it's that ability to be uncomfortable. I think that's how I'm seeing it.

Formulating an understanding of the future workplace can provide that springboard for establishing the appropriate skills and abilities to support expertise in any environment. Thus, one must recognize the changing landscape and get a sense of the technical and business acumen that must be enabled to secure long-term success within an organization.

While readiness for the future workplace is an ongoing exploration, experts will still need to figure out the most suitable way to learn, unlearn and relearn new behaviors that support the need to bring about effective expertise. Participant 4 believes that growing expertise will highly depend on the fluid nature of our ecosystem. The environment of the future that supports expertise is all about agility. Experts need to be ready to transition quickly from one context to the next, and even be capable of dealing with multiple contexts that are scenario driven. Participant 4 remarked that:

Individuals becoming more agile that they plug in, you plug in, play model will be more suited so that people will come to bring in their expertise in a particular situation which may be very different from the one that they have handled before. But that's how agility is going to be a key to success for individuals and teams to work together.

Expertise depends on individuals adjusting to the realities around them. The environment has to be there where individuals do not feel that they have to traverse learning solo. Rather it is more about how to bring a collective group together, pulling the experts in the one direction that provides them the same opportunities to deliver high impact and high performance. Growing expertise is more about how people are capable of working as a single unit rather than an individual with their specific agenda.

Growing expertise relies on the need to learn daily. Experts should seek the opportunity to learn new ideas and bring these into their respective environments. Furthermore, your attitude plays a significant role. People have expectations that experts will be nice and approachable. Thus, the ecosystem must create the necessary safe space for people to explore and express themselves while they share their knowledge. As an expert, gaining psychological safety is important to foster expertise in any environmental condition. Additionally, experts also need to take care in how they interact with others around them by not allowing people to feel inferior. In sum, the environment must foster a culture of learning and a growth mindset. Beyond knowing, people need to ensure that they can integrate knowledge within their flow of work. Consequently, experts should ensure that they are creating the relevant space and time to learn and develop their craft.

Theme 2: Coming out of Your Comfort Zone. Humans' de facto behavior is to enjoy comfort, relax and experience what makes them feel comfortable. Whenever someone is pushed out of their comfort zone, it becomes extremely difficult and even problematic for them. For this reason, they feel the urge to run and hide from whatever it is that may surround them, especially if this 'something' is new and unfamiliar. It should be noted that expertise is built on the notion that experts must be pulled from their comfort zone to excel and be the best they can be within their respective domains. The exploration of understanding the tension related to coming out of one's comfort zone required this interview question: **What are the strategies that you have used in the past to learn a new topic or technology that could typically pull you out of your comfort zone?** The answers came back from the outsider experts revealed that many of them still experienced being uncomfortable within the company.

Jumping into action is about coming out of your comfort zone. As an expert, you must be ready to tackle the unknown and recognize that this might cause some discomfort along the way. However, building expertise depends on you finding the pathway to ride out being uncomfortable until there is a stable option available down the road. The reality is that every role within your organization will likely create some amount of discomfort and unease. It is more a matter of how you navigate this uncomfortable situation that makes you an expert. Ensure you are building your network whereby people are available to support you throughout the different stages of your expertise. Manoj was open to sharing his struggle with coming out of his comfort zone. He spoke about various situations that continue to challenge him even at this level of expertise:

I had to respond to an RFP from a company and there were three elements to it. One is genomics, with which I'm quite comfortable...the other one is a complex data model. I'm not comfortable. So, the way that I'm doing it is a little bit of study of the tool and also, I'm trying to reach out to other experts within Microsoft.

The reality is that there are going to be times when an expert is not comfortable in their environment. However, they must develop the confidence to shake off the uncomfortable nature and push themselves to gain the knowledge and experience needed to make a difference.

Experts need to quickly realize that they will not be comfortable in everything. Moving out of the comfort zone depends on the individual in the particular situation. They must be willing to understand their position and find ways for others to help them navigate through the different stages. The most important thing that they can do is to have humility along the way. For Jose, it is about, *“being humble is very basic...under step number one is to be a good mentor, good teacher and communicate your knowledge.”* Besides, experts operate in multiple modes. Two modes that stand out are learning and teaching. In learning mode, an expert is basically there to learn. While in the teaching mode, they are there to share their knowledge with others. Irrespective of the mode, experts must know how to conduct themselves which may often require coming out of their comfort zone to either listen, learn, or teach.

Coming out of your comfort zone is about being in that always learning mode. As an expert, you must be ready to tackle the unknown and recognize that this might cause some discomfort along the way. However, building expertise depends on you finding the pathway to ride out being uncomfortable until there is a stable option available down the road. Participant 2 shared that *“I think you need to have a hunger to learn. You cannot*

learn new things while being in your comfort zone.” The reality is that every role within our organization will likely create some amount of discomfort and unease. It is more a matter of how you navigate this uncomfortable situation that makes you an expert. As a rule, ensure you are building your network whereby people are available to support you throughout the different stages of your expertise.

Learning and building a new experience requires the support of others. Committing to learning something new is not just about you, but also depends on the team, your manager, and to a large extent the organization. A learning organization offers the opportunity to leverage multiple resources. Experts should commit the time to bring others along to ensure their success. Participant 7 concluded that people need to *“Make an effort to know each one of the team members, get to know their strength and weakness,”* to support them whenever they need to traverse out of their comfort zone. Equally, experts need to be very intentional about how they can improve their expertise. They must be the ones to seek out new territories and opportunities that will challenge them while also pushing them out of their comfort zone.

To overcome your fears and doubts, you must acknowledge that you do not know everything. Moving away from the denial stage can provide a path for you to develop your expertise. Irrespective of what type of challenges you might encounter, it is vital to reach out to others without hesitation. A culture that also embraces failure pushes you out of your comfort zone whereby you can experiment and try new ideas. Experts should always be willing to push the boundaries, particularly knowing that they can gain new experiences. In addition, getting a mentor helps overcome those moments of doubt that prevent you from reaching your goals.

Theme 3: Promoting Knowledge Sharing for Greater Impact. Maintaining a growth mindset is all about knowing how to push the boundaries of KS. Being able to share effectively allows people to move through the different learning stages of being an expert more efficiently. In the end, everyone has the capacity to share something within an organization. Delivering greater impact comes through the collective efforts of others. The more we can share our knowledge, the greater value and impact can be achieved within an organization. Experts have to be ready to step out of their comfort zone and connect with others to support the diffusion of ideas and knowledge. OL is built with the foundation of having people who are willing to share their knowledge without any inhibitions. Exploring the topic of KS was done by posing the interview question: **How do you as a leader help promote knowledge sharing amongst your peers and the organization?** Experts across the spectrum were quick to respond with their lived experiences, recommendations, and best practices.

An important part of sharing is ensuring that we are creating consumable knowledge for all to access without any form of limitations. Admittedly, knowledge must be developed in a manner that others can easily consume it. If things are complicated or hard to retrieve people will likely have resistance towards it even if there might be a real benefit available in the end. There is no doubt that KS is the core of any organization. Experts should be ready to leverage documentation and other resources to promote KS easily. They should be approachable and provide knowledge in a consumable form. Tim maintains that:

And so now you have to have these new thinkers, so there is no need to take it personally. You just need to go, OK, we need new processes for knowledge transfer, wider documentation, and less isolation of things. So, when they say that,

I want to move. I've got a new opportunity, you just go like, OK, we already got these processes in place. I've already got some backup in place or would work with recruits really quickly and they get some time for knowledge transfer between so that's really interesting.

In his mind, Tim being a senior leader within Microsoft, having the proper structure in place where we are moving away from losing tacit knowledge to documenting them for great assimilation helps in an immense way. Above all, to avoid isolation of knowledge, experts must engage in proper documentation as a foundational component to encouraging KS across the organization.

If organizations want people to start sharing, then leaders and experts must start modeling that behavior within the organization. They must demonstrate the action and others will pattern and follow. Knowledge is an important currency within organizations, and everyone must acknowledge this reality for them to start appreciating the fragile nature of this currency. Sharing is about being open and being authentic. Ciara expresses her situation from the perspective that experts, “*need to be authentic and talk about their own experiences,*” which will help others move to the next stage. As an expert, we should always remember that people come to trust us with the fact that our knowledge is what has the most value. And through disseminating this knowledge, we must be conscious of the influences on others. Therefore, it is important for us to be open and acknowledge our mistakes along the way.

There is no doubt that experts must lead by example. If KS needs to be a priority within an organization, then the expectation is that experts will be the first to demonstrate how this is feasible for others. There are multiple avenues available for people to be willing to share their knowledge. Experts need to find which forums and mediums would

work for them to disseminate their knowledge. For example, Microsoft Hackathon has become a critical forum for people to share and create new knowledge. During the Expert-to-Expert Learning Series Workshop, Participant 5 was one of many participants that provided their perspective on the need to transform the organization into one that fully embraces both proactive and reactive sharing of knowledge. They mentioned that it is important for:

Sharing knowledge becomes very impactful because it is helping somebody truly and they're seeing it. So that is something maybe we need to encourage across the organization and have a framework we can scale it up. So, it's up to people who want to coach and who want to be coached as well. So it is, it's something we can encourage, and it will have a sharing culture.

For the most part, the value of experts within any fast-paced environment is to create new knowledge, engage in the transfer of knowledge, facilitate discovering new patterns / trends, fostering new ideas, and drive the practical application of the knowledge to ensure that individuals can consume it. As such, they must be willing to be looking ahead and bring back new ideas to integrate within their ecosystem.

For KS to have a greater impact within any organization, then leaders and experts will have to create the space and time to improve their expertise. Creating an anchoring point for experts provides a mechanism for them to engage in KS within an organization. Ensuring that they have a repository to support knowledge exchange helps promote sharing. Furthermore, the sentiment from team members was that supporting and encouraging a knowledge-sharing culture will make a significant difference in how people operate and perform within the organization. Participant 1 was very specific about promoting the idea that we need to start sharing more proactive knowledge. According to them, people have the tendency to share a lot of “*social knowledge that we share,*” which

lacks the sustainability factor in helping someone move to the next level in their career and professional journey. It should be noted that the participants all agreed that “*people are very open in sharing,*” and this can help promote new knowledge within the organization.

Spreading knowledge is about utilizing the appropriate forums. Expert teams must capitalize on the existing resources and capabilities that they have available to them. Learning something new is about having the willingness to learn irrespective of environmental factors. According to Participant 7, setting up wisdom sessions to share learnings can help steer a team into becoming more tightly connected and the organization into being one of continuous learning. Everyone grows by sharing their knowledge. Our ability to engage in KS and learning creates significant opportunities for all of us to develop. Building on the work of others through sharing provides the appropriate acceleration for an organization.

Research Question 3 (RQ3)

How do senior leaders in de-centralized and fast-paced organizations coach and help others make sense so that they function as one expert team?

Addressing research question 3 was meant as a way of solving the major challenge around leadership and expertise. Finding answers to this question provided me with the opportunity to scale up my thinking of figuring out the way to enable knowledge and support within a learning organization in a very consistent and repeatable manner. We would come to realize those leadership qualities are a critical component of expertise. Experts should have the mechanism to become leaders. They must understand what it

takes to exercise humility, be genuine, and authentic. These qualities are what make a leader and an expert. In everything, we need to recognize that we live in a world that continuously changes and adjusts to new norms. However, an expert is still a human being who exhibits the right disposition and as such must connect back with reality which is to show others that they care.

Learning from senior leaders is about providing insights into “how” the experience happened for the individuals. Experts were able to share top leadership qualities that allowed them to make a difference within an organization. Leaders are often called the enablers of knowledge, crucial actors who ensure that the resources are available for people to execute specific tasks and drive business outcomes. Understanding how leaders can build expert teams is one of the most important solutions to addressing the problem of replicating expertise and expert performance. For the final question in the study, there were three foundational themes under inquiry and directly related to RQ3:

- Theme 1: Leadership qualities for experts
- Theme 2: Experts being decisive when their backs are against the wall
- Theme 3: Building on your expertise through sound guidance

The idea of learning from someone else is extremely important and powerful in any organization. Making sense of the best practices that are utilized within global high-performing teams can be a recipe for success. Data collected to answer this question were from the outsider experts’ wisdom and guidance, fieldnotes, process documents, reflective researcher’s journals, and expert panel discussions. Undoubtedly, there is no shortage of information on the topic of leadership. However, what was needed to support

the E2EPF was more along the lines of the practical application of lived experiences and knowledge.

Theme 1: Leadership Qualities for Experts. Leadership qualities that produce a genuine expert are the capacity to tap into others, the eagerness to listen, and the willingness to acknowledge that you may not be right. All these are important tenets that determine how an expert view the world. They should also be conscious of how they need to adjust their style and understanding to become more authentic. It is through authenticity that we can find individuals who can make a real difference in the lives of others. Likewise, experts need to communicate that they trust each other. Without trust, then it is very difficult to execute any plan within an organization. To explore leadership qualities, the interview question was presented: **What are the five leadership skills that must be visible in every expert to drive high performance?** The responses from the outsider experts indicate that leadership plays a critical role in the life of an expert.

There is a symbiotic relationship between expertise and leadership. One cannot exist without the other even though they may not overtly be stated in many instances. However, for an expert to become exceptional within their field they also must demonstrate strong leadership qualities. Therefore, experts need to start to think about ways in which they can demonstrate leadership qualities that transform the dialogue. Every day is an opportunity for us to learn and modify our style of leadership. As we expand within our own expertise, we will have to also be cognizant of the leadership qualities that must be present in our performance. Furthermore, it is hard to persuade whenever we are not able to reveal ourselves as true leaders. According to Ed, *“This is*

not really about expertise per se, but more about being an effective leader having authority and effective manager,” which are important levers to help reshape an organization and expert teams. Recognizing that the combination of leadership qualities and expertise are required to effectively deliver results and impact. While expertise is about domain knowledge and execution, leadership plays a vital role in determining how best to demonstrate clarity within an environment.

Fundamental leadership quality is just acknowledging others. Jose would share that one has to *“Go back to the basics, being able to say thank you and please is a true sign of respect for an expert.”* It is through these behaviors that an expert can connect with their audience. An expert is always conscious of their ego versus their insecurities which allows them to be more respectful and humbler in everything they do. Without exercising humility, then there is a high probability that people will be turned off. Having the basic discipline and principle to appreciate others can go a long way in fostering a good relationship. While experts can influence different individuals within an organization, they must be able to communicate and collaborate at all different levels. Managing up and down allows an expert to engage the appropriate resources and demonstrate the leadership qualities that become a game-changer.

The insider experts all agreed that authentic leadership plays a critical role in driving expertise within organizations. In order for someone to manage up and down the leadership pyramid, they must be genuine and authentic. Participant 2 mentioned that *“What is close to my heart is authenticity. That is where you need to feel, you know, humble in your approach.”* Being authentic brings about another dimension of trust and humility to leadership. Individuals who practice authenticity are better able to deal with

complicated situations and bring others along in addressing them. The irony behind being humble according to the experts is that it cannot be taught in a classroom. Rather, they would continue to say that *“Humbleness can't be taught in a training session, right? It is a life experience which we go through.”* Acknowledging this life's experience is important for experts to develop the necessary skills and abilities that allow them to deliver impact and bring others together.

Trust plays an important role in how individuals within an organization work together to drive outstanding results. Unless we can trust each other, then it becomes extremely difficult to make any form of meaningful progress in a collective manner. Participant 4 pointed out that there is an important hygiene factor that must be addressed in pulling the pieces together within an organization. They mentioned:

Trust in your team, the fact that we have to trust our peers, trust our leaders, I think that becomes like hygiene for any high growth team, and how do you do that, you have to share the experiences, and you have to collaborate.

The bottom line is that building trust and culture requires everyone to be on the same page. Put differently, we must be willing to understand what success looks like broadly for the entire team and not just a myopic perspective of it. In the end, what this will do is that we create an environment where people feel comfortable for making mistakes, learn from them, and extend sharing to improve everyone.

Effective leaders admit when they are wrong and when they do not know a particular topic. This is a foundation that makes a great expert, being able to openly acknowledge your limitations which are vital for your survival. To become a very effective expert, one must start with leading and planning. Above all, experts will need to ensure that they are always exploring the environment from multiple handles. For this

reason, experts must consider themselves leaders who can lead by example. They will need to show others how to collaborate to be effective in solving complex problems within the ecosystem.

Theme 2: Experts Being Decisive When Their Backs are Against the Wall.

Through your passion, you can make decisions that go against the status quo.

Nevertheless, you must be conscious of the implication of every decision that you make.

Depending on your audience you will have to brace for impact as it relates to some people who will challenge you and even push back on such a decision. However, with strong conviction, you should be able to have the data to support any decision that you have made in your capacity as an expert. To better understand how experts are capable of being decisive in a complex situation, the interview question was raised: **Can you share a story where you have had to be very decisive in your decision-making process?** A long list of examples was provided by these experts on how they were able to overcome making tough decisions.

Being decisive as an expert comes from experience. Through years of experience, an individual is quickly able to make decisions that would take the average person a considerable amount of effort and time. What is more, most experts have several rules and assumptions that dictate how they make decisions. For example, decision guardrails can assist an expert make decisions in crisis times. They need to examine the environment and apply these respective ideas in addressing the problem of the day. In responding to this question, Daniel shared his personal experience:

I have those rules that are top of mind, and I'd be very decisive at that moment saying, hey, yes, we can do this or no, we cannot do that right away because I

have some sort of scheme already that is really fine. I have a system that really works. So, it's around those rules.

With this in mind, observation plays a crucial role for an expert to be decisive in an ever-changing organization. They must be watching for the appropriate signals from teammates and stakeholders so that acting is never delayed.

At the end of the day making the right decision will predominantly be based on the data that is in front of you as an expert. Therefore, you need to bring in all the facts and recommendations so that a decision can be made without people second-guessing themselves. Decisions can be made based on a multiplicity of factors. Establishing common understanding and principles provides an opportunity for experts to perform within their environment. Decision-making is about exploring the facts and taking action promptly. Kalyan provided examples that changed how he operates as a leader. He mentioned that:

I mean as a product manager; you always want to go to market soon. Go start the revenue, but the last one we did was I mean it has a bit, it was a tough one, right? I mean on one side the product manager in me; it helps me go to market as soon as you can. Alright, then the engineering background I have tells me if this is the right way to take it. I mean it begs me to ask this now. To ask this question, is this the right way? At the end of the day, the decision I took was to onboard the new partner onto the new platform which delayed the go-to-market by eight to nine months.

Operating in a fast-paced and dynamic environment requires an expert to learn how to accept progress over perfection. In addition, working in an organization that is always moving forward calls for experts to understand how they will drive momentum in everything they do.

Sometimes we must be comfortable within ourselves in making decisions and sticking with them. Many times, as leaders we are going to be put into a situation where

decisions must be made and not everyone will be happy, this is part of the territory of leadership and driving expertise within an organization. Participant 2 mentioned that:

I am pretty confident with the level of foolishness, to be honest in relation to my decision-making. While of course, I have shared my own failures in that predominantly if I link it with when you open the call about the way we plan, if you plan, if we plan well and if we put all the variables in place...Generally, if you plan well if you will seek all the variables, quantify the variables which can impact your priority...just go with your decision.

What the participant has highlighted in their statement is the reality that decision-making is interconnected to confidence. Unless we decide on a particular matter, we will forever be spinning our wheels. Therefore, it is always best to make that decision and manage the outcome or pushbacks accordingly. What matters is to ensure that planning is given priority.

Being comfortable with our decision-making process is something that stood out for the insider experts. They all agreed that unless you develop a certain comfort level then it would be extremely difficult to execute a particular decision you need to make within an organization. Participant 6 remarked that "*Elimination is my process to reach any decision,*" which is something that they continue to do in this new job with Microsoft. Others in the group followed a similar process to make decisions within the business. For instance, Participant 4 pointed out that:

Process of decision-making is crucial. Collect as much data as possible. Speak to all related parties/ stakeholders to gather perspectives. Look from an outside-in perspective. Think with logic, but at the same time acknowledge the emotions involved. If you are too close to the topic/ process- step away...in your mind and if you are not able to then you are not the right person to take the decision. Remain agile during the process. Decide with these fundamentals and you will always stick to your decision.

What these experts have in common is that they are capable of moving the needle in the right direction as it relates to decision-making. The fact that everyone recognizes that they will get pushbacks and disagreements also strengthens their position in moving forward with consensus.

It is all too common for an expert to deal with pushback especially if they had an original idea. Having the conviction to continue supporting their proposal is a good sign that they are capable of making decisions that matter. Correspondingly, decisions are based on the fact that we will have to make trade-offs. And in the process of making trade-offs, we must be conscious of not letting perfection get in the way of progress. Thus, as an expert, we should all be conscious of how we position the data that we are working towards the end state. Often people lose sight of what it takes to get to the end goal and allow the desire for perfection to overtake their reality.

Theme 3: Building on Your Expertise Through Sound Guidance. There is no secret to building expertise from sound guidance. This is merely applying experiences and unlocking words of wisdom to live not only as an expert but also as an individual in an ever-changing world. Expertise is not static, and the information gathered throughout these several months will likely change with time. There are some foundational principles that an expert should anchor against to provide them with the necessary knowledge and support in navigating the volatile, uncertain, complex, and ambiguous (Edmondson, 2018) world that we now exist within that keeps changing by the second. To download the pearls of wisdom from these experts, a very unique interview question was asked: **What are one or two things that every expert should remember in their journey?** The results from their response were quite fascinating, to say the least.

Sharing wisdom and practical words to follow can transform the way an expert interprets the world around them. Throughout this research journey, these experts have been extremely vulnerable in sharing their lived experiences and providing examples that allow others to better understand the knowledge being shared. Stefani was expressive in reminding us that everyone has something to offer. Everyone can give something different within the organization. Hence, we should not allow others to use their ego to create an atmosphere that is conducive to destructive behavior. Rather, we should stand up and give voice to those who are voiceless. She was instrumental in letting us remember that we should always find the time and space to inspire others. Stefani remarked that *“Do not attempt to push someone into a corner and dull their sparkle.”* Likewise, challenge those who attempt to push you to the side, ignoring your voice and perspective.

Fostering expertise is about the diversification of your knowledge and skills. As an expert, you should never stick to just one thing, knowing that this can become obsolete within the blink of an eye. Kalyan stated that we must “*Avoid being this one-trick pony,*” where you cannot transition from one environment to the next. Consequently, diversifying your ability to expand and grow within an organization allows you to develop expertise that can withstand the test of time. Altogether just remember that a fast-paced and ever-changing environment requires people who have steady hands. This means that you should remain humble and exercise kindness where possible. It is a trait often with great leaders. Therefore, an expert tries to become successful within any organization by accomplishing this through humility. In most cases, powerful leadership is demonstrating humility and kindness. Experts should be looking for ways they exhibit these behaviors within the organization.

The idea of building on your expertise is a never-ending process. The fact that we know that knowledge has an expiration date (Arbesman, 2013) makes it, even more, an urgent objective to accomplish for an expert team. Experts in their respective fields have to learn how to deliver their elevator pitches. Their ability to quickly summarize complex and interconnected information will create that distinction in execution and excellence. The insider experts were all aligned on spending time to address the need to develop the skills and abilities to exist in an ever-complicated environment that requires them to translate details in the simplest form. The commitment to acquire new skills that they can hone was a priority. Participant 3 mentioned that they personally will have to focus on developing the skills necessary to help them transition to the next level of leadership.

These ongoing discussions with the experts highlighted the need to continuously reinvent ourselves as experts. Expertise is not a static entity waiting on the next person to make their move. Rather, it is constantly evolving, changing to the tune of emerging technological innovations and business priorities. As leaders continue to find their way in this complex web of changes, they need to figure out the most appropriate way to connect and reach their audience. Participant 4 pointed out that as leaders move up the floors in their careers, *“Brevity is the skill that redefines them.”* Everyone must be willing to build their experience around being brief, which is a powerful translation skill. This is nothing more than taking the complex and making it consumable for anyone. It is a delicate and unique skill set that requires an expert to invest time and effort to refine.

Failure to understand your value and impact will result in mediocre performance on the team. Everyone should be conscious of their contributions and continuously evaluate how to improve. Raj reminds us that we all need to be constantly grounded in the reality of the customers, end-users, and stakeholders. Having an understanding of what makes them successful, will eventually make you successful too. With this in mind, growing expertise is about tapping into the right resources at the right time. Being able to connect with peers and mentors who can provide the best opportunity for those planning on growing their capabilities and knowledge. Continuously remember to exhibit a learn-it-all attitude and never that know-it-all. The outsider experts advise that we need to recognize that you will never be the smartest one in the room so do not pretend to be in the first place. In fact, Ed Cutrell said that *“If you're the smartest person in a particular room then perhaps you're in the wrong room.”* Above all, expertise is a journey, and you will need to find the roadmap that takes you there. And while you may have multiple

obstacles along the way this is true for any destinations that one may want to visit. Rather than becoming too obsessed with the obstacles along the way you should focus on what it will take to get to that finishing line.

Explanation of Research Findings

The in-depth phenomenological interviews that were conducted provided a deep understanding of expertise and expert performance from the perspective of scrutinizing experts within a global organization. MAXQDA equipped me with the ability to apply the line-by-line qualitative technique recommended by Saldaña (2021) and other renowned scholars including Creswell & Poth (2016), and Yüksel & Yıldırım (2015). Most rewarding though were the vast amount of information and insightful recommendations along with the numerous explanations from both the outsider experts and the insider experts. Their insights made a world of a difference in understanding the phenomenon of expertise and expert performance (see Table 9 for more details).

Table 9*Essence of Expertise and Learning Themes*

Level Experience	Learning Themes	Essence of Expertise (EofE)
Cultivating an Environment to Stand-out: Developing Expertise	Defining an Expert	EofE-1 - Expertise is a mindset that must be cultivated through continuous learning and development.
	Growing expertise in any environment Expert toolbox of skills and knowledge	
Building SMEs in the Organization: Empowerment through Expertise	Learning from lived experiences and vulnerabilities	EofE-2 - Openness to immerse in KS even sharing failures will facilitate the evolution of expertise in any environment.
	Promoting KS for greater impact	
Transitioning from Complexity to Simplicity: Experts Telling the Impact Story	Strategies for delivering high impact and performance	EofE-3 - Transforming into a learning organization requires the support and commitment of the entire team. Thus, individuals will have to be willing to step forward and speak up with confidence.
	Coming out of your comfort zone	
	Experts being decisive when their backs are against the wall	
Integrating Leadership into Expertise: Experts Becoming Leaders	Leadership qualities for experts	EofE-4 - Exercising humility is essential to pulling individuals together, which then provides us the ability to propel towards a common endeavor.
	Building on your expertise through sound guidance	

Expertise is a Mindset (EofE-1)

Final results from this research study have shown that expertise is a mindset that has to be cultivated through continuous learning and development. Even though maturing expertise has been impacted by the onset of the Covid-19 pandemic, experts still must be creative in how they engage and learn within the ever-changing environment. In fact, every expert should be inclined to have robust foundational knowledge within their respective domain/field. They need to treat each challenge as a building block that allows them to see their environment from a very different perspective. Moreover, the experts in this study were able to share their lived experiences and philosophies on how expertise as a mindset allowed them to think and act differently in a global organization such as Microsoft.

Cultivating an environment to stand out by way of developing expertise requires individuals to conceptualize the world around them as vastly different from what they did a few years ago. In this new world where expertise can thrive, people will need to realize that everything moves at an alarming pace and speed. Thus, they must acknowledge the realities around them and take the appropriate steps to acquire knowledge that will be relevant to stay ahead. As such, the ability to transition to a learn-it-all mindset and a learning-centric atmosphere can allow an expert to be prepared to react to any changing forces around them. Above all, the growth of expertise requires a shift in how people operate and function within their organizations. They need to constantly engage in this on-demand trigger whereby they are unlearning and relearning new ideas and habits to deal with the growing complexity of their profession. One participant mentioned their thoughts on the mindset shift:

It's about defining or perhaps redefining expertise in the context of the VUCA⁴⁰ world. It's a pit stop to reflect upon as an individual what habits/behavior you would want to cultivate/sharpen/stop to thrive and as a team, we can enrich a better culture by contributing and leading.

In this new era, expertise is all about balancing the needs of the customers and end-users with that of the experts themselves. Dall'Alba (2018) remarks that “Expertise is dynamic, embodied, intersubjective, and plural, in line with the inseparable relation between persons and world” (p. 37). The simplest form of understanding expertise is knowing that the individuals behind the concept are real. It is from this perspective that we understand how KS becomes a critical part of developing expertise within any environment.

Knowledge Sharing Supports a Learn-it-All Climate (EofE-2)

KS starts with people being authentic. Our ability to show the real human side allows others to share without any form of hesitation. Similarly, we need leaders to model the behaviors that others should pattern whenever it comes to sharing knowledge within an ever-changing and dynamic environment. By the same token, experts should find the time to learn so that they are in an optimum position to share. KS is about building on the work of others rather than reinventing the wheel. Likewise, finding the scope to leverage what others have done is a great venture to learn and develop your expertise. The outsider experts were clear in their lived experiences and remarked that people do not respect those who attempt to reinvent the same wheel which impacts effectiveness. Hence, openness to immerse in KS even sharing failures will facilitate the growth of expertise in any environment.

⁴⁰ VUCA, short for volatility, uncertainty, complexity, and ambiguity

Certainly, this open immersion highly depends on the willingness to share both from a proactive and reactive standpoint to increase the collective knowledge within the organization. Whenever an expert promotes KS which can drive greater impact, they inadvertently building subject matter expertise within the organization that will influence the empowerment of cultivating ongoing expertise. During the learning series, insider experts came to an agreement on the importance of KS. For instance, one of them mentioned *“Great learning experience. As talking to peers and learning their ideas about expertise was something different than my knowledge. The discussion was to the point and the videos related to topics were a great addition to the learning experience.”* They were able to admit the underlying benefits of sharing knowledge and interacting with their peers through this community of practice. Direct engagement in KS is about supporting a learn-it-all mentality that pivots the expert to transform the way they think about learning, sharing, and communicating their knowledge within any organization.

Embracing this learn-it-all culture helps transform an expert, expert team, and the organization. Experts should be ready to engage in a hacking mindset while embracing the need to explore different types of experimentation within the organization. Sharing knowledge is part of any progressive organization and culture. Having subject matter expertise is about knowing that you as an expert is paramount to creating and inventing new knowledge. Since there is a limit on what an expert knows, they should be ready to document and share their knowledge. This means that they should be in a position to model KS within the organization. Furthermore, openness to sharing is based on empathy. Experts can exercise an authentic attitude towards sharing their experiences whether this might be good or bad. Speaking about your own experience as an expert

opens the window of opportunities for others to follow. If everyone can exhibit the recommended practices on sharing, then this eventually becomes part of a learning organization's fabric and DNA. It is from this perspective that transforming into a learning culture becomes even more of a priority for organizations that want to remain competitive in the knowledge economy.

Transforming Into a Learning Culture (EofE-3)

A culture that promotes successes and failures is one that allows an expert to thrive. Transforming into a learning organization requires the support and commitment of the entire team. In a culture of always learning, individuals will have to be willing to step forward and speak up with confidence. Whenever expert teams rely on the collective knowledge of the community they gain a diversity of thoughts, ideas, and recommendations which provide a comprehensive structure for addressing complex problems. Solving complex problems requires that we pull in different expertise. Bringing others along demonstrates the effective leadership of an expert. As expert teams are formed, it is important that they work together to solve the challenges of the organization. Further, working together within a learning culture promotes KS, delivers value for the organization, and fosters the development of expertise via humility. At the fundamental level of learning, culture is one that consistently places the opportunity to experiment with emerging innovations and ideas that require unorthodox thinking from everyone.

When we embrace and support a learning culture, we are allowing experts to rethink the environment around them from the perspective of looking for what others are

doing within the organization and on the team, and finding ways that we can learn, teach, and share. Automatically this opens a new portal of thinking for the organization in that the individuals inside the expertise suits can admit to being vulnerable and open to learning something new every day. People are always ready to help others overcome their fears and move out of their comfort zone. Reaching out means acknowledging limitations and the opportunity to learn and grow. Never be afraid to ask for help as you take action without delay. These are the next-level traits and behaviors that define experts who are part of the organization that is always in a learning mode. Billet et al. (2018) explains that “Experiencing failure can also initiate learning from mistakes. The key premise of learning through and for work is, thus, developing knowledge by accessing workplace activities and interactions” (p. 114).

The transformation into this learning culture produces more autonomous future knowledge workers who are interdependent thinkers that function in a collaborative manner to deliver results not only for themselves but also for the team and the organization as a whole. At the grassroots level of this transformation is being able to transition the complex to the simplest form so that everyone is aligned and on the same page. In the weekly reflection journals, one participant wrote about supporting a learning culture that is “*thought-provoking...action mindset, growth mindset, making others successful, embracing challenges, and embracing failures. Build muscle to deal with diversity and networking.*” These are clearly skills and capabilities that are required to support a culture that is always learning with the intent of being better tomorrow than today. Not only do experts need to constantly and continuously be in this learning mode, but they also need to exercise humility while doing it.

Humble Experts and Humility (EofE-4)

Exercising humility is essential to pulling individuals together, which then provides us the ability to propel towards a common endeavor. Consequently, we must strive to support humbleness that can activate the right leadership trigger in which we know when to step back and assess our environment to create the necessary change that will cause others to feel comfortable via our communication and collaboration. To become a very effective expert, one must start with leading and planning. With this in mind, experts will need to ensure that they are always exploring their surroundings from multiple perspectives with the intent of bringing about meaningful and measurable change. In doing this then, it is important that experts demonstrate a humble disposition and not allow ego to take hold of how they diffuse their knowledge within the organization.

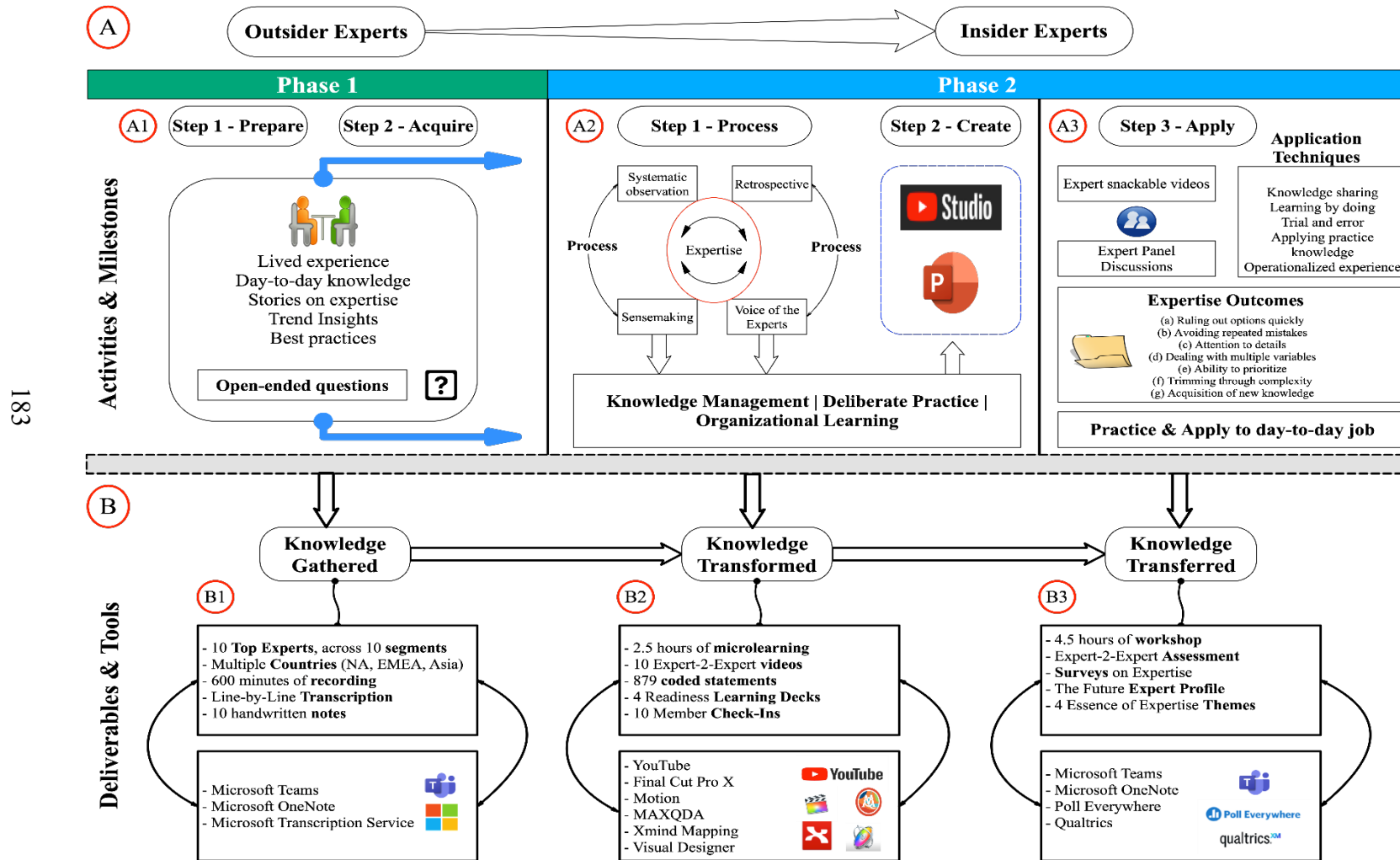
The participants for this study were all aware of the need to continue focusing on humility over ego. They further state that while we do have high-maintenance individuals in the organization, a majority of people do exercise a sense of humility that invites others to work closely with them. At the core of what we do as experts within a dynamic organization, we must ensure that people first view us as humans with compassion and empathy. Experts are very knowledgeable in what they do, and through that knowledge, they need to be able to connect with others. One of the most essential qualities of a leader is being able to disseminate information that resonates with the receiver. Therefore, an expert must be able to produce the experience that is needed for followers to join them and learn from their experience in various social settings.

Part of being a capable expert is understanding people in general. Providing support is about knowing how you will impact and influence others around you. Most of the time is not what we do but rather how we do it. This is where humility comes to life and the need to exercise humbleness while dealing with others within the team and the organization. In everything an expert does, they must be intentional in ensuring that everyone is synchronized. Obtaining clarity to the discussion builds the opportunity to exemplify strong leadership qualities. In most cases, an individual will have to learn how to conduct themselves while exercising their expertise. You can either be arrogant or be someone that really cares about people through your humility and action.

The journey behind understanding expertise and expert performance is a very important one that provided me with immense insight. Moreover, in leveraging the E2EPF, I was able to explore different aspects of the phenomenon and the relevant lived experiences of various experts. In Figure 29, the depiction of the framework highlights the core deliverables and tools used throughout the process. Part A demonstrates the basic components of the framework, while Part B specify the results from using it. The results have been broken down into three distinct categories: (a) Knowledge Gathered, (b) Knowledge Transformed, and (c) Knowledge Transferred. The associated deliverables and tools are then shown across these different categories. For instance, in the case of Knowledge Transformed, there were five deliverables that got produced by deploying the framework. In addition, multiple tools were used such as YouTube and MAXQDA to assist with the transformation process. In the end, the main value of the framework was to help transfer knowledge within our environment. Furthermore, individuals consuming the knowledge and experience must practice and apply accordingly.

Figure 29

Expert-to-Expert Practice Framework with Deliverables



To sum up, expertise has never been about your technical skills and how much knowledge you possess in the world. Rather, expertise can quickly be shaped up to be the following:

- An individual who has the recognition of possessing deep and in some instances broad knowledge and experiences in their field of domain.
- A mindset that is constantly in a research mode that is embedded with curiosity and the ability to accept failures.
- Continuous learning mentality and having the vision to discover new information, drawing upon association, engaging in-moment application of knowledge, and exploring diversity of thoughts.
- A deep passion and willingness to share without reservation or partiality
- Operating with the appropriate balance of learning and teaching (coaching and mentoring).
- Recognition of others and having the maturity to build on the work of others (hence, driving collaboration through the collective knowledge exchange within the organization).
- Ability to break down the complexity and simplify for any given audience (connect with others).
- Having the grace and the strength to be vulnerable. Being able to know your limitations and boundaries (humility over ego).
- Above all, it is less about technical knowledge, and more about being able to collaborate, adapt, and connect based on changes.

CHAPTER 5

DISCUSSION

*Often, we are too slow to recognize how much and
in what ways we can assist each other
through sharing expertise and knowledge
~Owen Arthur, Barbadian politician*

The purpose of this action research study was to increase employees' learning and effectiveness in dealing with complex problems, KM, and KS as subject matter experts by developing the Expert-to-Expert Practice Framework. This chapter presents the summary and discussion of the research findings that are directly connected to the research questions. The chapter is segmented into five sections. Section one is on providing the outcomes related to the previous research and theory. Section two addresses the utility of the E2EPF in the context of the current environmental conditions within Microsoft as a multinational corporation. In section three, important lessons learned are shared from both personal and professional perspectives. Section four deals with the boundaries of the study; implications for practice; and implications for future research opportunities. Finally, section five contains some concluding thoughts and remarks about the research process and journey.

Outcomes Related to Previous Research and Theory

To properly understand the problem of practice and intervention, an extensive literature review was conducted across multiple disciplines with a special focus on DPF, KMT, OLT, and leadership principles. Literature on deliberate practice laid the groundwork for the existing approaches and techniques that are available to investigate

expertise and expert performance. Bringing content from KMT meant that we were all going to be speaking the same taxonomy and definition through the Expert-to-Expert Learning Series and other forms of communication. Using OLT brought about new insight into how organizations are evolving their learning culture and what knowledge workers within an information-driven society will need to be doing differently to remain relevant in their respective fields. Finally, leadership principles and practices stood as a constant reminder for everyone who participated in the study to ensure that we facilitate a respectful and caring climate throughout the learning and research experience.

Knowledge Management Theory

Organizations like Microsoft are always rushing to capture tacit knowledge within their environment. Since this type of knowledge resides in the heads of the knowers (Dalkir, 2013) it presents a unique opportunity and challenges for a vast majority of individuals. Certainly, it requires one to figure out the best practices to record and circulate that knowledge within the organization amongst employees and expert teams. To support the circulation of knowledge, the need for knowledge-based systems and processes (Buchanan et al., 2006) must be in place to help with the diffusion and improvement of expertise. In addition, we also must examine how the integration of knowledge functions within an organization. Dall’Alba (2018) notes that “Developing expert performance involves not simply increasing knowledge and skills but integrating this knowledge and skills into expert ways of being in a specific domain” (p. 35). For the learning series, the insider experts and I spent a great deal of time focusing on ways to ensure that knowledge permeates throughout their specific domain and the organization.

There is no doubt that understanding the role of KM within the broader ecosystem plays an important role for everyone. During the sessions, the participants gained relevant information that helped them disseminate new knowledge consumed by others. As a result, one participant shared that:

It was interesting to understand their definition of expertise, the experiences that led to their expertise, and the unique circumstances of their time, place, and situation. This helped draw up themes from their conversations. Things like, "an expert can only be known as an expert if they put their hand up and contribute to discussions, projects, etc." "Stay open to learning" coupled with "Stay humble, stay curious". Just having knowledge isn't enough but is available to others who need the expertise you have gained and being open to sharing is a critical part of being an expert. These are probably things I already knew, but when I put them together and viewed them from the lens of this program, I began to understand why some people are hailed as experts and some just aren't.

Most of the participants shared their understanding of the common taxonomy and definition used throughout the learning series which are part of the common KM structure. One such individual spoke about working together with their peers. They were very forthcoming and mentioned:

It was good to hear from other colleagues. People can have varied ways of thinking and analyzing a situation being in the same team too. Through this group discussion, we got that different perspective and added them to our strategy too.

The community of experts sharing and working with each other is an important aspect of building expertise within a fast-paced environment. Collins and Evans (2018) share their perspective that expertise is a social activity that is part of a social group (think of the community of practice). They concluded that "only socialization can enable the individual to share the collective understandings of the group and so develop the tacit skills needed to apply them in new settings" (p. 24). It is from this perspective that we

observe that the learning series and the E2EPF had a demonstrable impact on the knowledge ecosystem within the company. It is imperative that as we develop expertise we do not only focus on knowledge and skills, but also recognize that there are other contributing factors across our environment that would need our attention including how we respond to the people around us (Dall’Alba, 2018).

Buchanan et al. (2006) noted that “an expert’s own experience certainly colors his or her articulation of knowledge, with a blurring between the facts that are generally true and the facts that are based more on personal experience” (p. 94). This was a powerful statement that played out within the learning series and the activation of the practice frameworks. The participants were conscious of how their experiences influenced how they were viewing the world around them and even interacting with their peers during the expert panel discussion. Correspondingly, the participants were able to share their perspectives after completing the learning series. One states that:

Traditionally an expert is an individual who has deep knowledge regarding a particular area. A person who is an authority in a specific subject/field/area. However, in the modern workplace along with depth, an expert need to have an additional wider view for more impact. For an expert to be an effective leader; to be revered and recognized, he/she must display additional qualities such as being a thought leader, creating a knowledge bank, being a mentor and guide for others, and someone who shares knowledge creates banks of knowledge for others to benefit from, collaborates with others, creates platforms and encourages others to collaborate, is ok to voice opinion even if not a popular one, etc.

The entire team agrees that knowledge is an expensive commodity with a costly price tag. What is more, they also have acknowledged that we are now operating within a very complex world that will continue to produce complex problems for experts to solve with their respective stakeholders and end-users. Feltovich et al. (2018) conclude that “individuals with more knowledge and experience have a more complex and appropriate

structure of their knowledge, which allows them to think and reason in a deeper and more functional manner” (p. 70). In this rapidly evolving world that waits for no one, experts will have to up their game to compete and stay relevant. This competition is not against each other but within themselves. They must figure out how to stay competitive with the latest emerging technologies, processes, and business models. Buchanan et al. (2006) suggest that “Expertise depends on well-organized, specialized knowledge much more than on either superior memory skill, which would transfer, or general problem-solving ability, which also would transfer” (p. 89). The participants within this study are fully aware of the challenges ahead and the need to stay up-to-date with the ever-changing landscape of knowledge. They also know that to remain competitive, they must practice and improve their expertise on an ongoing basis.

Deliberate Practice

All the five principles of deliberate practice: (a) push beyond one’s comfort zone, (b) work toward well-defined specific goals, (c) focus intently on practice activities, (d) receive and respond to high-quality feedback, and (e) develop a mental model of expertise (Ericsson et al., 2018) were all evident with both the outsider and insider experts throughout this study. Deliberate practice principles were also used during the preparation and implementation of the E2EPF which provided the foundational components of creating the relevant materials that were shared with the experts. Part of the analysis for Phase 1 was to apply the acquired knowledge from deliberate practice to the research study. The Cambridge Handbook of Expertise and Expert Performance

(2018) serves as the guide for conducting a proper analysis of new ideas and concepts that were raised through the exploration of expertise as a phenomenon.

Cross (2018) reporting in the article called 'Expertise in Professional Design' conveyed that "Developing greater expertise generally means developing a broader and more complex understanding of what has to be achieved" (p. 384), which is exactly how the participants in this study have been framing the workplace of the future that relies on experts. Similarly, engaging in purposeful practice is an effective function to push someone's out of their comfort zone (Dew et al., 2018). The participants were fully engaged and shared their perspective on deliberate practice and expertise along with coming out of their comfort zone. One of these participants mentioned:

An expert is someone who has studied, practiced, and consistently delivered a certain level of quality, in a specific area. An expert is one who is able to stand up and speak knowledgeably in their area of expertise, drawing from personal experiences and most often with data. An expert is someone who documents success and how it was achieved to allow for sharing of their experience and the knowledge derived from it. An expert is only an expert if they help motivate others to become experts.

These experts were walking away with clarity on how to interact with each other and frame up terms within the environment. It was great to observe them in action. An individual spoke about expertise from a unique perspective:

Expertise is the continuous gaining of knowledge around any specific area/topic, that covers both the depth and breadth around that area/topic. Expertise can be documented and is transferable in nature. Expertise is never rigid or finite, and expertise can only grow. If it is shrinking or staying constant, then it is redundant and ceases to be expertise.

Another participant shared that it was a great experience to engage in deliberate practice. They brought up the point of demonstrating new skills:

It was definitely helpful to hear from all the experts with average of 30 years' experience in Microsoft through this program. They are experts in their field which gave us insight into other areas and people at Microsoft too. We can use their knowledge of success/failure and expertise to become an expert in the future.

The power of training activities is meant to drive greater empowerment and improvements and are directly related to how we would perform within the principles of deliberate practice. The participants continued to showcase their understanding of changes happening around the world. They were very open and vulnerable to participate in sharing, and one such individual concluded:

Expertise is a trait that we all should practice if we are aspiring to become good leaders in the future, where we create an environment for the people to feel comfortable to share their knowledge and open to learn from others too.

Deliberate practice is about individualized learning, effective trainers, instant feedback, and repetitions (Ericsson et al., 2018). Hence, the E2EPF was built on the premise of supporting all these components which were directly integrated into an outcome-driven experience. As a result, the participants who participated in the learning series knew the intent was to improve expert performance which had a direct interconnectedness to supporting the cohesive nature of building stronger expert teams. It was also clear that for experts to improve their knowledge, skills, and abilities, they had to think about how to also increase performance which requires practice (Ericsson et al., 2018). To that extent, Dall'Alba (2018) suggests that "Being expert entails, then, something other than simply increasing knowledge and skills. It requires consistently demonstrating high-level performance through responding in attuned ways to the setting and issues at hand" (pp. 33-39). Focusing on developing domains of expertise along with fostering soft skills was

crucial for part of the learning process. The core objectives were to engage learners in utilizing deliberate practice more within their daily routines.

Even though deliberate practice calls for 10,000 hours of training, this alone does not guarantee that one will become an expert. As a result, Hoffman et al. (2006) observe that “years of experience, is useful and informative, but does not conclusively predict expertise because the length of domain experience does not necessarily translate into proficiency” (p. 167). While experience plays an important role in one becoming an expert, other factors such as driving expert performance, performing with an expert team, leveraging OL, and demonstrating humility are all important levers for individuals to explore on an ongoing basis. To that end, another participant mentioned:

It was very interesting to listen to the various experts from diverse business areas and hear their perspectives. It was reassuring to know the many values that they cited are the ones that I hold dear and practice. I received many pointers that I plan to focus on now in my personal journey.

The level of engagement by utilizing the E2EPF brought about a closer-knit bond for experts within the organization. They acknowledge the need to engage more in deliberate practice which can help boost expert performance and evolve their expertise in the respective field/domain. In the end, it will still depend on these individuals to utilize the knowledge resources available within the team and the organization to support KS and build on their expertise and leadership skills.

Organizational Learning Theory

The process of managing learning and development in an organization is central to OL (Mishra & Bhaskar, 2011). Organizations are making efforts to ensure that employees are equipped with relevant knowledge to learn and grow so that they can

remain competitive throughout these uncertain and volatile times. Furthermore, rapid changes to knowledge force us to learn, relearn and unlearn which can be overly expensive and time-consuming. Ericsson et al. (2018) state that “With the rapid changes in the relevant knowledge and techniques required for most jobs nearly everyone will have to be capable of continuing their learning and even intermittently relearn aspects of their professional skills” (p. 18). An important part of this learning experience is identifying how common frameworks like the E2EPF can help accelerate and support these audacious goals. While there are many components supporting OL, the ability to support team adaptation is high on the priority list. Above all, what is needed is team adaptation which is a vital component to activate various team members to actively start learning within the environment (Sonesh et al., 2018).

The learning series conducted within Microsoft reinforces the importance of OL and how to develop a learning culture that supports team adaptation within the organization. Individuals who participated in expert panel discussions shared their lived experiences and perspectives on how OL is needed to continue helping them grow and develop as experts. One of the participants was able to provide their perspective:

Everyone is unique and has their own unique journey which brought us to the convergence point of being peers today. The experience of engaging in discussions with them regarding expertise definitely highlighted that there is an expert who lives in each one of us and just the area(s) of expertise may vary. What is even more interesting is that expertise when shared can be inculcated into any work we are doing. The discussions helped me a lot, very specifically to create a plan around how I intend to hone my own areas of expertise.

The infrastructure and mechanisms must be in place to: (a) facilitate the transfer of knowledge, (b) allow individuals to hone their expertise in whichever domain of choice, and (c) coach new hires to the organization. Dall’Alba (2018) points out that

“knowledgeable and skilled experts have been unable to simply transfer this expertise to keen novices, although this is not to deny the central role that effective teaching can play in promoting learning” (p. 33), however, we need to realize that a lot is needed to foster expertise within a learning organization.

The workplace of the future that supports learning and fosters expertise must be safe for everyone irrespective of their background and knowledge level. For this reason, Edmondson (2018) concludes that “psychological safety can exist at work and, when it does, that people do in fact speak up, offer ideas, report errors, and exhibit a great deal more that we can categorize as learning behavior” (p. 65). The outsider experts were very adamant that safety is a number one priority to help develop expertise. Stefani the HR director mentioned that as an expert, gaining psychological safety is important to foster expertise in any environmental condition. Additionally, experts also need to take care of how they interact with others around them. At the same time, we need to understand that expertise does come with some unique challenges and baggage. Winegard et al. (2018) suggest that “expertise is difficult to achieve and quite rare, meaning it is costly and that it relies upon unique constellations of underlying traits and large amounts of leisure time” (p. 45). Put differently, experts who participated in the learning series will have to continue practicing honing their skills and this will require them to make the time and space for that to be feasible.

Helton and Helton (2018) indicate that “Expertise is the outcome of a prolonged period of learning” (p. 51), which means that team members will have to invest the time and effort required to yield the result and by extension the benefits. They must also be willing to share their collective knowledge and work together in solving problems that

are nascent and emerging within the organization. Researchers found that “Team members within an expert team can coordinate with one another to meet complex goals, and they can sometimes do so without overt communication” (Sonesh et al., 2018, p. 511). Already we are seeing the benefits of conducting just four weeks of one-on-one expert discussions and activities. Just imagine what more time together and focused learning can produce for the organization.

In this new era where organizations are driving hard to remain competitive and relevant, learning must be a critical lever in their arsenal. Expert teams and experts within these organizations must commit themselves to continuous learning, knowing that they will always be learning something new and different to help them mature their expertise along with transforming into a learning organization. Billet et al. (2018) observe that it is important to understand the different perspectives of how work activities and interactions can lead to developing strong expertise as part of OL. The scholars were able to share:

Individuals’ personal epistemologies are central to learning through practice and essential for rich learning from practice-based experiences and pedagogic practices. They include (a) an active interest and engagement in work-related learning; (b) readiness in terms of interest and knowing how to be positioned as effective learners; (c) engaging and learning interdependently in practice settings and through activities and interactions; (d) developing capacities to come to know, including haptic, auditory, sensory, and procedural capacities; and (e) engaging with others and artifacts to actively access understandings, values, and procedures; (f) and in ways that can adapt to other circumstances. (p. 121)

We may not be able to predict the future, but what is certain is that knowledge will be a critical component for any organization operating in the 21st century and especially those wanting to support their digital transformation initiatives. At the same time, it requires leadership to lead people to the next level. Expertise cannot exist without crucial

leadership qualities since they define how an expert function in this new complex and uncertain environment.

Leadership & Coaching Principles

Strong leadership qualities are there to steer people in the right direction. Leaders in any organization are there to bring clarity, set direction, inspire, and unblock their team to deliver impactful results within the organization. Throughout the learning series, the three layers of Microsoft leadership principles: (a) create clarity, generate energy, and (c) deliver success, became the guiding path for how insider experts, outsider experts and I interacted as professionals and teammates. Additionally, we were constantly being reminded of the different modes of how to function as a high-performing team. Sonesh et al. (2018) remark that “fostering effective team behaviors, cognition, and affective states is necessary for facilitating high levels of team performance” (p. 509), which also became the rallying point for us during the learning series. It was exciting to see the response from the participant in the program. One particular individual wrote:

I have always considered the facilitator of this program to be my mentor, so it was easy for me to bare my vulnerabilities to him especially because our areas of work this year and every year are so critical. I enjoyed the acknowledgment he always gives to something stated, the appreciation of the humor I resort to when nervous, and always making helpful suggestions when asked for help, either in the form of coaching or in the form of suggestions. The fact that he demonstrates the values and behaviors discussed in this session about experts really helped nail the concepts.

Individuals that participated in the learning series felt that there was consistency in the delivery of the sessions and how they directly connected to facilitating the Microsoft leadership principles and management excellence model. One of the participants mentioned:

Personally, it was very helpful as I got to meet many people and hear their ideas. At the same time, it was empowering to share our own views with others and get the validation if we were on the right track to becoming an expert or not.

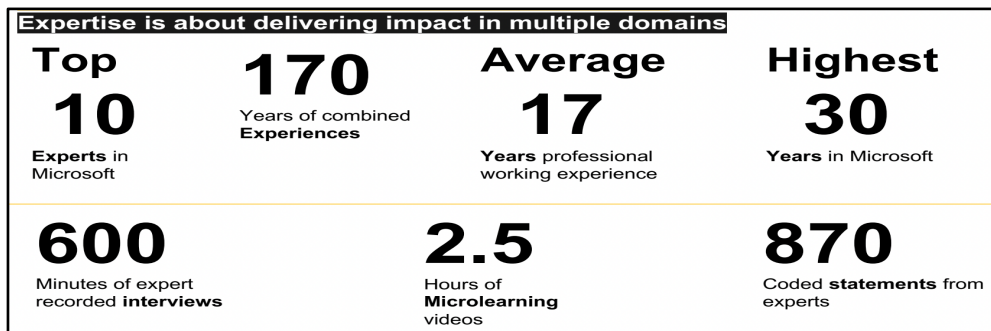
In leveraging the leadership principles from Microsoft, leaders are attempting to build teams that can work together in the most effective and efficient ways possible. Sonesh et al. (2018) added some insight, stating that “Expert teams have been shown to foster collective trust and a sense of team orientation and confidence” (p. 509). It is from this perspective that we embrace the idea to continue to model a culture that embodies our values and enables success across different boundaries. At the same time, Edmondson (2012) reminds us that “Leaders can facilitate teaming and accelerate learning by explicitly promoting team roles that support curiosity, responsiveness, and cooperation” (p. 256). Above all, we need leaders and experts to invest in the growth and development of others which they can do through supporting KM, engaging in deliberate practice, and helping transform into a learning organization.

Utility of the Expert-to-Expert Practice Framework (E2EPF)

The E2EPF was developed as a way of capturing the lived experiences, trend insights, and best practices of seasoned practitioners and experts within Microsoft. After collecting the data, I was able to extrapolate a few numbers that helped describe the different type of individuals who participated in the research study (see Figure 30). This was done in the form of phenomenological extraction to ensure that these experts had the opportunity to share their knowledge, guidance, and wisdom through open-ended questions. The framework was meant to also create a model that would shed light on how best to replicate expertise to transform a team of experts into an expert team (Ericsson et al., 2018).

Figure 30

E2EPF Lived Experiences by the Numbers



From...To Exploration Profile Development

Engaging in open conversations with outsider experts created the baseline for developing and capturing the lived experiences which were then documented in the form of snackable videos. These videos were then utilized as a part of a series of learning experiences for the insider experts. They were able to watch and observe other practitioners within the company sharing an immense amount of knowledge and experiences on how to navigate the complexity that is taking place in today’s Digital Transformation across segments and industries around the globe. Socializing the learnings from the outsider experts with the insider experts took the form of SME workshop series. The **From - To Exploration** exercise (see Table 10) that was assigned to them during the learning series workshop. They made significant progress towards framing up what the ideal profile of the future expert would be in an organization. One of the participants shared their interest in working with the profile and how it would require ongoing effort:

I have taken the lead to build the expert profile. Together with the team, I will finalize what can be done by myself in this journey and together in v-team to make a change in the culture.

Table 10*From - To Exploration Expert Profile*

Attributes	From	To Expert	Additional details
Skills	<ul style="list-style-type: none"> • Functional and soft skills 	<ul style="list-style-type: none"> • Developing Meta skills 	<ul style="list-style-type: none"> • Leadership Quotient • Growth Mindset • Complex Problem solving • Critical Thinking • Emotional Intelligence • Decision Making
Behaviors	<ul style="list-style-type: none"> • Know it all • Respect 	<ul style="list-style-type: none"> • Humble Listening • Always Curious • Put knowledge into practice • Respect for Individual • Learn it to all--- Share it all 	<ul style="list-style-type: none"> • Professional Maturity • Bringing to cognizance some blind spots that will add respect to individual
Mindset Shift	<ul style="list-style-type: none"> • Fixed 	<ul style="list-style-type: none"> • Agility and Entrepreneurship 	<ul style="list-style-type: none"> • Entrepreneur Mindshift

At the onset, the framework was designed with the supporting foundation of KM coupled with deliberate practice to provide real-life examples and explanations in addressing the phenomenon of expertise. It was really meant to explore how best practices along with the principles and ideas of other experts can help transform an environment. Since we know that experts need to “be proactive about seeking out ways that you can help contribute to the success of your product and your team. Nobody is going to tell you exactly what to do all the time” (LeMay, 2022, p. 26). In becoming

familiar with the lived experiences of others, they could also be open to expressing their perspective on expertise and how to continue fostering the growth and development of experts.

The framework utilized qualitative interviews with the outsider experts to adequately capture the essence of expertise from their perspectives. Baker et al. (2018) shared that “Interviewing techniques comprise face-to-face discussions and hence enable a more individualistic and potentially deeper appreciation of expertise development” (p. 261). Ten experts were interviewed over the course of two months using a virtual forum which also allowed for that face-to-face interaction to capture their ideas, thoughts, and knowledge. The power behind this approach with the framework is that it created realistic documentation of previous experiences. In a research study conducted on expertise, they found that “Retrospective approaches to collecting and assessing practice history data require participants to think back to the early years of their involvement in the domain of interest and reflect on past practice experiences, behaviors, and characteristics” (Baker et al., 2018, p. 260).

Leveraging the Expert Rating Scales

While not attempting to reproduce flawless scientific measurement in this study, I was able to leverage an expertise rating scale with associated definitions to determine the current expert competency level for those who participated in the learning series (see Table 11). Ackerman and Beier (2018) suggested that “By its very nature, the study of expertise is associated with several specific measurement problems” (p. 216). Insider experts were able to conduct the self-assessment after completing the four-week

workshop with their peers. It was from this standpoint that the framework enabled the ability to innovate while engaging in an on-demand learning experience. Another interesting part of the framework was the ability to acknowledge the uniqueness of developing leaders and experts within an ever-changing environment through peer-to-peer interactions.

Table 11

Expertise Rating Scale and Definition

Level	Definition
Initiate	Minimal or no exposure
Novice	Some introductory instruction; may have taken formal courses, but little applied experience
Competent	Actively learning and working in the field; usually has five or fewer years' experience; in complex fields may take up to 12 years; relies on others for complex problem-solving advice
Professional	Able to work with little to no direction at a high level' recognized with awards and recognition for outstanding contribution in the field; often has assumed substantial responsibility for decision making
Expert	Highly regarded by others; can handle difficult, rare situations; skilled across subdomains; offers groundbreaking solutions; rarely has less than a decade working in the field

Note. Adaption of the Dreyfus and Dreyfus (2005) five-stage general model of skills acquisition. It was modified for the E2EPF and the audience within Microsoft to make it more relatable to them.

The expertise rating scale was utilized during the end of the learning series and training. It is important to note that Baker et al. (2018) remarked that “key factors distinguishing experts from non-experts are largely the result of training” (p. 257), which was essentially a core part of the framework. In completing the assessment, the experts

did a self-assessment which allowed them to rate themselves. A majority of the experts felt that they were above the ‘Competent’ level within this scale. This translates to mean that they are actively working and learning within their chosen field of expertise but there is always room for growth and development. When asked the question: I intend to exchange information and engage in KS in the future to deliver business impact, the participants reported that they will follow through on sharing knowledge within the organization. Above all, they also commented on that the E2EPF will help them drive high performance.

Becoming an expert is an ongoing process of living to acquire new knowledge and improve oneself. Dall’Alba (2018) concluded that “Developing expertise can be conceptualized, then, as a continuing process of becoming; never entirely complete, nor achieved once and for all” (p. 35). What the E2EPF allows is to start that journey and embed rich resources that can help a professional navigate their way into the realm of expertise by engaging in deliberate practice and applying the knowledge within the flow of work. Above all, we also need to remember that there is no right or wrong way of developing expertise. We just need to find the learnings from what has been tried and proven by others and can be replicated effectively.

Scaling up of the Expert-to-Expert Practice Framework

Leveraging the E2EPF within Microsoft for scaling up expertise is one of the foundational principles of the model. The intent is to find ways that this framework can work in different contexts and environmental situations. It is built with the understanding that there is value to have the expertise to support the business goals and objectives. To

scale this framework would require the collaboration of expert teams, leaders, and stakeholders. Sutton and Rao (2016) mentioned that “Scaling well hinges on making the right trade-offs between mandating that new people and places become perfect clones of some original model (a “Catholic” approach) versus encouraging local variation, experimentation, and customizations (a “Buddhist” approach)” (location 128). The model has been proven to work with both the outsider experts and the insider experts to understand their perspectives on who is an expert, and what makes an expert. Now it would be a matter of tweaking the different components of the model to fit an organization's particular needs.

Boundaries of the Study

As with any action research study, it is important to note the relevant context and boundaries that existed at the time to facilitate such an endeavor. For this study, there were four boundaries that were considered: (a) selection process of participants, (b) timeline/duration of the study, (c) time zone implications, and (d) transferability of the framework. Understanding these provided a sounding board to ensure that different stages and components of the study were interconnected in the best way possible.

Selection Process of Participants

Even though the participant selection process was adequate, it still had a few boundary considerations around it. For instance, purposive sampling was used to choose participants for this study based on key characteristics agreed by the researcher (Tongco, 2007). I drove the selection process based on my knowledge which might have limited the inclusion of participants. As such, the outsider experts were selected primarily on

their expertise and experience within Microsoft. However, this was conducted by observation from my perspective going through documents and making the selection of these individuals. In addition, the selection process was also limited from the standpoint of choosing regional experts (e.g., did not have experts from APAC⁴¹ - excluding India for this study), and language barriers. Finally, the number of insider experts was capped at six team members and one leader to ensure that the learning series were more manageable and provided one-on-one experience. On one hand, control was needed to ensure smooth delivery of the sessions, but on the other hand, it excluded team members that wanted to participate.

Timeline/Duration of the Study

The intervention for the Expert-to-Expert Practice Framework was divided into two different phases. The first phase spanned a total of two months, while the second phase was limited to four weeks. This time constraint drove the discussions with the experts which at times felt somewhat rushed since it was only one hour per week. Also, the number of activities that we could have undertaken during the learning series had to be time-boxed which again had a slightly rushed feeling. Another aspect related to the duration of the study had to do with the fact the insider experts had limited time to actually put the knowledge into practice which might not reveal the real effectiveness of the program. Nevertheless, early signs indicated a positive reaction to the implementation of the E2EPF and its ability to help develop and replicate expertise within the organization.

⁴¹ APAC - the Asia-Pacific regions which include Australia, China, and Japan.

Time Zone Implications

While time zone restrictions did not directly impact the overall effectiveness and experience of the learning series, they did present some challenges for me. Conducting work-related sessions across multiple time zones always presents some form of time-zone-related limitations and this was no exception. The time zone differences between me, and the outsider experts presented complications in scheduling and agreeing on the appropriate commitment to conduct the sessions. An example, scheduling the outsider experts that were based in Boston, Fort Lauderdale, and Ireland required cooperation among these individuals. Similarly, the insider experts who are predominantly in India across multiple locations presented some scheduling challenges. The expert panel discussions were hosted on Monday mornings with IST⁴², which meant that I had to complete the sessions late Sunday evenings in the PST⁴³ time zone.

Transferability of the Expertise Framework

Implementation and usage of this Expert-to-Expert Practice Framework was not built with generalizability in mind since it highly depended on experts from within the organization and other key stakeholders. Specifically, it was more geared towards supporting transferability to any organization based on the approaches, methodologies, and techniques used to design and implement the solution. Certainly, reproducibility of the outcomes will highly depend on the specific context for expertise, and expert teams within the environment. The final concern is around the predictable nature of the

⁴² IST - India Standard Time is 12:30 hours ahead of Seattle

⁴³ PST - Pacific Standard Time

framework to determine if expertise will increase over time. Due to ongoing environmental challenges, reorganization, and personal skilling requirements there might be some implications for effective implementation. In fact, Baker et al. (2018) remarked that “collecting practice data from already elite performers in determining how valuable the data are in terms of being of use to future performers” (p. 265), is always problematic and presents numerous issues. Therefore, caution should be taken in not over-promising to convert everyone into experts overnight.

Lessons Learned

In starting this research journey there were numerous reservations on my part. The first that jumped out was whether I would survive the rigor of the program. While I had all intention to stick with any task I started, it was more of ensuring that I had the tenacity and grace to maintain the commitment to follow through to the very end. Unquestionably, it was an extremely challenging undertaking, but with perseverance and resilience, I was able to make it happen. Ever since starting this doctoral program, I knew that I wanted more. Encapsulated in this learn it all mindset, this was the time that I would put in the effort and time to ensure that I capitalized on what was being offered by this program.

Someone might have thought that I am a glutton for pain and punishment. Perhaps, they might be onto something. I do appreciate an opportunity where knowledge exchange and learning are intertwined which is exactly what was delivered with this program and the various action research cycles and processes that I had to accept along the way. True confession, I do not believe that given an alternative I would ignore taking up this path either. Put differently, I would have accepted regardless and forged myself in

the fire of knowledge and experience from the people that I met on this journey. Without a doubt, this research experience has helped immensely with my personal and professional development.

Professional Growth and Development Only Part of the Story

On the professional side, there were so many new ideas, thoughts, and concepts that saturated my mind. While I understood the basics of conducting research, entering this program, and doing it yourself, was on another level. Professionally, I have grown in the most consequential way possible as it relates to my knowledge, experience, and understanding of research. Conducting research now has become part of my inner core system where I now comprehend the value of theoretical frameworks, conducting a literature review, and moving into research design and methodology. The vast amount of information gained has aided me in further understanding the significance of using quantitative, qualitative, and mixed methods methodologies. Practices of research such as developing surveys, conducting interviews, field observations, and completing various types of analyses have all driven me into becoming a better research practitioner.

Learning from other scholars, cohorts, and professors brought another level of self-awareness that I too can make it. No longer was I intimidated by reading a research paper and screaming, “What the heck are they talking about, English please?” Rather, I am confident that it will not be Latin to me, but something more understandable since I have been down that road to bring simplicity to research for anyone. Willyerd and Mistick (2016) remind us that:

Being open is a key practice of people who successfully manage their careers, not only because they can adjust behaviors for better results but also because they can

recognize opportunities when they come along, no matter how seemingly small at the time. (p. 97)

Consequently, I am a much better research practitioner who has improved my educational knowledge, leadership skills, and practical capabilities in solving complex and wicked problems (Jordan et al. 2014) which continue to be a challenge for many organizations around the world.

Personal Ambitions and Passion are the Other Part of the Story

While growth on the professional side is undeniable, there has also been a lot of development on the personal front too. The most important personal lesson that rises to the top of the list would be the ability to be a humbler individual. Throughout this arduous journey, I have learned so many valuable lessons that have shaped my perspective on exercising humility in everything that I do as a leader, as an expert, and just as a plain old human being. The interactions that I have had with professors, cohorts, critical friends, managers, peers, and team members have taken me down the highway of wanting to do more and be the best while demonstrating humility. I have matured to the point of understanding what it truly means to be authentic, speak-up, and share your voice and ideas while also being vulnerable and telling your stories to others. Hord and Sommers (2008) indicate that “We can help build trust and reduce fear by having norms of accepting ideas, accepting the people who tell their ideas, and not rushing to judgment too quickly” (p. 89). This new fondness for vulnerability has allowed me to trust others more and be brave enough to translate knowledge that would have otherwise been locked away.

After completing the dissertation proposal defense on February 14, 2022, it was off to the races. At least that is how I felt at the time. The reality though there was a lot happening around me and the world at large. It was extremely difficult to stay focused and concentrate on making meaningful progress. While I wanted to give my all, there were multiple distractions that came rushing into full frontal view. For example, Russia made the decision to strike Ukraine which brought a massive flood of global changes. In my company, I was responsible for leading up our incident responses and business continuity plan. The level of involvement during the first few weeks of the war meant that I had limited bandwidth to focus on making progress with my program. I also quickly realize that there might be other factors lingering ahead:

- Global disturbances (ex. Russia-Ukraine war). Russia and Ukraine conflict in February 2022
- Covid-19 virus impact capacity and staffing. Covid-19 impacting team members
- Inflation and rising cost resulting in distractions
- Medical emergency and surgery created a scary and overwhelming feeling

We live in a society that is constantly changing based on several moving factors. Indeed, I cannot control the externalities, but what I can surely do is to spend time focusing on matters that are squarely within my reach. Even with these roadblocks, I have kept to the schedule as best by writing and continuing the research process.

The number of papers that I have written has grown immensely in my digital repository. Constantly writing papers has forced me to develop my personal and academic writing skills. Far from being perfect, I continue to learn and pick up tips on

how best to improve my writing which can help me in every aspect of my life. Within the same space, there is also an affirmation of being a serious lifelong learner and researcher which has come about from the deep desire and commitment to keep on pushing myself. Earlier in the program, I learned to avoid putting artificial labels and limits on my ability to excel. Along the way, I kept reminding myself that “there is no learning without mistakes” Hord and Sommers (2008, p. 88). Instead, secretly I have become my favorite cheerleader, one who brings out the encouragement irrespective of personal achievements (successes or failures) that have come about from executing a particular action towards my destination.

In short, I am a much better person, friend, coworker, husband, father, and teacher because of these personal developments that I have bravely tackled in these past months. Altogether I got the opportunity to use the resources that I obsess over - books, emerging technologies, and gadgets. Both Mieg and Evetts (2018) were spot on when they mentioned that “experts are essential in precisely those domains where there are no right answers” (p. 143), so for me, it was more about exploring and finding solutions that could potentially lead to an answer that has plagued my imagination. In reaching this new destination in my life, it is only a temporary one and I will likely have to continue acquiring new knowledge. There is so much to learn, so much to observe, so much to share, and if I should stop now, how selfish would that be?

Implications for Practice

The purpose of completing the action research is to observe the difference it will create within one’s practice. Understanding the implications of implementing the research process and the associated intervention within our environment is discussed in

this section. Firstly, the implications related to the community of practice and connected communities are addressed. Secondly, opportunities to integrate into the daily practice and workflow. Finally, implications on how best to support upskilling and continuous learning from an expert standpoint.

Community of Practice and Connected Communities

The Expert-to-Expert Practice Framework works best whenever it is implemented within the settings that will support a community of practice to thrive. One of the major goals of the framework is to ensure that team members are exchanging and sharing knowledge and ideas. It is meant to bring them together within a much smaller setting so that they can learn from each other and share best practices that they either have as part of their lived experience or something they learned along the way. Wenger (2018) concluded that “Communities of practice are about content – about learning as a living experience of negotiating meaning – not about form. In this sense, they cannot be legislated into existence or defined by decree” (p. 229). It was important for this framework to support the community of practice which the participants admired greatly. One individual during the expert panel discussion brought up the fact that they appreciated the intimate settings that this learning community provided to them. They were able to be vulnerable without being judged by anyone in the group.

Integration of Framework Within the Daily Workflow

Even though the duration of the expert interaction with the insider experts was extremely short (we only had the opportunity to do four weeks), they respected the

knowledge shared during the learning series and strongly agreed that the wealth of knowledge that they gained by having participated in the study would have an impact on their daily workflow. They would want to practice many of the experiences, ideas, recommendations, and best practices shared by the outsider experts and their peers. Indeed, this was meant to bring a stronger commitment to improve expertise from start to finish. Taking a cue from the research of Sonesh et al. (2018) on writing about the best practices of team modeling shared that “a team built of members with the highest technical prowess may propel the team to the highest levels of achievement; however, it is the well-developed ‘team-based’ skills coupled with technical skills that represent the most effective teams” (p. 506). Certainly, the end state is to have team members change their habits and behaviors to ensure that we can develop a culture of learning that supports expert teams.

Upskilling and Continuous Learning

Technologies are rapidly changing daily. Organizations are restructuring their operations very frequently. Managers and leaders are seeking employees who can operate in dynamic and complex environments. Different learning experiences and styles must be supported in the present and future workplace. Unless leaders can invest in their employees' experience then there is a high probability that people will start exploring alternatives to improve their knowledge, skills, and abilities. Hord and Sommers (2008) mentioned that “learning takes time and is messy. Messy problems usually do not have quick answers. From our experience, quick answers sometimes have intended consequences. They usually have unintended consequences” (p. 100), and as such, the

framework will require time to work effectively. The knowledge economy relies on the value and benefits to transform our social skills, learning capabilities and investments are all central to the practice framework. Therefore, it will be up to the producer of knowledge, consumers of knowledge, and leaders (supporters) of knowledge to actively utilize this framework to gain incremental improvements.

Implications for Future Research

Future research can be accomplished by building on the lessons learned from this study along with the effectiveness of the practice framework. Since this was an action research, it takes an interdisciplinary and iterative approach to explore the problem of practice (PoP). There are four main implications for future research that comes to mind to help promote and support expertise as an experiential learning capability. First, building deeper research on expertise would surely benefit any expert team. Second, developing partnerships and collaborations with other organizations including universities. Third, exploration of the social implications of ethnographic classification and stratification. Finally, establish integration of the latest technology solutions within the framework to ensure the interconnectedness of knowledge.

Building Deeper Research on Expertise

Recommendations would for future due diligence and studies to be conducted involving a larger number of participants both at the outsider and insider levels. This would provide diverse perspectives from more experts within the company that can share their unique viewpoints on the phenomenon. It would also be ideal to see if there is any impact on overall learning experience, documentation, and knowledge capture

capabilities from the perspective of having experts from other parts of the world that were initially excluded in the first wave implementation. Additionally, establishing cooperative network points to build deeper expertise and engagement would proactively provide an avenue to expand the program into other parts of the organization. Mumford et al. (2018) concluded that “experts are unique...by virtue of their exceptional work in a given domain, and social recognition of the value of this work, experts leave behind them a record, often objective records, of their work” (p. 291), hence it would be great to connect deeper into this relationship. To ensure that the foundation is set for the ongoing implementation of a community of practice, it would be beneficial to explore how to integrate the framework into the workplace by alignment with core priorities.

Partnership and Collaboration with Other Organizations

The strength of the original framework had to do with how powerful the recruiting capabilities of the outsider experts were for the first implementation. These individuals were able to share their knowledge, lived experiences, and ideas as part of the overall learning process. To expand the capability of the framework, it would be good to also examine more the foundation of collaboration with new innovative methods such as digital transformation and the ever-changing landscape. Conducting additional research into pairing stronger connections of these concepts within the model so that insider experts receive the readiness to apply the knowledge immediately in the workplace. Partnership with other organizations like LinkedIn and the newly acquired companies would be a great expansion opportunity.

Assuring that the program leverages the lived experience of diverse experts would guarantee that the latest information and knowledge are being circulated appropriately.

Buchanan et al. (2006) point out that:

Strategic knowledge is important because of its power: experts use more efficient problem-solving strategies than novices. Not only do we expect experts' answers to be better than those of novices, but we also expect their chain of reasoning to be more focused and more efficient. (p. 89)

Finally, partnership with external experts and institutions would strengthen the credibility of the framework which goes beyond a Microsoft lens. Research into partnering with institutions such as Arizona State University (ASU) and the University of Washington (UW) to bring more of their entrepreneurship and business collaboration would be invaluable.

Social Ethnographic Classification and Mindset Shift

The framework was created with the intent of being flexible to acclimatize to different organizational, and environmental situations. As we think more about diversity and inclusion which are becoming more mainstream, exploring the social implications of ethnographic classifications using the Expert-to-Expert Practice Framework might reveal important interpretation and behaviors based on the social conditions and interactions of different cultural norms and models of learning. A research exploration could be undertaken to look at cross-cultural comparison or even deep dive into analyzing communal stratification ecosystems within a globalized context. We are living in time where the erosion of territories, boundaries, cultural structures are becoming more commonplace. Thus, developing an understanding of the implications around using the framework within these configurations could potentially lead to interesting participants'

observations and unparalleled data rendering involving the different dynamics (people openly expressing themselves vs. those who are more reserved in their expression). Furthermore, it could yield insight to help organizations manage their knowledge acquisition, consumption, and governance based on the results.

Integration of the Latest Technology Solutions

Increasing the value proposition for the framework would highly depend on the need to capitalize on the latest technology breakthroughs within the industry. The benefits of emerging technologies in the learning experience and environment are immense and can transform the way people learn and develop their craft. Integration with the latest technological solutions which will be arriving in the distant future can infuse creative and innovative perspectives into how experts and expert teams evolve to meet the global changing needs of their stakeholders and organizations. Innovative solutions such as Artificial Intelligence (AI), Augmented Reality (AR), Mixed Reality (MR), Virtual Reality (VR), along with Microsoft Viva Engage, and Viva Learning, will all bring about new ways of interacting with the world around you as an expert. Integration of these emerging technological solutions to experiential learning will surely continue to add immense value to the program and its users.

Conclusion

There is no doubt that the current knowledge economy exists within a time that can be framed as being volatile, uncertain, complex, and ambiguous (VUCA), which requires unique approaches to solving problems and challenges that will likely present themselves. Willyerd and Mistick (2016) comment that “to avoid becoming obsolete, you

must learn on the fly. Most learning happens while we are doing work” (p. 89).

Developing expertise and expert teams for high performance will require ongoing investment into KM, deliberate practice, and significant transformation to become a learning organization.

This study explores the diverse ways in which an organization can promote expertise and expert performance that can be replicated through consistent behaviors and deliberate practice. The Expert-to-Expert Practice Framework was developed to allow for seamless connection between outsider experts and insider experts within any organization. To generate the opportunity for shared knowledge and learning experiences that can transform teams of experts into *expert teams* who then in turn can deliver high impact and value to any environment. Dall’Alba (2018) concludes that “we expect experts to display not only substantial knowledge and skills but also a capacity for critical reflection while exercising responsible judgment” (p. 36-37), which connects to the core objectives of the framework.

The continued acquisition of knowledge in this new era will require investment from all actors and stakeholders. Seizing great learning opportunities within the 4th Industrial Revolution (Oke, 2020) will force people out of their comfort zones (Ericsson et al., 2018). In fact, Venkatesan (2022) notes that “we achieve success by focusing and exploiting our strengths. We avoid failure by confronting our weaknesses” (p. 108). Leveling up requires a step change in how we think and act within our environment. We must constantly engage in this reflection modality to ensure that we have an always-on learning mode (Hord and Sommers, 2008), that helps connect and promote professional learning communities. Buchanan et al. (2006) conclude that “A person who merely

carries out the orders of a 'black box' cannot lay claim to being an expert – but neither can the box” (p. 94). Let us make sure that we utilize the knowledge, skills, and abilities around us to truly develop our expertise as experts within this ever-changing and fast-moving global hybrid workplace.

REFERENCES

- Ackerman, P. L., & Beier, M. E. (2018). Methods for studying the structure of expertise: Psychometric approaches. *The Cambridge handbook of expertise and expert performance*, 213.
- Adams, C. D. (2021). *Educator's perspectives of using G Suite for education with Chromebooks: A narrative inquiry*. Northcentral University.
- Ahmad, F., & Karim, M. (2019). Impacts of knowledge sharing: a review and directions for future research. *Journal of Workplace Learning*, 31(3), 207–230.
- Amin, A., & Roberts, J. (2008). Knowing in action: Beyond communities of practice. *Research Policy*, 37(2), 353–369.
- Andrade, A. D., Techatassanasoontorn, A. A., & Singh, H. (2017). Phenomenology: Understanding the ICT4D experience. *Twenty-Third Americas Conference on Information Systems*.
- APQC. (2018). APQC. [https://https://www.apqc.org/](https://www.apqc.org/)
- Arbesman, S. (2013). *The half-life of facts: Why everything we know has an expiration date*. Penguin.
- Argyris, C., & Schon, D. (1978). *Organizational learning*. Reading, MA: Addison-Wesley.
- Asrar-ul-Haq, M., & Anwar, S. (2016). A systematic review of knowledge management and knowledge sharing: Trends, issues, and challenges. *Cogent Business and Management*, 3(1). <https://doi.org/10.1080/23311975.2015.1127744>
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60, 421–449.
- Baker, J., Hodges, N. J., Wilson, M. J., & Zealand, P. N. (2018). Collecting and assessing practice activity data: Concurrent, retrospective, and longitudinal approaches. *The Cambridge handbook of expertise and expert performance*, 257-270.
- Bapuji, H. B., & Crossan, M. M. (2003). From raising questions to providing answers: Reviewing organizational learning research. *Organizational Learning and Knowledge, 5th International Conference*, 519, 1–24.
- Barão, A., de Vasconcelos, J. B., Rocha, Á., & Pereira, R. (2017). A knowledge management approach to capture organizational learning networks. *International Journal of Information Management*, 37(6), 735–740.

- Basten, D., & Haamann, T. (2018). Approaches for organizational learning: A literature review. *SAGE Open*, 8(3). <https://doi.org/10.1177/2158244018794224>
- Bhattacharya, K. (Ed.). (2017). Pulling it all together. In *Fundamentals of Qualitative Research: A Practical Guide*. Taylor & Francis Group.
- Bierly, P. E., Kessler, E. H., & Christensen, E. W. (2000). Organizational learning, knowledge, and wisdom. *Journal of Organizational Change Management*, 13(6), 595–618.
- Billett, S., Harteis, C., & Gruber, H. (2018). Developing occupational expertise through everyday work activities and interactions. *The Cambridge handbook of expertise and expert performance*, 2, 105-126.
- Blackman, D., Connelly, J., & Henderson, S. (2004). Does double-loop learning create reliable knowledge? *The Learning Organization*, 11(1), 11–27.
- Bloom, B. (1985). Developing talent in young people. BoD–Books on Demand.
- Bogard, G. (2011). *Un/masking domestic violence: A phenomenological exploration of mirrored transformative learning amongst instructors and batterers*. Texas A&M University-Corpus Christi.
- Bradbury, H., Glenzer, K., Ku, B., Columbia, D., Kjellström, S., Aragón, A. O., Warwick, R., Traeger, J., Apgar, M., Friedman, V., Hsia, H. C., Lifvergren, S., & Gray, P. (2019). What is good action research: Quality choice points with a refreshed urgency. In *Action Research* (Vol. 17, Issue 1, pp. 14–18). <https://doi.org/10.1177/1476750319835607>
- Brown, J. S., & Duguid, P. (2001). Knowledge and organization: A social-practice perspective. *Organization Science*, 12(2), 198–213.
- Buchanan, B. G., Davis, R., & Feigenbaum, E. A. (2006). Expert systems: A perspective from computer science. *The Cambridge handbook of expertise and expert performance*, 87-103.
- Budd, J. M. (2005). Phenomenology and information studies. *Journal of Documentation*, 61(1), 44–59.
- Chatti, M. A. (2012). Knowledge management: A personal knowledge network perspective. *Journal of Knowledge Management*, 16(5), 829–844.
- Clark, R. E., & Estes, F. (1996). Cognitive task analysis for training. *International Journal of Educational Research*, 25(5), 403-417.

- Coghlan, D., & Brydon-Miller, M. (Eds.). (2014a). *The SAGE Encyclopedia of Action Research*. SAGE Publications Ltd.
- Coghlan, D., & Brydon-Miller, M. (Eds.). (2014b). Phenomenology. In *The SAGE Encyclopedia of Action Research* (pp. 614–616). SAGE Publications Ltd.
- Collins, H., Evans, R. (2018). A sociological/philosophical perspective on expertise: The acquisition of expertise through socialization. *The Cambridge handbook of expertise and expert performance*, 21.
- Coughlan, E. K., Williams, A. M., & Ford, P. R. (2019). Lessons from the experts: The effect of a cognitive processing intervention during deliberate practice of a complex task. *Journal of Sport & Exercise Psychology*, 1–11.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124–130.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. SAGE Publications.
- Cross, N. (2018). Expertise in professional design. *The Cambridge handbook of expertise and expert performance*, p. 372.
- Cyberstates. (2020). *Research Report: The definitive guide to the U.S. tech industry and tech workforce*. The Computing Technology Industry Association (CompTIA). <https://www.cyberstates.org>
- Dalkir, K. (2013). *Knowledge management in theory and practice* (pp. 1–356).
- Dall’Alba, G. (2018). Reframing expertise and its development: A lifeworld perspective. *The Cambridge handbook of expertise and expert performance*, 33-39.
- Davenport, E., & Hall, H. (2002). Organizational knowledge and communities of practice. *Annual Review of Information Science and Technology*, 36, 170–227.
- de Jager, A., Fogarty, A., Tewson, A., Lenette, C., & Boydell, K. M. (2017). Digital storytelling in research: A systematic review. *The Qualitative Report*, 22(10), 2548–2582.
- Dew, N., Ramesh, A., Read, S., Sarasvathy, S. D., & Virginia, V. (2018). Toward deliberate practice in the development of entrepreneurial expertise: The anatomy of the effectual ask. *The Cambridge handbook of expertise and expert performance*, 2018, 389-412.

- Digital Skills Assessment Guidebook (Development Sector). (2020). ITU Publications. International Telecommunication Union (ITU).
<https://academy.itu.int/index.php/main-activities/research-publications/digital-skills-insights/digital-skills-assessment-guidebook>
- Dreyfus, H. L., & Dreyfus, S. E. (2005). Peripheral vision: Expertise in real world contexts. *Organization studies*, 26(5), 779-792.
- Eden, C., & Ackermann, F. (2018). Theory into practice, practice to theory: Action research in method development. In *European Journal of Operational Research* (Vol. 271, Issue 3, pp. 1145–1155). <https://doi.org/10.1016/j.ejor.2018.05.061>
- Edmondson, A. C. (2012). *Teaming: How organizations learn, innovate, and compete in the knowledge economy*. John Wiley & Sons.
- Edmondson, A. C. (2018). *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. John Wiley & Sons.
- Edmondson, A., & Moingeon, B. (1996). *Introduction: Organizational learning as a source of competitive advantage* (pp. 7–36).
- Ericsson, A., Hoffman, R. R., & Kozbelt, A. (2018). *The Cambridge handbook of expertise and expert performance*. Cambridge University Press.
- Ericsson, A., Prietula, M. J., & Cokely, E. T. (2007). The making of an expert. *Harvard Business Review*.
- Feltovich, P. J., Prietula, M. J., & Ericsson, K. A. (2018). Studies of expertise from psychological perspectives: Historical foundations and recurrent themes.
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *The Australian and New Zealand Journal of Psychiatry*, 36(6), 717–732.
- Gibbs, G. R. (2012). Analytic quality and ethics. In *Analyzing Qualitative Data*. SAGE Publications, Ltd.
- Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods*, 3(1), 42–55.
- Helton, W. S., & Helton, N. D. (2018). 5 Expertise in Other Animals: Canines as an Example. *The Cambridge Handbook of Expertise and Expert Performance*, 49.
- Herr, K., & Anderson, G. L. (2012). Action research, ethics, and the Institutional Review Board. In *The action research dissertation: A guide for students and faculty* (pp.

112–126). SAGE Publications, Inc.

- Hiatt, J. M. (2006). The essence of ADKAR: A model for individual change management. *Yashada.org*.
- Hoffman, R. R., & Lintern, G. (2006). Eliciting and representing the knowledge of experts. *Cambridge handbook of expertise and expert performance*, 203-222.
- Hord, S. M., & Sommers, W. A. (2008). *Leading professional learning communities: Voices from research and practice*. Corwin Press.
- Hortovanyi, L., & Ferincz, A. (2015). The impact of ICT on learning on the job. *Learning Organization*, 22(1), 2–13.
- Hsiao, E. L., & Huang, X. (2019). Strategies to support personal knowledge management using a wiki site in online courses. *Journal of Educators Online*, 16(1).
<https://doi.org/10.9743/jeo.2019.16.1.5>
- Hycner, R. H. (1985). Some guidelines for the phenomenological analysis of interview data. *Human Studies*, 8(3), 279–303.
- Ibrahim, F., & Salleh, N. M. (2019). Embedding knowledge management theory in learning and teaching approach. *International Journal of Learning and Development*, 9(1), 19.
- Imai, K., Nonaka, I., & Takeuchi, H. (1985). Managing the new product development process: how Japanese companies learn and unlearn. *The Uneasy Alliance Managing the Productivity Technology Dilemma*.
<https://doi.org/10.1097/01.BRS.0000105533.09601.4F>
- Jordan, M. E., Kleinsasser, R. C., & Roe, M. F. (2014). Wicked problems: inescapable wickedity. *Journal of Education for Teaching*, 40(4), 415–430.
- Kalsoom, S., Kalsoom, N., & Mallick, R. J. (2020). From banking model to critical pedagogy: Challenges and constraints in the university classrooms. *UMT Education Review*, 3(1), 25–44.
- Kimble, C. (2013). Knowledge management, codification, and tacit knowledge. *Information Research*, 18(2), 255–256.
- Kim, J.-H. (2016). *Understanding narrative inquiry: The crafting and analysis of stories as research*. SAGE.
- Klenke, K., Martin, S. S., & Randall Wallace, J. (Eds.). (2016). Phenomenology and narrative analysis. In *Qualitative Research in the Study of Leadership: Second*

Edition. Emerald Publishing Limited.

Kumar, V. (2012). *101 design methods: A structured approach for driving innovation in your organization*. John Wiley & Sons.

Lehmann, A. C., & Ericsson, K. A. (1997). Research on expert performance and deliberate practice: Implications for the education of amateur musicians and music students. *Psychomusicology: A Journal of Research in Music Cognition*, *16*(1), 40–58.

LeMay, M. (2022). *Product Management in Practice*. O'Reilly Media, Inc.

Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic Management Journal*, *13*(S1), 111–125.

Levitt, B., & March, J. (1988). *Organizational Learning*. *14*, 319–340.

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.

Macnamara, B. N., & Maitra, M. (2019). The role of deliberate practice in expert performance: revisiting Ericsson, Krampe & Tesch-Römer (1993). *Royal Society Open Science*, *6*(8), 190327.

Maier, R. (2007). *Information and communication technologies for knowledge management* (Third Edition). Springer Berlin Heidelberg.

McAdam, R., & McCreedy, S. (2000). A critique of knowledge management: Using a social constructionist model. *New Technology, Work and Employment*, *15*(2), 155–168.

McInerney, C. (2002). Knowledge management and the dynamic nature of knowledge. *Journal of the American Society for Information Science and Technology*, *53*(12), 1009–1018.

Mertler, C. A. (2019). *Action research: Improving schools and empowering educators*. SAGE Publications, Incorporated.

Microsoft. (2020). <https://www.microsoft.com/en-us/about/company>

Mieg, H. A., & Evetts, J. (2018). Professionalism, science, and expert roles: A social perspective. *The Cambridge handbook of expertise and expert performance*, *2*, 127–148.

- Milway, K. S., & Saxton, A. (2011). The challenge of organizational learning. *Stanford Social Innovation Review*, 9(3), 44–49. <https://doi.org/10.48558/DGE6-XZ93>
- Mishra, B., & Uday Bhaskar, A. (2011). Knowledge management process in two learning organisations. *Journal of Knowledge Management*, 15(2), 344–359.
- Moustakas, C. (1994). *Phenomenological research methods*. SAGE Publications.
- Muhammed, S., & Zaim, H. (2020). Peer knowledge sharing and organizational performance: the role of leadership support and knowledge management success. *Journal of Knowledge Management*, 24(10), 2455–2489.
- Mumford, M. D., McIntosh, T., & Mulhearn, T. (2018). Using cases to understand expert performance: Method and methodological triangulation. 2018). *The Cambridge handbook of expertise and expert performance*, 291-309.
- Nkhoma, & Lam. (2016). Developing case-based learning activities based on the revised Bloom’s Taxonomy. & *IT Education ...*
<http://proceedings.informingscience.org/InSITE2016/InSITE16p085-093Nkhoma2328.pdf>
- Nonaka, I. (1991). The knowledge-creating firm. *Harvard Business Review*.
- Nonaka, I., & Konno, N. (1998). The concept of “Ba”: Building a foundation for knowledge creation. *California Management Review*, 40(3), 40–54.
- Nonaka, I., & von Krogh, G. (2009). Tacit knowledge and knowledge conversion: Controversy and advancement in organizational knowledge creation theory. *Organization Science*, 20(3), 635–652.
- Northouse, Peter G. (2016). *Leadership: Theory and Practice* (7th ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Oberg, H., & Bell, A. (2012). Exploring phenomenology for researching lived experience in technology enhanced learning. *Proceedings of the 8th International Conference*.
- Oke, A., & Fernandes, F. A. P. (2020). Innovations in teaching and learning: Exploring the perceptions of the education sector on the 4th industrial revolution (4IR). *Journal of Open Innovation: Technology, Market, and Complexity*, 6(2), 31.
- Olson-Stewart, K. (2009). *New to the state and new to teaching: Creating authentic resilient educators (C.A.R.E.) utilizing digital narratives*. 2(1), 15–28.
- Park, S., & Kim, E. J. (2018). Fostering organizational learning through leadership and knowledge sharing. *Journal of Knowledge Management*, 22(6).

<https://doi.org/10.1108/JKM-10-2017-0467>

- Pink, S., Mackley, K. L., & Moroşanu, R. (2015). Hanging out at home: Laundry as a thread and texture of everyday life. *International Journal of Cultural Studies*, 18(2), 209–224.
- Prange, C. (1999). Organizational learning - desperately seeking theory? *Organizational Learning and the Learning Organization*, 23–43.
- Rowley, J. (2000). From learning organisation to knowledge entrepreneur. *Journal of Knowledge Management*, 4(1), 7–15.
- Rowley, J. (2001). Knowledge management in pursuit of learning: The learning with knowledge cycle. *Journal of Information Science and Engineering*, 27(4), 227–237.
- Saldaña, J. (2021). The coding manual for qualitative researchers. *The Coding Manual for Qualitative Researchers*, 1–440.
- Sanz-Valle, R., Naranjo-Valencia, J. C., Jiménez-Jiménez, D., & Perez-Caballero, L. (2011). Linking organizational learning with technical innovation and organizational culture. *Journal of Knowledge Management*, 15(6), 997–1015.
- Schildt, H., Mantere, S., & Cornelissen, J. (2020). Power in sensemaking processes. *Organization Studies*, 41(2), 241–265.
- Schön, D. A. (1987). *Educating the reflective practitioner*. Jossey-Bass Publishers.
- Sehgal, G., Kee, D. M. H., Low, A. R., Chin, Y. S., Woo, E. M. Y., Lee, P. F., & Almutairi, F. (2020). Corporate social responsibility: A case study of Microsoft Corporation. *Asia Pacific Journal of Management and Education (APJME)*, 3(1), 63-71.
- Selen, W. (2000). Knowledge management in resource-based competitive environments: A roadmap for building learning organizations. *Journal of Knowledge Management*, 4(4), 346–353.
- Simon, H. A., Dantzig, G. B., Hogarth, R., Plott, C. R., Raiffa, H., Schelling, T. C., ... & Winter, S. (1987). Decision making and problem solving. *Interfaces*, 17(5), 11-31.
- Sternberg, R. J. (Ed.). (1999). *Handbook of creativity*. Cambridge University Press.
- Sonesh, S. C., Lacerenza, C., Marlow, S., & Salas, E. (2018). What makes an expert team? A decade of research.
- Sutton, R. I., Rao, H., & Rao, H. (2016). *Scaling up excellence: Getting to more without settling for less*. Random House.

- The state of knowledge management* (Cross-Practice Research Publication). (2019). Technology Services Industry Association (TSIA).
<https://www.tsia.com/resources/the-state-of-knowledge-management-2019>
- Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. In *Ethnobotany Research and Applications* (Vol. 5, p. 147).
<https://doi.org/10.17348/era.5.0.147-158>
- Tracy, S. J. (2010). Qualitative quality: Eight “Big-Tent” criteria for excellent qualitative research. *Qualitative Inquiry: QI*, 16(10), 837–851.
- Venkatesan, R. (2022). What the heck do I do with my life? How to flourish in our turbulent times (p. xii). Rupa Publications. Kindle Edition.
- Vera, D., & Crossan, M. (2004). Strategic leadership and organizational learning. *Academy of Management Review. Academy of Management*, 29(2), 222.
- Walls, H. L. (2018). Wicked problems and a “wicked” solution. In *Globalization and Health* (Vol. 14, Issue 1). <https://doi.org/10.1186/s12992-018-0353-x>
- Wenger, E. (2018). Communities of practice: Learning, meaning, and identity (Learning in foing: Social, cognitive and computational perspectives) (p. 229). Cambridge University Press. Kindle Edition.
- Willyerd, K., & Mistick, B. (2016). Stretch: How to future-proof yourself for tomorrow's workplace. John Wiley & Sons.
- Winegard, B., Winegard, B., & Geary, D. C. (2018). The evolution of expertise. *The Cambridge handbook of expertise and expert performance*, 40-48.
- Yarovoy, A., Nagar, Y., Minkov, E., & Arazy, O. (2020). Assessing the contribution of subject-matter experts to Wikipedia. *Trans. Soc. Comput.*, 3(4), 1–36.
- Yilmaz, Y. (2012). Knowledge management in e-learning practices. *Turkish Online Journal of Educational Technology*, , 11(2), 150–155.
- Young, B. W., Eccles, D. W., Mark Williams, A., & Baker, J. (2021). K. Anders Ericsson, Deliberate practice, and sport: Contributions, collaborations, and controversies. *Journal of Expertise*.
- Yüksel, P., & Yıldırım, S. (2015). Theoretical frameworks, methods, and procedures for conducting phenomenological studies in educational settings. *Turkish Online Journal of Qualitative Inquiry*, 6(1), 1–20.

- Zhang, H., Zhang, X., & Song, M. (2020). Does knowledge management enhance or impede innovation speed? *Journal of Knowledge Management*, 24(6), 1393–1424.
- Zhou, H., & He, Y. (2018). Comparative study of OKR and KPI. In *2018 International Conference on E-Commerce and Contemporary Economic Development (Eced 2018)*, DEStech Transactions on Economics Business and Management.

APPENDIX A

REQUEST TO CONDUCT THE RESEARCH STUDY

Hello Martin,

As part of the next phase of the doctoral program, I will be conducting the final research study within our environment. The university process requires that I receive approval to conduct this final cycle of research.

I am looking forward to completing this research with the team which would gather rich information about building and developing expertise within our organization. The plan is to also work with experts outside of MXPA Digital Operations who will share their “lived experiences” with us so that we can replicate any best practices and lessons learned.

The expected outcomes for this project will be that we have (a) snackable videos, (b) trained subject matter experts on how to develop their expertise, and (c) expert profiles and personas. The intervention for this research will entail the Expert-to-Expert Practice Framework which requires participation from about 10 outsider experts, and six insider experts (Field Success Managers and Delivery Managers).

Information will be gathered from outsider experts over a period of about three weeks. I am also expecting that the SME workshop will be conducted for a duration of one hour per week spanning a four-week period. Assessment instruments will involve recording the calls from outsider experts, creating the videos, and using Microsoft Forms and Microsoft Teams as assessment tools.

The dates of the intervention for the SME workshops will be during the summer of 2022 timeframe (July - September). The commitment to participate will be done on a voluntary basis for those who want to contribute.

As with prior research cycles, the findings from this final cycle will be beneficial to the team members, Accenture, MXPA leadership, and more importantly Industry Solutions and CE&S organizations.

All you need to do is reply to this email to extend your approval and consent.

Regards,

Leroy McLean

APPENDIX B

INVITATION INTEREST FOR OUTSIDER EXPERT

Action Required: A Discussion on Expertise & Experts in Microsoft

Monday, February 28, 2022

2:02 PM

Hello Microsoft Colleague:

My name is Leroy McLean, and I am a doctoral candidate in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU). I am working under the direction of Dr. Leigh Graves Wolf, a faculty member in MLFTC. Currently, I am conducting a research study on **experts, expertise, and expert performance** within multinational corporations. The objective is to gather information on how experts perform within different environments.

Primarily, I want to spend time talking with you about:

- Being an expert within Microsoft,
- What leadership skills you have gained over the years,
- How do you improve performance within your domain of expertise.

The purpose of this study is to understand how we will be able to replicate expertise within our organization by learning from your lived experiences and knowledge.

We are asking for your help, which will involve your participation in a brief **virtual** discussion over Microsoft Teams. The telephone **interview** (about 45 to 60 minutes) will concern your knowledge, experiences, attitudes, and beliefs about expertise along with being a subject matter expert. I will record your responses so that this will provide us with clips to share with our team members to learn from you. I will be looking to conduct this interview with you between March to April 2022 timeframe.

Please let me know if you would be interested in participating in this wonderful research opportunity. We look forward to working with you and learning more about your lived experience as an expert within Microsoft.

Regards,

Leroy McLean

Director, **MXPA** Digital Operations
Field Success Lead

APPENDIX C

INVITATION REQUEST FOR INSIDER EXPERTS

Open Invitation to Participate in Expert-2-Expert Learning Series Research

Thursday, July 14, 2022

10:35 AM

Subject	Open Invitation to Participate in Expert-2-Expert Learning Series Research
From	Leroy McLean
To	Team Members – AnswersHub and Field Success
Cc	CST Enablement and Support LT Members
Sent	Thursday, July 13, 2022 11:00 PM

Hello Team,

Have you ever wondered how other experts are able to be top of their game? How about what it takes to be a top subject matter expert (SME) in your field? Well, if you do have these burning unanswered questions, then I do have a **fantastic opportunity** for you. I am looking forward to having about five individuals participate in the **Expert-to-Expert Practice Series Workshop** from August 15, 2022, to September 4, 2022. Well, this is an excellent opportunity where you will be able to sharpen your skills, improve your understanding of experts, expert performance, and expertise within Microsoft and more broadly the world.

How will this benefit you?

- Gain insights and best practices from **10 experts within Microsoft** that can be applied to your work
- Learn about the **latest trends on expertise** that are based on research from leading scholars in their respective field
- Help create the new **“Expert” persona and profile** for our organization
- **Develop new skills** around working in the era of COVID-19 as a leading expert and leader in Microsoft

What to expect?

- Complete four virtual interaction sessions with your peers. One hour each week for four weeks
- Watch the snackable short videos from several experts across Microsoft
- Develop the expert profile template with guidelines on knowledge, skills, and abilities to perform in the business
- Participating in the latest survey experts and expert performance (10 minutes)
- Submit an expert reflective activity statement about your experience (15 minutes)

How to participate?

- Reply to the email to confirm your slot
- Attend the expert discussion sessions with your peers to learn and grow
- Complete the surveys, and reflection journal
- Rock your knowledge on expert and expert performance across MCAPS organization and outside of Microsoft

Learning Series Structure

- First session will start on Monday, August 15, 2022, at 9:30 AM IST
 - Session 1 - August 15, 2022 – 9:30 am IST
 - Session 2 - August 22, 2022 – 9:30 am IST
 - Session 3 - August 29, 2022 – 9:30 am IST
 - Session 4 - September 5, 2022 – 9:30 am IST
- Duration of single session is only one hour commitment
- Total of five hours commitment to complete all sessions and exercises

If you would like to participate in this next round of research, please respond to this email. Due to the nature of these sessions, spaces are limited, and I will only be able to accommodate the first five (5) individuals to this request.

Thank you for your interest and participation.

Leroy McLean,

Doctoral Candidate
ASU --- Leadership & Innovation



APPENDIX D

IRB RECRUITMENT CONSENT LETTER

Hello Team Member:

My name is Leroy McLean and I am a doctoral student in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU). I am working under the direction of Dr. Wolf, a faculty member at MLFTC. The purpose of this **research study is for us to explore expertise** and how we can replicate this phenomenon within our organization in a consistent and accurate manner. In developing a framework for **expertise within Microsoft**, we are able to identify the important traits and skills that are necessary for individuals to scale and be successful in an ever-changing environment.

We are asking for your help, which will involve your participation in a brief **virtual intervention session** that will be conducted over a four-week period. The expectation is that you would need to spend appropriately one hour per week in these sessions. In addition, you would be expected to complete a write-up on your experience in the form of a reflection journal. Complete a short survey concerning your knowledge, experiences, attitudes, and beliefs about existing expertise would be done at the end of the four-week period for these sessions.

Your participation in this **study is voluntary**. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. Choosing not to participate in the study does not affect your standing at Microsoft and with AnswersHub. You must be 18 or older to participate in the study.

The **benefit of participation** is the opportunity for you to learn strategies and practices related to expert, expertise, and expertise performance within the organization and the broader community. Additionally, the potential benefit is to enhance the experiences of our colleagues/team members/customers. There are no foreseeable risks or discomforts to your participation.

For the discussion groups, we will request to audio **record the experience** using Microsoft Teams. The discussions will not be recorded without your permission. Please let me know if you do not want the interview to be recorded; you also can change your mind after the discussion starts, just let me know. I will ask for your oral consent at the time of the discussion for those who are selected.

Your responses will be confidential. Results from this study may be used in reports, presentations, or publications but your name will not be used.

If you have any questions concerning the research study, please contact the research team – Leroy McLean at ldmclean@asu.edu or 425-435-5232 or Dr. Leigh Graves Wolf at leigh.wolf@asu.edu or 602-543-7564.

Additionally, if there are any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact Dr. Leigh Graves Wolf at leigh.wolf@asu.edu or 602-543-7564 or the Chair of Human Subjects Institutional Review Board through the ASU Office of Research Integrity and Assurance at (480) 965-6788.

Thank you,

Leroy McLean, Doctoral Student
Dr. Leigh Wolf, Clinical Associate Professor

APPENDIX E

INTERVIEW QUESTIONS

SEMI-STRUCTURED INTERVIEW PROTOCOL

Briefing Statement

Thank you for agreeing to participate in this interview. The purpose of this session is for us to discuss your experience of being a subject matter expert while delivering high performance in Microsoft. Please respond with your own thoughts about the questions.

Request

- **May I audio record this interview?**
- **As you respond to the questions, please do not mention the names of individuals in your responses.**

Research Questions	Interviewing Questions
RQ 1: How do subject matter experts in a decentralized organization deliver high performance by using their knowledge, skills, and abilities (KSAs)?	<ul style="list-style-type: none">• Could you share with me how you define an expert?• What knowledge, skills, and abilities do you believe that every expert should have in their toolbox?• What has been your experience being an expert in Microsoft?• Can you describe how you have been able to (a) rule out options quickly, (b) avoid repeated mistakes, (c) attention to details, (d) deal with multiple variables, (e) ability to prioritize, and (f) trimming through the weeds to get to the particular issue.

<p>RQ 2: How do the motivations of employees impact their ability to engage in deliberate practice?</p>	<ul style="list-style-type: none"> ● What environmental factors do you see must be in place to support the growth and development of a subject matter expert? ● What are the strategies that you have used in the past to learn a new topic, or technology that could typically pull you out of your comfort zone?
<p>RQ 3: How do senior leaders in decentralized and fast-paced organizations coach and help others make sense so that they function as one expert team?</p>	<ul style="list-style-type: none"> ● How do you as a leader help promote knowledge sharing amongst my peers and the organization? ● What are five leadership skills that must be visible in every expert to drive high performance? ● Can you share a story where you have had to be very decisive in your decision-making process? ● What are one or two things that every expert should remember in their journey?

Debriefing Statement

Thank you for your responses and your time today. I appreciate it very much. I will be using your responses to inform my work this semester and future efforts

APPENDIX F

DIGITAL WEEKLY REFLECTION JOURNALS

The purpose of this digital weekly reflection journal is to capture and document your learning experience while participating in this research study. The intention of this journal is for you to quickly share your thoughts on how you are progressing week after week. It is meant to capture your perspectives as you complete each week with the associated activities.

These reflection journals are designed to be relatively easy to complete. You should expect to spend less than 10 minutes each week completing your journal entries. Once you complete the details required in the journal, you will submit your journal for that week using the Microsoft Form Portal.

- How would you rate the relevance of this week's learning session?
 - 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree
- Can you describe the most effective part of the session this week?
- What are you most looking forward to learning in the next session?

Please submit your journal after answering the questions above.

APPENDIX G

RESEARCHER SELF-REFLECTION JOURNAL

The purpose of this researcher's self-reflection journal is to document the overall experience and implementation of knowledge learning sessions with the group. The aim is to ensure that I am able to capture what is being observed thoroughly and report it in an objective manner.

The information captured in these reflection journals will assist later on during the analysis phase of the research process. The researcher will be required to complete these journal entries similar to that of the participants. This will provide a triangulation of data from both a quantitative and qualitative perspective.

- How would you rate the participation level of this week's learning session?
 - 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree
- Describe the most effective part of the session this week?
- What are you most looking forward to in the next session?

Please submit your journal after answering the questions above.

APPENDIX H

INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

Phenomenology Analysis and Representation

Analytical Activity	Grouping	Purpose	How
Horizontalizing (listing all relevant expressions)	Phenomenological Reduction	The extraction of significant statements from the co-researchers and the outsider experts.	<p>This will require that I read and reread the data collected from the field.</p> <p>A list will be created for non-repetitive, and nonoverlapping statements from the verbatim data sources.</p> <p>The data that remains will be called horizons.</p>
Reduction of experiences to the invariant constituents	Phenomenological Reduction	Clustering of the horizons into themes.	<p>Breaking the translated data into meaning units. Ideally, this is the grouping of the significant statements into broader units.</p>
Thematic clustering to create core themes	Phenomenological Reduction	Clustering the core themes of the experience within the study.	Develop the relevant themes that will include information on the phenomenon.
Comparison of multiple data sources to validate the invariant constituents	Phenomenological Reduction	Comparing themes derived from experts with other data sources.	Completing an exercise of comparing multiple data sources, researcher observation, field notes, panel discussions, including literature.

Phenomenology Analysis and Representation

Analytical Activity	Grouping	Purpose	How
Constructing of individual textual descriptions of participants	Phenomenological Reduction	The narrative explains the perceptions of the phenomenon.	Describe the experiences of the co-researchers using the excerpts from the discussions/interviews. Also, provide an explanation of meaning units by using a narrative format.
Construction of individual structural descriptions	Imagination Variation	Description of the “what” the participants experienced.	Capturing what happened including verbatim examples from the individuals (both outsiders and insiders).
Construction of composite structural descriptions	Imagination Variation	Provides insights into the “how” the experience happened for the individuals.	Integrating the textual description into a structure. Explaining how the phenomenon occurred for the different individuals.
Synthesis of the textual and structural into an expression	Essence	Creating two narratives for participants of the study that includes the “what” and the “how” of the occurrence.	Write up a composition of the description for the phenomenon being investigated by the researcher. This will be written from the third-person standpoint for all of the participants as an entity.

APPENDIX I

OUTSIDER SCHEDULING TABLE

Scheduling

Friday, March 11, 2022

1:45 PM

Organization	Individual	Location	Option	Scheduling Note
Cloud & AI	Kalyan Kaki - Principal PM Manager	Redmond	Afternoon	March 25, Friday 1 pm
Finance	Daniel Briozzo - Director of Finance, LATAM	LATAM	Morning	March 25, Wednesday at 11 am
Human Resources	Stefani Okamoto - Director, Learning and Development	Redmond	Afternoon	April 12, Tuesday at 10 am
Experiences & Development	Raj Gopalakrishnan - Program Management Lead	Redmond	Afternoon	April 4, Monday 11 am
Microsoft Gaming	Nick Anderson - Software Engineer 2	Redmond	Afternoon	March 23, Wednesday at 2 pm
CTO Microsoft	Ed Cutrell - Sr. Principal Research Manager	Redmond	Afternoon	March 21 - Monday at 1 pm PST
Security, Compliance, Identity, & Management (SCIM)	Tim Sinclair - Principal Program Management	Redmond	Afternoon	March 28, Monday at 11 am

Customer Transformation & Innovation (MCAPS)	Jose Nunez	Fort Lauderdale, FL	Morning	March 28, Monday, at 1:30 pm April 6, Wednesday at 10:00 am
	Manoj Kumar - Sr. Industry Digital Strategist	New York	Morning	April 5, Tuesday at 1 pm
Complex Delivery and CTO (MCAPS)	Ciara O'Donnell - Sr. BPM	Dublin, Ireland	Morning	April 1, Friday at 8 am
CTO Microsoft	John Barry	Redmond	Afternoon	April 4, Monday at 2 pm

APPENDIX J

INSIDER EXPERTS' PARTICIPATION ACCEPTANCE

Thanks again for your interest. Congratulations to those who were extremely fast on replying.

Here is the final list of acceptance into the research.

Please note that our first session will be on **Tuesday, August 16, 2022**, due to public holiday. More details to follow along with access to the microlearning materials.

Name	Comment	Response #	Date / Time	Approval
Team Member 1	<p>Hey Leroy,</p> <p>Please add me to the waiting list as well. 😊</p> <p>Team Member</p> <p>he/him</p> <p>Business Program Manager</p>	11	7/14/22 8:48 AM	Waiting list
Team Member 2	<p>Hello Leroy,</p> <p>Would love to be a part of this. If the slots are full, please include me in the waitlist or if available in the next ring.</p>	10	7/14/22 8:44 AM	Waiting list

	TIA. Regards, Team Member			
Team Member 3	Hi Leroy, I see already first 5 is taken, please put me in the waiting list😊. Thanks!	9	7/14/22 3:38 AM	Waiting list
Team Member 4	I would like to join, Regards, Team Member	8	7/14/22 2:01 AM	Waiting list
Team Member 5	Please add me Leroy Thanks Team Member	7	7/14/22 12:28 AM	Waiting list
Participant 7	Please add me as well Leroy. Regards,	6	7/13/22 11:39 PM	Accepted

	Participant 7			
Participant 3	I am in cc, so not sure if I am eligible. If yes, then please add my name as well. Cheers Participant 3	(LT)	7/13/22 11:38 PM	Accepted
Participant 2	Please add me in this learning endeavor. Participant 2 Senior Business Program Manager	5	7/13/22 11:38 PM	Accepted
Participant 1	Add me. I would like to be part of this amazing opportunity. Thank you Participant 1	4	7/13/22 11:35 PM	Accepted

Participant 4	Please accept my nomination, Leroy! Rgds, Participant 4	3	7/13/22 11:32 PM	Accepted
Participant 6	Hi Leroy, I would love to be a part of this program. So kindly accommodate me. Participant 6 Business Program Manager	2	7/13/22 11:15 PM	Accepted
Participant 5	Interested. Am in Participant 5	1	7/13/22 11:12 PM	Accepted

Note: Acceptance of six team members and one LT member.

Regards,

Leroy | [McLean](#)

APPENDIX K
MEMBER CHECKING

S R #	Video Name & Link	Description	Focus Question	Who's in the video
1	<u>Defining an Expert</u> Link - https://youtu.be/wma-yKVa2xM	The content in the video will focus on the definition of an expert	Could you share with me how you define an expert?	<ul style="list-style-type: none"> ● Ciara O'Donnell ● Daniel Briozzo ● Ed Cutrell ● Jose Nunez ● Kalyan Kaki ● Manoj Kumar ● Nick Anderson ● Raj Gopalakrishnan ● Stefani Okamoto ● Tim Sinclair

2	<p>Expert toolbox of skills and knowledge</p> <p>Link - https://www.youtube.com/watch?v=iWSJhpTf6SE</p>	<p>This video will focus on the knowledge, skills and abilities that experts should possess in any environment</p>	<p>What knowledge, skills, and abilities do you believe that every expert should have in their toolbox?</p>	<ul style="list-style-type: none"> ● Ciara O'Donnell ● Daniel Briozzo ● Ed Cutrell ● Jose Nunez ● Kalyan Kaki ● Manoj Kumar ● Nick Anderson ● Raj Gopalakrishn an ● Stefani Okamoto ● Tim Sinclair
3	<p>Experts sharing their lived experiences</p> <p>Link - https://youtu.be/8dN34D9WOU4</p>	<p>The video will provide information from the experts sharing their perspectives and lived experiences</p>	<p>What has been your experience being an expert in Microsoft?</p>	<ul style="list-style-type: none"> ● Ciara O'Donnell ● Jose Nunez ● Kalyan Kaki ● Raj Gopalakrishn an ● Stefani Okamoto

		on what it's like being an expert		
4	Strategies for delivering high impact Link - https://youtu.be/yo_RM2ECGeg	The content will be about experts identifying key success factors that will allow individuals to deliver greater impact within their organization s	Can you describe how you have been able to (a) rule out options quickly, (b) avoid repeated mistakes, (c) attention to details, (d) deal with multiple variables, (e) ability to prioritize, and (f)	<ul style="list-style-type: none"> • Daniel Briozzo • Tim Sinclair

			trimming through the weeds to get to the particular issue	
5	Growing expertise in any environment Link - https://youtu.be/bS4LL1tVeA0	Discussion on the important characteristics that must be available to support the development of SMEs within an environment	What environmental factors do you see must be in place to support the growth and development of a subject matter expert?	<ul style="list-style-type: none"> ● Ciara O'Donnell ● Ed Cutrell ● Kalyan Kaki ● Manoj Kumar

6	<p>Coming out of your comfort zone</p> <p>Link - https://youtu.be/ZtNp4BnUk2o</p>	<p>Discussion on what must be done to ensure that individuals come out of their comfort zone to learn something new or different</p>	<p>What are the strategies that you have used in the past to learn a new topic, technology that could typically pull you out of your comfort zone?</p>	<ul style="list-style-type: none"> ● Daniel Briozzo ● Jose Nunez ● Nick Anderson ● Stefani Okamoto
7	<p>Promoting knowledge sharing</p> <p>Link - https://youtu.be/aDbGe2Qe8ao</p>	<p>The content will primarily concentrate on the different ways that experts can support and promote knowledge sharing</p>	<p>How do you as a leader help promote knowledge sharing amongst my peers and the organization?</p>	<ul style="list-style-type: none"> ● Ciara O'Donnell ● Ed Cutrell ● Jose Nunez ● Kalyan Kaki ● Manoj Kumar ● Nick Anderson ● Stefani Okamoto

		within their organization		
8	<p>Leadership qualities for experts</p> <p>Link - https://youtu.be/nvsD9MUH6qo</p>	<p>Discussion on the top five leadership skills that every expert should be considering within the respective domain and/or field.</p> <p>Focuses on the difference between being a</p>	<p>What are the five leadership skills that must be visible in every expert to drive high performance ?</p>	<ul style="list-style-type: none"> ● Kalyan Kaki ● Stefani Okamoto ● Tim Sinclair

		<p>leader</p> <p>versus that</p> <p>of an expert</p> <p>Highlights</p> <p>the key</p> <p>factors that</p> <p>differential</p> <p>leaders from</p> <p>subject</p> <p>matter</p> <p>experts</p>		
9	<p>Experts being decisive on the job</p> <p>Link - https://youtu.be/_G_QjBVu-AI</p>	<p>Focuses on</p> <p>the need for</p> <p>experts to</p> <p>make</p> <p>decision</p> <p>within</p> <p>various</p> <p>situations</p> <p>and against</p> <p>different</p> <p>scenarios</p>	<p>Share a story</p> <p>where you</p> <p>had to be</p> <p>very</p> <p>decisive in</p> <p>my decision-</p> <p>making</p> <p>process?</p>	<ul style="list-style-type: none"> ● Ciara O'Donnell ● Daniel Briozzo ● Kalyan Kaki ● Nick Anderson ● Raj Gopalakrishn an

10	<p>Building on your expertise</p> <p>Link - https://youtu.be/6RMZk3jFOEk</p>	<p>Identifies the most important guidance that can transform an individual into become an expert</p>	<p>The one or two things that every expert should remember in their journey?</p>	<ul style="list-style-type: none"> ● Ciara O'Donnell ● Daniel Briozzo ● Ed Cutrell ● Jose Nunez ● Kalyan Kaki ● Manoj Kumar ● Raj Gopalakrishn an ● Stefani Okamoto
11	<p>Profiling an Expert - Introduction</p> <p>Link - https://youtu.be/oErf7UxPI1k</p>	<p>Discussion with experts introducing themselves</p>	<p>Tell me about yourself, provide information on your experience and background in Microsoft and the</p>	<ul style="list-style-type: none"> ● Ciara O'Donnell ● Daniel Briozzo ● Ed Cutrell ● Jose Nunez ● Kalyan Kaki ● Manoj Kumar ● Nick Anderson

			industry in general	<ul style="list-style-type: none">• Raj Gopalakrishn an• Stefani Okamoto• Tim Sinclair
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APPENDIX L

LEARNING SERIES WORKSHOP SCHEDULE

Learning Series Schedule

Session 1 - Cultivating an Environment to Stand-out: Developing Expertise

- Discuss the purpose and outcomes
- Examine the Learning Series Structure & Expectations
- Analyze the Theories to Practice Principles
- Learn how to create an environment that you can thrive with other leaders
- Q&A

Session 2 - Building SMEs in the Organization: Empowerment through Expertise

- Evaluate the techniques on empowerment through lived experiences
- Describe how knowledge sharing is a powerful way to demonstrate expertise and continuous learning
- Understand the practical steps to activate knowledge sharing
- Discuss how teams can work more effectively
- Q&A

Session 3 - Transitioning from Complexity to Simplicity: Experts Telling the Impact

Story

- Describe the strategies for delivering high impact and performance
- Assess how to come out of your comfort zone
- Determine how experts can be extremely decisive in their decision making
- Create the Expert Profile for Digital Era – foundation framing
- Q&A

Session 4 - Integrating Leadership into Expertise: Experts Becoming Leaders

- Discover ways to continue to demonstrate strong leadership qualities to drive success
- Assess how you can transition from being an expert into become a leader
- Learn the different methods to practice on building your expertise in an ever-changing environment
- Finalize the Expert Profile for Digital Transformation Era
- Q&A

APPENDIX M
IRB APPROVAL



EXEMPTION GRANTED

[Leigh Wolf](#)
[Division of Educational Leadership and Innovation - Tempe](#)

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Leigh.Wolf@asu.edu

Dear [Leigh Wolf](#):

On 2/24/2022 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Developing Expertise & Expert Teams for High Performance by Utilizing the Expert-to-Expert Practice Framework
Investigator:	Leigh Wolf
IRB ID:	STUDY00015462
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	<ul style="list-style-type: none">• Digital weekly journal.pdf, Category: Participant materials (specific directions for them);• IRB Social Behavioral - McLean-02172022.docx, Category: IRB Protocol;• Leading Edge Delivery in Industry Solutions 1.1.pdf, Category: Technical materials/diagrams;• Manager's approval for conducting research.pdf, Category: Other;• Recruitment consent letter - Insider.pdf, Category: Consent Form;• Recruitment consent letter - Outsider.pdf, Category: Consent Form;• Research study timeline.pdf, Category: Other;• Researcher reflection journal.pdf, Category: Participant materials (specific directions for them);• Survey Insider Experts.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 2/24/2022.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required. Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

REMINDER - - Effective January 12, 2022, in-person interactions with human subjects require adherence to all current policies for ASU faculty, staff, students and visitors. Up-to-date information regarding ASU's COVID-19 Management Strategy can be found [here](#). IRB approval is related to the research activity involving human subjects, all other protocols related to COVID-19 management including face coverings, health checks, facility access, etc. are governed by current ASU policy.

Sincerely,

IRB Administrator

cc: Leroy McLean