Exploring e-Learning Experiences in a Dynamic Organizational Learning Environment: An Interpretative Phenomenological Analysis of Organizational e-Learners in a Multicultural Consulting Firm in Hong Kong

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Dedication

This dissertation work is dedicated to my son, Grayson, my parents, Rainbow and Peace, love, and hope.
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Abstract

With e-learning being increasingly recognized as effective in supporting professional and organizational performance, much needs to be known about e-learners’ experiences and its influence on the performance on individual and organizational levels. This Interpretative Phenomenological Analysis study explored learning experiences of e-learners embedded in the dynamic learning context of a Hong Kong based consulting firm, shedding light on the potentials of aligning individual learning goals with those of organizations. Employing the theoretical framework of Pintrich’s (2005) Self-Regulated Learning model and Nonaka’s (1996) Organizational Learning model, the qualitative study interviewed eight participants from different departments. The results underlined not only the nuanced subtlety that made organizational e-learning a personal experience important to individual e-learners but also a shared experience vital to organizational knowledge creation, performance and development. The findings embodying meaningful themes relating to motivation, adaptation/navigation, and interaction entail significant implications for educational and organizational theory and practice. The knowledge generated would be beneficial to the organization and its wider community where new knowledge is created and cognitive growth cultivated.

*Keywords:* e-learning, organizational learning, self-regulated learning, organizational e-learners, motivation, knowledge creation
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Chapter One: Introduction to the Study

Organizational e-learning has been widely recognized and substantiated as an effective way to intelligently equip, engage, and empower the workforce (Cheng, Wang, Moormann, Olaniran, & Chen, 2012; Doornbos, Simons, & Denessen, 2008; Liaw & Huang, 2013). Exploring and making sense of e-learning experiences in a dynamic and knowledge-intensive learning environment is critical to knowing about, interacting with, and tapping into the complex e-learning system and the system-enabled relationships in the organization that would benefit individuals and the collective in the long run (Allen, 2016; Wiklund-Engblom, 2015). Despite growing literature and interest devoted to this area, much remains to be learned about the dynamic intricacy and positive synergy organizational e-learning environment and its members can create.

The purpose of this Interpretive Phenomenological Analysis (IPA) study was to understand the lived experiences of organization members as e-learners related to their motivation, adaptation, and interaction in a self-regulated yet interactive e-learning environment in a multicultural consultancy firm located in Hong Kong. The central phenomenon – motivation toward, adaptation of, and interaction with organizational e-learning – is generally defined as a process through which the structures and boundaries of technology, learning, and technology-in-use coevolve, continuously emergent while being created and recreated by use and possibilities of ICT (Information and Communications Technology).

Knowledge generated and insights gleaned are expected to ultimately inform and highlight the positive involvement of both educational and organizational scholar-practitioners in the innovative, iterative, and multi-dimensional process of organizational e-learning design, organization, and development. It is hoped that the betterment of organizational e-learning
mechanism and the learning environment will be informed, enabling desirable e-learning experiences and results at all levels.

This chapter provides a brief overview of the research related to organizational e-learning and e-learners to provide the context and background that situate the study. The research problem, purpose statement, and research questions are presented to ground the study, which is followed by a discussion of the rationale and significance of the study that draws attention and connection to potential audiences and shareholders that would benefit from the work. The final part of the chapter illustrates the theoretical framework this study rests upon as its conceptual guidance mapping it onto both academic and professional spectrums.

**Context and Background**

Organizations, like individuals, need continuous learning to embrace a changing and challenging world. Therefore, strong learning systems accompanied by robust learning and training programs are sprouting up across the corporate landscape to constantly help organizations gain a competitive edge. “The rate at which individuals and organizations learn may become the only sustainable competitive advantage, especially in knowledge-intensive industries” (Stata, 1989, p. 64). Stata’s (1989) often-quoted line has served to explicate the need for increasing learning capacity, flexibility, and adaptability for most organizations (Robert & James, 2008) and individuals.

As corporate businesses confront a world of increasing competition and complexity, many corporations have responded by investing vigorously in the learning and development realm. This has included increasing the use of technology in enacting learning, acknowledging that the demands of great success merit the commitment of state-of-the-art, robust, and adaptive learning systems for them to enhance performance and keep abreast of the times. Literature
shows that e-learning has a positive impact on the learning tenacity, e-learners’ attitudes and perceptions towards collaboration and interaction, and perceived self-regulation and self-efficacy (Chen & Tseng, 2012; Liaw & Huang, 2013; Ozdamli & Uzunboylu, 2014). The world full of wonders has greatly opened our eyes and minds to how technology-in-use can enable individual and organization learning to an extent previously unanticipated. Yet, as Allen (2016) succinctly notes in his acclaimed work, e-learning is about success and change, both individual and organizational. However pervasive nowadays, e-learning has hardly realized its full potential in facilitating the most effective learning by creating “meaningful, memorable, and motivational” (pp. 18-19) learning experiences.

**Research Problem**

The new era has witnessed rapid technological development and exponential growth in digital learning tools, with e-learning as an essential learning and training medium for today’s organizations. The importance of e-learning has been broadly recognized as an efficient and effective way for employees to acquire knowledge, values, and skills to support individual professional and organizational performance (Cheng et al., 2012; Doornbos, Simons, & Denessen, 2008). However, the evolving complexity and emergence of organizational e-learning environments keep creating new challenges and demands on learners. Thus, much needs to be understood about organizational e-learners’ learning experiences about their motivation, adaptation, and interaction in the self-regulated, dynamic learning process, and about the influence these e-learning experiences have on their own professional performance as well as organizational performance.
The digital interface(s) and networks therein are utilized to enable interaction, collaboration, and innovation to not merely fulfill tasks and optimize performance, but also to help learners attain high-end individual and collective learning goals.

**Justification for the Research Problem**

The study addresses the need to learn more about the lived experience of organizational e-learners in complex digital contexts for practitioners to be able to understand, improve, and harness the novel yet pervasive learning medium. The e-learning medium reflects today’s organizational learning dynamic more properly and effectively for individual and organizational growth and achievement. With this understanding, researchers can also gain subtler insights into intricate organizational learning systems. This will result in the development of more comprehensive, humanistic, and pragmatic organizational e-learning effectiveness models both for future theorists to further build upon and for ambitious practitioners to fully or partially leverage.

**Deficiencies in the Evidence**

Previous research on organizational e-learning has majorly focused on learners’ individual traits, differences, and factors (Roca & Gagne, 2008; Liaw & Huang, 2013), technological attributes (Prensky, 2001), and instructional design (DeRouin, Fritzche, & Salas, 2005). This focus has served to explain learners’ motivation and action to learn and improve with scarce attention to the organizational learning dynamics that contextualize such e-learning experiences. The value of organizational e-learning theorizing, and its recognized potential to be tapped in an organizational learning culture and context, has been explored (Cheng et al., 2012; Tynjälä & Häkkinen, 2005). It is also true that the significance of organizational learning environment factors has been brought into focus in creating a performance-based e-learning
environment (Wang, Vogel & Ran, 2011), and in informing a motivation-directed or self-regulated e-learning model (Cheng et al., 2012; Wiklund-Engblom, 2015). However, research on the impact of the complex and dynamic organizational e-learning environment/system on individual learners experiences—their motivation, adaptation, and interaction—is a far from sufficient—theoretically and empirically.

**Relating the Discussion to Audiences**

Individual learning experiences in dynamic organizational contexts that account for the motivation, adaptation, and interaction processes may impact the learning outcomes at all levels (individual, group, and organizational, Bronfenbrenner, 1979). Gaining a deeper understanding of e-learning experiences would enable corporate trainers, chief learning officers, instructional designers, and top management to be in a better position to adequately design, adapt, deliver, implement, and facilitate suitable, if not optimal, e-learning to align with complex organizational learning systems, cultures, and ambitions. More informed organizational e-learners would be more assertive in navigating the complex learning environment, and would be able to leverage a favorable learning outcome that benefits the individual, organization, and the community.

**Purpose Statement**

The purpose of this Interpretive Phenomenological Analysis (IPA) study was to understand the lived e-learning experiences of organizational members related to motivation, adaptation, and interaction in a self-regulated yet interactive e-learning environment in a multicultural consultancy firm located in Hong Kong. The results of the study aspire to shed light on the potentials and promises of organizational e-learning systems in contemporary dynamic contexts, where high-end individual and collective learning goals are to be fulfilled.
Research Question

Congruent with the research goals, an overarching research question is set out as follows:

*What are the lived experiences of organizational e-learners related to motivation, adaptation, and interaction in a self-regulated yet interactive e-learning environment and what is the influence of e-learning on the professional and organizational performance of organizational members?*

Rationale and Significance

Organizational e-learners are, by no means, merely individual learners whose goal is largely associated to pursuing educational or intellectual growth, as is the case with conventional e-learners in educational institutions. Organizational e-learners are inevitably involved in the complex scaffold the organization creates and recreates, thus entangled with achieving organizational learning goals in line with individual goals. In that sense, the relationship between individual and organizational e-learning purposes, processes, and outcomes would be the essence of the study.

Organizational training is vital to employees’ continuous learning and professional development. Recent industrial surveys and research found that a variety of corporations invest a significant amount in organizational e-learning each year to stay innovative and competitive (Little, 2010; Salas, Tannenbaum, Kraiger, & Smith-Jentsch, 2012; SkillSoft, 2010). Yet, the literature shows that owner-managers are lacking in positive attitude towards the modern triangular relationship of technology, learning, and training. This can be seen in practices that undermine employee participation and engagement in organizational e-learning, therefore impeding the progress and favorable outcomes of e-learning initiatives (Admiraal & Lockhorst, 2009). Moreover, the interactive nature of the relationship between organizational e-learning as
training mechanisms and organizational learning as knowledge management and innovation strategies calls into question the assumptions undergirding much of the research and practice on e-learning in organizations. For instance, are e-learning systems being taken for granted for organizational development and are they designed to build and enable the workforce that would enhance the organization?

The scenario depicted constitutes the situation of the organization that is the location of this phenomenological study: A knowledge-intensive and market-oriented consulting firm in Hong Kong. Having been designing and delivering a wide variety of business solutions for clients, the firm is experiencing a critical phase in enacting an effective e-learning system that truly engages its individual learners. As a result, this may create challenges in propelling learners to adapt to the learning organization the firm claims to host, and to the accompanying changes triggered by their e-learning system. The continuing advancement and expansion of organizational digital learning applications introduced even to the far corners of an increasingly globalized world has confronted practitioners and scholars with the imperative to study and understand the dynamics of e-learning in organizational contexts.

Given the rapid development of educational technology that continuously outpaces e-learning research findings, scholar-practitioners must constantly and critically reflect on the value, potential, and boundary of sophisticated technologies. These technologies have led to creative, groundbreaking application to fulfill organization learning and training agendas (DeRouin, Fritzsche, & Salas, 2005). Significantly, it would pay off for organizations to focus more on integrating advanced techniques with employees’ attitude, emotions, and learning experiences. Therefore, a fuller understanding of organizational e-learners’ learning experiences embedded in the dynamic learning context is important to informing effective e-learning systems.
that align individual learning agendas with those of organizations. This knowledge would be beneficial to the entire organization and its wider community where new knowledge is created and cognitive growth cultivated.

The significance of the study involves implications in three pragmatic pillars. First, the study may be useful for organizational leaders to take on a learning and enabling leadership, cultivating a learning culture that transmits their visions and strategies. Second, the study may enlighten instructional designers within organizations in ways that could improve how they devise and develop the kind of learning systems that stimulate e-learners’ metacognitive learning and application. Third, the study may support the developing awareness of e-learning facilitators of what learning experiences work best for e-learners within organizational contexts.

The study hopes to highlight the necessity of both educational and organizational experts to be involved in the innovative, iterative, and multi-level process of organizational e-learning design, organization, and development. Decision-makers and policymakers would be better equipped to take informed actions to ensure organizational e-learning effectiveness by the evidence-based, dynamic-focused research. Furthermore, potential influence on local, regional, and global entities and policies may involve issues as to how to wisely allocate funds related to training and technological infrastructure for workforce development that allows for fulfillment of organizational interests and societal needs. Thereby, a raised awareness of fostering a culture of continuous learning, individually and collectively, may organically ensue.

**Positionality Statement**

In addressing challenges and interpreting meanings in both intellectual and professional contexts as a scholar-practitioner, I am endowed with a privilege (replete with responsibilities) to articulate the lens through which I construct an understanding and interpret a social world. In that
sense, the validity and rigor of my research is bound to be impacted, to a certain degree, by my positioning in association with a variety of socially constructed dimensions in being, i.e., gender, age, ethnicity, hierarchy (Kincheloe & McLaren, 1994) in a given context. It is impossible for us to completely remove our preconceptions and opinions (Machi & McEnvoy, 2009) and transcend the situation, for we are inevitably too embedded historically, culturally, and structurally to acquire value-free knowledge that is universally true. Nevertheless, for me, coming to terms with my own positionality by acknowledging, negotiating, and thereby controlling, those biases and opinions are of vital impotence to the research (its process and the interpretation and impact of the outcomes).

The positionality involves the confrontation of three distinct realms that pertain to prior experiences and professional background, preconceptions and opinions, and potential biases, followed by reflection and a culminating conclusion.

**Prior Experiences and Professional Background**

I have been devoted to the field of corporate training and communication for around eight years, and experienced a growing passion in organizational e-learning that boasts cost-effectiveness, flexibility, and accessibility—advantages that have been increasingly recognized by organizations worldwide. Designing and facilitating training courses for executives with different backgrounds, and meeting clients’ distinctive e-learning objectives, requires more than resourcefulness and agility. The passion, expertise and experience grow with a price. They may cause me to jump to conclusions at certain points, for example, by making me readily assume the utility and acceptability of e-learning systems. Also, the initial research problem and research approach and methods would have been framed and designed differently if it were not for my previous experiences and constructivist-transformative worldview (Creswell, 2009) gradually
taking form throughout my early academic life in literature and social science that vastly values human meaning-making.

As an executive assistant to the CEO in a multi-cultural consultancy, my responsibilities and efforts are primarily concentrated on corporate communication and training. I am actively engaged in developing customized training programs and facilitating organizational e-learning for our diverse clientele. In such a volatile climate, as a business owner or learning and development professional, one needs to be more resourceful and agile to help business and shareholders effect change by elevating staff motivation (mostly in learning and keeping up with the world), morale and performance. My role and goal, congruent with that of the organization, is to assist our client organizations and ourselves in achieving goals through efficacious learning and change. Granted, learning and change, be it evolutionary or revolutionary, in an organization at different levels is much more intertwined and complicated than one could fathom and predict. Nonetheless, in implementing new e-learning initiatives and programs that embody relevance and innovation, companies are potentially creating an opportunity to transform traditional learning behavior, thinking, and sensemaking of individuals that would translate into learning on an organizational level. While I appreciate the perspective the unique experiences and position open for me, I should equally heed the accompanying risks and be open to various emergent perspectives that would keep informing/shaping my ongoing positionality and lead to enriched insights.

Preconceptions and Opinions

In the surge of globalization and digitalization, my generation has benefited from interdependence, innovation and advanced technology which brings convenience and excitement. Moreover, I have long engrossed in diverse training projects internally and
externally, and have been involved in a relative absorbing learning environment. Therefore, I might inevitably land in communities of like-minded peers, further reinforcing my conviction (confirmation bias) that the processes and findings of the research would confirm the e-learning effectiveness and its positive influences at all levels. Besides, since I was once struggling with the geographical issue accompanied by an once-in-a-lifetime education opportunity, the sentiment might serve as a breeding ground for the bias.

Growing up in a well-educated family I was “born” to think that learning is natural and joyful, and we are meant to explore the truth, passionate and untiring. Thus, in engaging in the organizational e-learning research and exploring organizational e-learners’ motivational experiences, this deeply-ingrained belief would make me easily fall prey to the opinion that learning should be driven by our inner desire. Furthermore, being deeply drawn to and influenced by the Kant deontology subjects myself to the belief that only intrinsic motivation is the ethical motive. Likewise, I view intrinsically-motivated learners as deserving commendations and respect, in blatant contrast to extrinsically motivated learners who focus solely on maximizing the utility (such as reward and promotion) and are thus deemed morally crooked. This conviction would nevertheless affect the ideology, and thereby the approach and procedures employed and interpretation attempted in the research process. Yet, in the course of confronting the potential preconceived bias, it has also dawned on me that intrinsic motivation should be examined attentively and justly to reflect the dynamic of organizational e-leaners’ vindicated motivation throughout their learning experiences.

To fight against these preconceptions, I set out to find disconfirming evidence every step of the way and carefully examine and reexamine them. In addition, instead of labeling and categorizing learners, I paid more attention to the learning context and process; here, by learning
about the dynamic organizational context and learners’ adaptation process, the study gained a relatively balanced and holistic perspective.

**Potential Biases (Linked to Structural and Deficit Thinking)**

Differences may lead to biases. In light of the two understandings of differences – structures and deficits (Jupp & Slattery, 2009), potential biases I might hold or develop in the process are unveiled in relation to the research. On a structural thinking note, differences of race, gender, class, etc. among participants and between the researcher and the researched might cloud the researcher’s judgment. For I am dealing with an international clientele as well as the multicultural workforce in my professional settings, the tri-nature of mine (having been nurtured under Confucianism, post-colonialism, and mainstream western culture) may facilitate my understanding of organizations of different cultural-historical backgrounds and people of different races and ethnicities. Yet, it might implant me with preconceived ideas penetrated through hegemony when opening a dialogue with diverse participants. In view of deficit thinking, the participants’ lived experience, characteristics, and moral orientation are likely to stand out in the process and paralyze my ability of impartial representation. Hence, employing dialectic thinking and reasoning to avoid simple binaries in the entire process as well as responsibly contextualizing, decoding, and analyzing participants’ narratives holds great significance.

**Reflection on Dimensions of Positionality and Epistemology**

Compared to demographic positioning, ideological and discursive positioning is more worthwhile when the researcher represents and interprets the *other* (Briscoe, 2005). In ideological dimension, it is the privileged position and social power that allow me to be able to empathize with the *other* (participants) and advance justice; in discursive dimension, I should
commit myself to eliminating biases and subordinating, engaging the other in the ongoing dialogue. This is especially true with a qualitative researcher conducting an IPA study that honors individual interpretation of their own experiences and the importance of what that sensemaking has informed the complexity of a phenomenon.

Associating positionality with epistemology both empowers and disempowers our expertise in the organization: We are empowered by our unique and unreplicable experience yet disempowered by the constraints of its limited nature. Recognizing that one’s positionality can bias one’s epistemology would help to mold our worldviews and make us readily open to possibilities by examining our knowledge formation processes and cultivating informed skepticism (Takacs, 2002). Hence, as a scholar-practitioner working and learning in a professional context, it is my moral and social responsibility to reflect on my positionality that shapes my perception and interpretation, truly listening to others, and consciously embrace an ethical neutrality and uphold justice.

**Concluding Note**

Through coming to terms with those elucidated biases and opinions, it is my hope that a rigorous and authentic perspective on present-day organizational e-learning, grounded in an appreciation of the identity, positionality and othering, would be illuminated.

As scholar practitioners, we are required to frequently enact critical reexaminations and reflections of current philosophies and practices. Reflexivity and positionality can offer numerous opportunities as we unpack our epistemologies and become open-minded, scrupulous, and skeptical (Fennell & Arnot, 2008). As such, in exploring the organizational e-learners’ experiences, I am an adaptive learner myself, carefully unpacking my own learnings and allowing new ideas to emerge, and alternative interpretations to flow. New thinking and being
are still underway. New philosophical and practical conceptualizations of positionality are continuously reengineered and reinterpreted to take into consideration new and diverse understandings of e-learning and organizational dynamics. This position fits within a context where advanced technology and human interdependence in our society is calling for persistent reexamination and rigorous reflexivity.

Theoretical Framework

This section addresses two theories that are combined and applied to guide this study, and analyzed in detail to provide a rationale of its application, and how this integration of theories shapes the research question, purpose and methods. A reflection on the theories’ potential implications and limitations is provided.

A combination of a Self-Regulated Learning (SRL) model (Pintrich, 2005) and an Organizational Learning (OL) model (Nonaka, 1994) is used as the theoretical framework that guided this study (Figure 1). Pintrich’s (2005) framework as “a heuristic to organize our thinking and research on self-regulated learning” (Pintrich, 2005, p. 455) outlines four areas of SRL: cognition, motivation/affect, behavior and context. In referring to cognition, the framework describes target goal-setting, metacognitive awareness, selection and adaptation of cognitive strategies for learning. Motivation/affect encompasses efficacy judgments, task value and interest activation, monitoring and selection and adaptation of strategies for managing motivation and affect. Behavior entails time and effort planning, awareness and monitoring of effort, time use, choice behavior. Context includes perceptions of task and context, monitoring changing task and context conditions, change or leave context.

The perspective of knowledge creation in Organizational Learning (OL) theory (Nonaka, 1994), on the other hand, offers enriched insight into how the organization may consciously tap into the knowledge creation processes organizational e-leaners are exposed to and actively
engage in. This would include the spiral of knowledge conversion by four self-transcendental processes: *socialization, externalization, combination,* and *internalization.* This structure provides the context that undergirds the self-regulated learning or individual e-leaners. The following Figure 1.1 illustrates the interaction of these two theories.

*Figure 1.1. Theoretical Framework of the Study: An interactive combination of SRL & OL. Adapted from and combined by Pintrich (2005) Self-Regulated Learning (SRL) model and Nonaka’s (1996) SECI model. (The integrated model is created by the researcher.*)*
Rationale for Applying Self-regulated Learning

E-learning systems implemented by organizations may readily embed technologies, information, and knowledge to offer both opportunities and constraints that simultaneously manipulate and liberate their organizational e-learners. Granted, it is, after all, the learners who decide upon their level of being manipulated and liberated in terms of learning pace, strategies, content, and even results based on their characteristics, beliefs, prior knowledge and experience, motivational attributes, and self-determined goals. This type of active, conscious, prudent, and responsible engagement is characteristic of Self-Regulated Learning (SRL) (Pintrich, 2000; Zimmerman, 1990, 2000, 2001). The nature of e-learning in a collaborative learning constellation determines, to a greater or lesser degree, the dynamic organizational learning environment in the investigation.

Thus, in order to thrive in the system (micro and macro) learners would have to not merely navigate their own learning path and progress in the process, but be intrinsically motivated to adapt themselves and such self-regulated process to an encompassing organizational learning environment/system that embeds them. The purpose of the study is, in part, to explore how organizational e-learners’ attitudes and behaviors influence and are influenced by the dynamic, self-paced, and self-regulated e-learning context.

Hence, the notion of SRL is situated at the core of the theoretical framework that guides the inquiry, which is examined from a hermeneutical perspective. That is, the study presents diverse perspectives and voices from various seminal and contemporary authors of SRL and SRL-informed research and practice that relate to both traditional and e-learning settings throughout its extensive historical trajectory.
Theoretical Perspectives of Self-Regulated Learning and Implications

The evolution of learning research beginning in the 1950s has witnessed the emergence and development of concepts and theories of Self-Regulation (McKeachie, 2005). Key to this progress is the emergence of the notion of metacognition consisting of metacognitive knowledge and metacognitive experiences/regulation (Flavell, 1979, 1987). Metacognition refers to higher order thinking – simply known as “thinking about thinking” or “knowing about knowing.” It is the role of executive processes in the overseeing and regulating cognitive processes that metacognition emphasizes (Livingston, 1997) that led learning researchers into the expedition of self or agency in relation to motivation, affect, cognition, goals, and experience. This gave rise to the efforts of SRL theorizing that involves, integrates, and expands beyond central tenets of prior learning theories e.g., behavior, cognition, motivation, and social interaction.

With the increasingly globalized and digitalized era presenting important opportunities for fostering e-learning, the notion of self-regulated learning might be adapted to enact and enable effective use of digital systems and often untapped complex learning environments (Azevedo, 2005a) that embed such learning processes. It may as well affect the ways we explore and evaluate self-regulation in learning organizations equipped with and utilizing new learning and communication technologies. Additionally, the volatility and uncertainty associated with rapid technological development further require organizational responsiveness, adaptation, effectiveness, and cohesiveness in such coalesced e-systems that scaffold our self-regulated yet interactive learning rarely existent in traditional organizational learning environments.

A portrait of self-regulated learning perspectives of relevance. Given that there is a vast array of SRL theories and perspectives to gain insight from, rather than discussing each one exhaustively and separately, this section will delineate the common themes and unpack the
organizational e-learning implications of the body of literature, with special emphasis on those most aligned to e-learning contexts.

SRL can and are often viewed and theorized as a dynamic process. The SRL theoretical models of Zimmerman’s (1989, 2000, 2005), Winne and Hadwin’s (1998, 2005), Pintrich’s (2000, 2005), and Azevedo’s (2010b, 2011) have been frequently cited and applied in the literature on SRL, with the last one adapted to computer-based learning contexts. Although the convergence these models share and divergent distinctions are both crucial to deeper understanding of SRL, Pintrich’s (2005) model as “a heuristic to organize our thinking and research on self-regulated learning” (Pintrich, 2005, p. 455) informs the framework that shapes the study.

It outlines SRL as a few dynamic phases. For example, Pintrich’s (2005) matrix model of SRL combines four areas (cognition, motivation, behavior and context) with four phases: forethought, planning, and activation; monitoring; control; and reaction and reflection, to illustrate a dynamic process in and of itself. The first phase normally involves forethought, whereby individuals define, plan, and set goals for the task, and self-motivate while activating prior knowledge about the relevant content and context. In the middle phase, individuals monitor the task and enact the plans, which is intimately linked to the metacognitive awareness and monitoring, regulating, and controlling of their own learning process through adjustment to any of the four areas of SRL (Pintrich, 2005). Individuals in the final self-reflective phase usually reflect on their learning, their performance, their learning strategies, and the learning context, and make adaptations that may inform and influence future learnings (Pintrich, 2005; Zimmerman, 2005). The model encapsulates both areas/factors and phases/processes of SRL in a more holistic way.
To summarize, the role of self-regulation is critical to successful learning in any format. Self-regulated learning (SRL) concerns the enactment and sustenance of self-regulation of (meta)cognition, motivation/affect, behavior, and context in recursive and dynamic learning processes (Azevedo et al., 2011, 2013; Pintrich, 2000, 2005; Zimmerman, 1989, 2005). Notably, context is identified as an important area that requires learners to have the capacity to regulate it for their own sake while simultaneously being restricted or facilitated by it in the learning process (Pintrich, 2005; Zimmerman, 2005). It is important for organizations to understand this regulation process in order to be able to harness the learning technologies and systems as well as enact and foster the best possible organizational environment, organizing and facilitating effective e-learning while enabling our organizational e-learners in the right way.

The understanding of the complexity and interdependence of the SRL processes and its processual-contextual perspective has reached the point where systematic efforts can be enacted to both exploit and expand the SRL model that would enable an innovative application. This can be done by integrating it with organizational learning theory/model, to be discussed later in this chapter. The following subsection is devoted to the affordances and perturbations associated with applying SRL in the study.

**Connecting Pintrich’s (2005) Self-Regulated Learning Model to the Study**

Research has identified a multitude of critical tenets of self-regulated learning that may potentially explain learning processes and performance. The areas of focus for this examination have been selected for their prominence in the literature and relevance to a dynamic organizational e-learning environment that contextualizes the study. Each key tenet of SRL is examined for details linked to the development of the study and in particular, how the research question and data collection align with the framework in use so that a deepened understanding of
the role SRL plays in shaping the study is gained.

**Self-regulated learning tenets and linkages.** SRL models are still being developed (e.g., Greene & Azevedo, 2009). The informed framework of the study is not intended to be all-inclusive. It intends to apply the critical and relevant perspectives and tenets of the models to the complex organizational e-learning environment that is important to the study. In the following, the relevant areas of SRL identified by Pintrich (2005) are discussed and linked to the study within the context of dynamic organizational e-learning.

**Metacognition.** It refers to awareness of cognition: knowledge-building process, understandings, the way people deal with information for better learning and understanding, and, above all, the ways people control their thinking (Azevedo & Aleven, 2013; Pintrich, 2005). Such reflexivity in the thinking of organizational e-learners, in their meta-cognitive awareness of the learning process and the actual learning context, is worthy of examination in the study to illuminate participants’ organizational e-learning experiences.

**Motivation.** Pintrich (2005) identifies affect and motivation as one area of SRL to allude to the subtle connection of the two. Motivation, as an individual’s drive to obtain a goal, is subject to regulation in the learning process. Motivation regulation is about how people set goals, maintain engaged, and follow through to obtain the goals, an ability to control and monitor motivational beliefs throughout the learning process (Pintrich, 2005). Motivation regulation processes, present at all the four phases of Pintrich’s (2005) framework, is of tremendous importance to organizational e-learning effectiveness and is at the core of the study.

**Behavior.** “Individuals can observe their behavior, monitor it, and attempt to control and regulate it” Pintrich (2005, p. 466). As the consequences of thinking and understanding, behavior and behavioral planning is intimately linked to cognition and metacognition, (Efklides, 2011;
Pintrich, 2005). It underscores the importance of creating and enabling the proper e-learning systems as well as organizational learning environment that stimulate the level behavioral interaction in observing, reflecting on, and adapting their course of actions.

**Context.** Learners engaging in learning activities attempt “to monitor, control, and regulate the context as an important aspect of self-regulated learning” (Pintrich, 2005, p. 469). Ubiquitous and permeating the entire learning process, context exerts certain influence on every aspect of learning. Thus, given the specific context being targeted in the study, great attention was given to how an organizational learning context could be enacted and organized to facilitate e-learners’ reflexive SRL and development that would, in turn, enable organizational learning and development.

Previous research on e-learning in light of SRL theories or models seems to lay much emphasis on areas and processes in relation to learning technologies and external e-learning environments. However, the motivation, adaptation, and interaction processes of organizational e-learners are related to their learning experiences rooted in an even larger learning context: a dynamic organizational learning environment, which was taken into consideration in informing the framework reversely, and illuminating the full picture of organizational e-learning experiences.

**Rationale for Applying Organizational Learning**

Clearly, despite the affordance of SRL, many learners might still be reluctant to regulate their own learning process by investing time and energy or other resources in a given context (Boekaerts, 1999). And even if they do, whether their effective individual learning processes and outcomes can be efficaciously transferred to organizational learning is worth questioning. However, as noted by Boekaerts (1999), learning environments can be taken advantage of to
enhance certain skills involved in SRL and facilitate the learning of new self-regulation strategies. Hence, the line of argument was extended to e-learning enacted in organizational learning environments where a specific context can be created and fostered to enable self-regulated e-learning illuminating motivation, adaptation, and interaction processes in an unobtrusive way, which would result in a healthy interplay between individual learning, e-learning systems and organizational learning.

Embedding adult individual e-learning process in organization learning requires fundamentally and consciously linking of (e)-learning to the deep-down structuring and organizing of organization learning at large that reflects the ultimate purpose, value, and influence within an organization. Organizational e-learners are, by no means, merely individual learners whose goal is largely associated to pursuing educational or intellectual growth, as conventional e-learners are in educational institutions. Organizational e-learners are inevitably involved in the complex scaffolding the organization creates and recreates, thus entangled with achieving organizational goals for the sustainable common good for themselves. In that sense, the complex relationship between individual and organizational (e)-learning purposes, processes, and outcomes is the essence of the study, and the crux of the organizational effectiveness of the digitalized new era.

Nonaka’s Organizational Learning Theory in Perspective

Typically, as Nonaka’s (1996) SECI model, among other key OL models, was chosen to constitute the overarching theoretical framework. Its relevant conception and impact on the knowledge creation in organizational learning intertwined with individual learning engagement, interaction, and collaboration will be articulated.

Nonaka (1994) transformatively denotes tacit knowledge and explicit knowledge as
distinctive human knowledge in the process of the spiral amplification via which knowledge at all levels (held by individuals, organizations, and societies) can be both expanded and renewed. The “spiral of knowledge” (Nonaka, 1994, p. 34), composed of four knowledge conversion modes – socialization, externalization, combination, and internalization – altogether accomplish the learning self-transcendence. A continual interplay between tacit and explicit knowledge facilitated by a reflecting-while-experiencing dynamic leads to unique, worthwhile perspectives elevated through social interaction and thereby integrated to the shared collective experience (Nonaka, 1994). SECI (Nonaka & Takeuchi, 1996) model further enunciates the dynamic processes where knowledge is created, converted, transferred, and shared in organizations. Both a knowledge outcome and a social outcome are therefore anticipated, due to successfully enacted organizational knowledge creation and conversion (Nonaka & Von Krogh, 2009). In the following, Nonaka's SECI model – complementing Pintrich’s SRL model – will be addressed in a practical way in association with this study.

**Applying Nonaka’s Organizational Learning Theory to the Study**

As a technology-and-market-centered enterprise in the service industry, an organization is accustomed to relating to systematic feedbacks that produce returns in profits to seek, explain, and predict physical growth. Nonetheless, the perspective of knowledge creation (Nonaka, 1994, 1998, 2003; Nonaka et al., 2006; Nonaka & Von Krogh, 2009) offers an enriched insight into how the company may consciously and genuinely tap into the interrelated knowledge creation processes. This is referred to as the spiral of knowledge conversion which occurs through feedback from the market and wider society being cultivated and cognitive growth (besides physical growth) being nurtured. Thus, leaders, in order to manage knowledge humanistically, must embrace and care for the dynamism of knowledge creation for knowledge emergence with
visions on what knowledge to create and on how to foster the freely-emerging knowledge and with commitment to ideas, possibilities, experiments, self-reflection, and humanity (Nonaka, 1998, p.53).

In a broader sense, organizational learning (knowledge creation) would be understood to organically unfold as we draw on both systems thinking and ecologies thinking to realize “a cyclical cultivation of resources” (Nonaka, 1998, p. 53) and a “synergetic expansion of knowledge” (Nonaka, 1994, p. 34) in building a truly humanistic, learning, and knowledge community.

**Critics of the Two Models and Limitation of the Combined Framework**

While SRL, as a socially embedded process, is inexorably related to empowerment, agency, democratic participation, and personal responsibility, it is simultaneously entangled in practices and processes that relate to “subordination and domination,” “obedience [and] oppression,” and “control [and] conformity” (Freire, 2000; Vassallo, 2013, p. 564). However, with the educational, political, and economic environment of the era shifting dramatically, certain repertoire of capabilities required to keep abreast of emerging challenges are largely aligned with what is involved and advanced in SRL, such as self-motivation, self-directing and – navigating, collaboration, adaptation, and innovation (Pintrich, 2005; Zimmerman, 2002). Hence, it is the responsibility of researchers and practitioners to critically enact and embrace the eclectic discourses and interpretations in SRL theorizing and application for “nuanced conversation and ethically informed practice” (Vassallo, 2013, p. 564).

Although Nonaka’s theory of knowledge creation and conversion appears to have seldom invited systematic criticism, existent critics of Nonaka’s knowledge creation theory and SECI model primarily offer two kinds of objections – a conceptual one and an empirical one (Gourlay,
For instance, Essers and Schreinemakers (1997) criticize its subjectivism that connects organizational knowledge more to the managerial authority and decision-making process than to a scientifically corroborated series of criteria; whereas Bereiter (2002) questions the scope and depth of the actual process (especially the collaborative process) via which new knowledge and understandings develop within an organizational environment. Despite that, Nonaka’s postulation that the creation of knowledge consists in the interaction of tacit and explicit knowledge via spiral four-knowledge-conversion processes, to a great extent, points to the essence of this study that examines individual experiences reflected in varied respects where diverse forms of knowledge are created and implicated.

While a complete review of the vast amount of perspectives and research of SRL and OL would be unrealistic, this exploration articulates the aim and scope of the study, key concepts and relationships to conceptualize the framework, and simultaneously the difficulty to situate the study more justly given the different focus of levels of the two models. Nonetheless, as explicated, the inquiry targets a very particular context within which the e-learning is occurring: a fast-paced, knowledge-intensive consulting firm. The goal is to build and use a framework that integrates organizational knowledge management theory speaking to how to position, convert, apply, and renew the knowledge that e-learners are being exposed to within the organization.

Summary

Organizational e-learning needs to be pragmatic and humanistic given its organizational mission and agenda in the business landscape, and the far-reaching societal responsibility the organization is inexorably assuming. The learner-centered and context-focused perspective, as well as the macro-micro inclusiveness offered by the theoretical framework, would enrich practical and civic (desirably) values pursued by e-learners as individuals and learning
organizations as a collective in the society. The integrated framework of the two models (SRL & OL) delineated above addresses motivation, adaptation, and interaction at varied levels. The study illuminates how organizational e-learners engage in learning and “learning to learn” processes advanced by a learning organization through their lived experiences towards achieving positive individual learning results in keeping with and escalated by higher organizational learning ends.

**Definition of Key Terminologies**

**E-Learning.** E-learning is continuously emergent, emanating from the possibilities of ICT [information and communications technologies] in the hands of administrators, instructors, and learners, and created and recreated by use. The forms and shapes of technology, learning, and technology-in-use for learning co-evolve, one pushing, pulling, and modifying the other (Andrews and Haythornthwait, 2007, p. 19).

**Self-Regulated Learning (SRL).** SRL is defined as

…an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment. (Pintrich, 2005, p. 453)

**Organizational Learning (OL).** Based on Simon’s (1969) position and what is presented in the business dictionary, a customized definition is attempted to suit the study: Organizational learning means the dynamic and continuous process of enhancing the collective ability and informed actions through systematic restructuring, sensemaking, knowledge integration, and understanding.
Conclusion

E-learning has ushered in a new era of thinking, learning, and living. It has permeated our organizations to facilitate emergent organizational learning and training agenda in increasing complexity. The study aimed to understand the e-learning experience of organizational e-learners with regard to motivation, adaptation, and interaction processes in a dynamic learning environment of a knowledge-intensive consultancy firm, and thereby inform the betterment of organizational e-learning mechanism and learning environment that would together enable desirable e-learning experiences and results. The process of exploring the SRL model and OL model as a combined theoretical framework fulfilled the potential to guide, shape, and bring into focus not merely the research problem, question, and purpose, but also research design and methodology before commencing the project. In other words, the theoretical framework provided an effective lens through which to investigate the issue presented and cast new light on the tenets of the research study on organizational e-learning in both its depth and breadth.

As discussed, the practical value of relevance can be a powerful source of motivation that drives e-learners’ and the learning organization’s learning, adapting, applying, and collaborating. As Illeris (2007) notes that motivational issues should be resolved by enabling positive conditions in the environment, attending to leaners’ needs and desires and discretionary efforts, caring about their real life situations, and making learning bear relevance to them. What appears challenging would be the balance and positive synergy organizations seek to achieve between the escalated value of the collective – as a result of effective organizational learning – and the individual learners’ motivational and practical value in and beyond their dynamic learning process of tacit and explicit knowledge conversion. Before reporting the core issues of how the researcher explored the problem of practice in question, a comprehensive review of literature
from a range of perspectives and on multiple relevant aspects will further unveil and contextualize the intricacy, contention, and significance of organizational e-learning and the importance of achieving a fair level of learning effectiveness, both individually and collectively, in the new epoch.
Chapter Two: Literature Review

The advancement of information and educational technologies and Internet access has revolutionized the way organizations train their diverse and geographically dispersed workforces. We have been witnessing the dramatic growth of and massive change in organizational e-learning landscape where e-learning systems are enacted as an important organizational learning/training medium to realize organizational development agenda. The acclaimed cost-effective organizational e-learning platforms provide learners with educational and occupational opportunities in diverse ways while the self-pacing and directing learning context enables leaners to engage in e-learning anytime, anywhere, in any preferable style.

Granted, many researchers and practitioners find it challenging when implementing e-learning in the complexity of embedding the systems with dynamic organizational (learning) context to achieve digital transformation in an effective way (Seufert & Meier, 2016; Uden & Damiani, 2007). Many organizations that have invested ample resources on e-learning efforts have yet to receive desirable outcomes as anticipated. The confoundedness of practitioners and the expectation discrepancy of organizations would account for a full investigation into organizational e-learners’ lived learning experiences in this context. That would offer a better understanding of the intricate interplay between individual and organizational learning processes to better the effectiveness of organizational e-learning. The literature review, therefore, is poised to increase the existing knowledge by surveying and critiquing the relevant literature, and propose research worthy of exploration.

Four thematic strands of literature of particular relevance emerge through the comprehensive survey of prior literature in the field. They are: learning technology and the new learning paradigm; e-learning and intrinsic motivation; adult self-regulated learning,
motivation, and adaptation; and, adaptive e-learning systems and e-learners’ adaptability. The analysis and critique of each strand has revealed, however, that studies on effectiveness of organizational e-learning are scant and limited in terms of the magnitude, methodology and generalizability. A gap in the existing knowledge concerning the role of e-learners’ motivation, adaptation, and interaction processes in effective organizational e-learning further contextualizes the need of current study. Further, organizations may benefit from the experience and process-driven e-learning design and implementation guidance and insight generated from a qualitative study to optimize organizational e-learning systems and experiences that align with organizational learning goals. Ultimately, the essence of the four strands calls for research that seeks to understand the experiences of organizational e-learners linked to motivation, adaptation, and interaction processes contextualized in a complex, dynamic context to inform effective organizational e-learning.

The background framing the present study – the inter-reciprocal and interactive adaptation between organizational e-learners’ learning needs, the design of organizational learning technology, and the overarching organizational learning culture and dynamic – further contextualizes the literature review. The four strands of scholarship are therefore established and organized to reflect on how organizational e-learners are unique in their needs for learning. Organizations and change agents can tap into that complexity in designing and delivering e-learning solutions that spur their engagement. Environments can be organized and facilitated to support intrinsically motivated, self-regulated learning in the ongoing adaptive process that would in turn enable a healthy organizational learning dynamic.

Learning Technology and the New Learning Paradigm

Learning technology, broadly interpreted technological tools for the purpose of learning
(Azevedo & Aleven, 2013), serves as the backdrop that contextualizes the study. This section briefly discusses how the term e-learning is conceptualized by different sources over time and used in the specific learning context, and the new learning paradigm that has been evolving to underpin learning technology development and application.

**E-learning as Both Technology and Learning Process**

While the term e-learning is frequently discussed when referring to the use of computer-based technological tools for learning in all sorts of digital contexts, it represents, in the study, both the tool and the act that pertains to the learning process. E-learning mechanism and systems are alternately used to refer to the integrated technology, content, and the context. E-learning boasts numerous advantages, not least of which is the possibility to conquer the temporal and spatial constraints of traditional face-to-face learning contexts (Bates, 2005). In addition, liberty of relationship development (Anderson, 2006) and facile access to online courses and materials attributed to advances in technology (Li & Irby, 2008) can be viewed as other integral benefits.

To borrow the definition from Kaplan-Leiserson’s glossary, e-learning serves as a tool that provides

A wide set of applications and processes such as web-based learning, computer-based learning, virtual classrooms, and digital collaboration. It includes the delivery of content via Internet, intranet/extranet (LAN/WAN), audio- and videotape, satellite broadcast, interactive TV, and CD-ROM. (Kaplan-Leiserson, 2000, pp. 5-6)

This “tool” definition is later enriched by Clark and Mayer’s (2002) “instructional method” definition by emphasizing the blended content and methods that lead to “build[ing] new knowledge and skills linked to individual learning goals or to improved organizational performance” (p. 13). Despite that, Andrews and Haythornthwaite’s (2007) interpretation
instilling a sense of emergence and social dynamic in e-learning is rather insightful in the organizational context today and thereby has an important bearing on the design of the study.

E-learning is continuously emergent, emanating from the possibilities of ICT in the hands of administrators, instructors, and learners, and created and recreated by use. The forms and shapes of technology, learning, and technology-in-use for learning co-evolve, one pushing, pulling, and modifying the other. (p. 19)

The underlying social and processual values in e-learning combined with its uniqueness as technology for instrumental methods linked to “tailored feedback,” “collaboration,” and “simulation” (Clark & Mayer, 2002) constitute the context for the review. Moreover, as the learning technology design is more and more inspired to take on transparence of technology (Burge, 2001), a new learning paradigm grounded in leaners’ perspective (in relation to the individual, the collective, and the interactions in between) emerges.

**Emergence and Impact of the New Learning Paradigm**

The complex digital information age in which we find ourselves calls for both cognitive and non-cognitive competencies for more complex challenges. A new learning paradigm guiding state-of-art learning systems that develop those competencies, while fitting into the dynamic organizational learning paradigm, will usher in the postmodern, connectionist Knowledge Era of necessity. Learning technology and systems have been co-evolving with the development of learning paradigms which has essentially determined their trajectory. Thus, a brief overview of three paradigmatic pillars of learning theories is offered with a special focus given to *constructivism* as its multifaceted underpinnings relate to experiences, contexts, and collaboration, followed by the theorizing of the emergent new learning paradigm (*connectivism*) specific to organizational e-learning contexts. Both paradigms are of vital epistemological
relevance and significance to the conceptual framework of the study.

Learning paradigms that systemically categorize various learning theories represent varying perspectives on the learning process. Over the century, the most reputed and widely applied learning paradigms that impact the learning technology development and application are behaviorism, cognitivism, and constructivism. Theorizing of learning has shifted from centering on our behavior and stimulus-response (S-R) associations (Baum, 1994), and our minds of complex cognitive schemas and strategies (Leidlmair, 2009), to underscoring our active construction of meaning and knowledge. This intellectual process involves “discovery and exploration in a responsive learning environment” (Tennyson, 2010, p. 7) and the social-cultural contexts that embed individuals (Glasersfeld, 1989) and tool-appropriating (Säljö, 2002).

Nevertheless, learning is beginning to be viewed as a broader dynamic process beyond the individual level and under the auspice of digital connectedness (Siemens, 2005). Meanwhile, learning technology is evolving from learner-external-performance-focused, to learner-internal-processing-oriented, to learner-context-directed, to interaction- and collaboration-centered (Wiklund-Engblom, 2015).

**Constructivism.** Drawing from both cognitive psychology and social psychology, this learning paradigm is often recognized as a theory with two dominant variants: cognitive constructivism and social constructivism. It theorizes that learning is an active, ongoing, socially bounded, cognitive organizing process of knowledge construction through the learner’s own constructing (Bruner, 1990) the subjective interpretation and comprehension of the reality, interacting with the learner’s prior knowledge and experiences. Cognition involved here is contextual and flexible in the construction process, and learning mankind as "actively complex, socially embedded, and developmentally dynamic self-organizing systems" (The Society for
Constructivism in the Human Sciences, cited by Mahoney, 2004) is the knowledge builder. As such, the new era infused with digital devices and networks of extreme mobility and flexibility automatically proffers the promise of nurturing such “cognitive flexibility” (Spiro, Feltovich, Jacobson, & Coulson, 1992, p. 58) of the learner to process and organize information from diverse perspectives. Furthermore, the social contexts that embed learners and the individual-collective relation as well as the appropriating of reality-mediating tools are specifically emphasized in the process of constructing meaning in view of social constructivism (Säljö, 2002). It is in this perspective that how we appropriate cutting-edge tools by learning how to manage learning technology and systems in an organizational e-learning environment in certain linguistic, social, and cultural settings as well as its impact is illuminated.

In essence, constructivists interpret learning as an active, ongoing constructing process and the learner as “active, self-regulated, goal-directed, and reflective” (p. 7) in continuous discovering and exploring in a “responsive” (p. 7), dynamic learning environment (Tennyson, 2010). This interpretation is in concrete congruence with the conceptualization of intrinsically motivated and adaptive learning examined in the study. To highlight how learning occurs and how to learn to learn (mega-cognition) with the cutting-edge tools in creative ways is to reiterate the purpose of the study: exploring why (motivation process) and how (adaptation process) learners self-regulate in a dynamic organizational learning environment where new e-learning mechanism are incorporated.

**Connectivism.** The new learning paradigm/theory introduced by Siemens (2005), is defined as “the integration of principles explored by chaos, network, and complexity and self-organization theories” (p. 7). The theory, paying tribute to technological advancements on learning and knowledge, attempts to theorize the learning process in the context of complexity
with “shifting core elements” (p. 7) and complex patterns barely manageable by individuals completely (Siemens, 2005). From the perspective of connectivism, learning and knowing in the process of connecting/networking and self-organizing is more valued and crucial than the known and learnt, and such process is dynamic, emergent, changing, and ongoing. For the focused e-learning occurs in a dynamic organizational context within which learning, work, and performance are intertwined and non-linear, it fits, to a certain extent, in the new learning paradigm stressing effective communication, network building, and community-based knowledge management that features self-organization on both individual and organizational levels (Auvinen, 2013; Siemens, 2005). Naturally, connectivism offers a fresh and insightful perspective to the study and affects the way we understand, design, implement, and organize e-learning in post-modern nebulous corporate contexts characterized by decentralization and fragmentation. It serves to counterbalance the influential cognitive theorizing of learning (individual-focused) in the past decades while reinforcing some of the key thrusts of constructivism.

**E-learning in Corporate Organizational Contexts**

Undoubtedly, the organizational training/learning arena has undergone drastic transformation over the last decade, as the swift advancement in information technology has been tremendously vitalizing e-Learning, rendering it indispensable in today’s integrative, dynamic, and complex organizational learning environment. As Patel (2010) stipulates, e-learning has steadily gained its position in corporate training initiatives and agendas. State-of-art educational technology enables e-Learning mechanisms to get more and more comprehensive and robust, thus providing organizational learners with more intriguing and satisfactory training experiences. They engage in e-learning to earn professional certificates, replenish the knowledge
base, develop new skillset, or just keep up the learning momentum. Accordingly, an increasing
number of organizations acutely aware of the situation are embracing organizational e-learning
to meet and exceed the changing demands on their businesses, and achieve organizational
learning goals by personalized learning and enhanced interactivity and social interaction enabled
by effective processes of e-delivery (Jones, 2007).

Indeed, e-learning provides promising solutions to typical on-the-site training problems
such as flexibility, accessibility, facility requirements, and travel expenditure, and the global e-
learning market is predicted to exceed $49.9 billion by 2015 (Adkins 2011). As benign as it
might seem to organizations, enacting an e-learning system and strategy of high practicability
and effectiveness is not without hurdles. Unfortunately, the perks brought about by the e-learning
wave are submerged by the steady increase in e-learning attrition rates and undesirable learning
outcomes leading to questions about effectiveness. A whirlpool of organizations implementing e-
learning platforms and consultancies providing e-learning services have been struggling over the
last decades. Therefore, the rigorous investigation of learner completion status has been
intensified ever since e-learning made its début from the periphery of mainstream to mainstream
essential (Berge & Huang, 2004). Previous literature from the corporate training arena (Bonk,
2002; Moshinskiie, 2001) notes statistics of attrition rates as high as 80 percent in online training
courses. Meanwhile, Sela and Sivan (2009) claimed that the failure rates of information systems
for e-learning amount to over 30 percent. It would appear that technology-mediated
organizational e-learning has been continually facing the challenge of engaging learners and
stimulating their utmost persistence throughout the ongoing learning process. This invites more
research-based efforts that would provide empirical insights into the grim situation. However,
organizational e-learning researchers are more entangled with employees’ perception about the
usefulness of the e-learning based on antecedent factors. For example, evidence from research on
acceptance of organizational e-learning indicates that perceived usefulness of e-learning in
improving individual learning effectiveness significantly impacts employees’ intention to use the
system in the workplace (Cheng, Wang, Moormann, Olaniran, & Chen, 2012). It also affects
attitudes towards le-learning and learning satisfaction (Chen, Yang, Tang, Huang & Yu, 2007).
More specifically, drawing from the perspectives of training and instructional design and
technology acceptance, Cheng, Wang, Yang, Kinshuk & Peng (2011) investigates the influences
of perceived individual and social learning support on individuals’ acceptance of competency-
based e-learning systems. Their research suggests that perceived usefulness of e-learning design
in favor of self-directed learning processes and social collaboration positively affects individual
behavioral intention to engage in the e-learning system (Cheng et al., 2011). Nevertheless, it is
clear that the perceived usefulness of e-learning as a motivator to participate is more associated
with extrinsic motivation, which leaves the intrinsic motivation of learning unaccounted for, and
fails to see motivation as a dynamic process subject to change during the entire learning
engagement.

Although the latter study has taken into consideration the factors of organizational
learning environment such as social learning, interaction and collaboration, the impacts of a
complex, dynamic organizational learning environment on individual and collective e-learning
processes and outcomes is not significantly illuminated. Research dedicated to this area is still
embryotic. It is essential that organizations recognize and be sensitive to the complex patterns in
the learning process (illuminated by connectivism) embedded in organizational contexts in order
to adequately harness the learning technology and ensure the successful implementation of e-
learning systems and its effectiveness. The review shall explicate that with more details in the
third and fourth strands.

Meanwhile, on the individual level, seminal reports show that one possible cause for the uncertainty and downfall of e-learning in the organizational context is that the learning technology designers and organizations invariably fail to recognize the nuanced differences of individual motivation and capability in the learning process (Weaver, 2002). In other words, a contributing factor to organizational e-learning ineffectiveness would be learners not being properly motivated at the outset and during their engagement in the emergent, ongoing process e-learning. The next part of the literature review explores the role of intrinsic motivation in (e-) learning, organizational e-learning, and organizational e-learning effectiveness before jumping into a more complexly interwoven scenario.

**E-learning and Intrinsic Motivation**

Existing literature is consistent in confirming the importance of motivation in the e-learning process (e.g., Boekaerts & Minnaert, 2003; Dick & Carey, 1996; Hartnett, George, & Dron, 2011; Schunk, 1995; Ryan & Deci 2000; Wlodkowski, 1985). There is evidence that learners in online courses are more self-directed, independent, and intrinsically motivated (Garrison, 1997; Shroff, Vogel, Coombes, & Lee, 2007), whereas others found that motivation in online learning manifests itself as multidimensional (Hartnett, George, & Dron, 2011). A few scholars have indicated that intrinsic motivation can exert a great influence on (e-)learning with regard to learning outcomes and satisfactions (Bekele, 2010; Brophy, 2010; Hartnett, George, & Dron, 2011; Jones & Issroff, 2007; Paechter, Maier, & Macher, D. 2010; Sun, Tsai, Finger, Chen, & Yeh, 2008). Despite evidence of the impact of intrinsic motivation on (e-) learning in educational settings, much remains to be explored in determining the role of intrinsic motivation in organizational e-learning experiences.
Role of Intrinsic Motivation

Even the rigor of ingeniously designed learning experiences would be compromised, if the learners lack proper motivation. It is broadly acknowledged by instructors that the most important factor in successful instruction consists in the motivation level of learners (Dick & Carey, 1996). Properly motivated learners would have greater chance of success than their counterparts and consequently become more motivated to keep learning that way, As Wlodkowski (1985) contends, the vital importance of motivation is not merely attributed to a causal factor of learning, but is a consequence of learning it assumes through mediating learning.

Generally, motivation can influence what, how and when we choose to learn (Schunk, 1995). Notwithstanding a crucial component to learning generally, there does not appear to be one standard definition of motivation, even with an extensive body of research. An archaic notion of motivation, which originated from the study of motivation, was associated with primitive drives and needs (Weiner, 1990); contemporary perspectives tend to ground motivation in the individual cognitive processes (i.e., thoughts, goals, beliefs and faiths) and highlight the interactivity in and between the learners and the learning ambience (Brophy, 2010). The down-to-earth definition – “the attention and effort required to complete a learning task and then apply the new material to the work site” (Moshinskie, 2001, p. 34) – gets the kernel of the concept across to an expansive audience, albeit with a lesser degree of formality and subtlety. Schunk, Pintrich, and Meece (2008), however, give motivation the most concise yet precise definition thus far as “the process whereby goal-directed activity is instigated and sustained” (p. 4).

Varying theories in the field – attribution theory, expectancy-value theory, and goal theory – linked, to some extent, to the concept of intrinsic-extrinsic motivation, have been developed out of varied forms of motivation identified by Bandura (1997). A clear line has been
drawn between intrinsic motivation and extrinsic motivation, with the former referring to proclivity to engage in a behavior for the inherent reward or satisfaction of the activity per se (Rieber 1991) whereas the latter stresses the extraneous reward or outcomes entitled by performing such activity (Ryan & Deci, 2000). Research suggests that intrinsically motivated students demonstrate higher self-esteem, creativity, flexibility (Deci and Ryan, 1980), capability to achieve academically (Gottfried, 1985), as well as more explorative, reflective, and self-regulated behavior aimed at deep level processing (e.g., Ryan & Deci 2000; Boekaerts & Minnaert 2003). Favorable Learning atmosphere relies heavily on the efforts induced by intrinsic motivation to boost deep level learning – learning to understand (Marton & Säljö, 1984).

Evidence has shown a multitude of positive effects of intrinsic motivation on student learning. For example, Cordova and Lepper (1996), who attempted to promote intrinsic motivation via educational software, found that learners exposed to motivationally embellished activities with enhanced intrinsic motivation became more deeply engrossed in the activities, and eventually mastered more from the learning experiences in a fixed timeframe. Intrinsically motivated students of all age groups exhibit higher self-regulation (Pintrich & de Groot, 1990) and self-reported well-being (Levesque et al. 2004), less avoidance behavior (Thompson, 2004), more curiosity while actively immersing themselves in deep level learning, and exceptional persistence with more likelihood to achieve preset goals (Curry et al., 1990). Nonetheless, extrinsically motivated students do not necessarily always do and gain less (Ryan & Deci, 2000). Then, how exactly motivation leads to cognition and behavior remains, as asserted by Pintrich (2003), one of the key problems to be attentively addressed by the “motivational science” (Martens, Gulikers, & Bastiaens, 2004, p. 2). In this regard, extensive exploration in connection with other “sciences” and perspectives would offer abundant fresh insights into the dynamic,
ongoing learning process.

A considerable amount of research dwelling on the role of intrinsic motivation, with data retrieved by indirect measures such as questionnaires and surveys involving disproportional self-assessment, is seldom sufficiently compelling, nor is explicit about the antecedents and processes of this “innate [and] evolving propensity” (Martens, Gulikers, & Bastiaens, 2004, p. 2) and its implications. The process via which motivational factors interact with specific learning behavior and outcomes is not underscored and underexplored in most studies (Hakkarainen et al. 1999; Aybay & Dag, 2003; Waheed, Kaur, Ain, & Hussain, 2015). For example, Waheed et al.’s (2015) empirical study exploring perceived outcomes from Moodle shows a significantly positive relationship between intrinsic motivators (i.e., communication module features, course content module features, and course delivery module features) and students’ motivation to use e-learning that is positively linked to their perception about the learning effectiveness. However, the impact of intrinsic motivation on learning is simply interpreted by test scores or attrition rates (e.g. Pintrich & de Groot 1990; Vallerand et al. 1997), without truly deciphering and understanding the role intrinsic motivation plays in influencing these results in a processual way. The question remains as to what intrinsically motivated learners actually perceive and behave that makes a difference leading to their fruitful outcomes (effectiveness) as opposed to their less intrinsically motivated counterparts? When it comes to the ubiquitous e-learning in the new era of complexity, a lack of concrete insight in respect to intrinsic motivation appears to be more austere.

**Intrinsic Motivation in E-learning**

Clearly, rapid advances in e-learning have offered unprecedented advantages (McIsaac & Gunawardena, 1996). Of a myriad of factors crucial to the effectiveness of online courses,
motivation, a contributing determinant in learning and achievement in traditional educational settings (Brophy, 2010), has been equally identified as a decisive factor in e-learning environments (Bekele, 2010; Hartnett, George, & Dron, 2011, Jones & Issroff, 2007).

Research that examines motivation in e-learning environments is modestly circumscribed in terms of quantity and scope (Artino, 2008; Bekele, 2010; Hartnett, George, & Dron, 2011). For instance, existing research has had a tendency to approach motivation without fully acknowledging the dynamics influencing motivation to learn (Brophy, 2010; Hartnett, George, & Dron, 2011). Despite that creating and nurturing motivating learning climate has gained adequate attention (ChanLin, 2009; Keller, 2008), motivation has invariably been perceived or even labeled as a sort of propensity attached to the learner which remains comparatively steadfast across various contexts, on account of e-learners being normally viewed as intrinsically motivated and self-regulated (Garrison, 1997). Studies falling within this scope have focused on identifying traits of accomplished e-learners (Wighting, Liu, & Rovai, 2008; Yukselturk & Bulut, 2007). However, one study worth attention assesses the extent to which certain aspects of intrinsic motivation are affected partially by technological support to inform online pedagogical portfolio of learning activities (Shroff, Vogel, Coombes, & Lee, 2007). Indeed, intrinsic motivation, in e-learning environments, where students ought to be intensely motivated in the absence of more traditional structure to gain higher academic achievement and competence, has become a salient issue. Shroff et al. (2007) examined the effects and outcomes of various learning activities and associated technologies on aspects of intrinsic motivation in e-learning through qualitative analysis of semi-structured interviews with students in an online MBA program. The conclusion drawn from the case study is that individual student characteristics and choices as well as emergent group discussion dynamics worked in a concerted effort in providing
learning elements and opportunities conducive to enhancing intrinsic motivation (Shroff et al., 2007). And the finding that no single form of technological support or learning activity could be all-purpose thus far is fairly illuminating (Shroff et al., 2007), in that technology involvement does not interfere as much with intrinsic motivation in dynamic e-learning contexts.

While some researchers imply more or less that intrinsic motivation is characteristic-oriented and shared in certain type of learners (Shroff, Vogel, & Coombes, 2008; Styer, 2007), Rovai & Lucking (2003) posit that losing intrinsic motivation has seemed to be a likely imminence among e-learners due to their subdued sense of relatedness. Hence, viewing intrinsic motivation merely as e-learners’ natural inclination or as a phenomenon which can be “manipulated” simplistically by a change of learning environment (technology supported) would barely grasp the subtlety in view of the unawareness that learners are able to be motivated at different levels, in varying contexts, and in diverse fashions (Turner & Patrick, 2008; Hartnett, George, & Dron, 2011). Few noticeable studies of e-learning have recognized the contemporary situated view of motivation (Shroff, Vogel, Coombes, & Lee, 2007; Xie, DeBacker, & Ferguson, 2006), but for one example, two combined case studies conducted by Hartnett, George, & Dron (2011). Drawing on the theoretical framework of self-determination theory, the research explored the motivation of e-learners in two online learning contexts; the results elicited from cross-case analysis illustrating that the nature of motivation to learn in e-learning environments is a complex interplay of person-context interactions and is therefore multi-faceted and multidimensional.

Despite the relatively high expectancies that institutions and instructors have of motivating learners in the course of e-learning, a paucity of substantive insight into the actual impact of intrinsic motivation on the e-learning effectiveness is salient (e.g., Amory et al. 1999;
Keller 1999; Garris et al. 2002). Therefore, to increase the awareness of the relation between e-learning effectiveness and motivational process in complex organizational contexts, it is imperative to gain a better understanding of e-leaners’ perceptions of and experience in the organizational learning environment that pertains to motivation orientation and deviation accountable for the effectiveness of organizational e-learning.

**Organizational E-learning Effectiveness and Motivation**

As much as e-learning has been universally adopted by organizations as a flourishing training solution to provide their employees with learning-on-demand opportunities in order to achieve cost-efficiency, little endeavors have been made to assess the effectiveness of e-learning in an organizational context due to its structural complexity and technicality involved (Strother, 2002; DeRouin, Fritzsche, & Salas, 2005). There has been limited quantitative research proposing quantitative evaluation model with experimental results barely yielding practical results (Tzeng, Chiang, & Li, 2007); likewise, even more scarce existence is empirical and practitioner research within the paradigm of interpretivism deploying qualitative approach to explore the e-learning effectiveness, generating more pragmatic significance.

According to DeRouin, Fritzsche, & Salas (2005), e-learning design, with limited integrated e-learning theory accessible, appears to have been more technology-driven than guided by cognitive science and learning theory (Mungai, Jones, & Wong, 2002); the same holds true in e-learning-specific organizational learning contexts (e.g., Wang, Wang, & Shee, 2007, Hodges, 2004). A few studies that have already touched upon how advanced technology affects learners (positively or negatively) in both educational and organizational e-learning settings share similar insights.

For instance, Allen et al. (2002) state through their meta-analysis that the learner
satisfaction with e-learning experiences is inversely proportional to the number of application of integrated multi-media components within an online learning program. It might well indicate that an overly accentuation on technology leads to a decrement in learner motivation. Another study (Wisher and Curnow, 1999) echoing this standpoint reveals that the involvement of instructor real-time video in online training sessions has no bearings on learning outcomes whatsoever.

It may well suggest that instructing video in online training is not motivationally instrumental to learner performance; the removal of such video from the training course would probably not negate the learner performance and final results. The findings of aforementioned studies necessitate the learner-directed and contextual-processual approach in the investigation of e-learning effectiveness in a dynamic organizational environment. Given that technology continues to outpace e-learning research findings, research should critically explore the value and boundaries of sophisticated application and incorporation of technology (DeRouin, Fritzche, & Salas, 2005) and focus more on integrating it comprehensively with learners’ learning attitude and experiences embedded in the complex contexts.

In organizational e-learning, for example, under what conditions does technology enhance learner motivation to engage in and persist in e-learning rather than hindering e-learning? How do an assortment of technological advances stimulate e-learners’ motivation in professional and dynamic contexts? Since learners are still able to perform competently in training programs where sophisticated technology is not embedded, it is of paramount importance that researchers look at the dynamic in every respect conducive to organizational e-learner motivation and adaption so that desirable e-learning outcomes at all levels would ensue.

Indeed, the construct motivation has yet scantily been examined in organizational e-learning settings. As regards traditional corporate training, research shows that the pertaining
climate for learning in organizations can have impact on learner motivation that affects, to a considerable extent, exactly how and how much learning occurs in training process. For instance, if training is remedially designed or disagreeably associated with past training experiences, motivation to learn can diminish (Salas & Cannon-Bowers, 2000) and perseverance of learning may not endure. In comparison with traditional training protocols, e-learning conduces to more relatively self-directed and independent learning process. Thus, it is likely that a favorable digital context would be critical to cultivate proper motivation that leads to effective learning in an organizational e-learning environment. A few motivation related research concerns with simulation-based training frequently applied in organizations to build specific skills as it engages and motivates e-learners with sufficient practice and interaction (Prensky, 2001). Others relate to enhanced collaborative learning among trainees by communication and corroboration encouraged in e-learning programs, which would positively arouse motivation and commitment (Luor et al., 2014). However, those efforts fail to give sufficient credit to organizational contextual effects that organizational e-learning entails. Cheng et al. (2012) examine the impact of organizational learning environment factors on employees’ motivation to use an organizational e-learning system. The study reveals that employees’ perceived managerial support, job support, and organizational support have a significant influence on their perceived usefulness of the system for personal and social learning (Cheng et al., 2012). That, in turn, mediates the environmental impact on individuals’ motivation to use the system and their intention to use respectively. Nevertheless, the role of motivation in the e-learning process that eventually results in effective learning is explicit and underexplored.

Clearly, whereas the literature implies motivation as important and deserving attention in affecting e-learning effectiveness, much remains to be learned as to what role motivation,
especially intrinsic motivation, actually play in the self-regulated process of organizational e-learning. Accordingly, the survey of literature is directed towards exploring the increasingly popular self-regulated learning (SRL) in the context of the learning organization in that the motivation and adaptation processes, among other things are emphasized in an integrative, contextual, and interactive way in SRL. It opens up an avenue to understanding how e-learners’ experience with specific focuses on motivation and adaptation processes affect the e-learning’s effectiveness in organizational learning contexts and how organizational e-learning can be tapped to align individual and organizational learning and development.

**Adult Self-Regulated Learning in Learning Organization**

The organizational e-learning context impacts learners’ regulation of behavior, cognition, affect and motivation, based on their awareness and constant reflection of these domains susceptible to regulation in the process of learning that occurs in a given organizational context (Wiklund-Engblom, 2015). Such reflexivity in thinking and acting relates largely to being meta-cognitively aware of the learning process and of the learning context that can be taken advantage of for positive influence and effective learning. It also links to adjusting every aspect possible to realize the desirable adaptivity to the external environment. Notwithstanding its great relevance and importance, it is a less salient subject in discussion in the area of organizational e-learning that involves adult learners in workplace settings. E-learning context has its own constraints and capabilities, which would affect the possibilities for SRL processes (Wiklund-Engblom, 2015), and might both turn into opportunities for optimizing individual and collective learning. Enabling learners in cultivating their reflexivity is, therefore, instrumental in the engaging and adapting process for bringing about as many opportunities. Accordingly, attention also needs to be paid to how an organizational learning context can be enacted to facilitate e-learners’
reflexive self-regulated learning (SRL) and development that reversely supports organizational learning and development.

The study is exploring organizational e-leaners’ e-learning experience in a dynamic learning organization. It thus concerns both the psychological aspects of e-learning engagement for learning, growth, and better performance, and the contextual and processual aspects in relation to the impact and implications of dynamic organizational learning grounded in a complex adaptive social system. The concept of learning organization is, therefore, concisely discussed before further elaboration on SRL in such context.

Learning organization, grounded in self-development and action-learning, has been receiving a fair amount of attention and admiration from many organizations and researchers as it carries mighty potential to boost organizational transformation through learning and interaction and a commitment to learning (Gravin, 1993; Jones & Hendry, 1994). In response to the turbulence and complexity in the new era, organizational leaders/managers and scholars alike have long recognized that organizations will gain competitive advantages through constant change enabled by organizational learning (Senge & Sterman, 1992). While organizational planning viewed as institutional learning determines an organization's survivability by having shared mental models changed (de Geus, 1988), it is reflected in change in performance-related norms, strategies, and assumptions (Schön, 1983a). Although definitions of organizational learning and understandings drawn thereof vary, core themes remain resonant. As Senge (2014) cogently expresses in his recent work, the new type of learning-organization practitioner emerging nowadays emphasizes the ability to integrate one's personal learning with broader collective learning. That is, the individual-organizational learning alignment is of particular significance in widening the conceptualization and deepening the understanding of our targeted
learning organization that constitutes an organizational learning environment. Such alignment would focus essentially on how organizational learning is enacted and how learners engage in ongoing learning activities in organizational (including digital) contexts.

**Self-Regulated Learning, Mega-Cognition, Motivation, and Adaptation**

Self-regulated learning (SRL), highlighting “autonomy and control by the individual who monitors, directs, and regulates actions toward goals of information acquisition, expanding expertise, and self-improvement” (Paris & Paris, 2001, p. 89), deserves elaboration in informing the motivation and adaptation processes in organizational e-learning. This is because an adaptive e-learning system embedded in a dynamic organizational environment tends to render learners more conscious of their own thinking, learning, planning, assessing, and motivating processes (Boekaerts & Corno, 2005; Perry, 2006; Winne & Perry, 2000). Self-regulated learning occurs the moment learners adapt their various approaches and processes to learning (Winne, 1997). Therefore, the motivational and adaptational dimensions are interacting in an integral dynamic learning process. For example, research findings, congruent with social cognitive models of SRL (Pintrich, 1999; Zimmerman, 2000) reveal that the use of learning (mega)cognitive strategies can be partially explained by learners’ motivational beliefs and attitudes towards the e-learning process (Artino & Stephens, 2006). As effective learning entails both proper employment of cognitive and meta-cognitive strategies (Garner, 1990), the study naturally explores how learners adapt contextually enabled meta-cognitive strategies to/in a dynamic organizational learning environment.

SRL is “an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior guided and constrained by their goals and the contextual features of the environment” (Pintrich, 2000, p.
It involves deliberate, adaptive processes (Zimmerman, 1990) via which organizational learners not only need to reflect on and regulate how they get motivated and perform, but also have an awareness of when and how they learn (mega-cognition: knowing about knowing). This is effected through inherently catalyzing (Butler & Winne, 1995) feedback loop (Zimmerman, 1990) by which learners self-monitor their learning effectiveness. Paris and Byrnes (1989) well capture self-regulated learners’ characteristics by describing them as challenge seekers with confidence, persistence, and creativity while being realistic and resourceful. Also deserving of merits are their virtues such as positive motivation and miscellaneous mega-cognitive strategies for problem-solving and continual goal attainment (Paris & Byrnes, 1989), which account further for the e-learners’ intrinsic motivation and adaptation processes of particular interest in the current research.

Literature indicates that self-regulation learning can have a positive impact on learners’ performance and achievement (Azevedo, 2005; Azevedo & Cromley, 2004). Specifically, by training students to self-regulate their learning on the use of specific empirically based SRL variables, Azevedo and Cromley (2004) demonstrate that SRL exerts positive influence in facilitating students' conceptual understanding, learning process and performance effectively. Furthermore, SRL is proposed by Azevedo (2005) as an instrumental guiding framework within which to explore the complex dynamic interaction between learner characteristics, learning systems, and learning context. The insight was drawn from an overview of the research conducted by the author and his students on how SRL works to enhance learning about complex topics in computer-based learning environments (CBLEs) adaptive to the needs of individual learners. Granted, the importance of SRL in academic digital contexts has been both theoretically and empirically investigated and evaluated; its implications on adult e-learning in dynamic
organizational settings has not been sufficiently and significantly touched upon by researchers and practitioners.

Clearly, despite the affordance of SRL, many learners might still be reluctant to regulate their own learning process by investing time and energy or other resources in a given context (Boekaerts, 1999). And even if they do, whether their effective individual learning processes and outcomes can be efficaciously transferred to organizational learning is worth questioning. However, as noted by Boekaerts (1999), learning environments can be taken advantage to enhance certain skills involved in SRL and facilitate the learning of new self-regulation strategies. Hence, the line of argument would be extended in the study to e-learning enacted in an organizational learning environment where a specific context can be created and fostered to enable self-regulated e-learning. Such context would illuminate motivation and adaptation processes in an unobtrusive way, which would reflect a healthy interplay between individual learning, e-learning systems and organizational learning.

To facilitate individual e-learning process embedded in organization learning, it requires to fundamentally and consciously link e-learning to the deep-down structuring and organizing of organization learning that projects the ultimate purpose, value, and influence within and beyond an organization. The next sub-section and the final section introduce organizational learning models and adaptive e-learning systems as part of the broad contextual scaffolding of this study.

Organizational Learning, Knowledge Management, and E-learning

There are multiple organizational learning models and perspectives (i.e., Crossan, Lane, & White, 1999; March, 1991; Nonaka, 1994; Schwandt, 1994) coexisting in the contemporary complex organizational world. This sub-section intends to present in depth the target
organizational learning (OL) model of Nonaka’s as well as explore how it interacts with other relevant OL models in relating to individual and collective e-learning in the study.

**Nonaka’s Organizational Learning Model (Organizational Knowledge Creation Theory).** In his framework of organizational knowledge creation, Nonaka (1994) originally used the terms *tacit knowledge* and *explicit knowledge* as the two main types of human knowledge, through the spiral and interactive amplification of which knowledge at all levels (held by individuals, organizations, and societies) can be both expanded and renewed. The key to joint knowledge creation in organizations lies in the way tacit knowledge held by individuals is mobilized by organizations which simultaneously play a crucial part in providing the venue and avenues for creating a “spiral of knowledge” (Nonaka, 1994, p. 34). The spiral comprises four knowledge conversion modes understood as self-transcendental processes (Nonaka, 1998): *socialization, externalization, combination, and internalization* (similar to traditional notion of *learning*). The comprehensive SECI model introduced by Nonaka and Takeuchi (1996), elucidating how knowledge is created and shared in organizations, has been recognized as the bedrock of knowledge creation, conversion, and transfer theory and remains influential within and beyond the domain of knowledge management (KM) in fairly all cultures (Andreeva & Ikhilchik, 2011).

From an organizational culture perspective, there are differences between East and West. While western organizations tend to focus primarily on an explicit-knowledge-oriented approach featuring *combination* mode of knowledge conversion grounded in dominant western culture, Japanese management normally emphasizes the importance of creating tacit knowledge through social interaction within and across different levels (Nonaka, 1994; Nonaka & Takeuchi, 1996). Yet, the tacit knowledge inclined to be preoccupied with experience and action would be much
enhanced by unremitting interaction with counterbalancing aspects of explicit knowledge. Nonaka (1994) therefore asserts that a continual dynamic interplay between tacit knowledge and explicit knowledge is critical to the total quality of an individual's enlarged knowledge (enabled by reflecting-while-experiencing dynamics) that transforms into a unique perspective articulated and augmented through social intercourse and henceforth contributing to the shared experience. Consequently, knowledge conversion in organizational knowledge creation may have a social practice outcome aside from a knowledge outcome (Nonaka & Von Krogh, 2009). As such, Nonaka's OL Model – knowledge creation (SECI) theory – is deemed a suitable and complementary framework to offer the insight and guidance to the study.

**Confluence and resonance with key OL perspectives.** The primary focus of the OL models on mutual learning between the individuals and organizations would lead to healthy convergence between organizational and individual beliefs, habits, and pursuits, and thereby enable the organization to be more adept at addressing change efforts. Those indispensable efforts entail everyone’s active participation and contribution (such as the e-learning systems’ sweeping enactment and seamless incorporation, given the context of the current research). This sub-section will introduce a confluence of perspectives of these influential organizational learning models that lay the foundation for setting out how Nonaka’s OL model in use connects to the study’s conceptual scaffolding and practical renderings.

Highlighting “the individual’s interpretive influence on social systems’ structure” (Schwandt & Szabla, 2007, p. 51), all four models offer constructive insights into how organizational learning is enacted within organizations. This speaks to the intricate balance and concurrent tensions between exploitation of known entities and exploration of new alternatives (Crossan et al., 1999; March, 1991); permeation and spiral dynamism in collective learning
knowledge creation (Schwandt, 1997; Nonaka, 1994); strategic development and renewal (Crossan et al., 1999; Schwandt, 1997); and organization innovation and performance dissection (March, 1991; Nonaka, 1994; Crossan, 1999). In addition, it relates to adaptive, distributed, relational, and complexity leadership, which is indeed complex and dynamic in self-organizing to increase learning capacity and renewal at and across individual and organizational levels.

On a practical level, the Schwandt’s model provides a holistic and integrated perspective of viewing organizational learning behavior. It enables us to explain, understand and appreciate how organizational e-learners collectively engage in the dynamic social actions and human interactions associated with learning, and how the e-learning system manages to adapt to its environment through an innovative capacity that in turn shapes and consolidates the collective cultural values. Hence, it demands the leadership to hone critical cognitive abilities underlying “knowledge management, and systems thinking” (Schwandt & Szabla, 2007, p. 57) in efforts to combat entropy, emphasize the individual’s interpretive influence on organizational structure and collective values, and acknowledge the importance of integrating learning with sensemaking (Schwandt, 2005) to the coexisting system and individuals. In a more strategic dimension, March’s (1991) notions prompt our innovation-centered organizations to make the most of the existing technologies, structures, ideologies, and mainstream underlying values to maintain robustness and resilience while improving collective performance. Simultaneously, it is imperative for organizations to strive to tap into new (in)tangible resources and harness opportunities to develop new technologies and ideologies to strengthen adaptation and innovation capacity and thereby sustain the competitive edge (March, 1996). In striving to efficiently reconcile the internal integrative tensions and clashing demands while adapting to its changing environment, the perspective of knowledge creation (Nonaka, 1994) offers enriched
insight into how the company may consciously tap into the many knowledge creation processes. That is, through the spiral of knowledge conversion, the feedback from the market and wider society is cultivated and cognitive growth (besides physical growth) is nurtured (Nonaka, 1994, 1998). In this light, in order to manage knowledge humanistically the organization needs to enable “knowledge emergence” with visions on what knowledge to create and on how to foster the freely-emerging knowledge and with commitment to ideas, possibilities, experiments, self-reflection, and humanity (Nonaka, 1998, p. 53). Focusing on boundary-spanning attempts (experimentation) based on mutual trust alongside candid experience-sharing and healthy dialogue to induce active learning and innovation, the organization would emphatically address and augment the value of language evolving through conversation and dialogue (Crossan et al., 1999). This can be realized, as Crossan et al. denote, by extending the process of interpreting to interactions and enabling the growth of shared meaning/understanding and coherent, collective action underscored by integrating. Through engagement in unfolding meaning, communicating and clarifying the many intricacies involved, mighty coordination and collaboration would ensue in the complex context, rendering workplace learning, knowledge management, and practices more concrete, understood, vigorous, and self-regenerative.

**Link Between Adult SRL in E-learning Context and Dynamic Organizational Learning**

The prime challenge for organizational e-learning is to address the linkage between employees’ individual development and organizational learning and development (Chen et al., 2011; Tynjälä & Häkkinen, 2005). To achieve a benign, if not optimal, alignment between adult SRL in the e-learning process and organizational learning dynamics is increasingly recognized as vitally important for accounting for learning organizations’ effectiveness, innovation, and adaptability as well as the success of e-learning systems. Shifting to constructivist and
connectivist learning environments where interaction, collaboration, adaptation, and networking are key to collaborative knowledge creation and transfer renders the demarcation of processes and purposes between knowledge management system or organizational learning system and e-learning system insignificant. In Owayid, Alrawi, and Shaalan’s (2013) theoretical review, integration of organizational knowledge management and e-learning process is discussed by developing a KM-EL model and how such integration can be leveraged for effective organizational e-learning and the effectiveness and competitive advantage of the organization is articulated. Employing a similar methodology, Tynjälä and Häkkinen (2005) integrate varied theoretical approaches by reviewing theories of adult learning, workplace learning and organizational learning for the design of workplace e-learning environments. They conclude that the development of successful organizational e-learning should be based upon a combination of research knowledge from theories of the learning organization, sociocultural theories of learning, and cognitive theories of learning (Tynjälä & Häkkinen, 2005).

Although empirical studies of relevance are considered to shed light on pedagogical issues encountered in organizational e-learning, the application and incorporation of e-learning has greatly been examined from a theoretical lens, leaving much room for empirical investigation and insights derived therein. It is more so when it comes to the integrative angle that reflects an organic interaction of individual adult learning and organizational learning. Delving deeper into the realm, a design-based research proposes a performance-oriented approach in organizational e-learning applications, considering the alignment of individual learning needs and organizational interests as well as learning and work performance through organizational mission and vision being translated into tangible targets (Wang, Vogel, & Ran, 2011). Even so, the interplay between organizational learning dynamics and the self-regulated e-learning process is
not further explored during the process of designing a KPI-based e-learning system.

The link built between adult self-regulated e-leaning and dynamic organizational learning would illuminate how organizational e-learners engage in learning and “learning to learn” processes through their experiences towards achieving positive individual learning results in line with higher organizational learning goals and outcomes. To examine e-learners’ experiences in an organizational learning context, the multi-layered and dynamic context needs to be constructed and organized as facilitating and enabling for SRL. Further, it needs to consider the appropriating process of the new learning technology – adaptive e-learning systems.

**Adaptive E-learning Systems and Effective E-learning**

It is evident that the enactment of organizational e-learning is complex and challenging, and demands new ways of thinking about learning now and in the future and how desirable learning contexts from micro- to macro-systems (Bronfenbrenner, 1979) can be established and facilitated. E-learning systems challenge and change our traditional assumptions, attitude, and beliefs in how we create, transfer, value, and evaluate knowledge. Based on the review, e-learning embedded in organizational learning environment needs to be built and incorporated as an integrated and adaptive system that mirrors and enables constructivism and connectivism within the organization.

Furthermore, another perspective in exploring learner motivation and adaptation processes in organizational e-learning environment would be through the lens of adaptive learning systems. This section offers the rationale of adaptivity in e-learning and surveys theoretical classifications of relevant adaptive e-learning systems as inspirational and justifiable departure for the current study.
Adaptivity Enhances E-learning

As posited by Brusilovsky (1996a), adaptivity is tremendously important in state-of-art e-learning due to two factors. First, learners engaging in e-learning systems differ in their historical and cultural background, characteristics, preset learning goals and styles, knowledge base and cognitive capacity, and the dynamic progress of individual learner (e.g. the knowledge and ability improves in the learning process). Second, learners assisted by an adaptive system can efficiently navigate through personalized and often non-linear paths in the e-learning process. A learning system that, among other features, boasts adaptivity commits to providing learner-specific access to the content and process catering to leaners’ learning desires and goals.

As Lee (2014) contends, an adaptive e-learning system is a form of adaptive system that can adapt itself to different circumstances (Fröschl, cited by Lee, 2014). It specializes in the adaptation of learning content, appraisals, and presentation to facilitate and enhance e-learning, creating “an instructional sound and flexible environment” (p. 51) for learners with various profiles (Lee, 2014). In that way, a personalized digital context would be more effective in engaging and motivating individual learners, building dynamic, productive, and meaningful relationship between the system and individuals and among individuals. More importantly, it could tap into individuals’ latent potential and power along with their discretionary efforts. All of the abovementioned cannot be well fathomed and realized in regular non-adaptive e-learning systems that are not sensitive to learners’ needs and changes. Thus, the digital contextual focus needs to shift from a relatively static e-learning content and process to individual dynamics that simultaneously influence and are influenced by the adaptive learning system and interwoven networks of social meaning making within a corporate social-ecological learning system.

In terms of adaptive features, adaptation can be categorized into adaptive presentation
support at content level and adaptive navigation support at link level (Beaumont & Brusilovsky, 1995). Concept-bound architectures rather than concept-unspecific scaffolding are normally employed in adaptive e-learning systems (Hauger & Köck, 2007). Such systems involve fragments of content and links presented adapt not only to the learners’ attributes, prior knowledge, capabilities, learning preferences, etc., which are relatively stable, but also to their changing and ongoing performance and knowledge status, and their dynamic adaptability and motivation, as indicated by Karel and Kléma (2006).

**Theoretical Models of Current Adaptive e-Learning Systems**

This subsection provides a summary of theoretical approaches concerning current adaptive e-learning systems relevant to the context of the study. It is virtually impossible to fully survey the diverse and rapidly-developing e-learning systems, therefore, as paradoxical as it might be, reviewing the different theoretical models that ground corresponding adaptive learning systems is of immense practical value.

Broadly speaking, there are four theoretical approaches to adaptive e-learning regarding theoretical models: the macro-adaptive approach, the aptitude-treatment interaction approach, the micro-adaptive approach and the constructivist-collaborative approach (Mödritscher, García, & Gütl, 2004). Macro-adaptive approach is the most historical approach designed to customize the e-learning instruction based on, for example, learning objectives and delivery system in a macro dimension (Park & Lee, 2003). Aptitude-treatment interaction approach, however, focuses on learners’ aptitudes (i.e., knowledge base and cognitive ability) that instructional strategies adapt to, which provides leaners with more discretionary control over the whole e-learning process (Lee, 2014). While the third model uses micro-adaptive approach considers the performed learner tasks in the adaptation, the final model employing the constructivist-collaborative
approach incorporates collaborative technology into a social and dynamic learning system, leaving learners the most control as to their learning content and process (Lee, 2014). Notably, it is the e-learning systems inspired by this constructivist-collaborative model that grants learners a mature, self-regulated role in the ongoing learning process. It is because they construct and update their knowledge continually through learning tasks that are both subject-specific and meta-cognition-specific (Akhras & Self, 2000), and that require interaction and collaboration within complex networks.

Since the ultimate aim of this study is to understand how effective and optimal individual and organizational learning can be leveraged via e-learning systems in dynamic organizational learning contexts, the theoretical underpinnings and role of specific e-learning systems in individual and organizational learning processes cannot be underestimated. After all, in the organizational context, individuals’ “actions, evaluations, engagement intentions, and plans develop organically, as part of their personal adjustment to the social computing situation, thus technology, biology, and social practices are fused in an interactive synergy” Nahl (2012, p. 171).

**Conclusion and Reflection on the Significance**

Holistically, the three limitations of the existing literature on organizational e-learning justify the current study. First, the perspectives of constructivism and connectivism proffer new insights on exploring motivation adaptation processes of learners self-regulating in a dynamic organizational learning environment where novel learning tools are incorporated. They equally illuminate the way e-learning is comprehended, designed, enacted, and organized in post-modern complex and often abstruse organizational contexts. Second, prior limited amount of inquiries examining the role of motivation, or specifically intrinsic motivation in e-learning have
tremendously focused on distance/online education (e.g., Artino, 2008; Chen, & Jang, 2010; Shroff, Vogel, & Coombes, 2008) rather than corporate contexts, albeit with participants of all age groups. Although learner motivation in e-learning experiences might transfer within these two spheres, one may not automatically assume the dynamic of motivational experiences of organizational e-learners situated in complex corporate arena would not vary. Therefore, investigations into the impact of motivation on organizational e-learning experiences and results in a dynamic organizational environment are warranted. Moreover, the majority of the research examining e-learning’s effectiveness takes place in educational settings as well (e.g., Liaw, 2008; Salas, DeRouin, & Littrell, in press). It is evident that some of the significant findings of previous research may shed light on adult learners’ learning experiences in organizational learning contexts, certain conditions (e.g., organizational e-learning requires brevity, accessibility and applicability to a great extent. Nonetheless, organizational e-learners are involved in comparatively mature, dynamic, and complex learning contexts that would make adult learners engaging in organizational e-learning systems, programs, and activities markedly, if not totally, different than students embarking on educational pursuits (Brown & Ford, 2002). As such, it is momentous to reexamine e-learning effectiveness in organizational contexts independently and exclusively. Ultimately, previous partial, fragmented research concerning organizational e-learning has mainly focus on learners’ individual traits and differences (Roca & Gagne, 2008), instructional design (DeRouin, Fritzsche, & Salas, 2005) and theoretical strategies or technological attributes (e.g., Hodges, & Tech, 2004; Prensky, 2001), to explain learner motivation. Scarce devotion has been made to the organizational learning dynamics that contextualize such e-learning experiences, yielding few practical results and hardly amounting to empirical level. Having been viewed by learning organization theorists as a form of
organizational learning, the value of e-learning can be well harnessed in certain organizational learning culture and milieu (Tynjälä & Häkkinen, 2005). The significance of organizational learning environment factors has also been taken into consideration to create a performance-based e-learning environment (Wang, Vogel, & Ran, 2011) and inform a motivation-directed e-learning model (Cheng et al., 2012). Despite that, studies that have taken into account of the impact of a complex and dynamic organizational learning environment on organizational e-learning experiences in association with learning effectiveness is still embryotic, theoretically and empirically, and limited in their scale and scope. The learning environment here encapsulates an interactive synergy enabled by adaptive learning systems, leaners, and social networking and interactions (Nahl, 2012).

Accordingly, the lack of relevant empirical data leaves it unclear as to how e-learners experience organizational e-learning in a dynamic learning setting; specially, how they are motivated in and adapt to organizational e-learning process, how they align their individual learning outcomes to those of organizational learning, and how their learning attitude, (mega)-cognition, and behavior, combined with complex organizational learning dynamics affect the learning effectiveness at distinct levels. Indeed, the adult learner experiences in organizational e-learning are far more complex than what solely our intuition, cognition, and quantitative knowledge could possibly tell (Wiklund-Engblom, 2015). Hence, empirical studies drawing on an integration of perspectives of cognitive science and complexity science through a relational-processual lens to understand the e-learning experiences of organizational e-leaners is atypical yet critical. In addition, examining how the effective e-learning mechanism is designed, delivered, and facilitated in a dynamic organizational learning environment with reference to associated organizational learning theory is practically unprecedented. A research of these
considerations and capabilities would be contributive to the current knowledge base and practice.

Taken together, these factors point to the dire need to closely examine the organizational e-learning effectiveness in a dynamic organizational learning context today and ways organizations can explore to achieve and sustain the learning effectiveness at different but equal, interwoven levels in face of the complex business world. Thus, the qualitative study is aimed at understanding more about the dynamic interaction, especially regarding the motivation and adaptation processes, between individual learning and organizational learning. This goal was meaningfully fulfilled by exploring the organizational e-learners’ lived learning experiences embedded in the organizational learning background from a broad perspective. It, to a certain extent, informs how we as scholar-practitioners can design effective e-learning mechanisms that facilitate continuing intrinsically-motivated learning experiences, learner adaptability and navigation process, interaction and collaboration. All is associated with the outcome of a conducive organizational learning environment to embed motivational, effective and significant e-learning experiences.
Chapter Three: Research Design

Our time has witnessed the rapid advancement of organizational e-learning applied even to the far corners of an increasingly globalized world, amazing and challenging practitioners and researchers with its potential to reconstruct the organizational learning and training landscape. It is, therefore, imperative to come to grips with organizational e-learning dynamics and effectiveness in the complex organizational settings embracing diversity and mobility. In that spirit, the study explores the e-learning experience of organizational e-learners in a dynamic learning environment within a multicultural consultancy in Hong Kong in hopes of gaining insights into how such an organization can enable a conductive environment. The enabled environment would facilitate highly motivated self-regulated learning in the ongoing adaptive process that would in turn enable a healthy dynamic of organizational learning. The overarching research question guiding this inquiry follows: What are the lived experiences of organizational e-learners related to motivation, adaptation, and interaction in a self-regulated yet interactive e-learning environment and what is the influence of e-learning on the professional and organizational performance of organizational members?

This chapter sets out to associate the constructivist-interpretivist paradigm in qualitative research with the study in a macro-level perspective. The remainder attempts to explicate how a meso-level research approach – Interpretative Phenomenological Analysis (IPA) – addresses the particular phenomenon as an ideal strategy in the context of e-learners as members of a corporate organization. As the chapter develops, multiple critical aspects concerning the specific research design and methodology are discussed, which leads to a culminated discussion on how the use of IPA shaped the type of research and interview questions asked, as well as the form and procedures of data collection and data analysis. The final three sections speak to the validity,
trustworthiness, and humanity of the study through anticipated details on how the human data is to be collected, organized, transcribed, and interpreted.

**Qualitative Research Approach**

Of a plethora of paradigms introduced and incorporated throughout research history, the architecture of research with three pillars of (post)-positivism, interpretivism, and critical theory succeeds in casting an enduring scholastic spell, with the latter two inextricably entangled with qualitative inquiry. These paradigms serve as the overarching conceptual framework, conceptualizing and operationalizing the research. Enunciating a paradigm that tallies with the research topic and goals is thus eminently instrumental in that it unravels the assumptions and implications that derive from the taken-for-granted worldview (Butin, 2010). The constructivist-interpretivist paradigm, serving as the conceptual base for qualitative research, best aligns with the research question and purpose of this study, for the study aims to explore the dynamics and intricacies of how e-learners’ perceived learning experiences might impact effectiveness in a dynamic organizational environment. Comprehension promotes integration which facilitates application.

**Constructivism-Interpretivism**

In stark contrast to (post)-positivism, this *humanistic* paradigm, arising from and influenced by cultural anthropology in the early twentieth century, purports to be understanding from the inside by *walking in others’ shoes* to make sense of the social phenomenon. To achieve that, interpretivists immerse themselves in the context they are examining and excavating while reflecting on the hidden meaning through a prolonged process of researcher-participant interaction. The hypotheses-generating, rather than hypotheses-testing nature of interpretivism (Merriam, 1991) extols trustworthiness and authenticity as its quality standards in parallel
distinction from that of (post)-positivism (Guba & Lincoln, 1989). The researcher’s positionality and subjectivity is stressed in the hermeneutic and progressive process of interpretation espoused by the interpretivist position, thereby enriching the reflexivity and reflectiveness of interpretivism. Understandably, the constructive-interpretive paradigm lays the compelling ground for this qualitative research.

As a paradigm is a “set of interrelated assumptions about the social world which provides a philosophical and conceptual framework for the organized study of that world” (Filstead, 1979, p.34), constructivism-interpretivism would better be understood as well through philosophical lenses. Heavily influenced by Kantian theory that emphasizes understanding and meaning making in social science, and contrary to (post)-positivism, it embraces multiple and constructed reality as its ontology, dialectic and subjectivism as its epistemology; the axiology is conceived as value-laden, and its rhetorical structure as personalized and engaged (Ponterotto, 2005). The methodology predominantly relates to qualitative research methods such as in-depth interviews and participant observation (Ponterotto, 2005). Noteworthily, unlike (post)-positivists drawing on the hard science and infallible data, constructive-interpretive researchers aim to establish ethically sound rapport with the participants, elucidating trustworthy and authentic accounts carefully construed of the participants.

**Rationale for the Use of IPA**

Given the research purpose and research questions, Interpretative Phenomenological Analysis (IPA; Smith, 1996) is deemed the most desirable methodological approach to the inquiry. The particular organizational learning context for the e-leaners who are the participants of the study is in line with the IPA approach in respect to its emphases and main features, such as focusing on the individuals that share a common experience and making sense of how they
interpret their experiences (Larkin, 2013). It provided the common setting and parameter by which the participants were selected and interviewed for excavating their interpretation of individual experience that belongs to themselves within that context. Ultimately, IPA proved to be instrumental in understanding organizational e-learners’ meaning making (process) in terms of their lived experiences and henceforth the researcher’s sensemaking of that very process.

**Philosophical Underpinnings and Overview**

IPA has been heralded by qualitative researchers at large, since its recent and prominent inception initiated by Psychology Professor Jonathan Smith from University of London, as an accessible, flexible, and applicable medium yet able to unpack life’s complexity and subtlety rigorously (Larkin, Watts, & Clifton, 2006). Having been established and embraced as a viable qualitative methodology commonly used in psychology (Smith, 2011), IPA knows no bounds in the social science arena (Larkin & Thompson, 2011; Smith, 2011) in fulfilling its potential to examine and explore, understand and appreciate, articulate and communicate the experiences, perceptions, and interpretations derived from its participants.

IPA, concerning circumstantial exploration of individual lived experience, the meaning of experience to individuals and how they make sense of that experience, is theoretically rooted in phenomenology, hermeneutics and idiography (Smith, 2011), three overarching and interplaying philosophical underpinnings that are examined systematically as follows.

**Phenomenology.** With phenomenology as a philosophical movement (Larkin, Eatough, & Osborn, 2011), conversation (Glendinning, 2007), or dialogue revolving around issues of lived experience, phenomenological philosophers converge on the nature, necessity, and nexus of the experiential focus yet diverge on the mode of experiential examination (Smith, 2011). As much as such a dialogue would embrace diversity and multiplicity unlike no other – by accommodating
a host of inherent, distinctive variances – recurring notions, subjects, and concerns have
constantly emerged throughout the dialogue. In this regard, a brief review of the dialogue that
relates to two developmental phases is provided.

*Transcendental phenomenology.* The philosophical work by Edmund Husserl (1859-
1938) could be cogently identified in the earlier phase of phenomenology, emphasizing the effort
in “[getting] to the truth of matters, to describe phenomena, in the broadest sense” (Moran, 2000,
p. 4), which is recognized as “transcendental phenomenology” or “descriptive phenomenology”.
Husserl’s approach to scientific inquiry fiercely advocates that the phenomena under
investigation be examined only as themselves (as whatever appears) through *phenomenological
reduction* or *bracketing*, that is, suspension of all prior assumptions and transcendence of
“everyday qualities” (Larkin et al., 2011, p. 322). Achieved by compelling and conscientious
phenomenological account of the world “as it manifests itself to consciousness, to the
experience” (Moran, 2000, p. 4), this approach is regarded as precursory in the scientific research
history (Larkin & Thompson, 2011; Smith, Flowers, & Larkin, 2009). For IPA, the reduction and
bracketing practice in transcendental phenomenology, however controversial, has been serving to
cultivate qualitative researchers’ dedication to open-mindedness, reflexivity, and relatedness-to-the-world (Larkin et al., 2011).

*Hermeneutic phenomenology.* Martin Heidegger (1889-1976) and Merleau-Ponty (1908-
1961) are key figures appearing in the latter phase of the phenomenological dialogue believing
that “understanding is always from a perspective, always a matter of interpretation” (McLeod,
2000, p. 56), which marks the presence of influence of *hermeneutic phenomenology* or
*interpretive phenomenology*. Heidegger’s potent arguments are centered essentially upon
concepts of *person-in-context* that the personal and the social are intertwined and inter-
constituent and *intersubjectivity* that accounts for the human ability to arrive at a more dynamic, communicative, interactive, and context-relevant *worldly* understandings. Yet, Merleau-Ponty (1962), while agreeing upon the person-and-world relatedness, pushes the embodied situatedness to a higher level. Evident in IPA is the extensively overlapping embodiment and *intersubjectivity*.

Taken together, the two phenomenological philosophies can be distinguished by Husserl’s obsession with people’s psychological processes manifest in their perceptions and consciousness from Heidegger’s (1962) and Merleau-Ponty’s (1962) emphasis on an embodied sense of relatedness, situatedness and intentionality in which the world/the context is underlined. The latter stresses that the lived world/context embodies an array of both physically and inter-subjectively grounded possibilities and meanings (Larkin et al., 2011). Undoubtedly, the philosophical dialogue concerning phenomenological inquiry illustrates the ways complex meanings are given birth from interpreting the straightforward or well-wrought experience. After all, IPA acknowledges that despite all the efforts we are on our way to be a step closer (rather than further) to the experience (Smith, 2011).

**Hermeneutics.** The second philosophical root of the IPA design is grounded in hermeneutics, the theory of interpretation. As implied in the name of the later phase of phenomenology – *hermeneutic phenomenology*, the hermeneutic essence was instilled in phenomenological philosophy by Heidegger who views the person (participant or researcher) as “always and indelibly a person-in-context” (Larkin et al., 2011, p. 324) engaging in interpretive activities (Smith, Flowers, & Larkin, 2009).

This underpinning demands the IPA researcher to adopt a more palpable interpretative approach rendering the second-order account in connection with a more sweeping social,
cultural, and theoretical context (Larkin et al., 2006), in order to offer a “critical and conceptual”
(p. 104) interpretative commentary on participants’ own sensemaking (Smith & Osborn, as cited
by Larkin et al., 2006). It is interesting to note that the only entrance made available to the
participants’ inner world is from their own telling (the act of making sense of their own
experiences). This adds a layer of complexity to the reflective, analytic process that entails
examining others’ experience instead of one’s own while the researcher strives to interpret and
make sense of the participants’ shared narratives (their sensemaking “products”). It is the process
of sophisticated “engagement and interpretation” of the researcher that derives from the “double
hermeneutic” (Smith, 2011, p. 10) engagement (or “two-stage interpretation process”, Smith &
Osborn, 2007, p. 53) that makes IPA take on a far more dynamic and interactive hermeneutic
nature. Naturally, hermeneutic analysis involves the precise understanding of textual meaning
subject to robust interpretation and manifestation (Moustakas, 1994) that illuminates the
oftentimes inexplicable and inextricable phenomenon. The complexity of IPA inquiry evocative
of a combination of “an empathic hermeneutics” and “a questioning hermeneutics” (Smith &
Osborn, 2007, p. 53) is lively captured by Moustakas (1994) postulating that such hermeneutic
process should not only address the full description and interpretation of the *text* but also pursue
the possibility of multiple interpretations brought to fruition.

**Idiography.** Broadly and principally pitched at the level of idiography (as opposed to
nomothetics, see Lamiell, 1998), originally linked to the study of specifics and individuals
(Larkin et al., 2006), IPA is devoted to carefully analyzing each and every case intimately related
to individuals involved in specific situations at a particular stage of their lives, in its complexity
and subtlety. This accounts for a decent balance achieved between “convergence and
divergence” (p. 10) in the process of detailed analysis in which not merely emerge shared themes
and patterns but uniqueness is respected and nurtured by underscoring how in particular those themes apply to individuals (Smith, 2011).

In another dimension, IPA is idiographic in its resolute commitment to deviate from the universal principles identified in traditional empirical research (Breakwell, Smith, & Wright, 2012). Rather than holding a priori assumptions and claims on participants’ behavior and experiences, as Breakwell et al. (2012) notes, IPA researchers are positioned to allow for any new learning and inspiration emanating from participants’ authentic, narrative account of their experiences and the emerging generic themes as a result of researchers’ own interpretation.

Conclusion

IPA has developed as a set of core philosophical ideas (e.g., a phenomenological, hermeneutic/interpretive, and idiographic analysis). Rather than following suit in seeking the essence of the phenomenon under investigation, IPA as the “new phenomenology” (albeit having been criticized for the essential deviation, (see Dowling, 2005) concentrates on the experience in a manner in which “it manifests itself to consciousness” (Moran, 2000, p. 4). Notably, the hermeneutics’ embedment ushers IPA into a new terrain where reflexivity reclaims its centrality by embracing a social science perspective of intersubjectivity and embodiment both philosophically and methodologically (Dowling, 2005; Larkin et al., 2011). True enough, “[r]esearch is not truly phenomenological unless the researcher’s beliefs are incorporated into the data analysis” (Donalek, 2004, p. 516). In that sense, IPA appears to be the “true phenomenology” in harmony with the philosophical movement towards a territory deep rooted in the postmodern society that inhabits the “persons-in-context” and meanings constantly created and (re)constructed through interpretation. With IPA approach, as distinctive as it is, integrating “the rich description of a phenomenological core” and “interpretive range and flexibility”,
qualitative inquiry under the auspice of IPA could be immensely potent insofar as it is actualized with “the requisite care and commitment” (Larkin et al., 2006, p. 103-117).

The rest of this chapter examines closely the issue of rigorous and ethical data collecting and analyzing processes in the IPA study, and how this translates into much-enhanced reason, rigor, and trustworthiness. Meanwhile, the process provides a detailed report on how the research design and methodology appropriately answers the research question to address the complexities and nuances of the identified problem of practice.

**Participants**

The idiographic underpinning subtly undergirds the IPA research process in which a purposeful and broadly homogenous sampling method is adopted with comparatively small sample size in a way that allows for attempts at the explication of personal phenomena (Larkin et al., 2006; Smith, 2007), and each case is approached and investigated individually and meticulously. Consistent with the spirit of IPA, this study employed semi-structured interviews with eight individuals recruited by purposeful sampling (Bryman, 2008), individuals who were able to inform the research question (Creswell, 2013).

**Demographics**

The researcher engaged with 8 professional staff (approximately 28-55 years old, from different department across different levels including the executive level and with varied cultural background who were currently involved in e-learning programs. The e-learning programs, in the format of a ready-installed learning system with access to internet resources and various multi-media functions, were outsourced from a third professional party and advanced by the consultancy’s department of Human Resources Development, and supported by the top management. Although the staff were not mandated to complete certain courses or
achieve certain levels, they were encouraged to learn and use the system regularly to find out ways by which to benefit their effectiveness at work. HRD team were acting as learning facilitators in the process whenever needed. Considerations on participants’ background diversity in relation to positions, scope of work, and nationality are based on IPA’s paradoxical mission that allows for both similarities and differences that unfold in an individual narrative of the homogenous sample (Smith et al., 2009). A mixed gender sample was used as workplaces nowadays value the input and contributions from both genders. The criteria set forth regarding culture, age and gender was to ensure the maturity, diversity and equality of the participants, and equally significant impact they had on the learning organization, which served to increase the validity of the findings.

**Sampling Procedures**

Purposeful sampling, typical in IPA research, was employed in that it elicited participants that experience a shared, particular phenomenon (Smith et al., 2009). Participant recruitment process involved the following sequential steps:

1. A recruitment email (see Appendix B) was sent to all the executive staff who were participating in the rigorous e-learning program at the research site (specified in the next sub-section). The email effectively drew staff’s attention and interest in knowing more about the study itself and their e-learning engagement through concisely and enthusiastically introducing the study to them, and therefore earned their favorable responses.

2. A targeted engagement email (see Appendix C) was sent to a narrow-downed number of members within different departments who assume more training obligations and whose
learning experiences would, to a large extent, benefit the study. This communication called for their commitment in sharing and learning in the study.

3. A follow-up email (see Appendix D) was arranged to reach all respondents that showed enthusiasm in participating in the study. Aside from expressing gratitude, it shared more detailed information about the study, along with the consent form (see Appendix E) and the interview guide (see Appendix F), and the interview schedules. Any additional questions and doubts were encouraged to be put forth before the actual interview sessions.

Participants were not offered any gifts as incentives to take part in the interviews that constitute and inform the study.

**Research Site**

The research site selected for this study was a multicultural consultancy where a large-scale organizational e-learning program was in full swing. All professional organizational members in each department and across each level were involved and encouraged to learn. The researcher sought and gained approval from the organization’s Human Resources manager who reports directly to the management for interviewing a few volunteered members. This firm, by providing the organizational context of a fast-paced learning environment and up-to-date e-learning systems and programs, was ideal for the study that aimed to explore e-learners’ motivation and adaptation dynamics through their shared yet distinctive lived experience.

**Organization background.** The research site was a Hong Kong-based consulting company that is a business think tank offering a wide range of tailored business solutions and marketing and rebranding strategies for corporations and institutions all over the world. With
a short history, the culture of the company reflects Western and Eastern values, with Western management and diverse staff of both Eastern and Western background. As communicated on their website, the company embraces individualism, liberty, and democracy while equally underscoring piety, relationship, and virtue. This is evident on their website and within the internal credo printed and respected by their management and staff. Here is an excerpt of the credo:

We see caring, integrity, and excellence as our sustainable source of wealth. We value people as the priority, for we believe that every change effort and growing success is driven by the people, their talent and their devotion to delivering both process- and result-oriented services through embracing diversity and creativity, and operating conscientiously towards our community.

Striving to guarantee quality services and establish sustainable partnerships, the company believes that local and global success relies not merely on the know-how cultivated internally, but the know-who nurtured externally. Whilst boasting state-of-art technologies and expansive networks, the organization’s competitive edge and primary emphasis consists in its intellectual assets, a team of elites by virtue of their professional and academic backgrounds. They work collaboratively as work units or task forces on a project-by-project basis, enjoying a certain level of discretionary power at work.

The integration of expertise knowledge, resourcefulness, and global network provides a basis on which innovations are being developed and adopted, (human) resources tapped into, opportunities constantly created, and business further expanded. The organization’s notion of embracing various innovations enables it to actively exploit new technologies and methodologies that cohesively replenish the repertoire of organizational resources. With the mission and vision
being articulated – “to be the most caring and resourceful business partner that inspires and empowers our customers” – shown on their website, these espoused values altogether serve as the company credo, permeating the entire organization culture. The company maintains that gaining insights and excellence through experience in partnering with different countries and across different realms, and the ability to view things from varied perspectives and respect people from various cultures is precisely what makes it unique and invaluable to its customers and employees. The organization is essentially acting as a major contractor for local (Asian) projects as well as a sub-contractor for larger projects global-wide. With the appropriate positioning, a poised multicultural worldview and an appreciation of innovation, it is continuously and humbly evolving and obtaining recognition in its own right under the fierce competition in the global arena.

Interview site. Interviews were arranged in a quiet and cozy place opted by and convenient for participants and to facilitate spontaneous discussion. Confidentiality was guaranteed, and articulated during the discussion of the consent form (Appendix E).

Data Collection Procedures

IPA research entails a rigorous and concrete analysis of the verbatim accounts provided by a relatively small number of participants primarily through semi-structured interviews, focus groups, or other forms of narrative medium like diaries and personal accounts (Larkin et al., 2006; Smith, 2007). The following procedures were followed.

Methodology

Semi-structured interviews involve fewer constraints and more flexibility for researchers to establish rapport, probe and follow interesting areas or concerns that arise, and assume a facilitating and guiding role; they are deemed as the “exemplary” and the “best” (Smith &
Osborn, 2007, pp. 57-58) data collection method for IPA. It is because IPA researchers inexorably assume a vigorous responsibility that prompts them to intimately (and instantly) familiarize with the participants’ inner worlds while adopting an “insider’s perspective” (Conrad, 1987). With the approval from the Northeastern University Institutional Review Board (IRB), the study therefore, employed semi-structured interviews. The interviewing process was engaging, collaborative, and always treated the participants the “primary experts” (Alexander & Clare, 2004, p. 82) of their own experiences in their psychological and social world. This is aligned with the rationale and purpose of IPA research “to explore, flexibly and in detail, an area of concern” (p. 53) and illuminate the participant’s experience related to the overarching research question instead of attesting to the researcher’s a priori hypotheses or assumptions (Smith & Osborn, 2003). Although such method might have granted researchers less control over the process and generate complex data challenging for analysis (Smith & Osborn, 2007), the small number of target participants in fact offered more nuanced and enriched perspectives and insights (Smith & Osborn, 2003).

**Procedures**

Seidman (2012) offers some serious guidance in his model of in-depth, phenomenological interviewing. The essence of the “three-interview series” (Seidman, 2012, p. 21) was embraced to honor the phenomenological emphasis on exploring the meaning of participants’ experiences in the context of their lives, not by actually carrying out three consecutive interviews but by embodying the essential underpinnings in one comprehensive interview following one brief warm-up conversation. The researcher worked within a threefold conceptual interview framework: established the context of participants’ experience, allowed participants to reconstruct the details of their experience within the context that embedded it, and
encouraged the participants to reflect on the meaning of their experience (Seidman, 2012). The practical execution also referenced Robson’s (2011) five-phase framework – “introduction, warm-up, main body, cool-off and closure” (p. 284).

The vast majority of IPA studies published employ face-to-face interviews, (Brocki & Wearden, 2006), which is crucial especially for semi-structured and unstructured interviews (Alsaawi, 2014). The initial interview questions situated in and guided by the overarching research inquiry (Jacob & Furgerson, 2012) were developed prior to the interview and subject to refinement through the ongoing process. As recommended by Dörnyei (2007), a pilot session was arranged in advance for testing and evaluating the questions, among other adjustable issues. Open-ended questions were essentially used to enable interviewees to “elaborate and explain particular issues” (Alsaawi, 2014, p. 151). During the approximately 60-minute in-depth interview, a cozy and relaxing environment at the participant’s choice was provided as the interview venue to make participants feel comfortable and predisposed towards open communication. The rationale and purpose of the study and the interview protocol that facilitated the data generation were shared, guaranteed confidentiality articulated, and the informed consent was presented for the participants to take part in the interview. The possibility of necessary follow-up sessions was explained in a succinct way (Alsaawi, 2014; Jacob & Furgerson, 2012).

Throughout the process, appreciation was expressed for the participants’ engagement in the study and interest was shown in their narrated stories that bore significance to the research questions. Prompts and probes elicited more thorough but targeted narrative. Given that concerns of dual relationships, appropriate boundaries, and ethical dilemmas exist in all interviews, it was incumbent on the interviewer to heed and acknowledge the positionality and ethical issues prior to the interview process.
The interviews were tape-recorded and were done in English, and the interview data was transcribed after each interview, with pseudonyms used to protect individual identity (Creswell, 2013). The transcripts, along with the audio files, were saved in an encrypted folder on the researcher’s PC to which only the researcher and adviser have the access, restricted to this research. Participant feedback was sought on the transcripts and interpretations via email, as a way of member checking (Creswell, 2013), to maximize the validity and trustworthiness of the study.

**Data Analysis**

Research shows that a fair amount of latitude in variation is granted and evident throughout the IPA analytic process. It is plausible, however, that the “halo” over the steps depicted are eclipsed in comparison with other qualitative methods, which leads to an understanding of IPA as a perspective researchers have developed to achieve their qualitative data analysis (Larkin et al., 2006). This section focuses on the analytical methodology associated with IPA research and the thematic coding approach adopted in this IPA study as well as the periphery issues it raised.

**Methodological Grounding**

As required by the IPA approach, the researcher carried out the reflective and inductive analytic treatment of each data set (each interview transcript) followed by exploring patterns across various sets of transcripts and making sense of the patterns and themes evident. The analysis unfolded while patterns of meaning were constructed after first and second coding (Saldaña, 2013), and articulated in a thematic format (Osborn & Smith, 1998; Smith et al., 1999; Smith & Osborn, 2007).

With the process directed towards answering a target research question, Smith (1999) is
inclined to focusing on “themes and connections available within the text” (p. 411) more inductively. In order to do justice to participants’ meaning-making and meanings while learning about their psychological and social world, the IPA researcher must stay engrossed in the text and the process of interpreting. As Smith and Osborn (2007) note, before beginning with specific examples, the researcher should look for themes, connecting themes, and gradually reach “general categorization or claims” (p. 67), guided by idiographic thinking. In the same spirit, Pietkiewicz and Smith (2014) articulate the analytical process that involves “multiple reading and making notes,” “transforming notes into emergent themes,” and “seeking relationships and clustering themes” (pp. 9-12). Along similar lines, Turner, Barlow, and Ilbery (2002) adopt an open-coding technique borrowed from grounded theory (Strauss & Corbin, 1990) in their analysis that is typically “organized around themes which emerge from the transcripts rather than pre-determined constructs” (Turner et al., p. 289). The approach aims to curb premature interpretations and conclusions based on literature of relevance (although certain aspects of the interpretative analysis might have been informed by prior intense engagement with existent theoretical constructs, Larkin et al., 2006).

The essence of analytic methods systemically deployed in IPA research is to expose, explicate, and enunciate poised convergence and divergence embedded in the data sets composed of individual compelling stories. The analysis strives to inform and illuminate the research question surrounding the phenomenon in examination with a rich interpretation of the data that is sufficiently concrete and subtle to be informative and inspiring in and of itself. That entails not merely demonstrating themes in common but also underscoring the unique way in which the shared themes account for individuals’ experiences (Smith, 2011). Idiographically speaking, the concentration on the condensed narrative data in the iterative and dynamic, cross-sourcing and –
referencing analysis process (Smith et al., 1999) might as well unveil “potentially subtle inflections of meaning” (Collins & Nicolson, 2002, p. 626). On one hand, as Moustakas (1994), Larkin et al. (2006), and Smith et al. (2009) denote, the IPA researcher is required to present in-depth description of participants’ interpretation of their experiences including implicated objects, events, situations and psychological states (Fade, 2004). On the other hand, the researcher should embrace the interpretive discretion and freedom by applying dual interpretation grounded in double hermeneutic to contextualize the recounted experiences historically, culturally, physically, and psychologically.

In a broad sense, the analytic methodology of IPA reflects the reflexivity of the qualitative researcher in impacting and enriching the research (either the process or the final “product”) in a “more speculative” (Larkin et al., 2006, p. 104) yet significant way. Issues anchored in reflexivity may relate to how to balance the researcher’ iterative, informed reflections on positionality, assumptions, and specific role in cyclical dynamics of analysis with responsible subjectivity, conscientious spontaneity, and imaginative agility that may or may not spark authentic and diverse interpretations from the audience.

**Thematic Coding Approach and Process**

Among the three common analytic approaches articulated by Robson (2011), the thematic coding approach is perceived as the most applicable in social research given its popularity, and guided the data analysis process of the study. The thematic coding process involves five phases which are “(a) familiarizing yourself with your data; (b) generating the initial codes; (c) identifying themes; (d) constructing thematic networks; (e) integration and interpretation” (Robson, 2011, p. 476). This is primarily in agreement with the six thematic analysis phases postulated by Braun and Clarke (2006), the essentials of which were equally be meshed into the
process. The data analysis approach was congruent with the IPA methodology applied and the research question posed (Wimpenny & Gass, 2000).

**Phase one.** The researcher delved into the data collection, becoming familiar with the data and transcribing verbatim. The researcher kept reading, revisiting, and reviewing the transcripts until preliminary ideas, concepts, or notions were drawn and noted down.

**Phase two.** The researcher systemically zoomed in to heed interesting contents, features, and symbols across the full set of transcripts and generated initial codes (Robson, 2011), and zoomed out to collate data that bore relevance to each and every code.

**Phase three.** The researcher started to search for themes that are representative in scope, based on the codes developed in phase two, which was followed by gathering and assimilating developed codes into those themes being incubated. Then the researcher again extended the focus over onto the whole data set to collect relevant data falling under each and every initial theme.

**Phase four.** The researcher revisited the emergent themes and ensured that their consistency and coherence with the coded data sets and the larger data landscape, before constructing thematic networks (Robson, 2011) or a thematic map (Braun & Clarke, 2006). In the reiterative analyzing process, the names and meanings (both denotations and connotations) of themes were identified, defined, and refined to enable the presentation of a more coherent analysis.

**Phase five.** The researcher got down to composing the final report that involves not merely the ongoing and ultimate integrating and interpreting (Robson, 2011), but also selecting compelling extracts and their final analysis and “relating back of the analysis to the research question and literature” (Braun & Clarke, 2006, p. 87).
Specifically, the writing-up of the findings elucidating the underlying meanings inherent in participants’ experiences was, to a certain degree, an extension of the analysis in translating the finally derived themes into a narrative and coherent account so that the themes were explicated and refined and analysis stretched and augmented (Smith & Osborn, 2007). A juxtaposed presentation of researchers’ expanded interpretation and commentary with corresponding and supporting extracts from the transcripts was attempted while establishing informed links back to the literature (either as a stand-alone “discussion” section or integrated with “results” section is advised by Smith and Osborn, 2007). All the steps constituted a good qualitative research that values the emergent, dynamic, and reflective process.

The IPA researcher, while engaging in the analysis, is inevitably and inextricably entangled with this balancing work between representation, description, and interpretation as well as contextualization; it is through this dimension of analysis that IPA’s power as a qualitative research approach that interacts with different manifestations of wisdom shines out (Larkin et al., 2006). The IPA analysis emphasized intimate and dynamic interaction between the researcher and the narrative/text – with the researcher striving to codify and understand participants’ accounts of experience while simultaneously deploying the researcher’s own “interpretative resources” (Smith et al., 1999, p. 223). The “personal analytic work done at each stage’ (Smith, 2004, p. 40) largely predetermined the level of quality and decency of the final presentation of analysis.

Through unveiling, confronting, making sense of and coming to terms with the shared or discrepant perspectives on the problem of practice along with the deepened recognition of issues of positionality and ethics, it is believed that the upside would ensue – “the human part of the story (exposed)” (Jacob & Furgerson, 2012, p. 1) and nuances thereof would unfold and shed
light on and expand the researcher’ perspective and deepen the understanding of the problem of practice, the organization, and its people.

**Considerations of Trustworthiness**

The interviewing process and reflective and reflexive analysis are critical to the rigor and aesthetic flair of a qualitative study rooted in interpretative paradigm. The way the participants were engaged, data collated and processed, and findings and insights presented contributed decisively to the trustworthiness of the study and the receptivity of the audience.

**Trustworthiness**

The fundamental purpose of the study is to understand the lived e-learning experiences of organizational members in terms of motivation and adaptation in their self-regulated and interactive learning processes. It follows naturally that the individual, subjective experience and the exploration of it is at the center of the stage. Therefore, the rigor and trustworthiness of the qualitative study, rather than issues of validity and reliability in the positivist paradigm, is of paramount importance. Four aspects/criteria, initially suggested by Guba (1981), as to how to ensure the study’s credibility, transferability, dependability, and confirmability were rigorously considered.

**Credibility.** Concerning the congruence between the findings and the reality of the phenomena under scrutiny, credibility is argued to be a key criterion to ensure in maintaining trustworthiness (Shenton, 2004). Among the many strategies proposed by Shenton (2004) for the qualitative researcher to adopt in response to this issue, three were systematically implemented in the study. First, member-checking as the single most important construct (Lincoln & Guba, 1985) was used to increase the study’s credibility. The researcher arranged to send out the transcripts of the interviews to corresponding participants right after the transcription for their
review, and requested their feedback on whether the texts generated match what they intended to convey at that moment. Moreover, the process involved a verification of the emerging patterns, themes, and potential interpretations observed and developed by the researcher during the interview by seeking participants’ comments and rationalization given such observation. This served to develop a formative understanding of the data given its contextual meanings (Shenton, 2004). Second, sustained or prolonged engagement (Lincoln & Guba, 1985) with participants was initiated in order for the researcher to gain an informed and saturated understanding of the phenomenon in examination and the particular setting, and more importantly, to establish a relationship of trust with participants. In addition, the researcher used probes and iterative questioning to elicit detailed response while heeding any possible contradictions and discrepancies that might emerge (Shenton, 2004). Thus, verified invalid data was discarded and multiple explanations were provided to account for any contradiction that might lead to interesting insights.

**Transferability.** The criterion concerns the extent to which the findings of the study can be held accountable for other situations. Although there’s much debate as to its level of importance considering the specific context, environment, and individuals involved in a qualitative research, the prospect of transferability is still being embraced (Shenton, 2004). To enable adequate transferability to the audience, the researcher offered the contextual and procedural information about the project in substantial detail (Lincoln & Guba, 1985). “Thick description of the phenomenon under scrutiny” (Shenton, 2004, p. 69) that relate to the actual situation and context in particular would not only enhance credibility but also enable the overall conclusions to be drawn transferable to other contexts.
Furthermore, in the course of data analyzing, strong logical links were established in terms of evidence-warrant-claim and the writing was asserted in mediating between varied meanings and presenting the researcher’s interpretation of the meaning of participants’ lived experiences (van Manen, 1990). Hence, the transferability is augmented.

**Dependability.** An intimate connection between credibility and dependability is emphasized by Lincoln and Guba (1985). To ensure dependability in a more direct way, the researcher did an in-depth description of the processes to enable the audience’s informed understanding of the methods being employed and the effectiveness of the methods and the entire process of inquiry. An internal audit was attempted where the research design and its implementation, the operational details of data collection, and a reflective assessment of the project was strategically included, as advocated by Shenton (2004). However, an emergent design (Creswell, 2007) is essentially required in qualitative research whilst the researcher would balance the flexibility (of letting interviewee talk in any direction which may generate surprisingly valuable data and) the constraints (of preventing being lead too far to something tangential to the main inquiry). Thus, it is the researcher’s responsibility to balance the dynamic of the qualitative emergence and dependability

**Confirmability.** The concern of confirmability is the qualitative counterpart of that of objectivity in positivist research (Shenton, 2004). While the transgression of the researcher’s subjectivity is inevitable (Patton, 1990), a few steps were taken to confirm that the findings of the study reflect participants’ real-time experiences. The essence of the steps is two-fold: detailed portrait of the methodological procedures through which the emerging data remained accounted for, and the researcher’s openness in terms of her beliefs that underlined the decisions made and approaches used and the conceivable constraints and weaknesses (Huberman & Miles, 2002). To
accomplish that, a reflective journal was kept, as suggested by (Larkin & Thompson, 2011; Smith et al., 2009), for recording the step-by-step research process – the “audit trail” (Shenton, 2004, p. 72) – from which both procedural and interpretative decisions are traceable.

**Ethical Issues**

In the interactive data collecting process, sensitive subject, questions and hints might have affected the researcher’s ability to diagnose, improvise, and react. Thus, the unconscious or subconscious rigidity of both format and content might likely constrain the interview, generating certain types of normative and routine responses that compromise the validity and trustworthiness of the original qualitative research. Dickson-Swift et al. (2006) in their study revealed the problematic situations qualitative researchers encountered that arise in interviewing participants around sensitive topics and proposed their recommendations. They include but are not limited to: disclosure of why the particular topic is being investigated; building rapport with the participants; implementing strategies for leaving the research relationship; and managing professional boundaries. All of the recommended strategies were incorporated into the interview and the entire research process that resulted in a trusting bond between the interviewer and the interviewee.

Our traditions, experiences, vantage, perspectives inform interpretations which in turn inform our actions; and the greater our affinity and agility with different (especially opposing) perspectives is, the greater our chances for “reciprocal transformation” – transformation of ourselves in the context, with and among others (Nakkula, 1998) are. The deliberate training and nurturing of the researcher’s capacity to concentrate on and participate in diverse and dissenting views and the interplay between multiple lens and interpretations is essential to the study and our life, which further justified the purpose of the interview. With respect to qualitative research,
Jacob and Furgerson (2012) maintain that a good protocol does not ensure a successful interview; in addition to procedural considerations, it is imperative to maintain good connections with the interviewee. A good intention does not necessarily lead to good relationship; true harmonious relationship involves open mind and heart, true listening and empathy. The humanity and art of it is neatly captured by Kvale’s (2000) traveler metaphor in that the evolving formative journey helped lead the interviewer (inquirer) and the interviewee (participant) to new ways of understanding and unearthing the taken-for-granted values and selves.

Moreover, the positionality of the researcher was articulated as well as its potential impact on the data obtained and the subsequent interpretation and analysis of the data (Arvey & Campion, 1982; Gunasekara, 2007). Nevertheless, the limits and humanness of the researcher were noted and embraced in a humble and lucid way when she assumed a “fluid and changing” (Gunasekara, 2007, p 465) identity while grappling with the same fundamental problems of life and learning that the participants did. Hence, being reflexive and reflective in the entire research process and with one’s positionality and levels of identity mattered tremendously in doing justice to the research and people that were involved (the researcher and the researched).

All in all, the overarching goal of the use of interviews was for the researcher to create the most suitable conditions to engage the participants in talking openly (Ravitch & Riggan, 2012) while continuously contemplating on how certain ethical problems may arise. More important, the researcher focused on how to readily raise ethical sensitivity with potential solutions that neither tarnished the research validity nor the respect for the participant(s) (Kimmel, 1988; Sieber, 1982b).

Limitations
With principled considerations such as maintaining trustworthiness and ethics comes the void of constraints. Conceivable limitations that could constrain the study are put forth as follows. First and foremost, since this study, as other qualitative research, occurred in a natural setting, it inevitably invited enormous challenges and difficulties to replicate the study (Wiersma, 2000, p. 211). Second, given the nature of the IPA qualitative research, the inherent limitations over which the researcher had little control involved the generalizability and transferability. The study might have access to only certain group and types of people in the organization, hence certain, limited data generated. Further, the lived experiences of the participants might not be viewed as representative of all organizational learners in the new era. The experiences of these participants, albeit relatively culturally-diverse, situated in a dynamic organizational setting might not be transferable to individuals working in a different environment, nor to individuals with different cultural and professional backgrounds. Furthermore, the issues regarding gender, age, and deep seated personality traits were not specifically explored in relation to their motivation, navigation/adaptation, and interaction in this study, although they might play an integral role in accounting for their contextualized e-learning experiences.

Moreover, there would be unknown and unidentifiable conditions in the organization where the participants inhabit, work, and learn that could bias their responses. Understandably, participants might have felt different level of comfort and discomfort discussing their personal and interactive learning experiences intertwined with sensitive topics that might have been touched upon. Also, the extent to which the participants were ready or willing to share, explicate about, and reflect on the learning system, environment, and processes varies. Finally, the ethical issues, inexorably entangled with the human researcher (linked primarily to the distinct identity
and positionality), although effectively minimized by rigorous procedures, would have a certain effect on the understanding and interpretation of the data and presentation of the findings.

Admittedly, there might be other hidden limitations unearthed in the research process despite the many limitations listed above. Still, future research may cast doubt on the trustworthiness/validity of the qualitative study and its conclusions, particularly concerning the employed IPA methodology and research design. Nevertheless, it is adamantly argued that the richness and depth of the study would not be compromised since a sharp awareness of both the merits and constraints was embraced, as “the acknowledgement of limitations is the best way to evade them” (Alsaawi, 2014, p. 155).

**Delimitations**

Arising from the limitations in the scope of the study are the delimitations resulting from the specific, explicit, and discretionary choices made by the researcher. They included the choices of research purpose and questions, the qualitative paradigm and the theoretical framework adopted, and the research design, all of which were elucidated in the first three chapters and concertedly framed and grounded the study. Here, the research purpose is readdressed with a pronouncement of what the study was designed to aim for.

The context of this study is organizational e-learning. The study is intended to explore and understand organizational e-learners’ lived learning experiences co-created by themselves and the organization they inhabit, and the sense making process of their experiences on both individual and organizational levels. Therefore, the theoretical framework combining the Self-Regulated Learning theory and Organizational Learning Theory and addressing both levels were used to guide the focus of the study. The research problem that involves the individuals sharing a common experience, making sense of their own learning experience, and the research’s mean-
making of that of the participants pointed to the legitimacy of the employment of IPA approach under the humanistic paradigm of Constructivism-Interpretivism. In reference to the guiding framework and facilitated by the IPA approach, participant e-learning experiences concerning motivation, adaption, and interaction were furthered laid emphasis on and interpreted through the three crystalized central themes.

Assumptions

Above all, it is widely justifiably assumed that the research problem would not exist in the first place without pre-established assumptions as well as those gradually developed in the research process. The assumptions, on which the research problem is based, directly or indirectly influenced the type of methods and approaches the researcher rationally applied, and inferences, understandings, and conclusions the researcher reasonably drew from the study. Grandted, the fundamental assumption regarding the ultimate potential for the organization to best harness e-learning systems and achieve the concurrent learning goals at individual and organizational levels was largely based on the belief of the epistemological stance of constructivism. Critically examined assumptions made in research efforts were generalized and substantively justified as follows.

First, it was reasonably assumed that participants responded to the interview questions honestly and candidly, based on the rigidly adopted principles and procedures which assured the preservation of participant identities and their confidentiality, as well as the basic trust residing in human interactions. Specifically, in the data collection process, participants were instantly preserved anonymous by assuming pseudo names, and confidentiality was further secured by the researcher’s guarantee of concealing and adequately adjusting identifiable personal information to maximize truthfulness.
Second, it was reasonably assumed that the recruitment criteria of the homogenous sample were proper and sound, and thus ensured that the participants had all experienced the organizational e-learning phenomenon in question of the study. The criteria took serious consideration of their maturity, education, and positions, which further justified the certain amount of e-learning being undertaken by the participants.

Third, it was reasonably assumed that participants had a sincere interest in participating in the study, for voluntary participants committed to participating in the study after learning about the study through emails correspondences and conversation with the researcher. Equally assumed is that participants would reflect and engage with the researcher about e-learning experiences and have the capacity to remember what they had experienced. To justify this assumption, during the interview the researcher facilitated participants’ recollections of their past e-learning experiences and thus improved the trustworthiness of their accounts, employing the relevant interview techniques Thomsen and Brinkmann (2009) suggested. These techniques included but not limited to providing concrete cues, using typical content categories, allowing time for recall, asking for free and detailed narratives of recent specific memories (Brinkmann & Kvale, 2015).

**Summary and Conclusions**

With the perspective offered by the theoretical framework shedding light on how we enact and enable favorable self-regulated learning processes in a dynamic organizational learning context, the study considered individual e-learners (idiography) who shared a common, collective experience embedded in the dynamic organizational learning environment. An interpretive phenomenological analysis (IPA; Smith, 1996) approach was adopted to examine the collectively shared experience (phenomenon) within that context. Throughout the reflective
process, the researcher made sense of how the participants made sense of their learning experiences (double hermeneutics). Being a reflexive qualitative researcher involves being simultaneously filled with care, thought, and rigor, which would translate into the trustworthiness and ultimate validity of the research itself. The specific context of a multicultural consultancy firm provided the criteria by which the participants were selected justly and purposefully. In-depth semi-structured interviews (Creswell, 2013) were conducted to ethically engage the participants while collecting useful and insightful data for the exploration. The well-crafted interview questions were aimed at asking about the shared yet distinct learning experiences within that context, using the theoretical framework composed of OL and SRL models as a guide. Overall, a clear alignment was established as to how the IPA methodology and IPA-informed data collection and analysis methods facilitated exploring and illuminated the research question conceptualized by the theoretical framework.

**Reflections on IPA Methodology in Use**

In summary, the IPA inquiry process in its entirety resembles the way our brains work in complex social milieu, essentially revolving around amassing, decrypting, processing (organizing and sensemaking), and presenting. In his *Evaluating the Contribution of Interpretative Phenomenological Analysis*, Smith (2011) presents his substantive findings with a table summarizing the qualities of a good IPA paper, which include “The paper should have a clear focus; the paper will have strong data; the paper should be rigorous; sufficient space must be given to the elaboration of each theme; the analysis should be interpretative not just descriptive; the analysis should be pointing to both convergence and divergence; the paper needs to be carefully written” (p. 24).

Not claiming objectivity in the analysis and understanding as traditional European
approach to phenomenology does (Caelli, 2000), IPA values intersubjectivity, interpretivism, researchers’ reflexivity, and participants’ relatedness, embodiment, and engagement; that is, in keeping with the epistemological openness via which the researcher is empowered to make discreet inferences about discursive, affective and cognitive phenomena (Larkin et al., 2006; Smith, 1996). Meanwhile, intellectual skepticism was cultivated for the qualitative researcher to be able to spot fragmentation and disconnections, have illuminating queries, and gain refreshed insight into the “phenomenon at hand” (Larkin et al., 2006, p. 117), which is the dynamic organizational e-learning undertaking in the current study. The results of the study expect to shed light on the potentials and promises of organizational eLearning systems in contemporary dynamic contexts where high-end individual and collective learning goals are to be fulfilled.
Chapter Four: Findings

The purpose of this study was to understand the lived experiences of organizational e-learners to improve organizational learning systems and individual and organizational performance. The research explored e-learners’ learning experiences related to motivation, adaptation, and interaction in a self-regulated yet interactive e-learning environment within a multicultural consultancy firm located in Hong Kong. The interviews revealed the participants’ multifaceted perceptions and perspectives on their organizational e-learning experiences. The data speaks in response to the research questions:

What are the lived experiences of organizational e-learners related to motivation, adaptation, and interaction in a self-regulated yet interactive e-learning environment and what is the influence of e-learning on the professional and organizational performance of organizational members?

Eight participants were interviewed and each participant revealed their unique experience in relation to the research question. The participants’ accounts were analyzed from the perspective of the basic tenets of the theoretical framework using IPA methodology. The analysis of the data led to three superordinate themes and six subordinate themes. The superordinate themes with their respective subordinate themes linked to the guiding theoretical framework are presented in Table 4.2.

Participants

Participant characteristics and demographic profile are presented within eight brief vignettes for each individual participant. In accord to the principles of confidentiality and sociopolitical concerns, participants were named after different months as their pseudonym while their ages were reflected only in age groups, and ethnicity identified in broader geographical
areas. Each vignette was structured in alignment with a four-part framework: a brief demographic description, participant positionality, their experiences as e-learners, and the perception of the learning context for the experience as well as their reflection and meaning making. The participants’ basic demographics and major perceived characteristics are illustrated in Table 4.1, providing a general sense of who they are.

Table 4.1.

Demographics of Participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>Age Group</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Education</th>
<th>Profession</th>
<th>Perceived personality traits</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>39-44</td>
<td>Male</td>
<td>Asian</td>
<td>BSc in Computer Science</td>
<td>Human Resources</td>
<td>Calm, analytical &amp; optimistic</td>
</tr>
<tr>
<td>February</td>
<td>49-54</td>
<td>Male</td>
<td>South American</td>
<td>MBA</td>
<td>Sales &amp; Marketing</td>
<td>Compassionate, eloquent &amp; agreeable</td>
</tr>
<tr>
<td>March</td>
<td>44-49</td>
<td>Female</td>
<td>Asian</td>
<td>MSc in Global Finance</td>
<td>Accounting</td>
<td>Cheerful, humorous &amp; incisive</td>
</tr>
<tr>
<td>April</td>
<td>29-34</td>
<td>Female</td>
<td>Asian</td>
<td>BA in Design</td>
<td>Customer Service</td>
<td>Assertive, earnest &amp; graceful</td>
</tr>
<tr>
<td>May</td>
<td>34-39</td>
<td>Male</td>
<td>North American</td>
<td>BSc in Psychology</td>
<td>Operation</td>
<td>Gentle, dynamic &amp; intuitive</td>
</tr>
<tr>
<td>June</td>
<td>34-39</td>
<td>Male</td>
<td>Asian</td>
<td>LL.B.</td>
<td>Sales &amp; Marketing</td>
<td>Prudent, logical &amp; rational</td>
</tr>
<tr>
<td>July</td>
<td>29-34</td>
<td>Male</td>
<td>Asian</td>
<td>BSc in IT Information System Management</td>
<td></td>
<td>Respectful, reserved &amp; precise</td>
</tr>
<tr>
<td>August</td>
<td>44-49</td>
<td>Female</td>
<td>Asian</td>
<td>BA in Sociology</td>
<td>Administration</td>
<td>Mature, royal &amp; organized</td>
</tr>
</tbody>
</table>
**Rationale for Crafting the Vignette**

Crafting a profile/vignette of a participant’s experience is deemed effective and compelling in opening up the interview material to analysis and interpretation in IPA methodology. As a research product in the words of the participant, a profile fulfills central criteria of qualitative analysis by presenting the interviewee in context, clarifying the person’s intentions, reflecting her/his consciousness, and conveying a sense of time and process (Seidman, 2006). After all, the primary purpose of the interview is to understand the experience of the interviewee through her/her own stories and narratives transformed from the researcher’s learning, processing, and epiphanies in the interviewing process. Through storytelling, researchers are empowered to make sense of the interview data, and make sense of ourselves and the social world where we are situated (Mishier, as cited by Seidman, 2006; Seidman, 2006). To discover and share the “coherence” (Mishier, as cited by Seidman, 2006, p. 120) the interviewee has expressed in her/his stories linked to the organizational and social context, the researcher is empowered to bring her/him alive.

**Participant Vignettes**

As much as patterns and themes emerged through participant narratives, each individual provided a unique lens of their very own relationships with and perceptions about e-learning experiences and the context for the experience, as well as their mean-making and reflection upon it. The participant vignettes that follow present participants’ diverse cultural, educational and intellectual backgrounds which provide a context for their observations and opinions relating to their shared yet unique e-learning experiences.
January. January is a mixed Asian born in Hong Kong and educated in Malaysia. His own positionality was much related to his ethnic, educational, and professional background as being a “hardworking” student and professional. Being the first person interviewed, the Human Resources officer recounted his experience related to the e-learning initiative on an etymological track. He described at great length the rudimental principles of the firm and the services and resources boasted, as well as how he appreciated the “flattened management structure” in terms of power distribution. He was eloquent about the “right” commitment to the widespread e-learning aligned with the firm’s objectives. In the course of advancing and engaging in the e-learning program, he expressed equal excitement, commitment, and bewilderment. Upon reflection, he commented that learners were encouraged to develop their learning portfolios and journals that encompassed an array of “subjects of interests, skills of focus, informed comments and suggestions”. On a deeper second thought, he then admitted that from a more “critical perspective,” he was heeding “both the benefits and non-benefits” in the process of e-learning, in view of the company values in accordance with future training agendas.

As regards motivation experienced throughout e-learning, he perceived this e-learning program as “useful,” providing the “primordial force” for him to make steady progress. Meanwhile, he sensed his unrelenting engagement in the e-learning program and much-needed periphery support vitally “influenced” the workforce in embracing the e-learning practice and mentality contextualized in a dynamic environment as represented by the firm. In recalling his most memorable moments, he smiled on those “innovative incorporation of interactive simulations” that might help them get grips with the “changing” environment, albeit not always. In the end, January expressed optimism and showed his resolution to “grow with the firm” by continuous learning and efficacious “modeling and coaching.”
**February.** One of senior professionals in the sales and marketing department, February, originally from South America, was well aware and proud of his longevity in the industry and the firm as well as his academic and professional background in Europe and Asia. Hence, his positionality involved greatly the history of which three decades dedicated to the industry and more than a dozen of years to the firm.

Answering the questions in a rather circuitous fashion, he nostalgically gave a historical recount of the company and himself, and justified its continuing development in light of keeping up with the time by implementing e-learning. He delineated the foreseeable practical benefits of e-learning and its strengths in achieving short- and long-term goals in a “flexible” way. Regarding his e-learning experience, although he admitted his lack of proficiency in navigating the e-learning system, he viewed it as a tremulously enlightening adventure through either self-exploring or consulting with “experts.” He summed up his reflections on his e-learning experiences by reiterating that clarity of the “purpose” is imperative and the pragmatism should be grounded in the daily practice. Inbuilt “Multimedia” applications were quite “appealing” to him while going over some conceptual points.

Yet, on a deeper level of sensemaking, he articulated some concerns regarding collaboration centered upon occasional awkward working atmosphere with a seemingly harmonious appearance, and the difficulty to gain “genuine support” from members of other teams, especially colleagues from a younger generation. He deemed that this could affect the collective motivation and learning outcomes. From his understanding, the organization’s “vision” might exert instructive impact in guiding and motivating professionals to learn and apply within and even beyond their strengths.
March. Describing herself as “precocious” and “sensitive”, middle aged March cheerfully introduced the high education she had received in global corporate finance in local and Parisian universities. In regard to her general learning pattern, she tended to be more inductively oriented, placing primary emphasis on the overarching “ideas” and “principles” in mapping out all the subtle, interrelated branches and sub-branches. Her identified propensity and ability to “explore,” excavate, and “establish” interrelations and “connections,” in return, engaged her by fixating her attention for supporting details.

She viewed her relatively new learning experience as “groundbreaking” in transforming her initial biased perception of e-learning into inspiring open-mindedness. In association to her identity of corporate accountant, she appreciated the soft element of “relationship” in the program, which was deemed complementary to the comparatively hard nature of “mechanic data” and figures she’d been dealing with. March praised the functionality of e-learning as both instantaneously and perpetually accessible, be it an urgent reference or “stand-alone learning resources.” She was particularly elated when talking of “the fun part” of the e-learning process which was the autonomous learning mode and self-directed learning contents.

She further reflected that “the good thing about self-learning” is that the learner would enjoy “determin[ing] the level of relevance” and making discretionary “decisions” by and for herself. Moreover, she viewed the “connections” and “relevance” inherent in the e-learning experience conductive to her ongoing motivation in various situations and circumstances. Creative ways of delivering either the usual or “inspiring” contents worked as well to sustain her engagement in the learning process and became something she would later on recall constantly to guide her subsequent learning activities. In making sense of the learning and applying experience and the context for such experience, she depicted the learning and working “community”
congenial to providing “feedback” and “support” as an imperative motivator for e-learners to stay on track intellectually and professionally as well as nurture the interpersonal relationship.

April. April is a relatively young Asian lady with an exotic twist shown in her confidence and poise, partly due to her growing up in Hong Kong and UK alternately, and pursuing her studies and early career in Switzerland and Germany. Her positionality was essentially revolved around her elite mentality shaped by parental influence and the elite education system she had been in. The seriousness and inclination to comment critically came out naturally with her choice of language.

In terms of the perception of overarching learning context, different from others’ observation, she found it a bit “frustrating” to see the deficiency of employee involvement in new initiatives including e-learning as would have been expected. She felt the “historical and cultural legacy” of the company was “too powerful a notion” to be understated in any change imitative for authentic learning experiences and results that would translate to “better performance and service.” She observed that some of her team members would rather immerse themselves in routine tasks and duties that were easier to be properly assessed than in self-regulated learning whose results were relatively “intangible and unknown.” The central issue, from where she stood, was whether e-learning “goals and strategies” were properly “communicated” to the employees and resources were ideally allocated to support the “collective learning” and positive “changes” ensued, which “team dynamic” would profit from.

She pondered her e-learning experience and takeaways but gave her comments from a broader perspective. Overall, she still felt that she gained from the “learning unity” its “flexibility and sensitivity” when adopting state-of-the-art technology to cope with the changes and challenges with multicultural workforce. Specifically, regarding the e-learning mechanism,
“emotions- and expectations-arousing multimedia” made the useful knowledge retain longer in her for “future exploitation.” In making sense of her learning experience, she identified with potential opportunities of “learning with and from different people” and working things out with them through e-learning. She felt most motivated and excited when knowing her team was having a “learning synergy” and turning to each other for support or venting frustration. “Overall, I am an optimist.” She said in a nonchalant manner, and would like to see the company achieve continual success with “a learning attitude.”

May. Prior to his appointment to an operations position, May had been an active business consultant in North America specializing in commercial innovation and market optimization. At the time of the interview, he had been working in the organization for less than five years. However, he was well-versed and gave a full portrait of his personal background as well as that of the firm and its culture that was believed to help foster a learning engagement. His positionality unfolded as he identified himself as an honored psychology graduate and articulated how he had utilized his psychology knowledge to benefit his professional career in marketing.

While echoing some other participants’ sentiments while celebrating the new way of learning, he revealed that what he was grappling with in his e-learning “work” was how to substantially make the “time and effort” spent in learning and exploring the “worthwhile.” He interpreted his motivation and affinity associated with e-learning as an outgrowth of his initial “passion for intellectual training and challenges” and his ease with navigating and pivoting on the electronic instructional contents, design and delivery. He couldn’t help but noticed the intertwined volatile “emotions and feelings” that are “lurking” and waiting to be taken care of in order to profit from the learning process. That led to his suggestion of developing “procedures” and “supporting schemes” that would facilitate the “smooth transition” of e-learners’ mindset
and attitude towards the program. Upon further reflection, he candidly called for “enthusiasm and candid communication” at all levels that could reduce “ambiguity” and create “concreteness” when it came to “new system” and “workflow” application and task force building in a learning organization.

When gently prompted to talk about how he perceived the potential effectiveness of the e-learning initiative in enhancing the collective performance, he instantly related to his motivational experiences where “a sense of risk” was aroused and helped sustain his focus and effort on critical issues. He also shared a few “techniques” employed and “resources” harnessed such as supportive “mobile applications” and multimedia linkage to make alive “recurrent associations.” As a way of his sense-making, he shared the ideal e-learning goals (e.g., to be practical, relevant, and memorable) such program should be” target[ing]” to sustainably engage and enable learners and the organization.

June. June had more than a decade of experience in consulting companies and started to work as a sales executive in this firm after earning a law degree at his twenties. Born in Hong Kong and educated mostly in Europe, he displayed a rather boastful quality with a loud voice, a stern stare, and an occasional metallic laugh. He identified himself largely with his law academic background and family legacy in law. As noted by him, the training in law school had a huge impact on how his logic and thinking in learning. He was more “conscious about” different “wording” and “interpretations” while remaining equally drawn to the “unconventional” and “creative” learning approaches and contents.

In recounting his e-learning experience, June applauded the e-learning system and the e-learning concept per se as flexible and autonomous, and constructive in stimulating his self-directed exploration. With regard to motivational experiences, he compared how he saw potential
in a client with the way he identified the “moments” and “areas” when and where he was able to predict their potential to be leveraged in elevating him, thus making discretionary efforts in accumulating “tangible results” over time. When reflecting on how he adapted to the learning process and gained from it, he laid more emphasis on the possibility of e-learning being more of a way of “thinking” and “learning” gradually merged into his life. Meanwhile, he recognized that the “accommodating” learning system, to a certain extent, helped him to focus, respond, and adapt.

As a self-claimed “result-driven” professional, he heralded the pragmatism of the implemented Custom Relationship Management program and highlighted the part played by the coherent company “environment” and “support” in facilitating learners’ active and successful application. His insight in respect to his sense-making of the context that embedded the learning experience was unveiled in the end of the interview, which pointed to the importance of a “learning culture” and his confidence in the organization to produce “positive synergy”

**July.** Working as an IT specialist, July is a native Hong Kong gentleman and has been in the position for more than five years, a period “long enough to go through some changes” with the organization. He portrayed himself as constantly evolving with the organization where his talents and skills were valued and put into good use. So did he position himself in the e-learning process.

He unambiguously expressed his satisfaction with the non-mandatory e-learning experience and freely investing time in the “technical” and “structural” sphere of it in line with his job responsibilities. He shared his fascination with supplemented learning materials and courses which were far more groundbreaking and entertaining, when they included more
“interactions” and “fresh ideas” and real-life “simulations,” and offered a game-like role playing and hyper-interactive forum.

On reflection, July reported a certain level of relation between his motivation in e-learning and predetermined learning goals and visions. Besides, the accessibility of social media as a medium to “share and connect” or “look smart” was also perceived by him of great value in promoting motivation to engage in e-learning. His succinct way of conversing was in stark contrast to his incisive observation revealed in the final hindsight regarding the learning context and conceivable better e-learning experiences. He anticipated “more guidance” from the organization to ground the freedom of self-regulated e-learning, to give it a form to deform or extend.

**August.** Senior employee August has been in her position for decades, assuming an indispensable role in the administrative department and the organization in general. Her tenure in the organization started from the inception of company positioned as a “market-oriented for-profit innovative” firm. She has had the chance to “witness” and “understand” how evolutionary and revolutionary changes have worked throughout different phases within the organization. That explained how she acknowledged her personal identity and professional identity as one, “dedicated” and “hardworking” contributor.

In relation to her learning experiences, despite that her devoted attitude and the adaptive mechanism assisted her self-learning to an extent, she found herself sometimes “engulfed by many learnings prompts and steps,” hesitating about “where” to “put more effort” and “what needs more attention” to get to the next stage. As an epiphany, August realized the ephemeral “alertness” of tracing her e-learning mental process as well as the developing “clarity” of the experiences and gains, relying on retrospection and reflection.
In perceiving and interpreting the context for the collective e-learning, she concurred that the prevalent e-learning phenomenon in the organization could be largely attributed to the culture and values the company possesses. “To be the most caring and resourceful business partner that inspires and empowers our customers,” she felt that the “vision” could, to a great extent, resonate with its people, and lead them to achieve their goals through various modes of learning, e-learning particularly, as it is “pervasive” and “at our figure tips.” Meanwhile, August reasoned that the company’s excellence also derived from partnering with and learning from entities from different countries and across different realms. She observed that not just herself but most of the staff “shared this learning mindset” to feel included, which enhanced their individual e-learning “belief” and “momentum,” and to get inspired by communicating with dissenting views and “perspectives.”

**Researcher’s Meaning-Making of the Participants and Their Shared Experiences**

The researcher made sense of the identities and positionalities of the participants, during and after the interview, largely through their displayed demeanors, attitudes, as well as self-narrated perceived experiences as organizational e-learners. The sense-making process is rather a dynamic evolvement as each interview continued and then came together for a hermeneutic analysis. While the organizational e-learning phenomenon created the context for shared *lived experience*, the homogenous sample of participants recounted the experience and reflected upon it distinctively, capturing both similarities and dissimilarities in constructing the reality via the situated interaction with the researcher.

For instance, Analytical January of computer science background and the prudent previous law enforcer, June, presented themselves rationally and logically, viewing their learning experience and the organizational context dialectically with an identifiable growth mindset. In
moderate contrast, elegant and confident April, with the influence of elite education permeating their demeanors, made some sharp observations and critical comments regarding the learning environment of the organization. The same issue had equally drawn the attention of the dynamic could-be psychologist, May, when delivering the seemingly intuitive account of his perception of learning system and context.

Notably, both cheerful and enthusiastic and experienced in their own positions, February and March shared their experiences in a more lighthearted and optimistic way, associating them with other similar experiences to make themselves understood and understand further. Though March was perceived more of an independent learner and February relied primarily on interdependence, they both remarked favorably on collegial and organizational support and cooperation at diverse levels.

While nearly all the participants were immensely pleased with the flexibility and freedom in e-learning, July, relatively on the introverted side, would expect more formal structure and guidance from the organization to empower self-regulated e-learning observation, reminiscent of the plausible notion that freedom is based on reason and restrictions. Not surprisingly, the sophisticated lady, August, recognized as a dedicated predecessor, was all diplomatic and balanced in her narratives and interpretations. Throughout the interview interaction, it appeared natural to rationalize that her exhibited maturity, self-reliance and organization as well as the team spirit she celebrated allowed for her prosperity in a broad spectrum of circumstances (including e-learning) in the organization.

Data Analysis

Data analysis, viewed as a rather non-linear, interactive process, entails interrelated stages of organizing, previewing, coding, and generating potential themes and thematic networks
that demand concrete support of illustrations and evidence (Creswell, 2014). Participant transcriptions were thus further drawn upon for coding, decoding, and recoding that led to developing the meanings of the interviews through contextualizing the emerging themes from the data (Smith et al. 2009). In conformity with IPA’s methodological cannons, the analysis was essentially focused on meaning. After offering a sense of the whole, the complex interview conversation data were examined for natural meaning units and extracting major themes, followed by rich and extensive hermeneutical interpretation of meaning (Brinkmann & Kvale, 2015). Individual subjectivity of the participants and the researcher in the course of meaning making was therefore greatly respected, adding textures and flavors to the rigor and vigor of the research study.

**Superordinate themes.** In the analysis enabled by cross-referencing interview data, a line of core themes – superordinate themes – were taking form horizontally (illustrated in Table 2). Although a significant number of interviews and full solicitation of opinions were not possibly fulfilled at this stage, the spontaneous yet sincere communication with people representative of different sections and levels within the organization made visible three pillars. They were concerning participants’ organizational e-learning experiences and how they made sense of those experiences: 1) motivation and individual e-learning; 2) navigation and adaptation; and 3) interaction and collective e-learning. Their sense-making was largely impinged on reflection and social interaction associated with communication and feedback as well as support system. The themes and supporting theoretical evidence from the eight participants are summarized in Table 4.2.
Table 4.2.

Emergent Central Themes (*Meaning Condensation*)

<table>
<thead>
<tr>
<th>Superordinate and Subordinate Themes</th>
<th>Salient Links to the Theoretical Tenets of SRL and OL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Super 1:</strong> Motivation and individual e-learning</td>
<td><strong>Sub 1:</strong> Autonomy as an intrinsic drive for mega-cognitive learning</td>
</tr>
<tr>
<td></td>
<td><strong>Metacognition:</strong> Autonomy and freedom granted in e-learning prompted learners to intrinsically control their thinking for deeper understanding.</td>
</tr>
<tr>
<td></td>
<td><strong>Sub 2:</strong> Emergent ingenuity as a sustained motivator</td>
</tr>
<tr>
<td></td>
<td><strong>Motivation:</strong> Creative embedment in terms of content, context and approach constantly drove e-learners to set, follow, and obtain their goals.</td>
</tr>
<tr>
<td></td>
<td><strong>Tacit knowledge:</strong> As a result of metacognitive and motivational learning, tacit knowledge was taking form.</td>
</tr>
<tr>
<td></td>
<td><strong>Internalization:</strong> Acquiring tacit knowledge converted from explicit knowledge in applied learning and practice.</td>
</tr>
<tr>
<td><strong>Super 2:</strong> Navigation and adaptation</td>
<td><strong>Sub 3:</strong> Adaptive system facilitating contextual mega-cognition, reflection and adaptation</td>
</tr>
<tr>
<td></td>
<td><strong>Context:</strong> Micro context of the adaptive e-learning system created the environment for navigation and adaptation, and was recreated by the e-learners active engagement and negotiation.</td>
</tr>
<tr>
<td></td>
<td><strong>Sub 4:</strong> Embedded connections and coherence enabling collective adaptation</td>
</tr>
<tr>
<td></td>
<td><strong>Metacognition:</strong> Ability to control and monitor motivational beliefs in context-oriented application was enhanced.</td>
</tr>
<tr>
<td></td>
<td><strong>Behavior:</strong> Behavioral planning, regulating, and adapting followed metacognitive refection.</td>
</tr>
</tbody>
</table>
**Combination:** E-learners adapted to and tapped into the e-learning system by navigating through connections and systemizing and applying explicit knowledge.

<table>
<thead>
<tr>
<th>Super 3: Interaction and collective e-learning</th>
<th>Sub 5: Multi-dimensional communication, dialogue, feedback and collaboration</th>
<th>Context: Macro organizational context fostered the climate to learn and collaborate collectively.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub 6: Counsel, support, and stewardship</td>
<td></td>
<td><strong>Externalization:</strong> Interaction, such as communication and dialogue, enabled the articulation of tacit knowledge into explicit knowledge.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Socialization:</strong> Individual learners accumulated and shared tacit knowledge by embracing contradictions in their social environment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Explicit knowledge:</strong> Knowledge was communicated, collected, expanded, integrated and transferred in the organization.</td>
</tr>
</tbody>
</table>

Not surprisingly, the three condensed themes are by no means mutually isolating; rather, they mutually informing and enhancing. They are composed of and interwoven into their respective subordinate themes (expounded below) extrapolated from and feeding back to the conceptual canons underlined by the chosen theoretical framework: self-regulated learning theory and organizational learning theory. The organic incorporation and interaction of all the elements related to the research question focused on the dynamics of learning and performance individually and collectively.
Subordinate themes. Expectedly, some e-learners were more favorably disposed towards organizational e-learning than others. This predetermined perception and orientation will be further discussed because it would appear to affect how they engaged in their learning and made sense of the experiences grown out of it. Despite that, on a closer examination of coded data, six subordinate themes (two under one superordinate theme) sprouted into maturity. While informing the condensation of the superordinate themes, they added extra layers of insights to the findings.

Each subordinate theme, relating to and decoded by the guiding conceptual and theoretical framework, gradually was manifested through various canons of data processing and analyzing and evaluating, contextualizing nuanced answers to the research question. The subordinate themes are: 1) autonomy as an intrinsic drive for mega-cognitive learning; 2) emergent ingenuity as a sustained motivator; 3) adaptive system facilitating contextual mega-cognition, reflection, and adaption; 4) embedded connections and coherence enabling collective adaptation; 5) multi-dimensional communication, dialogue, feedback and collaboration; 6) counsel, support, and stewardship.

Findings

The multifaceted e-learning experiences of organizational learners necessitate continuous exploration for deeper meanings and connections. Nonetheless, identification of carefully distilled themes alongside their supporting evidence offers crucial insights into the organizational learning and development as well as e-learner self-learning and actualization in an organizational context.

Table 2 outlines both superordinate (super) and subordinate (sub) themes and corresponding theoretical links. Each theme presented in the table is expanded and elucidated
with evidence of the substantive interview data in the sub-sections that follow, with juxtaposed quotes and the researcher’s interpretations and understandings. Indeed, knowledge along with findings emerged equally during the interview process where “on-line interpretation” and “on-the-spot” (p. 221) (dis)confirmation co-opted, and in the after-interview analysis where both participants’ understanding and the researcher’s perspective and sensemaking co-constructed nuanced meanings (Brinkmann & Kvale, 2015).

**Motivation and individual e-learning.** The first major superordinate theme is in line with the problem of practice of interest and informed by the theoretical framework. As the motor that moves our world, motivation is the key to learning, working, and living and, the importance of which could not be overstated in any learning-related circumstance. Although, individual e-learner related to, portrayed, and interpreted their motivational experiences in a distinctive fashion, it was largely illustrated and supported by two subordinate themes: *autonomy as an intrinsic drive for metacognitive learning* and *emergent ingenuity as a sustained motivator*, the supporting details of which are presented respectively.

**Autonomy as an intrinsic drive for metacognitive learning.** The prevalent consensus among interviewers trickled down to the first theme – e-learners’ experience and appreciation of the sense of autonomy – which is paramount in intrinsically motivating organizational e-learners to engage in the thinking and learning process, controlling their thinking, deepening their understanding.

January shared his predetermined faith in the autonomous approach of e-learning, which was the “primordial force” driving his rapid process of making progress. Simultaneously, his enthusiasm and motivation also stemmed from his *critical perspective* as to how this e-learning system could be better adopted for future organizational development:
So I believe in this approach in general, self-learning, e-learning, whatever; a high concentration of free will and free recourses.... It’s been my primordial force to dive into it… I’m taking a rather critical perspective toward it. Or simply as a reference when we consider another training program … to see what’s in need for optimal performance. We better take into account what’s important for the firm at that specific time…

June mentioned that the system proffered “flexibility” and freedom for him “to resort to anytime” to “refresh” his “memory,” alluding to the inherent autonomy of the e-learning system. In response to the ways he perceived the effectiveness of his e-learning experience, he enthusiastically endorsed the autonomy and dependence e-learners could enjoy in improving performance by learning and exploration:

How autonomous we are allowed to be. Whether we are learning dependently using the system or when we are exploring betters ways by applying what we learn. To this end, I think more tolerance to our experimenting with the new knowledge will be helpful to bring about positive changes.

More specifically, March found “the fun part of the process” being that one could make decisions on what to focus on in e-learning processes and have the control over the way one learned. It would appear that the self-regulation of the learning content that bore relevance was motivating and rewarding.

You know, the good thing about this kind of self-learning is that you are the one who determines the level of relevance or to establish such relevance to your own area of expertise...I don’t think there is a mandatory guideline there. In fact, that’s the fun part of the process as you get to decide for yourself what is worth your attention and what is not.
In relation to the learning system’s contextual relevance, July was emphatic about how he chose to focus on the “technical,” structural part of the learning program, aligned with his specific job responsibilities, suggesting that foreseeable positive outcomes benefited from such relevance motivated him tremendously:

Well, personally, I am more focused on the technical part, say, the structure of the CRM program and how it was designed and programmed, so that in the future, I may incorporate those features and advantages to our own intranet system.

February intuitively embraced e-learning as a natural, potent way to keep abreast of the times, claiming that having a clear “purpose” is key to effective e-learning and daily performance. More importantly, he believed e-learning’s potential in sustainably achieving learning and performance goals in a “flexible” fashion, which drove his energy and focus in the process. He maintained:

And it’s undeniable that we are e-learning all the time without knowing it, absorbing things constantly, voluntarily. I believe we are all made to learn, to feel curious, to feel challenged and to conquer it by learning more and feeling more and more curious…As for e-learning orchestrated by an organization like us, I feel a sense of purpose would help me to be more focused, especially when I’m enjoying the flexible…um… schedules, processes, so on and so forth, so we’d see tangible results, progress because of learning…

This purpose-directed mentality prompted by autonomous intrinsic drive bears certain resemblance to the goal-oriented ambitions of several participants. For instance, for better performing his job as a result of e-learning, June expressed his passion for the joy and career
development, and deemed the anticipated goals as crucial in keeping his learning ongoing and pushing him forward.

…as I truly love the job I’m doing, I would push myself to confront many challenges coming along on the path to becoming better at my job and in the field, for my future career development’s sake. As for the e-learning program, I think that logic applies also. As long as the program helps me to achieve the goal, there is always an attraction there to keep you interested.

April experienced the elation of motivation and excitement in the context of group “learning synergy.” She anticipated a more powerful integration of the firm’s impressive “historical and cultural legacy” with the e-learning agenda to bring about heightened learning awareness, engagement, and results demonstrated in “better performance.”

… Our company enjoys a reputation for its historical and cultural legacy. It is only right to emphasize that in every initiative it advances. E-learning, yeah, no exception. Give it a frame, a cause. And of course, instill it naturally…learning would bring change, bring about better performance, more awareness, better relationship.

Further to what the influence of the alignment between organizational culture and “values” and e-learning objectives was on the intrinsic learning drive, August also perceived such alignment efficacious in making e-learners feel a sense of “belonging,” more grounded and ready to “achieve their goals” by embracing e-learning.

**Emergent ingenuity as a sustained motivator.** The creative ingenuity emerging in the instructional design surfaced rapidly as another core motivator for participants while the phenomenon of enlightenment and sense of urgency for mastery and excellence was gradually
taking form. The interview data suggested that the embedment of inspiring functions, contents, and approaches would serve as a learning motivator stimulating e-learners’ prolonged engagement. Nevertheless, in creating the “stimulus” to keep learners “stay focused,” such ingenious embedment inevitably invited disruptions and distraction in its abundance, which could be perceived as a constant “challenge.”

Although April’s critical observation regarding learning and applying indicated that peer e-learners tended to stick to routine practice to get instant tangible results rather than stepping into the novel “unknown” territory, most participants’ responses to the ingenuity and emergence of e-learning were favorable. June implied that the “unconventional” emergence such as “creative tools” and “novel contexts” increased the effectiveness of obtaining and retaining knowledge, bringing “uncanny” clarity to the important, reflective attributes and the entire e-learning experience.

Yeah…personally, I find certain sections are more learning conductive than others. Especially, those unconventional learning approach or creatively presented learning contents are what I’m drawn to… This was sometimes assisted by some of the creative tools available and of course, some novel contexts. The flashbacks kind of had an uncanny power to make you realize this is something that’s going to work and stick.

Concisely, August concurred on learners’ affinity with creativity and innovativeness, through contributing it largely to the shared “vision” of being “the most resourceful”. In accord with that, March found herself easily drawn to creative contents and structures that are “inspiring”, thus finding herself lost in engaged e-learning.
In terms of my own learning goals, honestly, anything new, inspiring can whip my appetite and keep me engaged. Just to gain some new insight every time is the goal for me, I guess…

Similarly, January described his e-learning experiences as memorable when there involved “innovative incorporation of interactive simulations and practices.” However, he viewed the “changing” emergence of creative learning contents and contexts as both disruptive and stimulating with respect to his learning motivation and effectiveness.

Generally, for me the whole process has been quite smooth. Like I mentioned, I’d like to see any innovation incorporation of interactive simulations and practices… Because they were just fascinating and anything but boring, compared to texts and presentations. It made the learning experience unforgettable… and required our instant attention and reaction…the changing contexts could distract our focus sometimes…you know. I hope it’s just a challenge to tackle besides the blessing.

The similar double-sided sense of chance and challenge brought by the emergence of creativity and innovativeness in the e-learning system coincided with March’s feeling towards her e-learning progress. :

…honestly, anything new, inspiring can whip my appetite and keep me engaged. Just to gain some new insight every time – is the goal for me…Of course, I feel excited about the new experience … I mean, the flexibility is liberating, but can be overwhelming at some point.
Interestingly, upon reflection, May identified with “intellectual challenges” as the motivation in his much-engaged learning experience in which he felt a sense of “urgency.” Besides, he observed that his motivation contingent on the perceived practical value and “risk”-inducing virtual simulations.

I, personally, I’m fond of challenges. It wouldn’t motivate me if it’s something way too easy. Whenever I encounter something that challenges me intellectually, I’m intrigued…It sort of creates this sense of risk, the urgency for me to crack it. Of course, it gotta be related to my work or area of interest, otherwise, it wouldn’t be risky enough to arouse me, you know…

**Summary and reflection of superordinate theme 1.** The perception autonomy and freedom one enjoyed in self e-learning was highly celebrated. Autonomy was further attributed to the inherent instantaneity, flexibility, and explorative nature of e-learning enjoyed by e-learners, to a level that experimentation and application of newly acquired knowledge in routine work were anticipated by the e-learners. Moreover, the inspiring ingenuity manifest in creative e-learning structure, content, approach, and context actively engaged and challenged learners at the same time, indicating an achievable dialectic balance in e-learning systems to enact and sustain motivational and meaningful experiences. Thus, enabling and adaptive organizational context would be appreciated and constructive in motivating such autonomous and explorative learning.

It was also evident that the participants’ reported motivation and behavior trajectory alternated between prescribed expectations, recognized job-duties, and learner-centered and designed endeavors.

It would appear that at some level, motivation in individual e-learning in an effort to promote individual self-development was organically extended to relate to ambitions in
organizational development resulting from collective learning. Equally derived from the ambitions and efforts was the belongingness individual e-learners felt in their motivational experiences. On the whole, the negotiation, reconciliation, and re-creation between e-learners and the learning context were adequately revealed.

**Navigation and adaptation.** In the process of exploring how participants adapted themselves to the e-learning process, the analysis revealed their awareness of the changing learning context when navigating in the learning system, and the dynamic process of determining the level of benefits. The adaptive learning system provided the context for e-learners navigating coherently and effectively through the learning process, constantly creating environments and moments for e-learners adapting back to the evolving learning structure and purposes. Among participants’ variations of navigating and adapting experiences, two salient subordinate themes were concentrated and articulated as follows:

**Adaptive system facilitating contextual mega-cognition, reflection, and adaptation.** Organizational e-learning happened in the learning system enacted by the organization for e-learners to tap into to produce favorable results. The ability to be context-conscious, reflect, react and renew the strength through e-learning was found to be, in part, associated with the learning system’s agility to instigate and enable such qualities and behaviors of individual e-learners.

March’s observation of her own sub-consciousness to “keep track of” her learning “progress” and to “profit” from navigating through “different circumstances” attested to e-learners’ mega-cognition in relation to contexts and processes. She related:

I did keep track of my progress and look at different steps of trajectory all at once to think how to profit from it in different situation, um…context.
In particular, July gave credit to the supplemented e-course recommended in the learning program as he appreciated many a “fun and effective” approach, e.g., “simulations,” which made him more aware of the associated context and brought about new insights, opportunities, and rewards in enhancing his learning outcomes. He also noted that the goal to achieve the predictable results made “aware” by certain “goal-setting” contexts kept him “charging” throughout the learning process.

When I envision what I need to know to get it done, I’m ready to charge and keep charging…At certain moments, I was made more aware, than others, of how to reach the learning goals it set that happened to be consistent with mine…

May, on the other hand, shared his submerged “volatile” emotions she experienced in engaging in the e-learning under certain situational circumstances, which would affect, to a greater or lesser degree, his “learning effectiveness.”

I felt I was particularly efficient in some situations, when I’m elated by some interesting or inspiring contents put into real-life contexts. You got feedback immediately, when it’s favorable, it added to your confidence, when it’s negative, it did affect your mood a bit to carry on.

Moreover, it would appear that multimedia integration to enhance the e-learning engagement and learning flow, as well as post-learning application was much appreciated by most participants. February applauded the creative integration of “multimedia” to unwrap conceptual contents so that his subdued curiosity and engagement would be revived (shown in the above quotes), while April stressed the organic combination of certain “multimedia”
components and navigation system. It stimulated his “emotions and expectations” as well as self-reflection that merited further exploitation, as he articulated:

The lessons were also more interactive, activity-wise. It opened up a new portal for learners and teachers, however invisible, to gain a new experience and perspective. Take multimedia for example, they arouse our emotions and expectations, they keep us focused… they are there, stuck in your brain, of course the fascinating ones… they bought new feelings, new things when I looked back. I’d like to come across that element as many as possible, and it’s better organized in ways that make more sense…

**Embedded connections and coherence enabling collective adaptation.** Systematic connections and interrelations were found to be instrumental in adapting e-learners to the virtual learning environment while establishing applicable association under authentic working circumstances. March straightforwardly put forward the emergent nature of the e-learning experience as being “stand-alone learning resources” that could be “refer[red] to anytime” for “illustrative” reference. It illuminated the proper connection the learning system managed to create in e-learners' mind between virtual and real learning contexts for them to harness whenever necessary during work.

In a way, it helps build vivid images and associations when dealing with mechanic data … no matter it’s something to refer to anytime I need when doing my work, or as stand-alone learning resources, this is for sure helpful.

Notably, March resorted to the “roadmap” metaphor when mentioning the *big data* section where the relevant data was synthesized in all forms and shapes to present relations and
to extrapolate inferences, emphasizing the role that a clear overall picture of the e-learning system and a context-oriented coherent design played.

[M]aking connections, by being exposed to this big data section that provides a bird view of roadmap. How am I able to arrive at an illustrative, grand picture without the mindset of making and finding connections? Once you are open to all the possible connections, what to apply and how to apply it becomes natural.

Coincidentally, May’s instant and continual reflection on the e-learning process was attributed to the same imagery “roadmap” constructed through navigating the learning system in which connections and interactions were enabling. May related to the connections between perceived and real values when applying the knowledge to his daily practice work through “recurrent” reinforcement of such “thinking” and systematic stimuli.

I actually felt at ease with the system when I was able to access all the sections, backward and forward and could make my own plan according to separate or connected ideas, concepts… it’s like a roadmap with all the routes delineated and the intersections, which, in a way, kinda automatically pushed you to be more reflexive… sometimes, the recurrent points made, integrated in some contexts, applied this thinking of doing some sort of evaluation right away to see the possible results of certain actions…

Admitting that his initial confusion in navigating the learning system, February rather compared his e-learning experience to an exciting and enlightening “adventure” where exploration and exploitation happened. He realized that self-directed e-learning via making connections and reflection is an “ongoing” process.
I saw it as an adventure full of excitement, twists and turns… there were times it needed my effort to take advantage of the relevant materials, for example, the prioritizing of appointments based on the urgency, while other times, I would just let it lead me, wherever. And later on, I would think about it and make sense of it – figure out slowly, slowly what’s gonna benefit me more than the rest…It’s ongoing, the circle of exploring…

**Summary and reflection of superordinate theme 2.** It could be perceived that microlearning context enacted by the adaptive e-learning system offered e-learners a productive environment for navigation and adaptation when involving embedded and derivative practical activities. The practice of active navigating would as well facilitate e-learners’ self-regulated, adaptive learning process and retain their effective involvement. Simultaneously, the learning context was being shaped by the e-learners' reflective engagement and negotiation with learning and the context.

Furthermore, the unveiled awareness of the shifting contexts and processes and active conscious engagement in building connection and coherence bridged their conceptual association between virtual and real applications. It appeared that their way of adapting to e-learning world likely involved tapping into the e-learning system by navigating and systemizing and applying explicit knowledge. E-learners created and recreated their e-learning environments in both virtual contexts and real-life contexts through consciously and subconsciously making sense of the emerging structures and boundaries confronted in the e-learning process. It might as well have been in association with emotional response and adaptation certain participants had revealed. And it was likely that the e-learners navigated their specific learning goals and outcomes for the benefit of those of the individual and the collective in the process of structure reconstructing and
boundary shifting and reshaping. Learning experiences enabled by the adaptive e-learning system could be liberating and empowering.

**Interaction.** Another chain of thematic leads unfolded from participants’ accounts of their e-learning experiences. The data suggested that wholesome and supporting learning contexts, both micro and macro, as in the learning system and the organizational learning environment respectively, were perceived crucial in fostering desirable e-learning experiences linked to positive results in individual and professional performance.

**Multi-dimensional communication, dialogue, and feedback.** Despite May’s notion of e-learning rested largely upon individual independent exploration, his peers identified, to a greater and lesser degree, the overarching organizational environment as congenial to the genuine communication, open dialogue, and constructive feedback across multiple departments and teams. Not only did those diverse interaction boost learners’ motivation and team spirit to participate and contribute as team members, they also substantially grounded the learners in an organizational setting where learning, knowing, and working were interplaying through practical activities.

January conceived of the e-learning event as collective learning that is constructive in building and nurturing teamwork spirit, because learning challenges inevitably created opportunities to disrupt the status quo and increase learning-related communication for better learning and work flow and results. In responding to the questions that relate to collaborative work and the perceived e-learning effectiveness, he stated:

And the thought of we are all learning something new and important and, um, essential to our daily operation and efficiency… We talked about our problems and progress sometimes, especially problems. When I knew someone else was having some problem
or challenge, of course, I tried best to help, and we encourage each other, discuss the frustration, work on a better approach or solution… We enjoy working with others more; it helps us to get work done more efficiently.

In the similar vein, March found that the e-learning community that were sharing experiences and offering “feedback” and “support” motivated her to stay tuned and on track. When she was reminded of some overwhelming times she went through, she recounted:

… we talked about it openly on the platform and over a coffee or something. It helps to hear other people’s experience and thoughts and it actually drives you to move forward as you not alone in this and the frustration is normal and so is epiphany.

Fortuitously, both the professional and interpersonal relationship with her colleagues were enhanced via e-learning events, such as collaborative functions and forums, and extended beyond learning. March deems network support among individual learners and groups/departments as indispensable in making them collaborating learners and coworkers:

[O]n top of that, another feature this program has is this collaboration section where we get to communicate with others, get feedback, give comments, and do the scenario drill that would require you to get support from your coworkers… [E-learning] opens up our mind by the many ways we have cooperated with each other and from department to department. Not only just that, the relationship between us has been improved simply by going through this together and finding clues together, or maybe by communicating more than we did before and with the people we didn’t usually cross paths with.
In line with March’s mention of the paramount importance of substantive team support and anticipation of a prospering organizational learning synergy was April’s calling for much-cemented comradeship and clearly shared “learning attitude” and goals for both organizational and individual growth, despite her observation of deficient “involvement,” She envisioned:

If every one of us would see oneself as an important part of a whole, a learning unity, I believe one would involve more in e-learning, get more motivated, more willing to share experiences and so on. With this learning attitude, exchange of ideas comes naturally and together we create positive energy, positive values and positive relationship.

Echoing April’s discourse on “learning synergy,” June also perceived that synergy would originate and develop from interactions and “dialogue” that sustained the learning momentum. He suggested that e-learners’ being open, receptive and respectful in sharing their experiences make successful “cross-team” collaboration possible. He gently put forward his synergy thoughts:

Yes, this learning event provoked more talks between us regarding how hard or easy it is, and how helpful it is to make us more ready and qualified. Yeah, we talked about certain functions and contents, how to tackle certain problems… It built more dialogue among us…the positive synergy will sooner or later be developed among us as we work together along the way…As long as we respect and listen, we can achieve great success in collaborative team work even cross-team work.

When interviewed considering the collaboration and support from peers in the organization specifically, a majority of participants related, either directly or indirectly, to the organization’s identifiable culture of openness and open-mindedness, encouraging staff participation and input as well as exchanging ideas and perspectives. On another note associated
with e-learning, Interpersonal communication via social media and private mobile applications such as WhatsApp and WeChat made offering and gaining feedback and support more readily. For example, July viewed collaboration as much more accessible and effective compared to before with many communication tools available.

I think it is now becoming much easier to collaborate with people. For collaboration with other departments and teams, we use WhatsApp, WeChat, or even Skype to share files, opinions and communicate in groups…we were encouraged to share and connect, and communicate more about what’s going on with our e-learning. Some people, just because of that, all of a sudden, became more socially active.

**Counsel, support, and stewardship.** It was further unveiled through close analysis that both intellectual and emotional support from the learning community could bolster sustained motivation of e-learners individually and the learning synergy organizationally. The supportive interaction was as well manifested in the forms of consultation, coaching, modelling, and collaborating, in an either implicit or explicit way. Moreover, the organization’s articulate mission and espoused values (as explicated in the previous chapter) found their traces in spreading and cultivating a shared sense of learning and growing that engaged people and enabled the post-learning process of integration and transformation.

January reported that “authentic” e-learning could be maximized through “modelling and coaching” between individuals at different level, in which process, the informed anticipation in positive learning outcomes and engagement was contagious and invigorating among fellow e-leaners. He viewed “authentic” support emanating from “collegial spirit” as tremendously helpful in instigating engaged e-learning and transforming the learning attitude and results to better performance.
The urge to learn, the passion to collaborate from top down in a form of modelling and coaching could have an impact and eventually such impact could have more impact between individuals. Speaking of that, I strongly vote for the co-working spirit, so-called collegial spirit. This authentic support is definitely helpful to authentic learning. It helps trainees such as me to transform what we have learned to straightforward results.

In a similar vein, February considered consulting with more experienced coworkers for expertise advice as valuable in making most of the system and enabling inspiring learning experiences:

You know, I’m not very much a computer person, sometimes, I did bump a few problems when I was firstly introduced to this e-learning program. Well, I asked for people’s help. Those IT experts or someone more efficient navigating the program. Their answers and advices helped me to understand the system more profoundly. Yeah, it was quite an inspiring process.

Implicitly emphasizing the importance of team support and open communication, February portrayed the “genuine support” from diverse teams and different individuals in various age groups as potentially powerful in pushing the e-learning to another practical and emotional level, although he couldn’t get as much cross-team support as he would have expected:

We work in harmony… But you know I had difficulties in navigating the learning program, as I said; when I need help, I tended to consult someone from my own team and someone senior. I wish I could gain more insight from [younger people] as they are more programmed to the new technologies… I think we will become much better off if we
genuinely support each other even though each department have different responsivities and duties.

When touching upon how the learning would translate to effective applying and outcomes at the performance level, June noted the importance of macro contextual factors such as the company “environment” and “support” in facilitating effective learning and amplification of learning in application.

And whether you are able to successfully apply those things to your job and see the results is another story. It calls upon many factors. For example, the environment, the support of the company is favorable or not to facilitate such applying and learning. This is gonna be another steep learning curve.

Resonating to the key role of the organizational climate and culture, May claimed that the “cultural legacy” would foster healthy learning environments where “enthusiasm and candidness” and “work flow” transparency prevailed. On the same note, August noted that the respect and appreciation for different “perspectives” as the company’s espoused values benefited both their collaborative learning and collaborative work. She fervently embarked on the topic:

Overall, I feel we identify with the culture of the firm and the values it upholds. I mean, it all comes down to that. The founder, he encourages life-long learning and we have the company credo based on that, and of course humility… We share or strive to share this learning mindset, open to all varieties of perspectives, favorable or not, from colleagues, clients, and associates. With this belief, we learn from one another, build learning momentum. Um…by that, I find our work together more inspiring and satisfying.
Summary and reflection of superordinate theme 3. The central meaning drawn from this core theme would be that any form of human interaction would have a bearing on collective learning experience. The understanding of such interaction could be further deepened from two perceptive of human and environment -- e-learners and the macro context of organization.

It was reflected that individual e-learners constantly sought authentic feedback and support from their peers, and open dialogue and communication built on respect and receptiveness were appreciated. It was through these varied feedback system that a learning community identity was formulated and momentum in collaboration was enhanced. Indeed, through collective activities and efforts to find out better ways to learn and cooperate (learn to learn) inspired by e-learning, participants had grown to position themselves as collaborative co-learners and coworkers. Thus, it would be argued that the learning synergy created in the interactive e-learning process enabled and was enabled by the evolving positionality of e-learners and boundary pushing structures they reproduced.

It could be interpreted that the organizational environment within which motivated learners were able to stretch the breadth and depth of their learning comprehension and application by consulting with each other across levels was critical in enhancing e-learning and its effective transformation into desired, improved performance. Most importantly, participants' sensemaking illuminated the need for the organization to articulate and communicate its mission, values, and expectations in a constructive and coherent way throughout the e-learning initiative/event. The authority and decision-making process used to be perceived as democratic and less invisible were called for to cultivate a shared learning attitude and growth mindset and to enable and engage e-learners as a learning community in the processes of knowledge integration, application, and transformation. In that way, the roles organizational e-learners
envisioned they would play in the series of learning-oriented activities, challenges, and changes would become clearer under such conceptual and spiritual support from the leadership of the organization.

**Reflective Hindsight**

In the process of approaching, interpreting and making sense of the participants’ interpretations and sense-making, the researcher grappled with multiple ways of interpreting the participants’ perceived e-learning experiences in an attempt to do justice to the participants, their accounts, as well as the knowledge being socially co-constructed through conversations. Among the similarities reflected in the many concentrated themes were invariably imbued with subtle differences regarding the perception of the individual participant’s learning experience and the way they perceived the role of organizational context in the e-learning process. These aspects were given equal attention in the course of identifying emerging themes, drawing upon the IPA’s epistemological touchstones of phenomenology, idiography, and hermeneutics (Larkin & Thompson, 2011). Further, it rendered the undergirding philosophies of interpretive-constructivism and the theoretical framework extremely valuable in guiding the researcher’s laborious sense-making process. That involved iterative analyzing, interpreting and funneling of the interview data to understand e-learner relatedness to the learning context through the meanings they made.

Admittedly, there would always be a reasonable degree of uncertainty about the level of coherence between the participants’ understanding of e-learning, real shared yet unique learning experiences, and the transference into something tangible and substantive (i.e., performance) through sense-making. Nevertheless, the depth and width provided by the thick descriptions of details on participants’ authentic e-learning experiences and meaning making of such
experiences offered enriched insights into the research question. The rich data and the processing of it informed the researcher’s sensemaking in exploring what their e-learning experiences were like and how these experiences and outcomes thereof improved the individual and collective performance as well as reshaped and were reshaped by the context.

**Conclusion**

Bristling with detail and possibilities, the initial interview data – the personal accounts of their lived experiences – were attentively analyzed for generating “generic experiential themes” (Pietkiewicz & Smith, 2012, p. 361) in and across multiple data sets (Creswell, 2012). Three mutually-enhancing much-concentrated superordinate themes – *motivation, navigation, and interaction* – with their respective supporting subordinate themes, emerged and ultimately crystalized through the circuitous, iterative process of transcribing, coding, analyzing, exploring, interpreting, and verifying. These themes were presented and discussed in juxtaposition with the researcher’s own interpretation and reflection, which is in concordance with double hermeneutics in IPA research and practice (Pietkiewicz & Smith, 2012; Smith et al., 2009).

Thematic findings in reference to the subordinate themes are summarized as follows and discussed in the next chapter.

**Table 4.3.**

*Thematic findings drawn from subordinate themes*
<table>
<thead>
<tr>
<th>Subordinate Themes</th>
<th>Thematic Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Autonomy as an intrinsic drive for mega-cognitive learning</td>
<td>- Autonomy was identified as an intrinsic drive to motivate e-learners’ metacognitive learning.</td>
</tr>
<tr>
<td>2) Emergent ingenuity as a sustained motivator</td>
<td>- Emergent ingenuity was perceived as a vital motivator in arousing and sustaining e-learners’ motivation in e-learning.</td>
</tr>
<tr>
<td>3) Adaptive system facilitating contextual mega-cognition, reflection and adaptation</td>
<td>- E-learners’ mega-cognition – knowing/learning of their learning process – and reflective adaptation ensued were contingent on congenial contexts enabled by the adaptive learning system;</td>
</tr>
<tr>
<td>4) Embedded connections and coherence enabling collective adaptation</td>
<td>- Embedded connections and interrelations in the e-learning system were perceived instrumental in navigating and building coherence in their learning and applying process;</td>
</tr>
<tr>
<td>5) Multi-dimensional communication, dialogue, feedback and collaboration</td>
<td>- Open, communicative, and constructive dialogue among and feedback from diverse teams, departments, and levels were perceived crucial in enabling the authentic learning, applying, and collaborative synergy.</td>
</tr>
<tr>
<td>6) Counsel, support, and stewardship</td>
<td>- Adequate counsel, support from peers and sensible stewardship were of tremendous importance in fostering learning in a dynamic organizational e-learning context.</td>
</tr>
</tbody>
</table>

The findings unfold and bolds well for future organizational e-learning research and practice. It appeared that organizational e-learners self-regulated learning experiences would be most engaging, meaningful, and rewarding when the learning happened in an interactive and
enabling context where a healthy learning synergy took form, enlivening knowledge creation, conversion, elevation, and expansion organization-wide. Organizational e-learning dynamic the findings revealed could be portrayed in a form of legendary equation $E=mc^2$ (explicated in the next Chapter). $E$ denotes the synergistic energy, organizational learning effectiveness and learner experiences. $m$ represents the learner motivation, and $c$ refers to both the micro the macro contexts of the learning system and the learning organization respectively. Through double hermeneutics (sense-making of the participants and the researcher), the study indicates that organizational e-learners’ learning experiences are a dynamic interplay of the motivation, navigation, and interaction processes that are mutually informing and reinforcing. E-learner’s motivational experiences are multidimensional and interrelated with navigating/adapting process and interactivity with and within the learning context.

More importantly, the role of the context as both a micro and macro system in navigating and motivating e-learners could hardly be underestimated. An enabling and liberating organizational context with an interactive and adaptive learning system would foster the desirable learning synergy resulting in favorable outcomes at both individual and organizational levels.

The next and final chapter will be built on the themes and findings of this chapter, further discuss their results in the context of relevant research literature, and their significance and implications for the benefit of future research, practice, and social change. It would as well been seen as an extension of the researcher’s further meaning making that relates to a broader society and audience.
Chapter Five: Recommendations

The field of e-learning has been witnessing burgeoning vitality. A multitude of organizations are increasingly tapping the information and communications technology to create e-learning opportunities for improving the performance of their workforce. Along with advancing technology and increasingly accessible information and knowledge comes the need for more effective knowledge transferring, interactive communication and learning facilitation to reach more in-depth understandings in complex learning environments. The need further necessitates the study’s earnest attempt to learn and explore more about organizational e-learners’ learning experiences co-created by themselves and their organization.

The context of this study is organizational e-learning, with a focus on exploring and understanding e-learners’ lived e-learning experiences and their sense making process of the learning experiences on both individual and organizational levels. The study aims to inform potentials and promises of organizational e-learning systems in contemporary dynamic business and digital contexts, where high-end individual and collective learning goals are to be fulfilled.

The research question that the study and its findings summarized in the following endeavor to answer is:

What are the lived experiences of organizational e-learners related to motivation, adaptation, and interaction in a self-regulated yet interactive e-learning environment and what is the influence of e-learning on the professional and organizational performance of organizational members?

Summary of the Study and Findings

Indeed, as e-learning has been increasingly recognized as effective in supporting professional and organizational performance, much needs to be known about e-learners’
experiences and its influence on the performance on individual and organizational levels. Under the guiding theoretical framework of Pintrich’s (2005) Self-Regulated Learning model and Nonaka’s (1996) Organizational Learning model, the semi-structured interview protocol was established to draw pertinent data that answered the research question. The IPA (Interpretative Phenomenological Analysis) study engaged and interviewed eight organizational e-learners from different departments of a Hong Kong-based multi-cultural consulting firm through purposeful sampling and semi-structured in-depth interviews. The interviews were primed and conducted to explore and understand the themes of lived daily e-learning experience in the organization from participants’ own perspectives.

The interview data were subsequently decomposed, decoded, thematized and analyzed with respect to the central tenets of the theoretical framework, which led to three superordinate themes and six subordinate themes. The interview process/experience and findings, in a broader sense, made clear to both the participants and the researcher the potential of organizational e-learning in bringing about positive results in learning and performance. The in-depth interviews with eight participants from multiple departments and levels within the organization revealed three core mutually informing themes concerning their organizational e-learning experiences: 1) motivation and individual e-learning; 2) navigation and adaptation; 3) interaction and collective e-learning, further dissected and interwoven into the corresponding subordinate themes bounded by the evidence collected the conceptual tenants of the chosen theoretical framework. Through rigorous cross-referenced and ethics-bound data processing and analyzing and evaluating, nuanced conclusions were contextualized to inform the research question. The thematic findings follow in reference to the subordinate themes: 1) Autonomy was identified as an intrinsic drive to motivate e-learners’ metacognitive learning; 2) emergent ingenuity was perceived as a vital
motivator in arousing and sustaining e-learners’ motivation in e-learning; 3) e-learners’ mega-
cognition – knowing/learning of their learning process – and reflective adaptation ensued were
contingent on congenial contexts enabled by the adaptive learning system; 4) embedded
connections and interrelations in the e-learning system were perceived instrumental in navigating
and building coherence in their learning and applying process; 5) open, communicative, and
constructive dialogue among and feedback from diverse teams, departments, and levels were
perceived crucial in enabling the authentic learning, applying, and collaborative synergy; 6)
adequate counsel, support from peers and sensible stewardship were of tremendous importance
in fostering learning in a dynamic organizational e-learning context.

Thus, it would appear that properly designed and organized e-learning organization-wide,
as a system and an event, would facilitate and sustain motivated self-regulated e-learning in an
interactive way. This design could organically result in a healthy synergy whereby knowledge
creation, conversion, and elevation, and expansion are boosted. A diagram (as shown in Figure
5.1) was attempted to portray as well as ground the major findings and the dynamics involved in
addressing the research question. Paying homage to Albert Einstein and his *Special Relativity*,
the structure of the equation $E=mc^2$ was profited conceptually in the diagram illuminating the
research findings and significance, reflecting its prodigious influence beyond physical world.

![Figure 5.1. Conceptual roadmap connecting the research question and core findings borrowing Albert Einstein’s *Special Relativity* equation $E=mc^2$](image)
Organizational e-learning dynamic with reference to the study results is captured in the equation, where $E$ represents energy and effect of e-learning that are linked to the synergistic energy, organizational learning effectiveness and performance, as well as learner experiences. $m$ means the aggregated learner motivation, and $c$ refers to both the micro context of the learning system and the macro context of the learning organization. In organizational e-learning, the reinforced notion regarding the relationship of learner $m$ (motivation) and the success and effectiveness of e-learning is incisively reflected in the mass-energy relation of the equation.

Moreover, the role of adaptive and interactive $c$ (context) in navigating and motivating e-learners is virtually likened to the speed of light that would engender a great amount of energy and effect in the organizational e-learning process and outcomes.

In sum, the study results drew from the perspectives of the organizational e-learners and their own interpretation. They underlined not only the uniformity of the organizational e-learning phenomenon and formality but also the nuanced subtlety that makes organizational e-learning a personal experience important to individual e-learners and a shared experience vital to organizational knowledge creation, performance and development. Processed in its entirety, the findings of the interviews embody meaningful themes that would entail significant implications for educational and organizational theory and practice.

**Discussion of the Findings Related to the Literature Review**

Despite the inherent coherence with preponderant literature, the findings provide a valuable insight into the continuum of adult learning research at both individual and organizational levels. First, the findings were gleaned from qualitative research interviews through a phenomenological approach, complementing the large volume of research studies
prevalent in concerning adult self-regulated learning in an organizational learning environment, which are either fully or partially quantitative. Explicit interpretation of the organizational e-learning phenomenon and e-learners’ experiences were the outcome of the participants and the researcher’s dedicated sensemaking and reflection.

The holism and resilience of the findings informing organizational e-learning were enabled by the integration of multifaceted interacting constructs from the combined theoretical framework, whereas other studies are essentially based on observation, confirming evidence of learners’ particular learning-oriented traits, or the attribution of engaged learning to the exterior factors.

Learning paradigm that situates e-learning. As far as the learning paradigm was concerned, e-learning happened, as conceived and depicted in participants’ accounts of their lived world, in a digitally connected learning community. It concurred with Simens’ (2005) contention/vision of digital connectedness where learning takes place and is valued from a broad dynamic, emergent, and ongoing process of communication, networking, and self-organizing based upon and surged above the individual level. This did not contradict with, rather reinforced, the typical conceptualizing of learning in constructivism that “self-regulated, goal-directed and reflective” (Tennyson, 2010, p. 7) e-learners are actively and continuously engaged in constructive exploring. Confirmed by the research findings, the targeted e-learning occurred in a dynamic organizational context within which the boundaries of learning, collaborative work, and socialization were blurred, and the processes were non-linear, and learner cognition and behavior are fairly contextual, flexible and complex. It echoed Mahoney’s (2004) observation in interpreting learners as active knowledge builders.
Meanwhile, partially aligned with what Wiklund-Engblom (2015) advocates in the trajectory of learning technology agendas, the current learning technology was employed to enable the examined organizational e-learning system. And it was embraced more of a mixed combination of the learner-context-directed, processing-oriented, interaction-collaboration-centered, and performance-growth-enabled organ indispensable in a learning organization.

**Intrinsic motivation and e-learning effectiveness.** A careful look into the e-learners’ narrated experience and sense-making process deepened the understanding of the role played by intrinsic motivation in their e-learning process. The findings indicated that autonomy and liberty as well as ingenuity in content, context, and process intrinsically motivated learners and sustained their engagement to achieve their learning goals. As a result, the learning was more in depth and applicable. It was largely due to the fact that intrinsically-motivated learners tend to be more creative, flexible, explorative, and self-regulated (Pintrich & de Groot, 1990; Ryan & Deci 2000; Boekaerts & Minnaert, 2003). And they are likely to exhibit more curiosity that makes them persistently engrossed in deep-level learning (learning to understand and put the learned into use/practice), which stands a higher chance to meet learners’ predetermined goals (Curry et al., 1990). In today’s increasing complexity, organizational e-learners are required to be more intrinsically motivated in the absence of official, stable, and structured frames.

The findings in respect to motivation offered more concrete insight into the dynamic of e-learner motivation in complex contexts and organizational environments. Although creating motivating learning environments has gained momentum over the years (ChanLin, 2009; Keller, 2008), research studies predominantly grappled with demulsifying certain traits of successful e-leaners (Wighting, Liu, & Rovai, 2008; Yukselturk & Bulut, 2007), giving the e-learning context less credit than it deserved. Thus, this study would built the gap and enrich the understanding of
the dynamic interplay between the learner motivation and the learning context by focusing on e-learners interacting with the organizational e-learning system. It is consistent with the findings of Waheed et al.’s (2015) empirical study suggesting that intrinsic motivators linked to course content and delivery features as well as communicate module features positively affected their perceived outcomes and therefore motivated learners to use e-learning. By elucidating that emergent ingenuity in terms of e-learning content, procures, and context as major motivators intrinsically piqued e-learners’ curiosity and sustained their ongoing engagement with ample evidence, this study added more substance and specificity to the literature.

The fact that innovative technology was effecting cohesively with other procedural and contextual elements as an entirety in motivating and engaging the e-learners concurred with the findings of Shroff et al.’s (2007) case study investigating the effects of learning activities and technologies on the intrinsic motivation students engaging in an online MBA program. Predominance of novel technology would not contribute as much to e-learners’ intrinsic motivation. A more situated view of motivation has been gradually taking shape, which recognizes the multifaceted and multidimensional motivational interplay of person-context interactions (e.g., Hartnett et al., 2011). A socio-technological emphasis whereby meaningful and appealing content is delivered in an engaging way that bolsters interactivity and context awareness would favorably nurture e-learners’ intrinsic motivation to achieve their higher learning goals which are not opposed organizational and societal goals.

Further, the findings that relate to micro and macro contexts, in terms of systemic relevance to practice and interrelation and organizational support and interaction, stand on previous literature (Cheng et al., 2012; Luor et al., 2014; Prensky, 2001). These findings put one step further the much situated and contextual view of intrinsic motivation. As such, in
association with and for the benefit of the practical e-learning system design and pedagogy, an integration of cognitive science, learning theory, and a socio-technological focus is a path worthy of exploring. It appears that a nuanced emphasis on independent yet sociable learners and their interaction with the micro-macro contexts would make organizational e-learning experiences more meaningful, motivational, and rewarding.

Self-regulated learning in learning organization. Admittedly, research has shown that e-learning is most effective for those individuals who readily possess self-regulatory propensities and abilities, which was reflected in some of the participants’ responses. Nevertheless, the organizational e-learning is innately designed for learners to profit from self-regulated learning process. In light of Pintrich’s (2005) SRL model, the study, laying extra emphasis on the e-learners’ experiences on regulating their behavior, cognition, affect and motivation, shed further light on which areas could be targeted to design and organize SRL-enabling e-learning. SRL as part of the guiding framework assisted the exploration of the complex dynamic interaction between learner experience, learning systems, and learning context (Azevedo, 2005).

Self-regulated learning not merely has a positive impact on learners’ conceptual understanding and learning process, but also on their performance and achievement (Azevedo, 2005; Azevedo & Cromley, 2004). Literature suggested that learners engaging in meta-affective and -cognitive reflection were able to re-negotiate and readjust their emotions and cognitions (Nahl, 2012). As such, positive feelings and perceptions could be increased by through orienting towards higher learning goals, and as a result, learning tenacity and learner perseverance would be attained. This was in no contradictory position with the results of this study, which accentuated the importance of reflection on various aspects, such as actions, reactions, judgments, adaptation and emotions involved in the learning process and specific contexts. Specifically, in
view of the affect-cognition continuum (adapted from Fleckenstein, 1992, p. 449), e-learners’ “cognitive load” and “affective load” (p. 196) and how these influenced their behavior were illuminated, with certain constructs and areas to be supported and to be designed features for in supporting SRL (Wiklund-Engblom, 2015). Such positive affect and cognition that could be traced from in this study ranges from freedom, intrinsic interest, high task value, to goal achievements and reflection.

The findings of the study regarding organizational e-learning experiences were drawn from a dynamic learning organization. It thus addressed both the psychological aspects of e-learning engagement for learning, growth, and performance, and the social aspects in relation to the context and process of the organizational learning event taken place in a complex adaptive social system. The learning organization and its enacted e-learning system as macro and micro learning contexts breed both promises and constraints, which, orchestrated properly, would positively advance learners’ SRL processes while aligning individual goals with organizational goals to optimize integrated individual and collective learning (Senge, 2014) and performance. In that spirit, this study furthered the exploration of the alignment of individual learning needs, organizational interests, and work performance with facilitation of tangibly manifested organizational mission and vision (Wang, Vogel, & Ran, 2011). The results regarding the organizational support and espoused values and vision offers more concrete insights to the interplay between organizational learning dynamics and individual self-regulated e-learning process.

**Adaptive and effective learning systems.** In addition, this study affirms existing knowledge about the adaptive e-learning system by confirming its ability to flexibly adapt to different circumstances to facilitate e-learners’ personalized learning process (Lee, 2014).
Although the delivery of the confirmation is unique, the study, excavating the lived experiences of vested e-learners, helped put in perspective how learners could benefit from the interactive adaptive e-learning system. For instance, the level of relevance, interconnection, communication, and feedback all, to some extent, relate to how e-learners make sense of and expect from their learning experiences engaging with the system.

This study revealed the potentials of organizational e-learners to profit from a dynamic e-learning system based on a constructivist-collaborative approach integrating collaborative technology into a social dynamic learning system, which, according to Lee (2014), could grant learners the most latitude and autonomy to control the learning process. Also, through enabling a more sophisticated role of self-regulated e-learners, such a learning system constantly (re)constructs and refreshes e-learners’ ongoing knowledge and cognition throughout learning processes and tasks that are context and subject specific (Akhras & Self, 2000). Conducted in a consultancy firm under an organizational context, the study thereby offers convergent yet enriched credence to established thought. It afforded a glimpse into e-learners’ sense-making of their interactive e-learning experiences realized and could be realized by an adaptive, interactive e-learning system, lending inherent value to the knowledge about learners’ perceptions and expectations of an effective e-learning system they may maximally harness and a macro context that could foster it.

In brief, the findings relate to the literature review in four aspects: 1) Learning paradigm of constructivism and digital connectedness that situates e-learning, featuring dynamic, emergent, an ongoing process of communication, networking, and self-organizing; 2) intrinsic motivation’s significant role in achieving e-learning effectiveness in a much situated and contextual perspective; 3) self-regulated learning processes essentially linked to mega-cognitive reflection
in the context of the learning organization in aligning individual goals with organizational goals to optimize individual and collective learning; 4) adaptive and effective learning systems integrating collaborative technology into a social dynamic learning while facilitating e-learners’ personalized learning process.

**Discussion of the Findings Related to the Theoretical Framework**

Participants’ reported e-learning experiences with relevance to intrinsically driven motivation and context-bound navigation and interaction were cohesively congruent with and contextualized by key tenants of the theoretical framework guiding the study: a combination of Self-Regulated Learning (SRL) model (Pintrich, 2005) and Organizational Learning (OL) model (Nonaka, 1996). As such, the findings are further discussed in relation to the two interacting models.

**Pintrich’s (2005) SRL model.** In a sense, the study was expanded towards and concentrated on how the design and operation of a particular e-learning system/program would optimally promote learners’ motivation to effect self-regulated learning, navigation and interaction in an organizational context. SRL in organizational e-learning involves e-learners’ ability to exercise agency in their micro-level individual e-learning processes (Wiklund-Engblom, 2015). These learning processes were examined by exploring cognition, motivation, and behavior with reference to the design and operation of the system learning context.

Elements of the study’s findings at the individual level confirm largely what is delineated in Pintrich’s (2005) holistic model of SRL where four essential areas – *metacognition, motivation, behavior, and context* – are addressed. Not surprisingly, in reality the four areas concerning the reported self-regulated learning process were merged and interrelated. First, meta-cognitive awareness of the learning process and the learning context was well validated in
the present study. A majority of the participants related to their reflective thought process and (mega)-cognitive tracking activities in coherently identifying, organizing, storing, sharing, and applying the newly-acquired context-specific knowledge and building up the momentum of connections and informed confidence. Regarding motivation and affect, the relatedness of which was recognized by Pintrich (2005), supported evidence affirmed an individual’s drive to obtain certain learning goal was subject to the freedom and autonomy perceived in their learning experience. Furthermore, ingenuity and creativity in content, approach, and context did positively affect motivation regulation in the learning process. Understandably, such ability to control and monitor motivational beliefs (Pintrich, 2005) could be strategically and innovatively promoted to guide e-learner goal-setting to goal-achieving progress. As an outgrowth to metacognition, behavioral planning and regulation (as manifested in the form of navigating the e-learning system) was found in reflective thinking and perceived understanding of the specifically involved context. This leads to the all-important area of the context that self-regulated learners strive to monitor, control, and regulate when engaging in learning activities (Pintrich, 2005). The emphasis was further indicated in participants’ obsession with the interlinks and connections established throughout the learning system as well as the organizational context cohesively facilitating the processes of self-regulated navigation, adaptation, and application.

Additionally, the findings suggested that the properly designed context-sensitive e-learning system in consonance with the organizational learning environment would, in turn, stimulate and reinforce the level of behavioral interaction and awareness of learning and applying. The role of the organizational context in e-learning is further illuminated in discussing in depth the findings in light of the guiding organizational theory that constitutes the theoretical framework.
Nonaka’s (1996) OL model (SECI). Drawing on Nonaka’s (1994) knowledge-based theory of the organization that portrays the dynamic, “synthesizing process” of “knowledge creation and utilization” (Nonaka & Toyama, 2003, p. 3), how the organization interacts with its participating e-learners and the changing environment was explored in the interviews. Many a thread of data shed light on the learning process via which individual e-learners and the organization integrated and transcended boundaries and contradictions.

Conceptually, based on the Giddensian view (Giddens, 1984) to illustrate the interaction and interconnection between the agents/individuals and the context/structure, Nonaka’s OL theory offered crucial insights and rationalization in the way the e-learning and applying (knowledge-creating and –utilizing) occurred as “a dynamic process of dialogue and practice” (Nonaka & Toyama, 2003, p. 2) from an individual-to-organization and to-societal level. Indeed, it was contextualized by participants’ favorable associations with unbound, open communication and constructive feedback in the e-learning process. Rather than focusing on one’s own part and specific position in the learning process given a particular environment out of a conservative static view of the organization, today’s e-learners turn to be more aware of the holistic context where complex realities necessitate an active dynamic interaction between the organization and its learning members. Especially with regard to how e-learners apply and utilize what they have learned, the findings concerning interaction are consistent with OL theory in that new knowledge is further developed through interactive e-learning and collective exploration and action across teams and departments. New momentum is built throughout the process where organization and individuals grow together.

Specifically, the four knowledge conversion modes – *socialization, externalization, combination, and internalization* (Nonaka, 1994; Nonaka & Toyama, 2003) – were largely
captured in participants’ narrated e-learning experiences and reflection on those experiences. For instance, real learning with amplified results was reported to happen as soon as the vast scope of communication occurred and feedback ensued in socialization. This learning is depicted by Nonaka and Toyama (2003), as “the process of converting new tacit knowledge through shared experiences” (p. 4). By embracing contradictions, organizational e-learners are able to accumulate and share their newly absorbed knowledge in the social context through action and practical consciousness (Nonaka & Toyama, 2003). Mentoring and counseling among individual e-learners as a format of dialogue to offer and receive support was found rejuvenating and motivating. This further amplified the spiral process of articulating and sharing learning experiences; in this way, e-learners’ tacit knowledge was externalized, synthesized and rendered explicit. Another new cycle of feedback and communicative interaction followed and resulted in combined and integrated knowledge and experience spreading across and over every dimension of the organization. Reported pervasive innovation of in-system and online communication networks also facilitated the combination mode of knowledge conversion (Nonaka & Toyama, 2003). Moreover, espoused corporate mission and vision were related by participants to constituting coherently enabling context, which could be infused into conception and operation of the firm’s services HRD creating concrete learning goals with systemic knowledge to disseminate. Ultimately, the visible, tangible, and explicit would be subsequently internalized by organizational e-learners to enrich the tacit knowledge reservoir. It appeared that only through the interactive process between tacit and explicit knowledge that the “spiral of knowledge creation” and the “synergetic expansion of knowledge” (Nonaka, 1994, p. 34) led to a humanistic e-learning community that e-learners dream of.
In summary, collectively, the two theories comprising the theoretical framework guided the researcher to reach condensed themes and findings that addressed the research question. The findings as a whole were conceptualized and contextualized by the theoretical framework in use. The findings linked to e-learners’ perceived autonomy, ingenuity, and interconnection as well as the reflective awareness of the context could be microscopically informed by the four areas of concern in self-regulated learning – *metacognition, motivation, behavior, and context*. It was through this micro-level examination that e-learners lived learning experiences and nuanced meaning making were largely grounded and accounted for. The findings regarding communication, feedback, counsel and support further echo the essence of SECI (Nonaka & Takeuchi, 1996) model elucidating the dynamic processes through which knowledge is created, converted, transferred and shared in organization. It is through this macro-level process that the awareness to collaborate and grow collectively takes place leading to genuine interaction among co-workers/learners. This interaction results in conditions to enable the organization and nurture cognitive and constructive growth. The processes on the micro and macro levels appeared to be mutually informing and influencing.

**Discussion of the Findings Related to the Research Question**

The findings of the study as a whole, contextualized by prior research of relevance and the guiding theoretical framework, answered the research question(s) through a process of gradual crystallization throughout the research process.

What are the lived experiences of organizational e-learners related to motivation, adaptation, and interaction in a self-regulated yet interactive e-learning environment and what is the influence of e-learning on the professional and organizational performance of organizational members?
E-learners’ experiences in a dynamic organizational context would be inherently self-regulated and interactive. But how? \( E=mc^2 \) where \( E \) as experiences could be interchangeable with the energy e-learners have felt and the effectiveness they have perceived through their performance. Granted, such experience is contingent on \( m \) as motivation of e-learners’, and \( c \) as context, both the learning system and the learning organization in micro and macro dimensions respectively. Based on participants’ related e-learning experiences, the relationship between learner motivation and the positive energy, experience, and effectiveness of e-learning was, in general, articulated and interpreted. Meanwhile, the role of the micro-macro context – learning system and organization – in motivating, engaging, and navigating e-learners was found crucial in engendering the positive synergy, tenacious effect, and memorable experiences throughout the organizational e-learning process and outcomes.

How do e-learners make sense of the learning experiences and ways they apply their learning outcomes to improve their professional performance and the organizational performance? To a larger extent, e-learners made sense of their learning experiences through reflection and interaction. Reflection could be stimulated by cognitive engagement and navigational system as well as motivational context. Interaction in form of online-offline communication and cogent feedback would in turn instigate reflexive reflection and self-regulation. When self-regulation was properly enabled by interaction, it assisted e-learners cognitively and reflectively in identifying their gaps of knowledge in specific contexts. It further motivated and facilitated them behaviorally in effectively navigating and adapting to the system and organizational context and orienting themselves onto their individual unique e-learning path for enhancing their professional performance among other learning goals. Interaction in terms of the support mechanism, on the other hand, created emotional momentum and rationality for e-
learners not only to thrive on the collective wisdom but also enjoy every opportunity to collaborate, grow, and prosper as a whole.

It would appear that the key to understanding the knowledge-creating-and-transforming organizational e-learning though e-learners’ sense-making process of their learning experiences is dialectic thinking and system thinking. Authentic effective e-learning that would bear cognitive, practical, and societal fruits brought by professional and organizational improvements is to ultimately seek organic integration of various aspects and contradictions realized by a dynamic, transcending process of interactive dialogue and practice.

Further elucidating the implications of the findings thematically could augment the potential application for educational and organizational research and practice. The organic interrelatedness and equilibrium of the three core themes: motivation, navigation, and interaction, enriched by their respective subordinate themes that relate to autonomy, ingenuity, context, communication, and support, imply further educational and organizational application and development needs in the new highly digitalized and connected era. A discussion of the implications in the following two sections further contextualizes the findings in the gamut of literature, research, and practice.

**Implications for Future Research**

From this study, a few potential informed directions for future research efforts emerge in the educational and organizational field. Participants’ awareness of the organizational learning context/ environment that had a bearing on their e-learning momentum and results at different levels may suggest that organizational researchers ought to engage in more context-specific e-learning inquiry with organizations of various natures and across diverse sectors. Concentrating on e-learners’ reflected and recounted experiences in current organizational contexts that are
dynamic and complex might offer meaningful insights to e-learning research. On one hand, organizational e-learners would be stimulated to make sense of their (mega-)cognitive, motivation, and adaptation process. On another hand, organizational researchers and practitioners may inform desirable learning organization practice as well as instructional designing aiming at continually motivating learners and improving after-learning performance. In that sense, promoting e-learning research through the theoretical lens of organizational knowledge creation and learning combined with learning theory at individual level would enrich the understandings of and for both organizations and learners, while inviting a new round of questions and inquiries worth close examination. To develop desirable organizational e-learning for organizations to cope with change requires researchers to draw from knowledge from a wide variety of theories, such as theories of learning organization, sociocultural theories of learning, and cognitive theories of learning (Tynjälä & Häkkinen, 2005).

**Philosophical and methodological basis.** The fact that this study’s participants interacted with the flexible semi-structured interview protocol, and articulated and interpreted their e-learning experiences substantiates the prospect of further qualitative e-learning research. Longitudinal studies as a quantitative, qualitative or mixed methods research could be as well worthy of pursuing to generate comprehensive insights. Further to the methodological consideration, researchers may well explore e-learning and training topic using a variety of approaches – for instance, survey, focus group, and in-field observation – to enrich and vitalize the findings.

**Instructional design research.** With respect to exploring the benefits of e-learning conducive learning systems, researchers of instructional design might look into multifaceted factors such as learner autonomy, content and context ingenuity and interactivity, navigating
adaptability and the like. As a result, broad avenues could be explored with effective and thoughtful features and elements being incorporated into organizational e-learning systems to cultivate and sustain motivation, navigation, and interaction, inherent in enhancing individual and organizational performance and long-term development. Moreover, based on the results as well as prior research literature, further research on e-learning system designs for organizational e-learners could dive deeper into learners’ micro-level processes of their self-regulated e-learning while taking into consideration the macro-level contextual impact.

**Organizational learning research.** Although the study yielded meaningful findings from adult participants’ shared learning experiences within a consulting organization, researchers might stretch the parameters of e-learning study to not only various sectors and institutions but also a wider range of learners from varying age groups and cultures. Future research may include investigations into non-profit organizations and adult educational institutions in which e-learning is advanced in various areas and subjects for various rationalizations. Conversely, worthy of further HRD (human recourses development) consideration is a distinctive focus on how today’s industry trainers experience the e-learning phenomenon in their training career and how they cope with the change by revamping and reinstating the e-training agenda that meets the growing criteria of business owners in the new digitalized world.

In sum, the implications of study for future research to reference and expand are three-fold. First, while the study promoted the philosophical basis of idiography, hermeneutics, and phenomenology, it substantiates the future methodological enrichment in qualitative research in e-learning. Second, the study provided ample inspirations for educational/instructional design research by exploiting and exploring multilayered factors in e-learning. Third, the study and its findings boded well for future organizational learning research that inevitably occurring in a
digitalized and interactive context. Diversity, rigor, and multi-disciplinarity are to be embraced in learning research inquiries.

**Implications for Practice**

Flowing logically from the findings of the study and discussions delineated under the canopy of theory and research, this section contains practical implications as well as visionary recommendations to useful integration of research and practice that means tremendously to organizational and society leaders and change agents who truly care and need to care more. The implications for practice are elucidated in relation to potential improvements to individuals, organizations, communities, and societies.

**Humanistic organizing of emerging knowledge via e-learning.** Understanding the overarching context and the instructional design conducive to organizational e-learners’ engaged learning experience and application bore crucial implications for organizational practice. Appreciating thematic essence of organizational e-learners’ learning experiences highlights the need for creating a wholesome e-learning-enabling environment and e-learning system aimed at enhancing e-learner engaged and sustained learning, application, and development. The following recommendations are illustrated within this context, contextualizing thematic findings that contain practical connotations for organizations to humanistically realize knowledge creation and transformation via e-learning.

**Organizational context of relevance and coherence.** Reinforcement of application, implication, and adaptation loop could be enabled by the organization through dissecting, contextualizing the corporate vision and values. A combination of knowledge conversion (Nonaka & Toyama, 2003), open communication of vision and values, and a learning mindset could be made tangible and permeating into operationalized service and products and procedures

for after-learning application. In this way, coherently explicit knowledge would be internalized by e-learners to enrich and synthesize the tacit knowledge base and applied in relevant contexts.

**Cross-boundary synthesis and collaboration.** The spiral of knowledge creation, synthesis, and transformation grows upwards, penetrating the ontological levels (Nonaka & Toyama, 2003). Knowledge creation and the sense-making process through e-learning are regenerative, stretching boundaries horizontally and vertically. To organize and transform knowledge humanistically, organizations should embrace the dynamism of the emergence of knowledge creation through boundary-transcending interaction and collaboration across departments, divisions, and teams, committed to new ideas, possibilities, and experiments, self-reflection, and humanity (Nonaka, 1998, p.53; Nonaka & Toyama, 2003). In this light, the organizational “knowledge leadership” (Nonaka, 1998, p. 53) is in need. It may encourage and facilitate the formation of self-organizing cross-functional learning teams and programs, and boundary-spanning attempts (experimentation) based on mutual trust alongside candid experience-sharing and constructively critical dialogue to induce active learning and innovation.

**Human faculty, technology, and sociability.** The new era is infused with emerging digital devices and networks of extreme mobility and flexibility. Drawing from the spirit of Giddens’ (1984) structuration theory on which Nonaka’s OL theory is partially based upon, organizational e-learning would constantly benefit form addressing the nexus of structure (technological and social) and agency.

**Systemic enhancement of human agency.** The notion of agency-structure merge allows for the flowing continuity of human agency and its institutional embeddedness, giving rise to possible structural and social change (Wittington, 2015). In this vain, innovative utilization of digital communication networks and humanized big data technology might facilitate the
harmonious interface between active e-learners and the structural context and promote humanistic knowledge conversion, transcendence. On another note, concept-bound architectures are encouraged to be continuously employed in adaptive e-learning systems (Hauger & Köck, 2007), yet with a connection-bound twist. It involve fragments of concepts, contents, and interlinks in various forms, adapting not only to the learners’ prior knowledge, abilities, learning habit but also to their dynamic motivation, performance, and knowledge status (Kareal & Kléma, 2006). Moreover, an increasingly personalized digital context, as promoted by Lee (2014), triggering more relevant thinking and reflection, should be further attempted in engaging and motivating individual learners and building more interactive, responsive, and wholesome relationship between the system and individuals.

**Interlocked on-line off-line interaction and networking.** There is little doubt that the e-learning process is facilitated by discussions and exchange of vocal ideas and facial expressions. There might as well be much more assurance, experience, and perspectives to be gained from being part of a COP (community of practice), in which one can immerse oneself in the social interaction and collective meaning-making process to establish or to be more aware of one’s identity as a learner, practitioner, or researcher (Wiklund-Engblom, 2015). Thus, organizations implementing e-learnings are recommended to adequately supplement online learning with offline actives and support to unleash collective learning’s immense power.

**Key takeaways.** In summary, the major takeaways from the study for future practice targeting various audiences are set out as follows:

- Organizational leaders are advised to consciously and actively engage in creating an enabling context and empowering organizational learners, strategically channeling,
communicating, and nurturing the learning culture and a growth mindset through offering ongoing learning opportunities, such as communities of practice.

- Instructional designers are encouraged to focus more on organizing a meaningful e-learning experience by giving more thoughts to the modern reflective interplay of e-learners, technologies, and social-cultural interactions to advance adaptive and humanized systems. For instance, more interactive, collaborative, and personalized digital contexts and interfaces should be developed to stimulate learner motivation, metacognitive reflection and collaboration at different levels.

- E-learning facilitators should recognize their integral role in creating learning experiences for organizational e-learners that engage, enable, and challenge learners. They should foster a reciprocal learning-process, within the constructivist learning framework. Their role is focused on navigating, adjusting and adapting, and making meanings through interactions with e-learners within the dynamic learning context. Facilitators work toward the ultimate goal of balancing the organizational learning needs with individual e-learner professional development.

Overall, the humanistic knowledge creation and management revolving around the dialectic dualism of technology-in-use set the cornerstone for more significant integration of theory, research, and practice. The study offered practical insight into how we can adapt and thrive amid dynamic workplace learning contexts. In essence, the aim of the study is to understand how optimal individual and organizational learning and learning-effected performance can be enabled via e-learning systems in a dynamic organizational learning context. Thus, besides theoretical underpinnings, the significant practical role of the specific e-learning context (both the learning system and the learning organization) in individual and organizational
learning processes cannot be overemphasized. After all, it is in this organizational context that individuals’ “actions, evaluations, engagement intentions, and plans” achieve organic development while adjusting personally to the social virtual situation, whereby “technology, biology, and social practices” culminating in “an interactive synergy” Nahl (2012, p. 171).

Conclusion

The thesis has demonstrated how the study—tapping an interpretative phenomenological analysis of organizational e-learners’ lived e-learning experiences—inform the problem of practice while bridging a gap in the existing prevailing literature. Organizing a desirable e-learning event that engages and enables all the learners and ultimately invigorates organizational learning and performance could hardly be realized instantaneously by this study. Nevertheless, the results of the study would highlight organizational e-learner perspectives relating to their learning experiences in the Customer Relationship Management e-learning program enacted by the organization, and provide insight into the learning context to be “motivational, meaningful, and memorable” (Allen, 2016, p. 18). Drawing upon a combined theoretical framework composed of Self-Regulated Learning (SRL) model (Pintrich, 2005) and the Organizational Learning (OL) model (Nonaka, 1994), the qualitative study employing the IPA approach is adequately grounded in the limited volume of existing organizational e-learning research. Its concentration on exploring and interpreting the nuanced experiences of the e-learners and their own interpretations of those experiences proffered a unique lens through which the enriched tapestry of today’s organizational e-learning was presented in perspective.

Orchestrate learning contexts in practice. The findings of the study posit that organizations and the educational design field hold great potential to enact and organize a holistic learning environment congenial to e-learners’ authentic learning experiences poised for
higher end growth as well as professional and organizational performance improvements. The participants’ perceived experiences and sense-making as well as that of the researcher’s revealed that the learning content was not as crucial in enabling desirable e-learning experiences and outcomes as the learning context at both macro and micro levels and how e-learning was organized in that context. Content of learning is not knowledge itself whereas how it gets dispersed, distributed, and circulated works to retain and transform the transient and fleeting knowledge. Contexts act as institutions that guide and regulate individual learning diversity and liberty while empowering them. The three key pillars that concern e-learners’ learning experiences – motivation, navigation/adaptation, and interaction, embodied in the thematic findings – are interlaid with the all-embracing and undergirding context. The study further suggests that organizational leaders aiming to create the organizational learning synergy and vitality leading to performance prosperity may profit from: first, fostering an enabling organizational learning environment that encourages autonomy in learning and application and values open communication collegial support; second, working closely with instructional design team/professionals to enact the fitting e-learning system that embeds features and activities that spur learner reflection, degrees of ingenuity, interconnection and relevance to practice.

Harness the technology-in-use. If e-learning is believed to be the solution for organizations to stay competitive and energized with the advancement and permeation of information technology, organizational practitioners and researchers must understand how learners experience their e-learning and perceive and interpret their experiences. This calls for diverse approaches to explore the lived experiences of organizational e-leaners engaging in such learning events. Making sense of the shared e-learning experiences unravels the promises, potentials, and mysteries of the increasingly complex e-learning enabled by technology-in-use in
dynamic organizational settings within a complex society. The exploration sheds light on many a path and avenue that would organically transform the individual learning and knowing with the facilitation of educational technology and the learning organization into ultimate organic growth on every level. Harnessing technology involved in the learning system is a transformation process in which ongoing organizational practices influence and are influenced by the technology (Boulos & Bjorn, 2007). It would require the concerted effort from researchers and practitioners to consistently examine the realities of embedding technology in learning systems within specific organizational context.

In sum, understanding how organizational e-learners make sense of their learning experiences that bear great importance to their learning goals and outcomes would help organization leaders and training professionals as well as instructional designers collectively organize motivational, adaptive, and interactive learning experiences of relevance and significance through well designed e-learning systems where technology informs and is informed by everyday practices.

It was evident that the organic incorporation of organizational e-learning requires new ways of conceiving learning and how organizations organize and enact e-learning systems and environments congenial to authentic learning at both individual and collective levels. Dynamic business contexts imbued with e-learning activities have brought a new paradigm, if not a new spirit, of learning that would prompt a change of attitude, strategies, and processes as to knowledge (tacit and explicit) creation, management, transfer, and transformation. Illuminated by the entirety of the study with its informed findings, it could be argued that e-learning systems for realizing desirable organizational learning synergy be designed and organized in a humanistic way that facilitates learner motivation, adaptation/navigation, and interaction, fostering self-
regulated e-learning in symbiosis with organizational learning benefited from the “socio-cultural connectivism” (Wiklund-Engblom, 2015, p. 8) in the organization and beyond. The goal of learning organizations and organizational e-learning in the epoch may well be to veer from merely imparting and disseminating knowledge towards organizing engaging, interactive, adaptive, and inspiring e-learning experiences, social relations, and contexts to create and prosper a wholesome organizational learning ecology.
References


Psychology, 88, 715–730.


Sage.


Appendix B

Recruitment Email (Initial)
Northeastern University College of Professional Studies
Doctor of Education Program

Subject: Participation Requested in Research Study

Dear Name,

I am currently conducting a research study centered upon the experiences of e-learners in organizational learning for my doctoral thesis in my graduate program at Northeastern University in the US. My goal is, through research, to understand the lived e-learning experiences of organizational members in a dynamic organizational learning environment such as your consultancy to inform the contemporary organizational world of how e-learners experience such learning methodology/system. The research hopes to shed light on e-learning designs in an organizational context. I am seeking your participation in the study because you have participated in the e-learning Custom Relationship Management program at Brightie Limited.

If you choose to participate in the study, I will be interviewing you about your e-learning experiences for research data collection and analysis. The expected time commitment is a one-hour interview at your convenience at a location of your choice. I anticipate I may also need to follow up with clarifying questions by phone. Confidentiality is guaranteed on both individual and organizational levels by using pseudonyms and research protocols that align with our high institutional and research standards.

If you are:
- currently working in the organization and involved in its Custom Relationship management eLearning program;
- assuming a position in Administrative, Marketing, Sales, Finance or Production department;
- aging 28-55, male or female, with any cultural background;
- with Tertiary education (or with basic computer literacy).

And most importantly, you are interested in sharing and exploring your learning experiences, you will make a suitable participant in the research interview.

Should you want to understand more about the study and be part of it, and you meet the criteria listed above, please email me back at yang.na1@husky.neu.edu and kindly include the information listed below. Additional details about the study will be provided accordingly.

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Appendix C
Engagement Email (Targeted)
Northeastern University College of Professional Studies
Doctor of Education Program

Subject: Your Participation Makes a difference

Dear Name,

Hope all is well with you.

You may have received my previous email regarding participating in a study I am conducting for my doctoral thesis. I look forward to working with you to learn about your own learning experiences in the e-learning campaign.

The purpose of this study is to understand the lived e-learning experiences of organizational members in terms of motivation and adaptation processes in an interactive organizational learning environment where high-end individual and collective learning goals are to be fulfilled. It is my hope that through our concerted efforts the betterment of organizational e-learning systems/designs in a dynamic organizational context will be illuminated.

To achieve the above research goals, one interview with two parts might be arranged accordingly (one warm-up interview, one core interview, and one follow-up if necessary). In the initial short warm-up session which would last for approximately 20 mins, we will try to get to know you as a person and talk about things in general. In the meantime, you will be asked to select a pseudonym to protect your identity and presented with a consent form (the digital version is attached for your reference) for your review and requested to sign if you decide to participate. As the timeline for the research interview will be from May to Aug, 2018, please feel free to set up an initial meeting with me by returning the email.

Your commitment matters. Your passionate input will be much appreciated. Please let me know if you have any questions or if you would like me to clarify anything. I’m here to support you and the exploration of your own experience that holds value to all of us.

Best Regards,
Brooke Yang
Appendix D

Follow-up Email (to ones that show interest)
Northeastern University College of Professional Studies
Doctor of Education Program

Subject: Thanks for Your Passion

Dear Prospective Participants,

Thank you for your reply and your passion in being part of the research study. I believe your input will be valuable to this research and in helping grow our professional practice at all levels.

The study intends to explore the lived experiences of organizational e-learners in an interactive, dynamic organizational learning context such as yours. Specifically, the research aims to gain an insight into how organizational members make sense of these experiences in terms of motivation, interaction, and adaptation as well as organizational e-learning effectiveness in such context. Therefore, your engagement and input counts and are valuable in attaining the goals whose implication will enlighten us both in academic and professional worlds.

As noted previously, you will have an interview that lasts approximately one hour with me in a comfortably arranged time and venue of your choice. The interview will be conducted in accordance with the procedures explained in the consent form. The interview will be audio recorded and transcribed further into writing for data analysis and interpretation. The interview questions involved (might not be identical) are also attached in this email to give you a general idea of what will be expected from you during the process. Finally, the transcripts of our in-depth interview will be shared with you for your review and assessment. Based on that, you will be welcome to share additional information and clarification if and when ambiguity or inaccuracy arises.

The timeline for the interview agreement will be from Jun to Aug. During this time period, you are encouraged to proactively schedule an interview appointment with me. I look forward to collaborating with you in sharing our learning experiences, interpreting the underlined issues, and developing the recommendations.

Thank you again for your interest in participating in the study. Please feel free to reach me via email yang.nal@husky.neu.edu or on my mobile (9501-1899) if you have any further doubts or questions.

Best Regards,
Brooke
Appendix E

Informed Consent Form
Northeastern University College of Professional Studies
Doctor of Education Program

Name of Investigators: Principal Investigator, Nancy B. Pawlyshyn, PhD; Student Researcher, Yang Na (Brooke)
Thesis Title: A phenomenological study of the perceived effectiveness of organizational e-learning in a Multicultural Consultancy Firm in Hong Kong

Informed Consent to Participate in a Research Study
We are inviting you to take part in a research study. This form will tell you about the study, but the researcher will explain it to you first. You may ask this person any questions that you have. When you are ready to make a decision, you may tell the researcher if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, the researcher will ask you to sign this statement and will give you a copy to keep.

Why am I being asked to take part in this research study?
We are asking you to be in this study because you are currently involving in your organization’s Custom Relationship Management e-learning program.

Why is this research study being done?
The purpose of this study is to understand the lived e-learning experiences of organizational members in terms of motivation and adaptation processes in an interactive organizational learning environment of a multicultural consultancy. This is to inform the effectiveness and betterment of organizational e-learning designs and systems in contemporary dynamic organizational contexts, where high-end individual and collective learning goals are to be fulfilled.

What will I be asked to do?
You will be asked to take part in an interview where you will share your e-learning experience with the student researcher. There might be a follow-up (telephone) interview involved to ask clarifying questions.

Research Design: Qualitative method will be employed throughout the research.
Research Approach: Interpretive Phenomenological Analysis (IPA)
Research Site: a location you choose
Participants: 8-10 organizational e-learners from different departments and across different levels.
Data collection: semi-structured in-depth interview that will take around 60 mins.
Interview Venue: dependent on your choice, e.g., local coffee shops where you feel comfortable

Will there be any risk or discomfort to me?
There is no foreseeable risk or discomfort that may be caused by the interview process carefully planned and executed.
Will I benefit by being in this research?
There will be no direct benefit to you for taking part in the study. However, the information learned from this study may help you understand better your own learning experience and that of the organization.

Voluntary participation: Your participation in the study is completely voluntary. You have the right to withdraw from the study at any time without any conceivable ramifications.

Who will see the information about me?
Confidentiality of the research data is highly guaranteed. Only the researcher myself and the advisor have the access to the content, restricted to this research. You will select a pseudonym that will be used throughout the study to protect your identity. Our interviews will be audio recorded and transcribed verbatim into written texts. The transcript will be analyzed to identify patterns and themes within itself as well as cross-referenced with transcript of other participants. All physical documents related to this study will be properly stored in a locked file cabinet whereas electronic ones will be stored in a password-protected online file storage program such as Dropbox. All data will be retained for a limited period of time and destroyed for good.

Who can I contact if I have questions or problems?
If you have any questions about this study, please feel free to contact me, Brooke Yang, at +85211899 or via yang.na1@husky.neu.edu, the person mainly responsible for the research. You can also contact Dr. Nancy Pawlyshyn, the Principal Investigator at n.pawlyshyn@northeastern.edu.

Who can I contact about my rights as a participant?
If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, Mail Stop: 560-177, 360 Huntington Avenue, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

Agreement:
I agree to participate in the research study described above.

____________________________________________
Signature of person agreeing to take part     Date

____________________________________________
Printed name of person above

____________________________________________
Signature of person who explained the study to the participant above and obtained consent     Date

____________________________________________
Printed name of person above
Appendix F
Interview Guide – Based on Two-Interview Protocol
Northeastern University College of Professional Studies
Doctor of Education Program

The first interview mainly focuses on establishing rapport with the interviewers while finding out the background and demographic information about them.

1. **Tell me about yourself. What’s your age, experience in the industry, and previous experience?**

2. **What is your education background? How would you describe your learning pattern given your experience?**

The purpose of the first interview is to get to know each participant generally as an individual and a person in the organization.

The second interview involves exploring the following questions and will be subject to modification and refinement throughout the ongoing process.

1. **How long have been working for the organization? What department are you in? What’s your job responsibility?**

2. **What kind of learning contents have you been requested to focus on or help perform your responsibilities? How have you learned similar things/ concepts in the past? What’s the difference?**

3. **How have you been trained to have developed the skill sets to help you learn and apply better? Are you comfortable with the learning tools? Do you perceive yourself as effective in navigating your learning process? How so?**

4. **Can you tell me a story about when you can learn something that it’s more relevant and easier to apply?**

5. **Can you tell me a time when you engaged in an effective e-learning? What makes it effective? And how did you know it’s effective?**

   Prompts: How would you view the dynamics of your own individual gains throughout the learning and the collective learning results that more or less determine the effectiveness/success of organizational e-learning?

6. **How do you perceive your own motivation in the learning process? What made you keep learning what you are supposed to learn and applying what you’ve learned to solve real-time problems? Were you excited about the progress? Did you experience any barriers? How would you deal with it?**

7. **Can you walk me through the personal and mental process you have gone through in your e-learning experience thus far?**
Prompts: When would you feel most or less motivated? Can you share more about the process where you adapted to the new learning contents and tools and where you found it more or less effective in promoting your efficacy and capacity and realizing your own learning goals?

8. Can you share what you have gained from this “learning” organization and the learning experience in particular? How do you make sense of all the experiences as to your ability to apply what you’ve learned to the organization to improve it?

9. In terms of application, how do you apply the contents to enhance the collaborative work between different departments? How did you collaborate with the sales team or marketing team? How did it turn out?

10. How do you perceive the effectiveness of the e-learning system implemented?
Prompts: Do you have confidence in its success to help you achieve desired professional performance as well as strengthen the organization’s collective learning awareness and capacity and its performance?