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MASTER OF RESEARCH AND DEVELOPMENT MANAGEMENT

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**ENHANCING CUSTOMER EXPERIENCE IN ELECTRIC COMPANY BUSINESS
CENTER THROUGH CUSTOMER JOURNEY MAPPING TO ADVANCE DIGITAL
ADOPTION AND SERVICE INNOVATION**

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20 March 2026

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Acceptance Page

This Special Problem of **EDELIZA C. CAMACHO** titled: “**ENHANCING CUSTOMER EXPERIENCE IN ELECTRIC COMPANY BUSINESS CENTERS THROUGH CUSTOMER JOURNEY MAPPING TO ADVANCE DIGITAL ADOPTION AND SERVICE INNOVATION**” is hereby accepted by the Faculty of Management and Development Studies, U.P. Open University, in partial fulfillment of the requirements for the **Master of Research and Development Management**.

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Declaration

This is to certify that:

- I. The special problem comprises only my original work towards the MRDM, except were indicated in the Preface
- II. Due acknowledgment has been made in the text to all other material used
- III. The special problem is fewer than 25,000 words in length, exclusive of tables, maps, bibliographies, and appendices.

Edeliza C. Camacho

Name

Biographical Sketch

Edeliza C. Camacho is a dedicated Customer Care Officer with extensive experience in frontline service operations and customer relationship management. She currently serves Manila Electric Company, where she plays a vital role in delivering excellent customer service, resolving concerns efficiently, and contributing to improved operational performance.

With 18 years of service in Meralco, Ms. Camacho has developed strong expertise in handling diverse customer needs and fostering positive customer relationships. Her long-standing experience reflects her commitment to service excellence, adaptability, and continuous improvement in a dynamic and customer-focused environment. Ms. Camacho earned her Bachelor of Science in Entrepreneurial Management in 2000, followed by a Post-Baccalaureate Degree in Management in 2001 at Polytechnic University of the Philippines. Her academic background has equipped her with a solid foundation in business principles, management practices, and customer engagement strategies, which she effectively applies in her professional role.

Throughout her career, she has consistently demonstrated dedication and professionalism, contributing to initiatives that enhance customer satisfaction and service delivery. She actively participates in efforts that promote customer-centric innovation, particularly in improving processes and supporting digital transformation. Driven by a passion for excellence and innovation, Ms. Camacho remains committed to advancing her expertise in customer experience management and contributing meaningful value to both her organization and its customers.

Acknowledgement

I would like to extend my heartfelt thanks to my family, who serve as my inspiration to work at my best in writing this paper. I intentionally wanted to show them the grit, grind and growth in learning why I still pursued further education. Special thanks as well to my Special Project Adviser, Professor Primo Garcia, who provided his guidance, knowledge and expertise, I truly admire and appreciate. I would also like to express my gratitude to the respondents of my research for their time and valuable inputs, as well as my colleagues in Meralco for their support and guidance.

Greatest of all, thank you to almighty God who gives me the wisdom, the capability and the might to pursue and perform well in everything that I do. Apart from you, Lord, I can do nothing. All glory to you, Lord.

Dedication

This work is wholeheartedly dedicated to my beloved family; my husband, Jin, and our children, Jacob, Jade, and Jia.

To my dear children, may you always embrace and find joy in the journey of learning and the endless opportunities that education offers. Let this remind you that knowledge is a gift from God—one that must be valued, nurtured, and shared with others. It is a powerful tool that, when paired with dedication and perseverance, enables you to overcome challenges and turn your dreams into reality.

Above all, to God be all the glory.

Love,

Mommy Edz

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LIST OF ABBREVIATIONS

- R&DM - Research and Development Management
- CX360 – Customer Experience 360
- CX – Customer Experience
- SME – Small and Medium Enterprise
- BC – Business Center
- CCR – Customer Care Representative
- TPA – Third Party Agency
- SLA – Service Level Agreement
- DN -Disconnection Notice

Abstract

Customer expectations are changing as more services become digital, pushing utility companies to improve how they deliver services. This study focuses on improving customer experience in electric company business centers by using customer journey mapping. Its goal is to help increase the use of digital services and support new ways of delivering better service. Information was gathered from employee interviews, customer feedback, and service performance data. Customer journey mapping was used to track and understand the full customer experience, from beginning to end, to identify delays, issues, and gaps in digital usage. The research was conducted in selected business centers that are currently improving their service processes. The results showed that customer journey mapping helps improve service by clearly identifying problem areas and customer needs. It helped reduce delays and showed opportunities to shift customers to digital platforms. As a result, customer satisfaction improved, services became faster and more efficient, and more customers started using digital options such as online services and mobile apps. The study also found that employee support and proper training are important for successful implementation.

In conclusion, customer journey mapping helps improve customer experience and supports digital adoption in electric company business centers. By focusing on customer needs and improving processes, companies can deliver better and more efficient services. This study offers useful insights for organizations working toward service improvement and digital transformation.

Keywords: *Customer Experience, Customer Journey Mapping, Digital Adoption, Service Improvement, Electric Utility*

I. INTRODUCTION

A. RATIONALE

The service environment today is increasingly shaped by rapid digital advancement, where customers expect efficient, seamless, and personalized interactions across both online and in-person channels. This shift is particularly evident in M Electric, a pseudonym for a major electric distribution utility in the Philippines that serves a wide spectrum of customers, including residential users, small and medium enterprises (SMEs), and commercial accounts. Although the company has invested in digital solutions such as mobile applications, online billing systems, and self-service platforms, a substantial portion of its customers continues to prefer visiting physical Business Centers (BCs). This behavior is largely driven by trust in face-to-face transactions, ingrained habits, varying levels of digital literacy, and limited awareness of available digital channels.

The broader national context further complicates digital adoption. In 2023, only a small proportion of households in the Philippines had access to fixed broadband infrastructure, reflecting persistent gaps in connectivity and digital readiness. As a result, two major issues arise: the slow uptake of digital services among critical customer groups and the continued strain on physical service channels due to high walk-in volumes. These challenges not only reduce operational efficiency but also limit the organization's ability to fully realize its intended omnichannel service strategy.

To address these concerns, M Electric introduced Customer Experience 360 (CX360), a strategic program designed to enhance service delivery and encourage digital channel migration. The initiative integrates customer profiling, journey mapping,

and touchpoint analysis to better understand customer needs and improve interactions. From a Research and Development Management (R&DM) perspective, the problem is approached as a socio-technical challenge—one that requires more than just technological solutions. It calls for a deeper examination of user behavior, assessment of technology acceptance, iterative design and testing of service improvements, and structured approaches to managing organizational change.

Existing studies on digital transformation point to common barriers, including fragmented data systems, lack of trust in digital processes, and resistance to new ways of engaging with services. In this study, Customer Journey Mapping is utilized as a key analytical tool to capture the actual experiences of customers, identify pain points, and uncover both structural and behavioral obstacles to digital adoption. This approach helps pinpoint opportunities where service design can be enhanced, particularly through digitally assisted solutions that remain inclusive and user-friendly.

The study contributes to multiple areas. Conceptually, it expands the understanding of digital adoption by incorporating not only perceived usefulness but also factors such as trust, system reliability, and institutional readiness. Practically, it presents Business Centers not merely as service points but as transitional spaces that can help customers build confidence in using digital tools. Strategically, it highlights the importance of addressing backend inefficiencies and legacy system limitations as critical enablers of long-term innovation.

Overall, this research proposes a comprehensive socio-technical framework that supports traditional utility organizations in transitioning toward more integrated, customer-centered digital service models while remaining responsive to the realities of their operating environment.

B. STATEMENT OF THE PROBLEM

Although M Electric has made substantial investments in expanding its digital service ecosystem, a large segment of its customer base still prefers conducting transactions in person at Business Centers. This trend persists even for services that can already be completed through digital channels such as mobile applications, online billing platforms, and self-service portals. The continued dependence on face-to-face transactions creates operational challenges, including overcrowded service centers, increased demand for manpower, and higher administrative costs. At the same time, it prevents the organization from maximizing the efficiency gains and scalability benefits that its digital initiatives are intended to deliver. The relatively low adoption of digital platforms also limits the company's ability to achieve full value from these investments and delays progress toward a fully integrated omnichannel service model.

This situation suggests that technological availability alone is not sufficient to drive customer migration to digital channels. Instead, various underlying factors influence customer preferences and behaviors. These include levels of trust in digital systems, established habits, digital literacy, perceived risks associated with online transactions, and external constraints such as access to reliable internet connectivity and appropriate devices. Without systematically examining and addressing these interrelated factors, efforts to improve customer experience and accelerate digital adoption are likely to remain fragmented, resulting in suboptimal outcomes.

From a Research and Development standpoint, this challenge offers an opportunity to apply structured and evidence-based approaches to better understand and respond to customer needs. Methods such as customer journey mapping, persona development, service blueprinting, and human-centered design enable a

more comprehensive analysis of the current service experience. These approaches facilitate the identification of service gaps, uncover hidden pain points, and capture emotional and behavioral drivers that influence channel selection. By grounding improvements in actual customer insights rather than assumptions, the organization can design and implement solutions that are both relevant and effective in addressing operational inefficiencies and user needs.

Furthermore, these methodologies support an iterative process of testing and refinement, allowing the organization to continuously improve its services in line with evolving customer expectations and technological advancements. This approach promotes adaptive learning and ensures that service innovations remain responsive and sustainable over time.

Anchored in this perspective, the study seeks to reinforce and operationalize M Electric's CX360 initiative through a rigorous analysis of customer behavior and the barriers that hinder digital adoption. It aims to develop practical, evidence-based recommendations that guide customers toward more efficient, accessible, and trusted digital service channels. More importantly, the study contributes to the organization's broader transformation goals by offering a research-driven framework that enhances service quality, improves operational performance, and supports long-term digital development. Within this framework, Business Centers are repositioned not only as physical transaction points but also as strategic environments that facilitate customer transition and build confidence in digital service use.

C. OBJECTIVES OF THE STUDY

This study is designed to translate the CX360 framework into a practical application by utilizing qualitative approaches within a Research and Development Management (R&DM) perspective. Its primary objective is to develop a comprehensive and evidence-informed understanding of customer behavior, service interactions, and patterns of digital adoption within M Electric's Business Centers. Guided by the view that customer experience emerges from the interaction of human factors, operational processes, technological systems, and organizational culture, the research aims to move beyond theory and demonstrate how CX360 can be implemented as a concrete tool for service improvement.

To achieve this, the study gathers insights from multiple sources, including customers, frontline employees, and actual service environments. This multi-perspective approach enables the identification of both visible and underlying influences that shape customer attitudes, choices, and engagement across physical and digital channels. By employing qualitative R&DM techniques, the research allows for continuous exploration and refinement of findings, ensuring that proposed service enhancements are grounded in actual user experiences and real operational conditions rather than assumptions. This orientation reinforces the importance of designing services based on empirical evidence and user-centered insights.

In addition, the study highlights the importance of increasing digital adoption as a means of improving efficiency, accessibility, and service consistency, particularly within the context of utility services where customer needs vary widely. By examining how customers transition between in-person and digital channels, the research seeks to identify barriers, key interaction moments, and opportunities to create a more

integrated omnichannel experience. These insights are intended to support organizational efforts to enhance service quality while advancing digital transformation initiatives across Business Centers.

Ultimately, the research aims to deliver both practical and theoretical contributions. On the practical side, it provides M Electric with a structured, customer-focused roadmap for improving service delivery and encouraging digital engagement. From a theoretical standpoint, it illustrates how the CX360 framework can be effectively applied through qualitative R&DM methods within a real-world utility setting, offering a model that other service-oriented organizations may adapt in pursuing their own transformation efforts.

Specifically, the study seeks to accomplish the following:

Objective 1: Customer Segmentation and Behavioral Profiling

Understanding Customer Profiles and the Persistence of In-Person Service Preference

This objective focuses on systematically identifying and defining distinct customer segments based on their behaviors, expectations, and contextual circumstances that influence how they interact with M Electric's Business Centers. Instead of viewing customers as a single, uniform group, the study acknowledges the diversity that exists among them—particularly in areas such as digital literacy, access to technology, trust in digital platforms, socioeconomic conditions, and previous experiences with both in-person and online service channels (Parasuraman, 2000; Venkatesh et al., 2012). These variations shape not only how customers perform transactions, but also explain why many continue to favor physical service channels despite the availability of digital alternatives (Laukkanen, 2016).

The analysis examines a range of behavioral indicators, including how often customers visit Business Centers, the types of transactions they prefer to handle in person, their dependence on assistance from Customer Care Representatives (CCRs), and their level of ease or hesitation when using self-service technologies. These observed patterns are further interpreted alongside situational factors such as the perceived complexity and risk of specific transactions—particularly those involving billing concerns, reconnection requests, or new account applications—as well as the urgency of the issue and the emotional comfort associated with face-to-face interaction (Berry, 1995; Zeithaml, Bitner, & Gremler, 2020). Combining these behavioral and contextual elements allows for the development of customer profiles that reflect real decision-making processes rather than assumptions about digital readiness (Homburg, Jozić, & Kuehnl, 2017).

Through the identification of these differentiated profiles, the study moves beyond a basic classification of customers into “digital” and “non-digital” categories. Instead, it aims to uncover the underlying motivations that drive continued reliance on in-person service. These insights make it possible to determine which customer groups are more likely to transition to digital platforms with minimal intervention, which may benefit from guided or hybrid service approaches, and which may remain dependent on physical channels due to structural, technological, or personal constraints (Rogers, 2003; Lemon & Verhoef, 2016). Ultimately, this objective establishes a critical foundation for designing service strategies that are both responsive to customer needs and inclusive across different segments.

Objective 2: Customer Journey Mapping and Experience Assessment

Revealing Pain Points, Emotional States, and Satisfaction Drivers Across the Service Lifecycle

This objective aims to comprehensively examine customer experiences across the entire service journey within M Electric's Business Centers, covering the phases before, during, and after service interaction. By adopting the customer's perspective in mapping this journey, the study seeks to capture not only observable actions at each stage but also the underlying thoughts, expectations, and emotional responses that shape the overall experience (Stickdorn et al., 2018; Rawson, Duncan, & Jones, 2013).

The pre-service phase involves how customers recognize their service needs, search for relevant information, evaluate whether to use digital platforms or visit a Business Center, and prepare the necessary requirements. The on-site phase focuses on activities that take place during the visit, including arrival, queuing, interactions with Customer Care Representatives (CCRs), processing of transactions, and the overall waiting experience. The post-service phase examines how customers interpret the outcome of their visit, including their perceptions of fairness and clarity, their confidence in any required follow-up actions, and their willingness to use digital channels in future engagements (Lemon & Verhoef, 2016). Customer interviews will be used to identify points of difficulty, inefficiencies, and smooth interactions across these stages, consistent with established qualitative research approaches (Patton, 2015).

A key component of this objective is the analysis of emotional responses throughout the journey. Feelings such as anxiety during waiting periods, frustration

arising from unclear procedures, relief after issue resolution, and satisfaction derived from supportive and empathetic service interactions are all considered critical in shaping customer perceptions. These emotional factors play a significant role in influencing memory, perceived value, and future behavioral choices (Zomerdijk & Voss, 2010; Kahneman, 2011). By examining both sources of dissatisfaction and elements that contribute positively to the experience, the study provides a balanced understanding of current service performance.

The resulting customer journey maps will present a detailed and evidence-based visualization of how customers actually experience M Electric's Business Centers. These insights will serve as an important foundation for identifying improvement opportunities while also preserving effective practices that enhance service quality.

Objective 3: Multichannel Experience Evaluation from Customer and CCR Perspectives

Understanding Physical and Digital Touchpoints from Customers' and CCR Perspectives

This objective seeks to combine insights from both customers and Customer Care Representatives (CCRs) in order to develop a comprehensive understanding of how M Electric's physical and digital service channels operate in actual practice. While customers engage with the service externally, CCRs function within internal systems, performance expectations, and procedural requirements that directly influence how services are delivered (Bowen & Schneider, 2014). By examining these two perspectives together, the study can identify gaps between intended service design and how services are actually experienced and utilized.

From the customer standpoint, the research explores interactions across both physical and digital touchpoints. Physical interactions include elements such as Business Center visits, queue management, face-to-face communication, and document handling processes. Digital interactions, on the other hand, involve the use of mobile applications, online platforms, and electronic payment systems (Verhoef et al., 2015). Through interview data, the study identifies recurring challenges that limit the use of digital channels, including usability issues, lack of confidence, fear of committing errors, perceived risks, limited access to technology, and the perception that digital options are not well-suited for complex or sensitive transactions (Laukkanen & Kiviniemi, 2010).

From the perspective of CCRs, the study examines frontline experiences that shape customer interactions but are often not visible to customers. These include observations on customer readiness for digital engagement, the types of support frequently provided, recurring service concerns, and operational constraints that affect efficiency, consistency, and turnaround time. Patterns such as repeat visits for similar concerns and continued reliance on manual intervention—despite the availability of digital alternatives—are analyzed to uncover underlying service gaps and process inefficiencies (Froehle & Roth, 2004).

By integrating these perspectives, the objective aims to reveal areas where human effort compensates for the limitations of digital systems, as well as situations where digital platforms fail to align with customer expectations and understanding. The insights generated provide a foundation for designing more effective and cohesive omnichannel service strategies that are better aligned with both user behavior and operational realities.

Objective 4: Service Improvement and Digital Adoption Enablement

Designing Evidence-Informed Enhancements for a Human-Centered Hybrid Model

The final objective centers on transforming the integrated insights derived from both customer experiences and Customer Care Representative (CCR) perspectives into practical and evidence-based recommendations for service improvement. Instead of treating digital adoption primarily as a means of increasing efficiency, the study highlights the importance of building trust, ensuring process clarity, and addressing emotional needs—particularly within the context of essential services such as utilities (Lemon, 2019; Zeithaml et al., 2020). All proposed recommendations are grounded in empirical findings obtained from interviews, field observations, and customer journey analysis.

Key focus areas for improvement include identifying service elements that discourage customers from using digital channels. These barriers often stem from unclear procedures, inconsistent messaging between platforms, and concerns about the risks associated with completing transactions independently, especially when outcomes are perceived as irreversible or critical (Meuter et al., 2000). Enhancing transparency is therefore a priority, particularly through clearer communication of requirements, real-time updates on transaction status, and well-defined service timelines. In addition, the study examines the role of assisted digital engagement within Business Centers, where CCRs support customers by guiding them through digital processes rather than performing tasks on their behalf. This approach is positioned as a practical strategy for gradually developing user confidence and promoting long-term adoption (Rogers, 2003; OECD, 2020).

The objective also considers internal organizational constraints that influence service delivery. Factors such as rigid policies, limited system integration, and workforce capacity challenges can affect both customer experience and the ability of CCRs to deliver consistent service. By aligning recommendations with these operational realities, the study ensures that proposed improvements are feasible and sustainable.

In the end, the goal is to support digital transformation in a way that remains inclusive and responsive to varying customer needs. Rather than encouraging rapid or forced migration to digital platforms, the study advocates for a balanced approach that maintains service accessibility while gradually increasing digital engagement. These recommendations are intended to strengthen the implementation of M Electric's CX360 initiative by fostering an integrated service environment in which digital and human channels complement each other and work together to enhance overall customer experience.

II. R&D MANAGEMENT FRAMING

Innovation Management in R&D Literature

Innovation management has been widely recognized in research and development (R&D) literature as a systematic and intentional organizational function rather than an accidental result of creativity or technological advancement. Within this field, innovation management is understood as a coordinated set of processes that enable organizations to identify opportunities, evaluate potential ideas, implement solutions, and ultimately generate value from these initiatives (Tidd & Bessant, 2021). This perspective broadens the concept of innovation beyond purely technological outputs, encompassing improvements in services, operational processes, and organizational practices.

A key principle highlighted in R&D management studies is the inherent uncertainty associated with innovation activities. Because outcomes cannot be fully predicted at the initial stages, organizations must rely on structured coordination, continuous learning, and feedback mechanisms to manage risks and ensure alignment with broader strategic objectives (Tidd & Bessant, 2021; Haneda & Ono, 2022). In this context, R&D management is concerned not only with the outputs of innovation but also with the processes that enable organizations to learn from experimentation, customer feedback, and frontline implementation.

Recent research further emphasizes the importance of integrating user insights and market knowledge into innovation processes. As industries increasingly transition toward service-oriented and digitally enabled operations, the success of innovation efforts depends on how well organizations incorporate customer interaction, service experience, and adoption behaviors into their development systems (Ferreira et al.,

2015). This shift highlights the growing need for R&D frameworks that are responsive to both technological change and evolving customer expectations.

Customer Experience as an Input to Innovation Management

Within R&D and service innovation literature, customer experience has increasingly been recognized as a key input to innovation, not merely an evaluation metric applied after implementation. Early innovation research focused on technological novelty and product features, particularly in manufacturing contexts. However, as services came to dominate modern economies, scholars observed that innovation outcomes were often determined by how customers perceived, understood, and trusted new offerings (Randhawa & Scerri, 2015).

Customer experience is commonly defined as the cumulative cognitive, emotional, and behavioral responses that arise across multiple touchpoints over time (Gustafsson, Snyder, & Witell, 2020). From an innovative management perspective, these responses provide rich experiential data that reveal where systems fail to meet customer expectations, generate confusion, or create emotional friction. Such failures often signal opportunities for service or process innovation more effectively than performance metrics alone.

R&D literature highlights that experience-based insights—derived from journey observation, user interaction, and frontline engagement—capture “sticky” knowledge that is difficult to codify but essential for meaningful innovation (Krishna & Kautish, 2018). This knowledge enables organizations to identify unmet needs, especially in service contexts where value is co-created through interaction rather than embedded in physical products.

Managing Innovation Through Customer Experience Understanding

From an R&D management standpoint, understanding customer experience functions as a mechanism for managing innovation. Rather than reacting to problems after implementation, organizations can proactively design innovations that address sources of customer uncertainty, distrust, or emotional stress. Service innovation research demonstrates that many failed or underutilized innovations stem not from technical flaws but from misalignment with customer expectations and experiences (Witell, 2025).

Integrating customer experience insights into innovation management allows organizations to:

- Prioritize innovation initiatives based on real usage challenges
- Design solutions that reduce cognitive and emotional effort
- Increase adoption by aligning innovations with customer confidence levels

In this sense, innovation management becomes an iterative learning process, where feedback from customers and frontline employees informs both design and refinement (Blommerde, 2023). R&D systems that incorporate customer journey analysis and frontline observation are better equipped to manage uncertainty and improve innovation outcomes.

Relevance to Hybrid In-Person and Digital Service Environments

R&D and service innovation literature further emphasizes that innovation management in hybrid service environments—where digital and in-person channels coexist—requires deliberate experience orchestration (Gustafsson et al., 2020). Digital transformation alone does not guarantee successful innovation; customers

must trust digital outputs, understand processes, and feel assured during high-risk or high-impact transactions.

Scholars note that service organizations frequently encounter a “digital paradox,” where investments in digital systems fail to deliver expected value due to low adoption or persistent reliance on human channels (Witell, 2025). R&D management must therefore address both technological capability and experiential acceptance, recognizing that emotional assurance and transparency are as critical as system functionality.

This perspective highlights the importance of frontline employees as innovative intermediaries. R&D literature increasingly acknowledges the role of frontline staff in translating system capabilities into lived customer experiences, making them essential contributors to innovation learning and diffusion (Haneda & Ono, 2022).

Link to Research Objectives and CX360 Framework

This R&D management framing directly informs the design and intent of the present study. *Objective 1* aligns with innovation management literature by developing customer profiles as a means of capturing experience-based insights that guide innovation priorities. *Objective 2* reflects R&D emphasis on identifying moments of uncertainty and failure through end-to-end journey mapping. *Objective 3* aligns with studies on frontline and customer interaction as sources of innovation-relevant knowledge. *Objective 4* operationalizes these insights through targeted CX360 interventions designed to improve system adoption and service outcomes.

The CX360 framework applied in this study is therefore rooted in R&D management theory: it treats customer experience understanding not as an outcome to be measured, but as a strategic input for managing innovation within a hybrid

service organization. By integrating customer and CCR insights, the framework supports evidence-based innovation decisions that balance technological advancement with human-centered design.

Drawing from R&D and innovation management literature, innovation is best understood as a system-level capability that connects technology, process, and customer experience. Managing innovation in service and utility environments requires embedding customer experience insights into R&D decision-making to reduce uncertainty, build trust, and improve adoption.

In this context, the study positions customer journey analysis and frontline observation as legitimate R&D management practices. By grounding innovation in lived customer experience, organizations enhance their capacity to develop solutions that are not only technically sound but also trusted, understood, and sustained in everyday use.

From a Research and Development Management (R&DM) perspective, the challenges faced by *M Electric* present an opportunity to systematically apply structured, evidence-based methodologies to understand customer behavior, evaluate service processes, and design innovations that directly address the sociotechnical barriers to digital adoption. R&DM emphasizes not only the creation of new technologies but also the development of organizational capabilities, processes, and knowledge systems that enable sustainable service innovation (Vial, 2019; Verhoef et al., 2021). Within this framework, tools such as customer journey mapping, persona profiling, and human-centered service design become essential diagnostic and developmental instruments (Lemon & Verhoef, 2016; Rosenbaum et al., 2017).

Customer journey mapping enables researchers to trace the end-to-end service experience, revealing the interdependence between touchpoints, emotional responses, and decision triggers that influence channel choice (Lemon & Verhoef, 2016). By identifying points of friction, unmet needs, and assurance gaps, journey mapping supports problem framing grounded in real user experiences rather than assumptions. It further allows the organization to visualize the disconnect between digital offerings and customer expectations, thereby guiding the prioritization of R&D initiatives with the greatest impact on service improvement (Homburg et al., 2017; Tueanrat et al., 2021).

Similarly, persona profiling operationalizes customer heterogeneity by translating diverse behavioral, motivational, and capability patterns into actionable segments. Within R&DM practice, personas help teams anticipate user constraints, design tailored interventions for different readiness levels and ensure that solutions address the needs of both digitally savvy customers and those who require more guidance or reassurance (Hess et al., 2016; Kane et al., 2015). This segmentation is particularly critical in utilities, where service interactions carry high perceived risk and where trust, clarity, and predictability significantly shape user behavior (Davis, 1989; Venkatesh et al., 2003).

Service design approaches complement these analytical tools by offering a structured process for developing, testing, and refining service innovations across both physical and digital environments. Rather than focusing only on front-facing interactions, service design adopts a systems-oriented perspective that considers the full range of elements influencing service delivery, including internal workflows, organizational capabilities, data integration, and supporting technologies (Westerman et al., 2014; Hess et al., 2016). By accounting for both visible customer touchpoints

and underlying operational mechanisms, this approach ensures that improvements are coherent, scalable, and aligned with overall service performance. Within the context of digital transformation, service design supports iterative development through controlled experimentation. This allows M Electric to introduce targeted, small-scale interventions—such as guided digital usage, improved communication interfaces, and tools that enhance frontline performance—before expanding them across the organization (Verhoef et al., 2021; Vial, 2019). Through this process of piloting and refinement, solutions can be adjusted based on real-world feedback, reducing implementation risks while improving effectiveness. When integrated within a Research and Development Management (R&DM) framework, these initiatives form a cohesive approach to addressing both service delivery challenges and digital adoption barriers. R&DM ensures that innovations are not only technically viable but also responsive to customer behavior, operational realities, and long-term strategic goals (Kane et al., 2015; Westerman et al., 2014). A key strength of this approach lies in its emphasis on continuous learning cycles, where insights gathered from customer research inform initial designs, pilot implementations generate practical knowledge, and subsequent refinements strengthen organizational capabilities (Vial, 2019; Verhoef et al., 2021). This iterative process enables M Electric to continuously evolve its service systems in line with shifting customer expectations and technological developments.

Viewed through this lens, the CX360 initiative extends beyond a traditional customer experience program and becomes a broader effort in organizational transformation. It provides a structured pathway for identifying service gaps, co-developing solutions grounded in user needs, and building internal capabilities that support sustained digital engagement (Hess et al., 2016; Westerman et al., 2014). By

combining systematic inquiry, experimentation, and capability development, R&DM ensures that the transition toward digital channels is managed deliberately, with equal attention to customer realities and organizational readiness.

The development and application of the CX360 framework within M Electric's Business Centers can also be situated within wider academic and industry discussions on customer experience management, digital transformation, and organizational capability building. Current literature highlights that customer experience initiatives are no longer confined to isolated improvements but are increasingly embedded within enterprise-wide transformation agendas, particularly in service-intensive and regulated industries such as utilities. In this context, concepts such as customer profiling, journey mapping, and digital adoption serve as key theoretical and empirical foundations that inform the design and implementation of CX360.

Customer Experience as a Strategic Capability

Customer experience has evolved from a peripheral operational concern into a core strategic organizational capability. Pine and Gilmore's seminal work on the experience economy positions customer experience as a distinct form of economic value that enables organizations to differentiate themselves beyond products and services (Pine & Gilmore, 1999). Subsequent research reinforces this perspective by asserting that organizations competing in mature or highly regulated industries must rely on experience-based differentiation to remain relevant and trusted by their customers. In recent years, this shift has been particularly evident in utility and infrastructure sectors, where traditionally transactional service models are being reshaped by customer expectations influenced by digital-first industries (Forrester, 2023; McKinsey, 2022).

Contemporary customer experience literature further emphasizes that customers now expect interactions that are frictionless, personalized, and supported by intelligent use of data across channels (Gartner, 2024). Within the utility sector, customer interactions encompass a wide range of needs, including billing inquiries, new service connections, service reliability concerns, and increasing engagement with digital platforms. As a result, customer experience has become a critical driver of customer trust, satisfaction, and long-term relationship stability (Accenture Utilities, 2023). In this context, the CX360 initiative within M Electric's R&D environment aligns with evidence supporting the systematic capture and analysis of customer insights, the creation of end-to-end visibility across service channels and touchpoints, and the personalization of services through analytics-enabled decision-making (McKinsey, 2022; Forrester, 2023; Gartner, 2024). Collectively, these perspectives position CX360 as a manifestation of global trends that frame customer experience as a measurable, science-based discipline central to organizational transformation rather than a purely qualitative or anecdotal concern (Pine & Gilmore, 1999).

Customer Profiling and Segmentation in Utility Organizations

Customer profiling and segmentation have become foundational practices in service improvement initiatives within energy and utility organizations. Industry reports from the Edison Electric Institute (EEI, 2021), IBM Energy Insights (2022), and Accenture (2023) consistently highlight how structured customer segmentation enables utilities to improve operational efficiency, enhance service personalization, and increase overall customer satisfaction. These studies demonstrate that profiling allows organizations to move beyond one-size-fits-all service models toward differentiated strategies that reflect the diverse needs, behaviors, and expectations of their customer base.

Utilities worldwide increasingly use customer profiling to develop behavioral and psychographic segments that explain customer channel preferences, including the propensity to use digital self-service platforms versus in-person transactions (IBM, 2022). Profiling also supports the design of targeted service strategies for high-volume and high-impact customer journeys such as new service connections, billing inquiries, and payment transactions (EEI, 2021). Moreover, advanced profiling techniques enable utilities to anticipate customer needs and proactively intervene during critical service events, reducing dissatisfaction and service recovery costs (Accenture, 2023). Behavioral research further suggests that profiling allows organizations to detect patterns related to digital readiness, likelihood of self-service adoption, and sensitivity to service disruptions (Deloitte, 2022). These insights directly inform the CX360 framework's structured approach to integrating customer data from both face-to-face and digital touchpoints. For M Electric, the literature validates CX360's emphasis on developing enriched customer profiles that combine demographic, behavioral, transactional, and journey-based attributes, thereby establishing a robust foundation for personalized and context-aware service delivery (EEI, 2021; Deloitte, 2022).

Journey Mapping as a Tool for Innovation and Service Improvement

Customer journey mapping is widely recognized as a cornerstone of contemporary service design and innovation practices. Stickdorn and Schneider (2018) argue that journey mapping enables organizations to visualize services from the customer's perspective, thereby revealing pain points, emotional responses, and unmet needs that may be invisible through traditional process documentation. Complementing this view, the Nielsen Norman Group (2021) emphasizes that journey mapping fosters cross-functional understanding by creating a shared representation of the customer experience, which in turn reduces organizational silos and supports

more coherent service design.

Empirical research demonstrates that journey mapping helps organizations identify “moments that matter,” or specific interactions that disproportionately influence customer satisfaction and perception of service quality (Nielsen Norman Group, 2021). It also enables the identification of operational bottlenecks and inefficiencies frequently encountered by frontline staff, supporting evidence-based service redesign (Stickdorn & Schneider, 2018). Importantly, journey mapping facilitates a shift from process-centric optimization toward experience-centric transformation, ensuring that improvements are grounded in customer outcomes rather than internal efficiency metrics alone (Deloitte, 2022). For a large utility provider such as M Electric, where Business Centers manage high transaction volumes and diverse customer needs, journey mapping is essential for streamlining walk-in processes, reducing repetitive effort, and aligning physical branch operations with digital channel capabilities (Accenture, 2023). The literature thus reinforces a central CX360 principle: sustainable service excellence must be rooted in the customer’s lived journey rather than relying solely on internal performance indicators (Nielsen Norman Group, 2021; Stickdorn & Schneider, 2018).

Digital Adoption and Behavioral Drivers in Public Utility Customers

Literature on digital adoption emphasizes that influencing customer behavior is particularly challenging in sectors where traditional, face-to-face service interactions remain deeply rooted. Research from organizations such as Deloitte (2022), the World Bank (2020–2024), and Accenture (2023) indicates that the transition toward digital channels in public utility services is driven by a combination of behavioral and situational factors. These include the level of trust customers place in digital systems, perceptions of ease of use and reliability, awareness of available self-service options,

and the availability of transitional support mechanisms such as guided onboarding or assisted engagement. Collectively, these findings highlight that digital adoption extends beyond technological deployment and is closely tied to customer experience and behavioral dynamics.

Further studies suggest that adoption improves when organizations tailor their digital strategies to align with individual customer needs and usage contexts. Personalized and behavior-informed recommendations—such as suggesting appropriate digital channels for routine transactions or providing targeted prompts during service interactions—have been shown to encourage greater engagement (World Bank, 2023). This aligns closely with the objectives of the CX360 initiative, which leverages customer profiling and journey insights to deliver context-specific guidance and digital nudges (Deloitte, 2022). By combining behavioral understanding with service design principles, the framework addresses both practical barriers and psychological concerns that hinder digital use.

Overall, the literature supports the view that integrating customer segmentation with journey-based insights enhances the effectiveness of digital transformation efforts in utility settings. A well-developed profiling system, supported by a clear understanding of customer experiences, enables organizations to design more responsive and user-centered strategies. This approach helps increase digital adoption while preserving customer trust and satisfaction, which are critical factors in service environments where reliability and confidence are essential (Accenture, 2023; World Bank, 2023).

Organizational Readiness and Capability Building

Research on organizational development within R&D and transformation environments emphasizes that customer experience initiatives succeed when supported by employee capability-building and cross-functional alignment. MIT Sloan Management Review (2023) highlights that organizations must harmonize technology, people, and processes to unlock sustainable service innovation. This alignment is particularly critical in customer-facing operations, where frontline employees translate strategic intent into actual service experiences. Additionally, change management literature underscores the importance of continuous learning loops, wherein insights from frontline interactions and customer feedback inform iterative improvement and adaptive decision-making (Kotter, 2014; MIT Sloan, 2023).

Within this context, CX360 functions not only as a customer-facing framework but also as an organizational capability-building mechanism. It serves as a structured knowledge system that guides frontline decision-making, supports process improvement and policy development through customer intelligence, and strengthens R&D capabilities by integrating behavioral patterns, journey insights, and qualitative feedback into service innovation cycles (MIT Sloan, 2023; Kotter, 2014; Deloitte, 2022). The reviewed literature therefore supports positioning CX360 as a strategic component of M Electric's broader service innovation ecosystem, reinforcing its role in aligning customer experience management with organizational learning, digital transformation, and long-term capability development (MIT Sloan, 2023; Accenture, 2023).

III. CONTEXTUALIZATION OF THE R&D ORGANIZATION ENVIRONMENT

M Electric (Meralco) as an R&D-Oriented Organization

The Manila Electric Company (Meralco), referred to in this study as M Electric, is the largest electric distribution utility in the Philippines, serving over seven million customers across residential, commercial, and industrial sectors. Established in 1903, Meralco has evolved from a traditional power distributor into an integrated energy and services organization operating in a highly regulated, technology-intensive, and customer-facing environment (Crunchbase, 2025).

As a utility with large-scale infrastructure responsibilities, Meralco's operations are inherently R&D-driven. Continuous research, systems development, and process innovation are required to ensure reliability, efficiency, safety, and regulatory compliance while responding to growing demand, energy transitions, and increasing customer expectations (PortersFiveForce.com, 2025).

Strategic Goals Relevant to R&D and Innovation

Meralco's strategic direction reflects an explicit focus on innovation as a means of sustaining long-term performance and public service mandate. Based on published strategy and corporate disclosures, the company's strategic goals include:

1. Grid modernization and digitization to support reliability, resilience, and increasing system complexity
2. Customer-centric service transformation, including digital service enablement and improved service experience
3. Sustainability and energy transition, through renewable energy integration and emerging technologies

4. Operational excellence and efficiency, supported by data, analytics, and process innovation

These goals necessitate continuous R&D activities, particularly in smart grid technologies, digital platforms, service processes, and customer engagement systems (SWOTTemplate.com, 2025; PortersFiveForce.com, 2025).

Organizational Structure Supporting R&D Activities

Meralco's R&D capabilities are distributed across multiple organizational units rather than confined to a single laboratory function. This reflects a decentralized and applied R&D model, typical of infrastructure and service utilities.

Key R&D-enabling structures include:

- Network and Engineering Groups, responsible for technical studies, system simulations, and infrastructure innovation
- Information and Technology Units, supporting digital platforms, data systems, and customer-facing applications
- Customer Relations Services, which manage service delivery, customer interaction, and experience improvement initiatives
- Meralco Power Academy (MPA), which serves as a knowledge, training, and research platform for emerging technologies and industry practices

In addition, Meralco established PowerTech, the country's first dedicated innovation, research, and technical training facility featuring a smart-grid simulation environment. PowerTech functions as a test-bed for new equipment, systems, and operational concepts before large-scale deployment, exemplifying experimental R&D in a real-world utility setting (ASTIG, 2015; DigitalFilipina, 2015).

Meralco's R&D Activities

Meralco's R&D activities are primarily applied, operational, and service-focused, reflecting the nature of its business. These activities include:

- Testing and piloting smart grid technologies and system upgrades
- Conducting studies on system reliability, loss reduction, and demand growth
- Developing and refining digital platforms for billing, payment, and customer service
- Training engineers and frontline employees on emerging technologies and processes
- Collaborating with academe, regulators, and industry partners on innovation initiatives

Unlike product-centric R&D organizations, Meralco's innovation efforts are tightly coupled with service delivery and customer interaction, making frontline operations and customer experience critical sources of innovation insight (MIESCOR, 2023; Business Mirror, 2023).

Relevance to This Study and the CX360 Framework

Within this R&D organizational environment, customer experience is no longer peripheral. Meralco's strategic objectives require not only technological advancement but also customer trust, clarity, and adoption of digital and process innovations. This aligns with R&D management literature that emphasizes the integration of user experience insights into innovation decision-making.

The CX360 framework applied in this study aligns with Meralco's R&D context by:

- Treating customer journeys as sources of innovation data (*Objective 1 and 2*)

- Recognizing CCRs as frontline contributors to experiential and operational knowledge (*Objective 3*)
- Translating customer and CCR insights into evidence-based service improvements (*Objective 4*)

In this sense, the study positions Business Centers not only as service outlets but as living laboratories where customer behavior, system performance, and human interaction converge—providing actionable insights for managing innovation in a large utility organization.

Meralco operates as an R&D-intensive organization where innovation is embedded in everyday service delivery, infrastructure management, and customer engagement. Its strategic goals, organizational structure, and applied R&D activities underscore the importance of continuously learning from both systems and users. Understanding customer experience within this environment is therefore integral to managing innovation. The present study situates customer and CCR insights within Meralco's broader R&D framework, supporting innovation decisions that balance technical capability with human-centered service outcomes.

IV. METHODOLOGY

This research investigates how customers behave, experience services, and transition toward digital engagement within the Business Centers of M Electric. In the context of utility services, transactions are often perceived as highly consequential because they are linked to financial responsibility, continuity of essential services, and household stability. As noted in service literature, such conditions intensify both emotional and cognitive responses during service encounters (Berry, 1995). Therefore, examining customer experience requires a broader perspective that captures how individuals interpret situations, respond emotionally, and make context-driven decisions, rather than focusing solely on efficiency metrics or usage rates.

By prioritizing the customer viewpoint, the study moves beyond superficial descriptions of service interactions and instead seeks to understand the underlying reasons behind observable behaviors. This includes exploring why customers may hesitate to adopt digital channels despite their efficiency advantages, as well as why physical service interactions continue to provide a sense of assurance, legitimacy, and control (Lemon & Verhoef, 2016). To support this investigation, the research adopts a single case study design, treating Business Centers as the central unit of analysis. This methodological approach is particularly suitable for analyzing complex systems where behavior is deeply embedded in organizational processes, social context, and environmental conditions (Yin, 2018). By focusing on these service environments, the study captures the convergence of policies, technologies, frontline practices, and customer expectations, allowing for an in-depth examination of how the Customer Experience 360 (CX360) initiative is implemented in practice rather than merely conceptualized.

The case study approach further enables an exploration of how formal service processes are interpreted and adapted in real-world settings. In many utility service environments, frontline employees exercise discretion to address customer concerns and compensate for system limitations, especially when transactions are perceived as sensitive or irreversible (Bowen & Schneider, 2014). At the same time, customers may also adjust their behavior based on prior experiences or perceived risks. Analyzing Business Centers within this framework provides a clearly defined context for understanding how service design, human interaction, and digital adoption are interconnected.

Customer journey mapping serves as the primary analytical framework for integrating and interpreting data. Rooted in service design theory, this approach recognizes that customer experience develops over time and across multiple touchpoints, rather than within isolated interactions (Stickdorn et al., 2018). This perspective is especially relevant for utility services, where interactions are not continuous but carry significant consequences, and where earlier expectations and subsequent reflections influence future decisions (Lemon & Verhoef, 2016).

Within this study, customer journeys are examined across three interconnected phases: pre-service, on-site service, and post-service. The pre-service phase focuses on how customers identify their needs, gather information, evaluate available channels, and prepare necessary requirements. The on-site phase analyzes activities such as arrival, queuing, interaction with staff, and resolution of concerns. The post-service phase explores how customers interpret outcomes, assess fairness and clarity, and determine their preferred channels for future transactions. This temporal perspective highlights the cumulative nature of experience, where dissatisfaction or anxiety at later stages may stem from earlier issues, underscoring the importance of

a holistic approach (Rawson, Duncan, & Jones, 2013).

To strengthen analytical validity, the study employs multiple data sources, enabling triangulation and cross-validation of findings (Patton, 2015). Data is gathered from customers, frontline staff, and organizational materials, reflecting the understanding that customer experience is co-created through interactions between users, employees, and systems rather than produced by the organization alone (Bowen & Schneider, 2014).

Semi-structured interviews serve as the primary data collection method and are conducted with customers, Customer Care Representatives (CCRs), and supervisors when applicable. This method allows for consistency across participants while maintaining flexibility to explore emerging insights, making it particularly appropriate for examining complex and subjective experiences (Creswell & Poth, 2018). Customer interviews focus on expectations, decision-making processes, emotional reactions, perceived effort, areas of difficulty, and factors contributing to satisfaction across both physical and digital channels. Special attention is given to understanding why customers prefer in-person interactions, including perceived risks in digital transactions, lack of confidence in self-service platforms, and the reassurance associated with direct human interaction (Parasuraman, 2000; Laukkanen, 2016).

Interviews with frontline personnel provide a complementary perspective by revealing operational realities that may not be visible to customers. These discussions explore recurring behavioral patterns, common sources of confusion or resistance, operational challenges, and informal practices used to manage service delivery. Such insights are essential for identifying situations where human intervention compensates for technological or procedural limitations and where existing processes unintentionally reinforce reliance on physical service channels (Froehle & Roth, 2004).

In addition to interviews, direct observations are conducted within selected Business Centers to capture real-time service dynamics. These observations examine customer flow, queuing patterns, time management, staff–customer exchanges, and the physical environment, including layout and informational signage. Non-verbal indicators—such as hesitation, frustration, confusion, or relief—are also documented, as they often reveal emotional responses that may not be explicitly expressed during interviews (Angrosino, 2016). Observational findings help identify discrepancies between formal service procedures and actual experiences on the ground.

Document analysis is incorporated as a supplementary method to provide organizational context. Materials reviewed include service procedures, operational guidelines, internal communications, and customer feedback reports. Comparing these documents with actual customer and staff experiences enables the identification of gaps between intended service design and real-world implementation, as well as structural constraints that influence both service delivery and digital adoption (Bowen & Schneider, 2014).

Participants are selected through purposive sampling to ensure diverse representation in terms of customer types, transaction categories, and levels of digital familiarity, as well as variation in employee roles and experience. This sampling approach is appropriate for qualitative research aimed at capturing depth and diversity of perspectives rather than statistical generalization (Palinkas et al., 2015). It supports the study’s goal of developing nuanced customer profiles based on behavioral patterns and situational context.

Data analysis follows a qualitative content analysis framework, involving iterative coding of interview transcripts, observation notes, and documentary evidence. Codes are progressively refined and grouped into broader themes such as

emotional responses, trust, perceived value, sources of friction, and barriers to digital engagement (Braun & Clarke, 2006). This process facilitates the development of customer personas that reflect distinct attitudes, motivations, and behavioral tendencies within the service population.

Findings are synthesized into customer journey maps that function as both analytical and communication tools. These visual representations illustrate customer actions, touchpoints, emotional states, and pain points across different stages, making complex insights more accessible for decision-making (Stickdorn et al., 2018). By mapping emotional trajectories alongside service interactions, the study identifies critical moments where targeted improvements can enhance customer confidence and encourage digital adoption.

All identified touchpoints are classified into physical, digital, and communication-based categories and evaluated using criteria derived from service and customer experience literature. These criteria include clarity, accessibility, effectiveness, emotional response, level of trust, and degree of friction (Zeithaml et al., 2020; Zomerdijk & Voss, 2010). Assessments are based on customer feedback, observed behavior, and employee insights, enabling the identification of consistent strengths and weaknesses across the service journey.

These evaluations are then integrated with emotional journey maps to examine how service design elements correspond with positive and negative customer experiences. This combined analysis highlights which aspects of service delivery contribute to stress, satisfaction, reassurance, or avoidance, reinforcing the importance of emotional memory in shaping future decisions (Kahneman, 2011). The outcomes provide a solid empirical foundation for developing CX360-aligned recommendations, emphasizing a balanced approach that combines digital efficiency

with inclusivity, trust, and emotional support.

Ethical standards are strictly maintained throughout the research process. Participation is voluntary, informed consent is obtained from all respondents, confidentiality and anonymity are ensured, and data are securely handled for academic use only. These practices are consistent with established ethical guidelines for qualitative research involving human participants in organizational contexts (Creswell & Poth, 2018).

V. FINDINGS

This section presents the findings derived from two complementary qualitative data sources collected as part of the CX360 project for M Electric Business Centers (BCs): (1) customer profiling and journey-based observations involving twenty (20) customers, and (2) semi-structured interviews with five (5) Customer Care Representatives (CCRs). The integration of these data sources enabled analytical triangulation, strengthening the credibility of findings by linking customer-reported experiences with frontline operational realities across key service journeys, specifically service application, payment and posting verification, and concerns management related to bill inquiry and reconnection.

Rather than treating customer behavior as a purely individual choice or technology-driven outcome, the analysis adopts a human-centered and contextual lens, recognizing that customer decisions are shaped by emotional states, perceived risk, household impact, service urgency, and institutional trust. Patterns observed across customer narratives and CCR accounts reveal that channel choice is not linear or static, but dynamic shifting depending on the perceived criticality of the transaction and the customer's need for assurance. The findings are organized into three major themes: (A) Customer Profiling, (B) Observed Service Strengths and Best Practices, and (C) CX360-Based Service Improvement Opportunities.

A. Customer Profiling

Customer profiling within the CX360 project integrates demographic context, customer experience, emotional drivers, and observable service behaviors to develop actionable customer archetypes that reflect how customers actually use and navigate M Electric Business Centers. Rather than relying on formal technology adoption

models, profiles were developed inductively from recurring patterns in customer interviews, journey observations, and CCR insights. These profiles explain how assurance-seeking, confidence levels, and risk perception influence channel selection—particularly during high-impact service moments such as payment verification and service reconnection.

Findings in this section are grounded in observations of twenty (20) customers and enriched by CCR interviews that contextualize customer behavior within system limitations, process rules, and service-level commitments.

1. Customer Profile 1: Digitally Capable but Assurance-Seeking Customers

Demographic Characteristics

This customer profile primarily includes working professionals, office-based employees, and digitally connected individuals who have regular access to smartphones, mobile banking applications, and online payment platforms. Customers in this group typically fall within the economically active age range and demonstrate functional familiarity with digital tools used for bill payment, account monitoring, and transaction confirmation.

Psychographic and Experiential Characteristics

Despite their digital capability, these customers exhibit strong **assurance-seeking behavior** during transactions perceived as high-risk or high-impact, particularly those involving potential service disruption or financial consequence. While they are generally comfortable using digital channels for routine transactions, their confidence declines when outcomes are irreversible, time-sensitive, or dependent on back-end validation. At these moments, digital tools are viewed as incomplete sources of certainty, and human confirmation has become essential.

These customers do not reject digital platforms; rather, they see them as efficient but insufficient when clarity and accountability are required. Their emotional responses during such transactions reflect heightened vigilance rather than anxiety, driven by a desire to avoid delays, penalties, or service interruption.

Behavioral Characteristics

Among the twenty (20) customers observed, nine (9) digitally capable individuals visited the Business Center primarily to verify online payment posting or to follow up on reconnection status after already completing digital steps. Their behavior indicates that the use of digital channels does not eliminate the need for human validation when service continuity is at stake. For these customers, the Business Center functions as a **risk-mitigation space**, strategically used to confirm accuracy and timeliness rather than as a default service channel.

2. Customer Profile 2: Utility-Dependent Walk-In Customers with Low Digital Confidence

Demographic Characteristics

This profile consists predominantly of housewives, informal workers, and laborers whose daily routines and household functioning are closely tied to uninterrupted electricity service. These customers rely more heavily on assisted or informal payment methods and have limited exposure to or confidence in navigating digital platforms independently. Educational attainment and consistent access to digital infrastructure are more constrained compared to the digitally capable segment.

Psychographic and Emotional Characteristics

Customers within this profile exhibit **high service dependency and elevated emotional stress**, particularly when confronted with billing issues or service

disconnection. Digital tools are often perceived as intimidating or unreliable, not because of outright rejection, but due to fear of making mistakes and lack of confidence in interpreting digital feedback. Trust is placed primarily in institutional authority embodied by frontline personnel, rather than in automated confirmations or app-based indicators.

Emotionally, service issues are closely associated with immediate household disruption, resulting in heightened urgency and low tolerance for ambiguity. Reassurance from a CCR—through clear explanation and visible process handling—emerges as the most significant driver of perceived service quality for this group.

Behavioral Characteristics

Among the eleven (11) walk-in customers observed, four (4) had experienced service disconnection and proceeded directly to the Business Center to seek reconnection. Their visits were motivated by the need for step-by-step clarity, documentation validation, and certainty regarding reconnection timelines. This group demonstrated a strong preference for face-to-face engagement during critical service failures, underscoring reliance on human mediation rather than self-directed digital channels.

3. Cross-Profile Behavioral Pattern: High-Anxiety Transactions Drive Channel Shifts

Across both customer profiles, a consistent behavioral pattern emerged: **transactions perceived as high-impact and emotionally charged triggered a shift toward in-person service**, regardless of digital skill level. Payment posting verification and service reconnection surfaced as key “anxiety points” within the journey, where uncertainty undermined confidence in digital outcomes. In such

situations, customers prioritized predictability, visibility, and assurance over convenience.

CCR interviews reinforced this finding, noting that customers from both profiles frequently seek confirmation that payments were correctly posted and that reconnection would occur within the expected 24-hour service level. Backend dependencies, approval requirements, and inter-unit coordination delays were observed to amplify customer anxiety, reinforcing the role of Business Centers as **assurance hubs** rather than mere transaction points.

Synthesis of Customer Profiles

When we look at the two customer profiles side by side, it becomes clear that customers may differ in habits and preferences, but they ultimately want the same thing—a service experience that is fast, easy, and dependable. These similarities and differences give a clearer picture of how customers interact within Meralco’s hybrid setup, where both Business Centers and digital platforms like the mobile app play important roles.

One of the most noticeable differences is how customers use digital services. Customers in Profile 1 are more comfortable using the Meralco mobile app or online channels. They prefer to pay bills, check account details, and request services digitally because it saves them time and effort. On the other hand, customers in Profile 2 tend to visit Business Centers, especially for payments, concerns, or more complex transactions. This is often because they are less familiar with using apps, or they feel more confident when talking to a service representative face-to-face. Even with these differences, both groups appreciate digital tools that are simple and easy to use. When the app is clear, reliable, and easy to navigate, even customers who usually prefer in-

person service become more open to trying it. Emotions also play a big role in how customers choose their service channel. Many customers want to feel secure and assured, especially when dealing with important matters like billing and payments. Customers who use the app often feel empowered because they can manage their accounts anytime, anywhere. Meanwhile, customers who go to Business Centers value the personal interaction—they feel reassured when someone explains things clearly or assists them directly. This shows that a good customer experience is not just about speed, but also about making customers feel confident and supported.

Another important observation is that customers do not stick to just one channel. Many of them move between digital and in-person services depending on their needs. For example, a customer might check their bill using the app but still visit a Business Center to clarify charges or resolve an issue. Others may try the app first, but if they encounter difficulty, they go directly to a service center. This behavior shows that the customer journey is not straight or fixed—it crosses multiple touchpoints. Because of this, it is important that the experience remains smooth and consistent whether the customer is online or onsite.

These insights have clear implications for improving service delivery and customer experience at Meralco. First, there is a need to strengthen the connection between digital and in-person channels so that customers experience the same level of service regardless of where they go. For example, information in the app should match what is provided at Business Centers. Second, improving the mobile app is essential—making it more user-friendly, simplifying steps for payments and service requests, and adding clear guidance can encourage more customers to use it. Third, frontline personnel in Business Centers can help bridge the gap by guiding customers on how to use the app, especially during their visit. This can gradually build digital

confidence and reduce long queues in the future.

In addition, understanding these profiles allows for more targeted approaches, such as providing step-by-step assistance for less digitally confident customers, or offering quick, self-service options for those who prefer fast transactions. Communication can also be adjusted depending on the customer's preferred channel. Given that this study focuses on a hybrid system, digital app usage becomes a key part of the overall experience. A well-functioning app can reduce the need for customers to visit Business Centers, helping manage foot traffic and improve service efficiency. At the same time, maintaining strong in-person service ensures that customers who need additional support are still well taken care of.

Overall, this synthesis shows the importance of finding the right balance. While digital solutions bring convenience and efficiency, human interaction remains important for building trust and providing reassurance. By combining both effectively, Meralco can deliver a more seamless, inclusive, and customer-centered experience that meets the needs of all types of customers.

A. Best Practices Observed

Analysis across customer and CCR data revealed several service practices that currently function as stabilizing elements within the customer experience.

First, **human-centered assurance at the service counter** emerged as a core service strength. Customers consistently valued CCRs who demonstrate empathy, clarity, and adaptability in their explanations. For customers with low digital confidence, CCRs' ability to simplify steps, clarify expectations, and de-escalate stress, particularly during reconnection cases—served as a trust anchor for the organization.

Second, **assisted digital introduction**, when situational conditions allowed, showed promising results. CCRs reported that customers with working devices, sufficient storage, connectivity, and active email or mobile numbers displayed openness, sometimes eagerness—when guided through digital tools. This suggests that resistance is often contextual rather than attitudinal, and that readiness improves significantly when prerequisites are met and guidance is present.

Third, **prioritization and expectation-setting for urgent cases**, particularly reconnections, positively influenced perceptions of fairness and reliability. Customers appreciated it when CCRs clearly communicated timelines, service level commitments, and next steps, even when resolution required backend processing.

B. Customer Journey

This section presents a detailed and human-centered description of the customer journey across three key stages: **pre-service**, **onsite (Business Center visit)**, and **post-service**. Rather than viewing the journey as a sequence of transactions, the discussion focuses on how customers **think, feel, and make decisions** as they navigate each stage. Insights were drawn from customer interviews, direct observations at the Business Centers, and corroborated by CCR accounts.

The analysis highlights that customer journeys are shaped not only by service processes, but by **uncertainty, emotional load, and the need for assurance**, particularly in situations where electricity service continuity is at risk.

i. Pre-Service Stage: Planning and Deciding to Visit

The pre-service stage begins when customers first become aware of a concern or potential problem—such as a billing discrepancy, payment posting uncertainty, or service disconnection—and start considering what action to take.

At this stage, customers are not yet physically present at the Business Center, but they are already deeply engaged in decision-making. Digitally capable customers often begin by checking the mobile app, reviewing online payment confirmations, or taking screenshots of transactions. Others consult family members, neighbors, or peers to determine whether their situation warrants a visit to the Business Center.

Mentally, customers are evaluating risk. The dominant questions are not about how to complete a process, but whether the **outcome can be trusted**. Customers worry about whether payments were actually posted, whether reconnection will happen within the promised timeframe, and what might happen if they wait too long.

One customer shared:

“I already paid online, but I’m not completely sure if it was posted correctly. If I just wait and the electricity doesn’t come back, it’s harder, especially at home.”

Emotionally, feelings range from mild concern to high anxiety, depending on the situation. Customers facing possible or actual disconnection experience heightened stress because electricity loss has immediate implications for daily living. Even digitally familiar customers begin to feel uneasy when digital confirmations do not fully answer their questions.

What customers expect at this stage is clear: they believe that showing up at the Business Center will provide **certainty, validation, and human accountability**. The visit is seen as a way to eliminate doubt and regain control over the situation.

ii. Onsite Stage: The Business Center Experience

The onsite stage encompasses several critical moments, from arrival to departure, where customer perception and emotion continuously evolve.

Arrival and Orientation

Upon arrival at the Business Center, customers immediately assess their surroundings. They look for signs, queues, staff guidance, and any indication that the process is organized and understandable. Some customers ask guards or staff where to go, especially if they are unsure which service line applies to their concern.

At this moment, customers are asking themselves: *Am I in the right place? Will this be handled today?* Initial emotions range from cautious hopefulness to nervousness, particularly among customers dealing with unresolved service disconnection.

A customer was observed quietly remarking:

“I just hope I’m in the right line. I don’t want to waste time.”

Customers expect clarity and structure. Disorganization at this stage can heighten anxiety even before any formal interaction occurs.

Waiting Experience

While waiting, customers remain mentally engaged with the outcome of their visit. They repeatedly check queue numbers, re-open payment confirmations on their phones, organize documents, or ask others how long the process might take.

The passage of time becomes a central concern. Waiting itself is often tolerated, but **uncertainty about how long the wait will be** becomes a source of frustration.

One customer explained:

“I can wait, but I really just want to know how long it will be. Not knowing is what makes it stressful.”

Emotionally, waiting amplifies whatever the customer brought with them—patience for routine concerns, but anxiety and restlessness for high-impact cases like reconnection. Customers expect transparency, reasonable waiting times, and visible progress in the queue.

Interaction with CCRs

The interaction with the CCR represents the most critical moment of the onsite stage. Customers explain their concerns, present documents or screenshots, and rely heavily on the CCR to interpret system status and next steps.

Mentally, customers focus on resolution and reassurance: *Will this be fixed today? Is my payment confirmed? What happens next?* The quality of explanation, empathy, and confidence displayed by the CCR strongly influences customer perception.

Emotionally, relief is common when customers feel heard and understood. Conversely, uncertainty persists when answers remain tentative or depend on backend processes without clear timelines. Customers expect CCRs to provide clarity grounded in system checks and to manage expectations honestly.

Departure from the Business Center

As customers prepare to leave, they evaluate whether the visit was worthwhile. Some leave with resolution, while others leave with instructions and a promise of follow-through.

Customers reflect on whether they can now trust the process without returning. Feelings at this stage are often a mix of relief and cautious optimism. Even if the issue is not fully resolved, clear explanations reduce anxiety.

Customers expect that what was promised will be delivered and that another visit will not be necessary.

C. Post-Service Stage: Reflection After the Visit

Once customers leave the Business Center, the experience does not immediately end. In the post-service stage, customers monitor whether the expected outcome occurs—such as reconnection or payment posting—while reflecting on the overall experience.

Customers mentally review whether their concerns were addressed and whether the explanations provided were sufficient. Satisfaction is closely linked to clarity rather than speed. One customer shared:

“At least now I understand what’s happening. Before, I was just guessing and worrying.”

When outcomes align with expectations set at the Business Center, trust is reinforced. When delays occur without updates, uncertainty emerges. Customers expect consistency between what was communicated and what happens next.

Synthesis of the Customer Journey

Across the pre-service, onsite, and post-service stages, the customer journey is driven primarily by **trust, clarity, and emotional assurance**, rather than convenience alone. Business Center visits are triggered not by lack of digital access,

but by moments where digital channels fail to provide sufficient certainty during high-impact transactions.

This end-to-end journey analysis fulfills Objective 2 by demonstrating how customer actions, thoughts, emotions, and expectations evolve over time. It also highlights key moments of truth—particularly during payment verification and reconnection—that inform the CX360 interventions proposed in subsequent sections.

Table 5.1

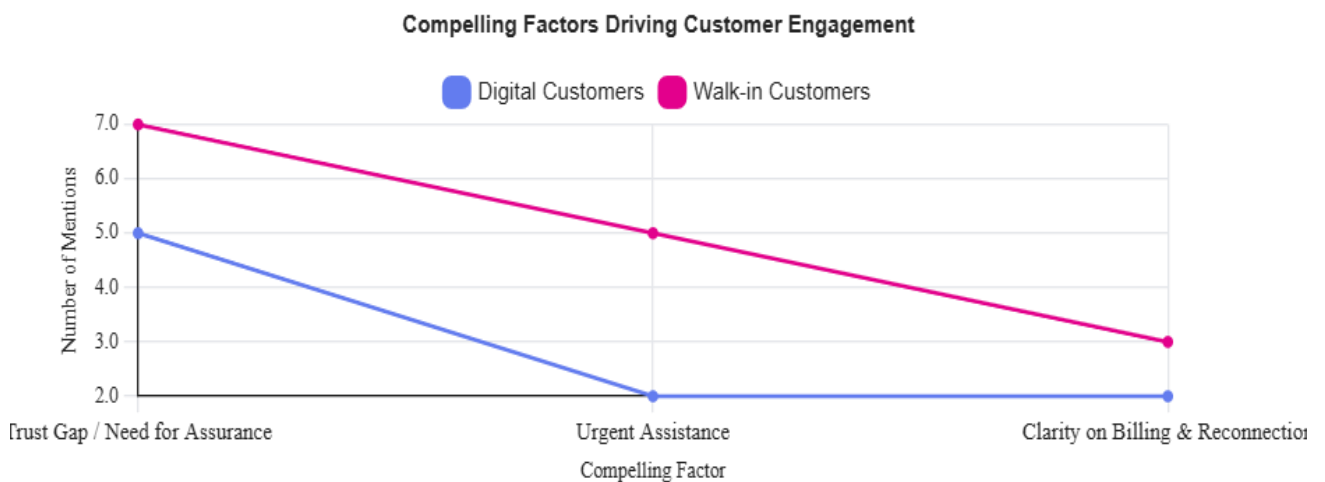
Synthesis Table: How CCR Insights Map to Customer Findings & Actions

Evidence Source	What We Heard	What It Means in the Journey	Action in Plan
Customers (9 digital)	Visit BC to verify posting / reconnection	Trust gap at critical steps	Real-time posting & reconnection trackers
Customers (11 walk-in; 4 disconnected)	Urgent assistance, want clarity	High emotion; prefer human assurance	Publish SLA, proactive DN nudges, fast lane reconnection
CCRs	Undelivered bills/DN, bill amount queries common	Notification & comprehension issues	DN literacy kit, queue TV explainers
CCRs	Delays: account verification, Users Assistance, meter/billing investigations	Backstage bottlenecks drive walk-ins	Internal SLA dashboards, one-stop case packets

Evidence Source	What We Heard	What It Means in the Journey	Action in Plan
CCRs	App adoption depends on device/email/mobile readiness	Prerequisite barrier	Eligibility quick-check, lobby Wi-Fi, coach-at-counter
CCRs & Customers	Need assurance on reconnection 24 hrs. or earlier	Expectation management	Unified promised-by timestamps and status updates

Note. CCR = Customer Care Representative; BC = Business Center; DN = Disconnection Notice; SLA = Service Level Agreement

Figure 5.1 Compelling Factors Driving Customer Engagement.



Compelling Factors Driving Customer Engagement

D. Synthesis of the Findings

The integration of findings draws upon insights gathered from both customer interviews and Customer Care Representative (CCR) perspectives, interpreted through the CX360 framework. Overall, the results suggest that customer experience

within M Electric's Business Centers is shaped not by single service encounters, but by the interaction of several key factors. These include the customer's level of digital capability, the urgency of the service need, and how clearly the service process is communicated throughout the journey. Together, these elements influence customer confidence, satisfaction, and their openness to using digital or physical service channels. The CX360 framework provides a comprehensive lens for examining these relationships by linking customer behavior, frontline practices, and organizational processes into a cohesive analytical model.

Customer interview findings reveal a distinct divide between digitally confident users and those who continue to depend on in-person services. Customers who prefer visiting Business Centers often cite limited digital skills, uncertainty in navigating online systems, or unfavorable past experiences with digital platforms. However, regardless of their level of digital familiarity, many customers from both groups still turn to physical branches when dealing with critical or sensitive transactions. Situations such as verifying payment postings, resolving billing discrepancies, or requesting service reconnection are often perceived as too important to handle without direct human interaction. This pattern indicates that adoption of digital channels is not determined solely by availability, but is strongly influenced by trust, perceived risk, and confidence in service accuracy. In such cases, Business Centers function as reliable spaces where customers seek confirmation and reassurance, reinforcing their role as essential trust-building touchpoints within the service ecosystem.

Perspectives from CCRs provide additional depth by highlighting operational realities that shape customer experience but are often hidden from view. Frontline staff consistently identify internal processes—such as account verification, billing investigations, and approval workflows—as sources of service delays. While these

procedures are necessary for accuracy and compliance, customers are typically unaware of the steps involved, leading to a disconnect between actual processing requirements and expected turnaround times. This lack of visibility often results in frustration, repeated inquiries, and negative perceptions of inefficiency, particularly when customers anticipate immediate resolution. The findings suggest that dissatisfaction is frequently not due to the time required to complete a process, but rather to insufficient communication and lack of transparency regarding what is happening behind the scenes.

Despite these challenges, one of the strongest positive aspects identified in the study is the human-centered nature of service delivery within Business Centers. CCRs play a critical role in shaping customer perceptions by offering personalized assistance, clarifying procedures, managing expectations, and demonstrating empathy during difficult or stressful interactions. Customers appear to place significant importance on these relational and emotional aspects of service, especially when dealing with complex or urgent concerns. Additionally, the findings highlight the effectiveness of assisted digital adoption, where frontline staff guide customers in using digital platforms during their visit. This approach allows customers to gradually develop confidence in digital tools while still receiving direct support, helping to ease the transition without eliminating the sense of security provided by human interaction. Viewed through the CX360 framework, the results emphasize the need for a balanced approach that integrates technology, process clarity, and human capability. Digital solutions alone are insufficient if customers lack understanding or trust in how the service journey operates. At the same time, empowered frontline staff and empathetic engagement serve as key drivers not only of satisfaction but also of gradual digital acceptance. The findings therefore point to the importance of a coordinated customer

experience strategy—one that aligns digital innovation with transparent communication and sustained human support.

By uncovering behavioral patterns, experience gaps, and operational constraints across different customer segments and service touchpoints, the CX360 framework proves to be an effective tool for both analysis and design. The study ultimately reinforces the idea that achieving meaningful and sustainable transformation in customer experience requires a service model that is inclusive, transparent, and responsive to emotional as well as functional needs. Within M Electric’s Business Centers, this means recognizing the continued value of human interaction while strategically enabling digital adoption through trust-building and customer-centered design.

Table 5.2

Customer Profiles Derived from CXI360 Analysis

Customer Profile	Primary Service Needs	Key Emotional Drivers	Behavioral Characteristics	Digital Readiness Level
Assisted Traditional Customer	Billing inquiries, payment issues, service reconnection	Anxiety, need for reassurance, trust in face-to-face assistance	Prefers walk-in transactions; relies heavily on frontline staff for guidance; hesitant to use digital channels	Low
Efficiency-Driven Customer	Quick resolution of routine transactions	Frustration with waiting time, desire for speed and convenience	Goal-oriented; sensitive to delays; open to alternatives that reduce effort	Medium

Digitally Curious Customer	Information validation, follow-ups, account inquiries	Cautious optimism, desire for control and clarity	Uses digital channels intermittently; seeks confirmation from staff; influenced by positive digital experiences	Medium
Digitally Confident Customer	End-to-end digital transactions	Confidence, autonomy, efficiency	Prefers online channels; minimal reliance on Business Centers; visits only for complex or exceptional cases	High
Complex-Needs Customer	Multiple or non-routine concerns (e.g., new connections, disputes)	Stress, uncertainty, need for clear explanations	Requires longer service time; values empathy and transparency; may combine digital and in-person channels	Variable

Table 5.3

CXI360 Mapping Across M Electric CX360 Touchpoints

Customer Journey Stage	M Electric CX360 Touchpoints	CXI360 Thematic Focus	Key Insights for CX Improvement
Pre-Service	Website, Mobile Application, Hotline, SMS/Email Notifications	Customer Emotions; Digital Awareness	Customers experience initial anxiety and urgency; limited awareness of available digital service channels influences preference for walk-in transactions
Arrival and Entry	Front Desk, Information Desk, Queue Management System, Signages	Service Operations; Trust and Assurance	Clarity of entry procedures affect early perceptions of fairness and reliability; potential to redirect simple transactions to digital channels
Waiting Experience	Waiting Area, Queue Displays, Digital Kiosks	Emotional Highs and Lows	Prolonged waiting contributes to frustration; waiting time presents an opportunity for targeted digital engagement and education

Service Interaction	Frontline Counters, Customer Service Representatives	Service Quality; Emotions; Trust	Transparency of process and clarity of explanations significantly influence satisfaction and likelihood of repeat visits
Resolution and Exit	Payment Counters, Receipts, Exit Instructions	Satisfaction; Digital Readiness	Sense of closure shapes overall experience recall; opportunity to encourage future use of digital channels
Post-Service	Customer Surveys, Notifications, Application Usage	Trust; Digital Adoption Behavior	Post-service feedback and behavior validate service effectiveness and sustained digital engagement

VI. CONCLUSION AND RECOMMENDATIONS

This chapter presents the overall conclusions of the study and corresponding recommendations derived from the CX360 analysis of customer experiences at M Electric Business Centers.

A. CONCLUSION

The findings of the study indicate that customer experience within M Electric's Business Centers is influenced less by the mere presence or advancement of digital platforms and more by factors such as customer preparedness, trust in service outcomes, and the clarity of the overall service process. While digital channels provide clear benefits in terms of efficiency and convenience, these advantages alone do not appear sufficient to fundamentally change customer behavior. Regardless of their level of familiarity with digital tools, many customers continue to depend on physical service locations when dealing with transactions that are perceived as critical. Situations involving billing concerns or service interruptions often drive customers to seek in-person assistance, as these environments offer greater assurance, validation, and perceived risk reduction. This pattern highlights the continued relevance of physical touchpoints as sources of trust in an increasingly digital service environment.

The study also shows that emotionally charged service situations significantly shape customer decision-making. During periods of uncertainty or urgency, customers tend to prioritize reliability and reassurance over speed or convenience. In these scenarios, the absence of clear information about service progress and limited visibility into internal procedures contributes to heightened anxiety and dissatisfaction. This often results in repeated visits to service centers. Such behavior should not be interpreted simply as resistance to digital channels; rather, it reflects gaps in

communication and unmet emotional and informational needs during key moments in the service journey.

Despite these challenges, the research identifies frontline personnel as a critical strength within the service delivery system. Customer Care Representatives (CCRs) play a vital role in maintaining positive customer perceptions by clarifying processes, addressing concerns, and demonstrating empathy. Their ability to manage expectations, provide reassurance, and respond effectively to urgent situations helps offset negative impressions that may arise from delays or system limitations. These findings emphasize the continuing importance of human interaction in ensuring service quality, especially in situations that are complex or sensitive for customers.

The use of the CX360 framework proved effective in capturing the different dimensions of customer experience by integrating behavioral, emotional, operational, and technological aspects into a single analytical perspective. Through this approach, the study underscores the importance of adopting a hybrid service model that combines digital accessibility with clear communication and strong human support. Rather than viewing digital and physical channels as competing alternatives, the results highlight the need for their coordinated use.

In conclusion, achieving meaningful improvements in customer experience at M Electric requires more than investment in digital technologies. It calls for a balanced strategy that incorporates transparent processes, empathetic service delivery, and sustained support for customers as they transition to digital channels. A human-centered approach, supported by integrated systems and clear communication, is essential to building trust and enabling long-term adoption of digital services.

B. RECOMMENDATION

Based on the conclusions of the study, the following actionable recommendations per prioritization, are proposed to strengthen customer experience delivery, support inclusive digital adoption, and enhance operational alignment within M Electric Business Centers.

1. Strengthening Digital Trust and Transparency

Digital adoption in utility services is fundamentally a trust problem, not a usability problem. The findings show that even digitally capable customers revert to the Business Center when transactions affect service continuity (e.g., payment posting and reconnection). This behavior reflects risk aversion under uncertainty: when the perceived cost of an error is high (loss of electricity), customers seek confirmation from an authoritative source.

Real-time status visibility, timestamps, and proactive notifications directly address this trust gap by reducing information asymmetry between the institution and the customer. When customers can see where their transaction stands, when it was received, and what will happen next, the system begins to feel accountable rather than opaque.

Transparency reframes waiting from an anxious state into an informed one. Customers are more likely to tolerate delays when they understand progress and constraints. Over time, consistent and reliable digital feedback builds confidence, making human verification a reassurance option rather than a necessity. This gradually shifts perceived credibility from the counter to the digital channel—without forcing behavior change

2. Standardizing High-Emotion Journeys (Disconnection and Reconnection)

Disconnection and reconnection are not merely operational processes; they are emotionally charged life events for customers whose households depend on electricity for safety, livelihood, and daily functioning. The findings indicate that emotional intensity—not lack of digital access—drives walk-ins during these moments.

Standardizing these journeys with clear rules, timelines, and proactive communication reduces cognitive and emotional load. When customers are told what will happen, when it will happen, and why, uncertainty diminishes even if the outcome is not immediate. Predictability restores a sense of control, which is critical in high-stress situations.

Publishing service-level commitments and providing visible prioritization (e.g., reconnection fast lanes) also signals fairness and reliability. Customers may accept delays, but they resist ambiguity. By making the journey predictable, the organization demonstrates empathy and competence—two core components of institutional trust—thereby lowering panic-driven visits and escalation.

3. Institutionalizing Assisted Digital Adoption at Business Centers

The findings clearly show that digital resistance is contextual rather than ideological. Customers are not opposed to digital tools; they are opposed to the risk of making mistakes without support. Assisted digital adoption works because it converts moments of vulnerability into confidence-building experiences.

When CCRs guide customers through digital processes during live service moments, customers achieve immediate success under supervision. This generates self-efficacy—the belief that they can perform the task independently in the future. Assisted onboarding also addresses practical barriers (device readiness, connectivity,

literacy) that are often mistaken for attitudinal resistance. By institutionalizing assisted digital support, Business Centers shift from being dependency hubs to capability incubators. This approach respects customer dignity, avoids forced digitization, and creates positive first experiences that increase the likelihood of repeat digital usage. Over time, this reduces walk-ins organically while reinforcing the CCR's role as a trusted guide rather than a gatekeeper.

4. Addressing Internal Process Constraints and Backend Visibility

Customers' anxiety is amplified not simply by delays, but by the absence of visible progress. The findings show that backend dependencies and inter-unit coordination gaps create perceived system opacity, which customers interpret as inaction or neglect.

Improving internal SLA visibility equips CCRs with accurate, consistent information, enabling them to manage expectations credibly. Providing partial customer-facing updates—even without full resolution—offers psychological reassurance that the process is moving forward. Knowing that a case is “Step 2 of 4 completed” is often more comforting than receiving no update at all.

Reducing backend friction also improves operational efficiency. Clear ownership, standardized case packets, and shared dashboards decrease rework and repeated inquiries. This creates a virtuous cycle: fewer follow-ups reduce workload, allowing CCRs to provide more focused, empathetic service, which in turn strengthens customer trust.

5. Segment-Specific Content and Channel Strategies

The findings demonstrate that customers differ not only in digital capability but in emotional needs, confidence levels, and decision drivers. A uniform channel

strategy risks excluding vulnerable segments while failing to fully empower capable ones.

Segment-specific strategies work because they align service delivery with customer context. Digitally capable customers value efficiency, visibility, and escalation paths; providing transparent self-service reinforces autonomy and trust. Walk-in-dependent customers, on the other hand, require visual cues, vernacular explanations, and human reassurance—especially during high-impact transactions.

Avoiding forced digitization preserves psychological safety. When customers feel respected and supported, they are more open to gradual change. Inclusion-first design ensures that no customer is left behind while still advancing digital adoption through choice, not coercion.

Taken together, these solutions work because they synchronize emotional, behavioral, and operational dimensions of the customer experience. Rather than attempting to eliminate human touchpoints, the CX360 approach leverages them strategically to build trust, provide clarity, and offer reassurance—especially where digital systems alone are insufficient.

By addressing trust gaps, emotional peaks, and backend opacity simultaneously, the organization creates a hybrid service ecosystem where digital and human channels reinforce each other. This alignment enables sustainable digital adoption, reduces unnecessary walk-ins, and strengthens the Business Center's role as both a service and confidence anchor.

First, journey transparency across both digital and physical channels should be significantly improved to reduce customer uncertainty and perceived service inefficiencies. Customers consistently expressed the need for clearer confirmation

mechanisms, particularly for payment posting, service reconnection, and transaction completion. Providing real-time or near-real-time confirmations, automated status updates, and clearly communicated service timelines can help bridge the information gap between back-and-related processing and customer expectations. Enhanced transparency not only reduces repeat visits and follows-ups but also builds trust by making the service process visible and predictable from the customer's perspective.

Second, high-impact customer journeys, most notably disconnection and reconnection processes—should be prioritized for redesign using a customer-centric lens. These journeys are often emotionally charged and time-sensitive, amplifying dissatisfaction when delays or ambiguity occur. Redesign efforts should incorporate proactive communication at critical stages, standardized processing expectations that are clearly communicated to customers, and visible progress indicators that show where a request stands within the service lifecycle. By structuring these journeys around moments that matter, M Electric can mitigate stress, manage expectations, and improve overall customer confidence during critical service events.

Third, Business Centers should be formally positioned as assisted digital transition hubs rather than solely as transactional service points. In this model, Customer Care Representatives (CCRs) play an active role in guiding customers through digital platforms during in-branch interactions. The use of visual aids printed step-by-step guides, and live demonstrations can help customers better understand and navigate digital services such as online payments, account inquiries, and service requests. This assisted approach allows customers to develop digital confidence gradually, reinforcing adoption without forcing abrupt behavioral change or excluding customers who require additional support.

Fourth, human-centered service delivery should be sustained and protected,

particularly for customers with low digital literacy, older age groups, and those facing complex or urgent service concerns. While digital channels offer efficiency and scalability, the findings indicate that face-to-face interaction remains critical for maintaining trust and inclusivity. Rather than enforcing digital-only processes, M Electric should continue offering in-person support as a complementary channel that addresses emotional, cognitive, and accessibility needs. This balanced approach ensures that digital transformation enhances, rather than diminishes, the overall customer experience.

Fifth, CCR capability development and support mechanisms should be strengthened to enable consistent, high-quality service delivery across channels. Continuous training programs focused on customer empathy, journey explanation, and digital platform navigation can equip CCRs to better assist customers and manage expectations. Additionally, providing CCRs with simplified digital tools, clear escalation pathways, and readily available customer-facing instructional materials can reduce service handling time and improve confidence in assisted digital interactions. Empowered frontline staff are essential to translating CX360 insights into meaningful customer outcomes.

Finally, internal coordination and process efficiency should be enhanced to minimize service delays and align backend operations with customer-facing commitments. The study highlights that many service bottlenecks stem from disconnected processes, approval dependencies, and limited visibility across operational units. Strengthening cross-functional collaboration, clarifying service ownership, and aligning internal service-level agreements with externally communicated timelines can reduce inconsistencies between promised and actual service delivery. Improved internal alignment ensures that customer experience

improvements are sustainable and supported by operational reality rather than frontline workarounds.

VII. PERSONAL LESSONS LEARNED (REFLECTIVE ESSAY)

The CX360 Project for M Electric Business Centers became a meaningful learning experience for me, as it revealed that customer experience is shaped not only by systems, policies, and processes, but also by human interaction, trust, and emotional realities. Through direct conversations with customers and Customer Care Representatives (CCRs), I was able to see customer experience beyond dashboards and procedures and understand it as something deeply personal and situational. This exposure helped me appreciate how complex it is to deliver service that is both consistent and compassionate, especially in an environment where customers come with varying needs, emotions, and levels of understanding.

One of the most important lessons I gained from this project is the realization that digital access does not automatically equate to digital trust. Although digital platforms are already available and accessible, even customers who are comfortable with technology still seek reassurance when dealing with critical transactions such as payment posting verification or service reconnection. I observed that during these moments, customers worry less about convenience and more about certainty. This experience emphasized for me how essential transparency and clear communication are, particularly when customers feel that the outcome of a transaction could directly affect their daily lives. It reinforced my belief that digital transformation should not only focus on expanding digital channels, but also on providing visible, reliable feedback that reassures customers and builds confidence in the process.

Another strong realization from the project was the powerful role emotions play in shaping customer behavior. Customers experiencing service disconnection often arrived at the Business Centers feeling anxious, stressed, and urgent. In these

situations, they tended to prioritize immediate human assistance over speed or self-service options. This taught me that customer experience is not purely rational or transactional—it is deeply emotional. I learned that the way a concern is acknowledged, explained, and handled can be just as important as how quickly it is resolved. Simple actions such as listening attentively, showing empathy, and providing reassurance can significantly reduce customer stress and leave a lasting positive impression, even when system limitations prevent instant resolution.

The project also heightened my awareness of customer diversity and the reality of digital inequality. Interacting with customers who preferred walk-in transactions due to limited technological skills or lack of confidence highlighted the importance of inclusive service strategies. I realized that pushing customers into digital-only processes, even with good intentions, may unintentionally exclude or frustrate certain segments. Business Centers therefore continue to play a vital role as safe and supportive spaces where customers can ask questions, receive guidance, and gradually build confidence in using digital tools. This insight reminded me that true customer-centricity means meeting customers where they are, rather than expecting them to adapt immediately to organizational preferences.

Engaging with CCRs gave me a deeper appreciation of the challenges faced by frontline employees. Many of these challenges stem from backend processes, system dependencies, and approval requirements that are beyond their direct control. Hearing their experiences helped me understand the pressure of balancing customer expectations with operational constraints. It also highlighted how critical internal coordination and realistic expectation-setting are in maintaining service credibility. This reinforced my belief that CCRs need continuous support through proper training,

clear guidelines, and user-friendly tools so they can confidently manage customer concerns and communicate effectively.

The CX360 Project reaffirmed and deepened my commitment to a human-centered approach to customer experience, particularly within complex and essential service environments such as electric utilities. While the project emphasized the importance of systems, processes, and digital tools in enabling operational efficiency, it became increasingly clear that technology alone cannot deliver meaningful service experiences. True service excellence emerges at the intersection of structured systems and human connection—where empathy, adaptability, and clear communication shape how customers feel, decide, and ultimately place their trust in an organization.

Engaging directly with customers and Customer Care Representatives throughout the study highlighted the often-invisible human effort that sustains service delivery daily. The findings revealed that behind every transaction is a customer navigating uncertainty, urgency, or anxiety, and a frontline employee balancing procedural requirements with the emotional needs of the person in front of them. This reinforced the idea that customer experience is not simply designed through policies or platforms, but continuously co-created through human judgment, patience, and compassion during each interaction.

The CX360 Project also provided a valuable opportunity to bridge theory and real-world practice. Concepts of customer journey mapping, service touchpoints, and experience design gained deeper meaning when observed through actual customer behavior and frontline realities. Rather than viewing customer experience as an abstract framework, the project allowed me to appreciate its practical complexity—

how small moments of clarity or reassurance can significantly influence trust, satisfaction, and willingness to engage with digital channels.

Personally, and professionally, this experience reshaped how I view digital transformation. It underscored that successful digital adoption does not come from replacing human interaction, but from designing technology around human capability, confidence, and context. In many cases, the most effective pathway toward digital engagement is not automation, but guided support that empowers customers rather than alienates them. This insight is particularly critical in ensuring that digital initiatives remain inclusive and do not unintentionally exclude vulnerable or less confident customer segments.

The lessons gained from this project will continue to inform my professional practice as I pursue roles and initiatives focused on customer experience improvement. Moving forward, I aspire to contribute to service designs that thoughtfully balance innovation with empathy, efficiency with fairness, and technological advancement with human trust. The CX360 Project ultimately reinforced my belief that the most sustainable and impactful customer experience strategies are those that place people—not platforms—at the center of transformation.

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IX. APPENDICES

Appendix A

Walk-in Customer Questionnaire

1. Walk-In Customers			
1. How frequently do you visit the Business Center?	Very Often	Often	Seldom
2. What type of transactions do you usually process here?	Service Application	Payments	Inquiries
3. How did you decide to visit the Business Center today?			
4. Did you consider using any online/digital channels? Why or why not?	Yes, Why? _____ No, Why? _____		
5. Describe your experience from the moment you entered until your transaction was completed.			
6. Which part of the process was easy for you?			
7. Which part was difficult, confusing, or slow?			
8. How helpful was our staff during your visit?	Very Good	Good	Quite unhelpful
9. Did they offer digital alternatives or suggest other channels?	Yes	No	
10. Are you aware of our mobile app or online services?	Yes	No	
11. Have you used it? Why or why not?	Yes, Why? _____ No, Why? _____		
12. What would make you more willing to use digital channels?			
More guidance _____			
Clearer instructions _____			
More trust in accuracy _____			
Fear of mistakes _____			
13. At which stage did you feel:			
Frustrated _____			
Relieved _____			
Confused _____			
Satisfied _____			
14. What is the biggest challenge when trying digital options?			
15. What improvements would you recommend for the Business Center?			
16. What would encourage you to shift to digital channels more often?			

Appendix B

Digital Savvy Interview Questionnaire

2. Digital-Savvy Customer Interview Guide

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1. How often do you use digital services (app, portal, email)?
 2. What do you like the most about our digital services?
 3. Have you experienced any difficulties?
 4. What made you switch from walk-in to digital?
 5. What features should be improved?
-

When do you still prefer walk-in service, and why?

Appendix C

Customer Care Representative Questionnaire and Answers

QUESTIONS	CCR 1	CCR2	CCR 3	CCR 4	CCR 5	CCR 6
1. What are the most common concerns customers bring to the Business Center?	Undelivered Bill/DN; Disconnection	Undelivered Bill/DN	Bill Amount ; Bill Delivery ; Confirmation in Delivery of DN	Bill Amount ; Bill Delivery ; Confirmation in Delivery of DN	Erroneous payment posting due to account under group billing when settling payment through TPA.	Meter disconnected without receiving disconnection notice.
2. Which parts of the service process cause the most delays?	For Application: Site/Account Verification and Technical Approval For Aftersales Service/s: Undelivered Bill and Meter Replacement	Account verification, system checking, and billing investigations that require coordination with other departments.	Billing related concerns with conjuctive Meter Replacement	Billing related concerns with conjuctive Meter Replacement	When the approval needs the creation of CUAF, it takes longer to approve the requests.	High billing concerns with replacement of meter
3. What do customers struggle with the most?	Adapting to Digital approaches especially if customer is part of older demographics and is still reliant to paper notices (as part of not being being able to break habit / nakasanayan na)	Understanding bill computation and using digital platforms (My Meralco App).	Some customers are still not yet familiar with the disconnection procedure and number of this in which the service is scheduled to be disconnected and needing to go directly to business centers since TPA no longer accepts long overdue bills.	Some customers are still not yet familiar with the disconnection procedure and number of this in which the service is scheduled to be disconnected and needing to go directly to business centers since TPA no longer accepts long overdue bills.	They need/prefer to go to the BC to report that their payment was not reflected yet on their account and/or their service was already disconnected.	Reconnection for burnt meter. Customer need a long process for reconnection because they still need to to remodel S/E and secure CFEI

4. What customer behaviors do you commonly observe (confusion, fear of digital, need for assurance)?	Need for assurance that despite not being able to pay on time their service will still receive ample/several notification prior disconnection	Confusion about billing detail and hesitation in using digital tools such as My Meralco App.	Customers needing assurance that service will be reconnected within the 24-48 hrs time frame given after settlement of disconnected bills.	Customers needing assurance that service will be reconnected within the 24-48 hrs time frame given after settlement of disconnected bills.	Realibility on Payment Channels/Apps	Confusion regarding additional bill deposit in their account
5. How comfortable are customers when staff introduce digital channels?	It varies, older customer tends to be more dismissive when digital channels are introduced as options for their concerns while younger demographics and tech savvy customers are much more willing to welcome digital options and is much willing to take time to learn how to	Some are open, but many—especially older customers—still prefer over-the-counter transactions.	Customers are eager as long as the mobile phone/tablet is capable to install the app and customer has a working / update email and cellphone number	Customers are eager as long as the mobile phone/ tablet is capable to install the app and customer has a working / update email and cellphone number	They questioning the realibility of the digital channels and safety of their bank accounts.	Senior citizens having difficulty when introducing digital channels. They still prefer the old system.
6. What are the barriers preventing customers from using digital tools?	Customer's lack of initiative and Obsolete mobile devices; Lack of promotional commercials on socmed for easy how-to's	Lack of familiarity, limited internet access, and preference for personal assistance.	Some customers have yet to download the app due to data/ gigabyte capacity of device	Some customers have yet to download the app due to data/ gigabyte capacity of device	Lack of knowledge on how to enroll, Internet Connections, Outdated mobile devices, Limited users, Realibility of the App	Not familiar and having difficulty to download app and installing it especially the Senior Citizen.
7. What support do frontline staff need to assist digital adoption better?	Customer's easy access to internet/wifi during transactions in order for CCReps to give hands-on to willing customers during transactions; CCReps to have training on all available Meralco's Dlgital App/Options	Training on digital tools, clear guidelines, and simple guides to help explain the process to customers.	Pamphlet/ Booklet copy with visible font and images of step by step guide on how to register with My Meralco App	Pamphlet/ Booklet copy with visible font and images of step by step guide on how to register with My Meralco App	Step-by-Step Promotional Flier/Leaflet guide on how to register to My Meralco App, More adds on social media platforms	Step by step tutorial to customers on how to download app, install and explain its features.

Appendix D

Data Privacy Notice

This research is **academic in nature** and is **not sponsored, endorsed, or required by MERALCO**. MERALCO has no involvement or responsibility in this study.

Participation is **voluntary**, and you may decline or withdraw at any time without consequence.

No personal identifiers (such as your name or contact details) will be collected.

The information you provide will be used solely for academic purposes and will be under my control and/or my academic institution's control as the Personal Information Controller.

By proceeding with this interview, you acknowledge that you understand the above and consent to participate in this academic research."