# FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

A QUANTITATIVE STUDY OF THE MOTIVATING FACTORS DRIVING EARLY
ADOPTION OF IN-STORE RETAIL MEDIA NETWORKS AMONG TRADITIONAL
RETAILERS, RETAIL GROCERY, AND CONVENIENCE STORE OPERATORS
TARGETING RETAIL MERCHANTS, RETAIL MARKETERS, AND ECOMMERCE
RETAIL MEDIA NETWORK TEAMS

A dissertation submitted in partial fulfillment of the requirements for the degree of DOCTOR OF BUSINESS ADMINISTRATION

by

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To: Dean William G. Hardin College of Business

This dissertation, written by Geri Wolff, and entitled A Quantitative Study of the Motivating Factors Driving Early Adoption of In-Store Retail Media Networks Among Traditional Retailers and Retail Grocery, and Convenience Store Operators Targeting Retail Merchants, Retail Marketers, and E-commerce Retail Media Network Teams, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved. Maria Cristina Gonzalez Arijit Sengupta Robert Rodriguez George Marakas, Major Professor Date of Defense: May 16, 2024 The dissertation of Geri Wolff is approved. Dean William G. Hardin College of Business Andrés G. Gil

Florida International University, 2024

Senior Vice President for Research and Economic Development

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## **DEDICATION**

To the women who strive to not only do their best but be their best selves.

The women whose hearts and souls are as expansive as their desire to make a difference in the world and in the lives of others. To all of those who have put off their dreams while helping others to achieve theirs.

To those who have struggled to find themselves, and at last, not only find they have been themselves all along but are now able to grant themselves acceptance. I dedicate this dissertation to my sisters in arms, daughters, nieces, and cousins.

Strong women in their own right who have no need to apologize for being themselves.

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This has been an amazing experience. I am sincerely grateful.

### ABSTRACT OF THE DISSERTATION

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Professor George Marakas, Major Professor

This paper intended to add to existing literature on retail sector technology adoption by identifying what factors contribute to the willingness to recommend adoption of in-store Retail Media Network (RMN) platforms, (those owned by retailers, employing digital screens). While the population of interest was at the organizational level, (i.e., national/regional chain retailers), respondents included manager-level (or higher) merchants, marketers, and RMN operators. This study adopted the definition of an RMN (Eisenberg et al., 2023) as "any digital advertising that appears on a retailer's owned and operated assets, on-, off-line, on a third-party publisher's property, powered by the retailer's first-party shopper data, or in a physical store."

Prior research has studied online RMNs as they have been deployed by Amazon, Walmart, and others as ecommerce websites/apps, but no studies to date have investigated the factors driving in-store adoption. With only a handful of very early in-

store RMN adopters, it is not possible to measure early adopter behavior, so this study concentrated on retailers with physical stores that sell cross-category merchandise (i.e., products across multiple categories) and operate national or regional retail chains in the U.S. comprised of 200 or more physical store locations as potential adopters.

The study's aim was to identify to what degree target respondents believe in-store RMNs would strengthen the three key customer-centric considerations of importance to retailers (i.e., customer retention, experience, and engagement) and whether the benefits that have been shown to accrue to retailers that have been operating in-store RMNs (i.e., new revenue stream from monetized in-store assets, increase in chain-wide sales, and the opportunity to remain competitive in a changing industry environment) would be considered sufficiently important to compel recommendation.

The response rate for this study, discussed in the Limitations of the Study Section, was not sufficient to allow an exploration of perceptions by job title, nor to provide any conclusive evidence. Therefore, the Discussion and Implications for Future Research Section offers observations based on interpretive conjecture. Shortcomings of this study create an opportunity to re-address the research question using a different approach to better understand the motivations of the population of interest.

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#### **CHAPTER I**

## INTRODUCTION

## **Context Setting**

Ecommerce Retail Media Networks (RMNs) have been gaining popularity worldwide, but particularly among retailers across the U.S. The rise in popularity has been driven by the deprecation of third-party data, specifically the demise of the thirdparty "cookie." HTTP cookies, which Google is gradually phasing out through the end of 2024, are those IP identifiers that represent specific consumers, allowing advertisers to track shoppers online and target or re-target them with advertising messages based on their browser and search engine behavior. For brand advertisers looking for alternate ways to reach target audiences, particularly with the continued drop in linear television viewing and ongoing fragmentation of audiences across media, the availability of firstparty customer data enables them to serve ads targeted on the basis of customer shopping behaviors. This has attracted brand advertisers who have redirected funds from traditional media to place advertising messages 'further down the funnel,' (closer to the point of sale). Over the past few years, retailers have watched as brands have enthusiastically redirected over 70 percent of all digital advertising spending to Amazon's RMN based on that retailer's massive digital reach. Brands are purchasing advertising on Amazon's website because they can use the platform's customer behavior analytics to understand and predict purchase patterns by segments of the consumer population based on their shopping and search behaviors on that retailer's website. Beginning in 2021 and hoping to cash in, to-date over 150 U.S. retailers have organized their first-party data and tied it

to expanded websites designed as digital RMNs to accommodate ad placement, generating new revenue streams.

## **Context of Study**

This study uses the definition of RMNs coined by Eisenberg, et al. (2023), which states "any digital advertising that appears on a retailer's owned and operated assets, whether, on-, off-line on a third-party publisher's property, or other media content powered by the retailer's first-party shopper data, or in a physical store." That said, the study will focus wholly on determining which factors most influence a retailer's decision to implement an in-store, retailer-owned RMN.

The important difference that delineates traditional online website advertising or promotional activities in-store from RMNs is the use of first-party customer data. That data is culled largely from retailers' loyalty programs and consumers' past internet search patterns. When a retailer prepares their customer data for this purpose it is fully anonymized and organized in a way that allows advertisers to target shoppers more specifically, either by demographics and/or product categories (i.e., down to SKUs), based on their shopping behaviors – in real time – as the consumer is visiting the website or on a physical journey in-store.

This paper will reference the descriptor "digital" to refer to ecommerce websites, while "in-store" will refer to digital signage networks. The in-store descriptor refers to display screens in the physical store used to message shoppers. The study will be bounded by U.S. retail organizations (i.e., retailers, retail grocery, and convenience store chains that operate physical stores) selling cross-category merchandise (i.e., products across multiple brand categories) and operating national and regional U.S. chains

comprised of 200 or more physical store locations, irrespective of whether they have already established a digital RMN. The study's aim is to determine retailers' intent to recommend adoption of an in-store RMN platform unique to the physical retailer in that the retailer owns the digital signage network and controls the sale of advertising allowing them to monetize their first-party data and keep the 100 percent of the advertising revenue. This is opposed to retail partnerships with programmatic third-party platforms which remit a percentage of advertising funds when those ads appear on in-store screens, although a retailer may choose to extend their in-store network through third-party partnerships (i.e., programmatic or Connected TV) to provide greater reach to advertisers. In-store monetization is a lucrative promise as nearly 85 percent of all retail sales currently occur in-store. By 2028 Forrester Research estimates the share of retail spending in-store is anticipated to drop to approximately 72 percent but is expected to continue to represent the lion's share of retail spending for the foreseeable future (Insider Intelligence, 2023). This means that even with the present focus on omnichannel touchpoints and digital RMNs, "the physical store space continues to remain the primary shopping outlet for the majority of shoppers and continues to be relevant for customers and retailers alike," (Hanninen, et al., 2021).

While not initially an RMN, Walmart envisioned an in-store network in 1998, fourteen years before Amazon launched what has undisputedly grown to be the largest digital retail media platform in the U.S. Walmart, which has now gone through three iterations of in-store networks, introduced its first version dubbed *The Walmart TV*Network using 42" high-definition television sets with the intent of providing in-store programming and contextual adverting opportunities for suppliers. It was a forward-

thinking idea, but the screens were positioned too high overhead for shoppers to view or engage with them making them inefficient for the intended purpose. In addition, the programming originally included audio, which distracted shoppers and annoyed employees, so the effort was shelved. However, in 2008, the retailer tried again, this time as the result of a \$10 million research project that took place over two years. *The Walmart Smart Network* installed digital screens (rather than TV sets) so they could be viewed easily, (this time without audio) and were programmed to play specific product information messaging during specific times of day targeting shoppers the research indicated would be most likely to be in each of the store's departments. This technology upgrade also gave the retailer the ability to analyze sales lift in specific departments and make year-over-year comparisons based on what messaging had been used.

To be clear, neither of Walmart's first two efforts were RMNs because advertising opportunities offered at that time were not tied to first-party data but were contextual. For instance, that meant ads for electronics products could be purchased to play on screens installed in the department of the store that sold electronics with advertising messaging that provided product information on products sold in that immediate area.

However, reacting in part to the money Amazon was pulling in from its advertising platform, in January 2021, through its Walmart Media Group, Walmart launched what is now *Walmart Connect*, which expanded both the retailer's digital and in-store offerings, tied them to first-party data, and connected and activated them as RMNs. Connecting the digital and in-store RMNs allows Walmart to provide brand advertisers with a more comprehensive "omnichannel" picture of customer shopping behavior with the ability to follow online search and connect it to in-store purchase.

Experimenting with the same opportunity, Target introduced its digital Target Media Network, but made it accessible only to vendor partners in 2016. Three years later Target rebranded their digital RMN media company as Roundel and expanded the platform incorporating it with their website to including all ecommerce within the purview of its digital RMN and expanded the effort in-store. In the approximately the same timeframe (2017), Kroger expanded its web capabilities by establishing a digital RMN, but it wasn't until 2020 that it established Kroger Precision Media (KPM), its sales arm, to sell advertising to CPG brands who were interested in reaching Kroger's ecommerce shoppers. Additionally, Kroger began testing smart TV screens on the doors of their in-store refrigerated coolers in pilot stores in 2018, and in fall of 2021 began a rollout with Cooler Screens to 500 select stores. Kroger had slowed the rollout of this product watching closely for customer feedback due to Walgreens' experience. Walgreens pulled the same technology from its refrigerated cooler doors both because their new CEO at the time (who has now exited), felt the visual presentation detracted from the stores' look, and because customers complained on social media that ads on refrigerated cooler doors made locating product more difficult. Kroger has since moved to complete the Cooler Screens rollout and is actively exploring the launch of an in-store network. With this background it becomes clearer to understand the motivation behind Kroger's proposed merger with Albertsons Companies as such a merger would expand the combined entity's national reach to number over 5,000 store locations. With that expanded footprint the combined entity would rival Walmart's 4,684 US branded stores and be able to offer a truly national network both online and eventually, in-store. With

growing opposition at the State and Federal levels, it is unclear at this time if the two companies will be allowed to complete their merger.

With the decline of linear TV audiences, which according to Nielsen Research, dropped to under a 50 percent share of all television viewing in July 2023, and diminishment of influencer popularity on social media, brand advertisers have been reallocating their budgets between a multiplicity of streaming (Connected TV / CTV) options, browser search platforms (e.g., Google), and alternative social media platforms (e.g., TikTok) to fill gaps in audience reach. Additionally, brands are urgently looking for ways to court members of Gen Z, which as the first fully digitally native cohort is also now the largest consumer group, wielding \$44 billion in purchasing power - but they are proving hard to reach through traditional media.

Recognizing an opportunity to fill this vacuum, retailers are emulating Amazon by tying their store brand's mobile apps and website advertising platforms to the wealth of their own first-party data and offering brand advertisers the ability to reach customers at or very close to point of purchase. For the handful of national retailers who organized their customer data in a way that would allow them to provide customer analytics to advertisers anonymously and by the dint of broad national reach, they found they were able to attract a significant amount of new revenue tied to their expanded website operations. The number of retailers who have moved in this direction has grown rapidly during and since the pandemic, which for close to two years forced consumers to change their buying behavior and segue to use of digital channels. The over 150 digital RMNs in the U.S. are now generating a share of the billions in advertising revenue for retailers who have initiated them, and in most cases, according to Forrester Research (2022), they

are generating operating profit margins in excess of 50 percent. According to Insider Intelligence, that this online sales phenomenon exceeded \$40 billion in advertising sales 2023 and is expected to surpass \$61 billion in advertising sales by the end of 2024; while GroupM, a conglomerate of five global advertising agencies, all of whom work with major advertisers, benchmarked advertising spending on RMNs at over \$110 billion for 2022 and projected that number to rise to close to \$170 billion by 2027.

But monetizing ecommerce streams is only part of the story. On average, close to 85% of all retail sales still occur in-store, and that number is higher for specific retail categories such as home appliances. Forrester Research's latest estimate of major growth in ecommerce purchasing expects that channel to grow to reach 28 percent of retail sales by 2028, which means the number of consumers who shop in stores will continue to vastly exceed those who shop via ecommerce sites and apps for the foreseeable future. This has caught the attention of retailers beyond Walmart who are beginning to realize that their physical stores are also monetizable media assets. This concept was underscored when in October 2022, then Insider Intelligence's principal analyst Andrew Lipsman declared that "Physical Stores are the Next Major Media Channel." The following December Forbes proclaimed that "Retail Media Networks are the Next Big Advertising Channel."

Clearly there is an additional untapped opportunity for most retailers who have not yet leveraged their in-store traffic. Per Forrester Research, creating an in-store advertising channel by installing a digital signage network can drive operating profit margins upwards to between 70 percent to 80 percent. While Walmart, its subsidiary Sam's Club, Target, Best Buy and Costco are operating in-store RMNs, Kroger,

Albertsons, and Home Depot are some of the retailers that have also been piloting instore digital screens to leverage their in-store traffic as a point-of-purchase opportunity for brands in their aisles and on their shelves.

Post pandemic, retailers now understand how important it is to create customer experiences that compel in-store visitation, which means that finding ways to elevate the in-store experience is critical to brick-and-mortar success. A key to improving that experience is providing product information that consumers are interested in and making them aware of comparable new products. The ability to showcase both featured and sales merchandise creates value for shoppers who want to know "what's new" or how they can stretch their shopping dollars and want the same access to product information that is generally available online.

Research by Intel Corp. found that in-store digital signage builds customer engagement by capturing 400 percent more views than static signage, increases the chance of impulse purchases between 18 to 20 percent due to new or "add-on" items (source: Talk Retail), and according to Nielsen, "advertising products via digital signage in-store aids the decision-making process substantially, with an increase of up to 33 percent in additional sales." Shankar (2016) also indicated that a potential benefit of new retail technology is to "encourage shoppers to purchase a greater share of their requirements for any given category from the focal retailer rather than another retailer." Similarly, Kalyanam et al., (2006) found that "new technology can boost sales and customer satisfaction."

Brands are eager to capitalize on in-store digital advertising because research has shown it to heighten brand awareness and generates sales. They know that 60 percent to

70 percent of customers make buying decisions at point of sale (Anthony and Desforges 2018) and are therefore willing to spend advertising dollars to be present at the bottom of the 'funnel' when buying decisions are being considered.

There is also great opportunity for retailers to attract more in-person shoppers by creating digital in-store environments that rival their online experiences. This is particularly important with young Millennials and Gen Z, both of which are largely digital natives, whose purchasing habits not only differ from earlier generations, but also tend to be more price-sensitive and less brand loyal (Swift Prepaid Solutions 2018). Attracting more of these customers in-store now will help make them more likely to do business with the retailers who best address their needs going forward.

All of this suggests that retailers who offer cross-category merchandise (i.e., multiple brands and types of goods) would benefit from leveraging their in-store traffic to generate additional revenue to their bottom lines by adopting an in-store RMN platform unique to their chain.

#### Statement of the Problem

While using in-store assets to attract additional brand investment is not new (i.e., shelf talkers, shelf slotting, end cap displays, sampling, or promotion), the present phenomenon of tying an in-store digital signage network to a retailer's first-party data to monetize customer traffic and allow brands to target shoppers in real time is new. Brands see great value in a medium that gives them access to 'bottom of the funnel' activity where the shopper is making decisions at point of purchase as it helps drive sales. However, most research on the retail sector focuses on customer behavior or new technologies in general, and the few studies conducted recently on RMNs are wholly

focused on the digital aspects of ecommerce. None have addressed the factors that lead to intention of retail operators to recommend adoption of in-store RMNs.

Therefore, the purpose of this study is to understand what combination of factors will most likely motivate retail, retail grocery, and convenience store chain operators to form an intent to recommend adoption of an in-store RMN.

# **Statement of Purpose**

The purpose of this research is to expand existing knowledge about the newest iteration of in-store retail media merchandising phenomenon, in-store RMNs. This study seeks specifically to understand what factors will most likely motivate retailers, retail grocery, and convenience store operators to recommend investing in an in-store retail network that will enable them to influence the instore customer experience. In this way the study will not only add to existing literature, but it will also help retail, retail grocery, and convenience store operators who are watching this phenomenon with growing interest better understand their peers' perceptions and attitudes toward in-store RMNs, and specifically, how their peers are prioritizing constructs that would motivate them to recommend adoption of what is a complex and expensive customer-facing technology.

#### **Practical Foundation**

# Study Beneficiaries

The intended beneficiaries of the study's findings are peers of the target respondents who have been following the growth of this phenomenon closely. These potential retail media network owners (i.e., retail, retail grocery, and convenience store operators of physical store locations) as well as professionals who have a business

interest in an expanded use of retailer owned RMNs in physical store locations (i.e., software and hardware vendors who design, install, and maintain the physical networks on behalf of retail operators) are among those avidly following this trend as it evolves and would welcome a better understanding of the factors driving such an investment decision.

These audiences are also interested in whether retail operators are willing to invest on an ongoing basis to support the technology (i.e., including the cost of staffing an in-house sales team to sell the advertising) and to acquire the skill sets and resources not generally found within a retail organization enabling them to monetize their in-store assets – with a goal of pocketing 100 percent of the lucrative potential – or outsource a number of these components to technology partners, which would diminish their return on investment (ROI).

## **Business Contribution**

Researchers have long studied technology evolution in retailing, although it wasn't until Markin and Duncan (1981) posited the *Theory of Retail Transformation* that technology advances were seen as a process of adaptation opposed to McNair's (1931) pre-determined stages of retail development along a "retailing wheel." Taking the view that "past is prologue to the future," Evans (2011) emphasized that retailers would benefit from examining the history of retail technology adoption issuing a caution to retailers that, "to succeed in the future, retailers must study, learn, and adapt in a way that both appeals to consumers and is cost efficient," while also acknowledging the difficulty involved in achieving such a balance.

Therefore, the goal of this research is to understand the different ways in which retailers plan to adapt to this latest market disruption to get a better sense of the way in which the industry is most likely to evolve and the degree to which that evolution will include in-store RMNs.

# **Research Question**

"What factors contribute to the intent among U.S. retailers, retail grocery, and convenience store operators of physical store chains to recommend adoption of in-store RMNs?"

#### **CHAPTER II**

## LITERATURE REVIEW

#### Introduction

Retail, retail grocery, and convenience store operators work to satisfy their customers' needs and make their shopping experiences sufficiently enjoyable so customers will return to shop with them, and ideally eschew other retail options. To accomplish this, they focus on building customer satisfaction and trust, hoping to keep customers' business by providing easily discoverable product choices along a range of prices to ensure affordability and convenience. This process is intended to build consumers' perceived positive value of a retailers' brand, (brand equity), that leads to customer engagement as a way to encourage lifetime relationships.

Brand equity has been defined as "the added value with which a given brand endows a product or organization (Jones 1986, Leuthesser, 1998). The concept of brand equity is that "to build a strong brand you must shape the way your customers think and feel about it," (Keller, 1993, 2016). Customer retention, customer experience and customer engagement are seen by retailers as factors that add value to their brand.

Customer retention theory (Dawkins and Reichheld, 1990) says, "that by identifying what customers expect and then by meeting and exceeding those expectations, customers will be far less likely to seek the services of competitors." Bolton et al., (2014) suggested the theory of customer experience is "holistic in that it incorporates the customer's cognitive, emotional, sensory and social responses to all interactions with a firm across all customer touchpoints over time." This construct is seen as leading to customer engagement, defined as a motivational state that leads customer attitudes and behaviors that go beyond

purchase," (Hoyer et al., 2010, Libai et al., 2010) to create a bond between the customer and the brand.

Over the years, retailers have tried a variety of approaches and realigned their priorities accordingly to achieve this goal. The evolution of research on retailers' priorities over the past 30 years was summarized by a meta-analysis by Hanninen, et al., (2021). Beginning with a focus on customer loyalty (Fuller, O'Conor, and Rawlinson, 1993), and store image (Baker, Grewal, and Parasuraman, 1994) in the early 1990's, the literature's focus moved to a preoccupation with online retail in the 2000's. Ecommerce was then its infancy, so the emphasis at that time was on understanding customer behavior on the online channel (Mathwick, Malhotra, and Rigdon, 2001). Hauble and Trigts (2000) suggested that product information available online "led to customers making better and more informed purchase decisions." In the latter half of that decade, research examined how retailers could best combine and integrate their offline and online offerings with additional emphasis on customer experience and creating engaging customer experiences (Verhoef, et al, 2009), and how price, promotion, merchandise, supply chain, and location work to deliver retail customer experience (Grewal, Levy, and Kumar, 2009).

By 2010 research reflected changing customer priorities and how retailers' business models were transforming with the advent of new technologies (Sorescu, et al., 2011). It was also during this period when research began examining the role of online reviews in social media and its influence on customer behavior, and those behavioral impacts on retail sales (Smith, Fischer, and Yongji, 2012), as well as implications of

environmentally conscious consumers (Liu, Anderson and Cruz, 2012), and what was then seen as a growing reliance on home delivery (Hua, Wang, and Cheng, 2010).

In 2015 the term "omnichannel" entered the research lexicon defined as "the seamless integration of all retailers' customer touchpoints." At the same time other researchers were examining new customer behaviors, such as "showrooming," (Rapp, et al., 2015), which refers to consumers seeing, feeling, and trying products on in a physical store and then buying online (Aliawadi, et al., 2017) or using their smartphones in-store to conduct product searches for comparative pricing and more information. It was at this time that Hubner, et al., (2016) conceptualized a framework about last-mile order fulfillment; Wang, Malthouse, and Krishnamurthi (2015) investigated the motivations for mobile shopping; Cao and Li (2015) explored sales benefits of cross-channel integration; and Melis, et al., (2015) examined the role of online experience in the choice of online retailer.

Summarizing, Hanninen, et al., (2021) pointed out that the "evolution from the physical store to digital platform was made possible by digitalization and supporting customer-facing activities ... which enabled retailers to embrace a larger number of new retail channels." The growth in ecommerce, which Forrester Research estimates will grow to \$1.6 trillion, representing 28 percent of all retail purchases by 2028, means the vast majority of purchases (currently almost 85 percent) still occur in a physical store and will do so for the foreseeable future (Lipsman, 2022).

With behavioral changes in shopping resulting from the pandemic, "growth in ecommerce has been additionally spurred by retailers growing their advertising business on digital retail media networks to pay for improved omnichannel retailing experiences

and home delivery services," (Bartholomew and Williamson 2022). Other contributing factors include the rise in digital advertising costs on heretofore popular digital search and social platforms (i.e., Google and Facebook), along with the deprecation of the third-party cookie, which previously allowed ads to target and re-target consumers wherever they browsed online. This means digital RMNs have become more attractive for advertisers looking to reach more audiences effectively while working with shrinking advertising budgets. Digital RMNs can help brands reach customer segments underserved by both popular digital platforms and declining linear TV audiences. In fact, RMN advertising funds are not just being sourced from traditional "fixed trade" budgets, rather brand advertisers have also been redirecting budget dollars from traditional media (i.e., linear television, radio, and print) into digital RMNs to ensure they reach underserved segments.

However, the largest contributing factor for digital RMN adoption has been Amazon's success. The rapid adoption and immense revenue growth of retail media offerings at Amazon have inspired retail media availability on other retailer websites (Gees, 2023). Amazon leads the digital RMN category generating revenues that will approach \$34 billion in 2023 (Dong, et al 2023). Note: Dong and his fellow authors' estimate actually missed the mark as Amazon's reported revenue generated through advertising sales worldwide for 2023 was close to 40% higher closing at \$46.9 billion. More than 150 national retailers to date have since been compelled to grab a share of these newly directed advertising dollars. Even though advertising spending was projected to slow for 2023, digital RMNs are on track for multiple years of accelerated growth,

expected to increase by more than 19 percent annually through at least 2027, and estimated to reach a combined \$1.6 trillion.

While projected growth of digital RMN advertising spend currently appears to outshine all other media, the fact that in-store purchases far outweigh those made digitally is the crux of the argument for creating in-store retail media channels. In-store RMNs not only have the potential to reach far more consumers, but also to do so at the point of purchase decision, makes an in-store channel (at the lower end of the purchase funnel) attractive to "endemic" consumer-package goods (CPG) brands (i.e., those that already occupy shelf space) and wish to boost sales, having evidenced that "physical retail drives sales and discovery," (Davidkhanian, et al., 2022).

Per Forrester Research, retailers should be highly motivated to create and monetize in-store channels because they have the potential to introduce an incremental revenue stream that generates profit operating margins of between 70 percent to 80 percent (Forbes, 2022).

Monetizing in-store assets in physical retail or retail grocery stores is not a new concept. In the brick-and-mortar world, retailers have historically presented offerings to consumers near point of purchase (Gees 2023). For instance, beginning in the 1980's, grocery retailers began charging brands "slotting" fees, also referred to as "fixed trade spending." In addition, retailers also charge promotional, advertising, and stocking fees, all of which creates more revenue for retailers than the thin margins they receive for selling a brand's products.

These changes were driven in part by retailers who have traditionally been motivated to hold down costs and find ways to squeeze as much revenue as possible out

of their physical square footage, while configuring their stores and offerings to satisfy customer needs and compel shoppers to regularly return.

The overarching theory on which this study is based is Markin and Duncan's (1981) *Theory of Retail Transformation*, which viewed the retail environment as a holistic ecosystem within which value norms and competition had a causal effect on market opportunities, and in turn leads to innovation by firms within that environment. Their ecosystem model showed that competition within the environment had a direct effect on institutional behavior, which in turn leads to emergent transformation of the ecosystem and a realignment of the retail institutions within it. Their premise was that retailing institutions exist within a dynamic state of interaction with their environment, which compels retail institutions to develop and change in direct response to disruption in their market environment. In this way, retailers continually seek to establish competitive advantages, generally in a way that creates barriers to entry for their competition to retain established differentiation.

Their theory was supported by McGoldrick (1990) who said that "operating in a dynamic and highly competitive environment compels retailers to adapt and increasingly anticipate disruption by changing or running the risk of inevitable decline," and by Dawson and Shaw (2012) who found that the "changing nature of retail competition has been shown to be a major motivation of a wide spectrum of operational changes." Echoing the same thought, Shankar, et al., (2021) pointed out that competitor innovation often leads to adoption of similar technologies which eventually transform the environment."

Evans (2011) went as far as to caution retailers that to succeed, they need to, "adapt in a way that both appeals to consumers and is cost efficient." Constant study of the competitive retail environment is essential, because as Pantano (2014) pointed out, "the speed of development of new systems for supporting retailers and consumers frequently subjects the retail industry to a process of disruptive innovation that makes available a large amount of novel information that requires modifying the traditional organizational process."

However, historically, retail technology innovation has been less motivated by customer-centric philosophy than by cost-conscious effort. Self-checkout is a case in point. Kroger debuted self-checkout in 1986 with the specific aim of lowering labor costs by as much as 66 percent. Similarly, in the early 2000's Walmart, looking to cut costs due to recessionary tailwinds and stiff competition from emergent superstores, also implemented self-checkout. In both cases not only was customer acceptance of the technology slow, but retailers found additional personnel were required to assist customers and self-checkout resulted in recurring theft. These unanticipated costs offset a good deal of the labor savings retailers were hoping to realize.

However, it was the environmental change wrought by the pandemic that shifted consumer attitudes toward "contact-less" checkout, which in turn made self-checkout a competitive necessity, forcing retailers to implement or expand self-serve checkout both to woo customers who were uncomfortable in face-to-face interactions at checkout and as a "defensive" measure, believing they must offer what their competition offers to retain their customers (Har et al., 2022).

Similarly, a survey of large British retailers by Bennet and Savani (2010) intended to assess retailers' readiness to adopt U-Computing (ubiquitous, or cloud computing) found a "widespread wait and see approach and a distinct lack of strategic thinking," regarding the innovation. Eight years later, evidenced by market research from McKinsey & Company (Baishya et al. 2018) retailers had adopted the technology, but had done so primarily to reduce their cost of computing and data storage, and had not adopted it uniformly across the retail sector. Despite agreeing that migrating workloads to the cloud was both necessary and valuable, respondents reported being hamstrung with "multiple, disjointed, and hard-to abandon legacy systems," which may still be true for some portion of U.S. retailers considering in-store RMNs.

According to Har, et al. (2022), technology acceptance in retail is evolutionary. That study, which suggests that the retail industry entered the 4.0 phase of retail in 2010, defined *Retail 4.0* as a process that "...alters supply chains into customer-centric organizations by enabling the rapid flow of items and information between channels while providing highly customized services to customers." Regan and Singh (2020) suggested that *Retail 4.0* is synonymous with the term "omnichannel," which they defined as a combination of many technological platforms, the intent of which is to provide consumers with a seamless purchasing experience, (i.e., Internet of Things/IoT, Mobile, QR codes, Artificial Intelligence/AI, Big Data Analytics/BDA, Cloud Computer, et al.).

The "4.0" moniker can be applied to any industry that uses multiple digital channels to adopt a business model with a customer-centric approach, but in retail, operators want the best combination of applications that help make customer transactions

"frictionless," or as easy as possible for consumers to discover new products and find specific products, without encountering issues that would prevent them from purchasing. While retailers continue to focus on cost control and embrace economies wherever they can find them, they also recognize that the newest consumer generations with purchasing power are digital natives who expect a physical store to provide a similarly "technology enriched" shopping experience, (Ferreira, et al. 2020).

Nevertheless, there are specific hurdles retailers who are interested in creating an RMN must overcome. One of the requirements of establishing either a digital or in-store RMN is a commitment to Big Data Analytics (BDA). "Retailers who are able to draw conclusions from big data are better prepared and can better predict consumer behavior, thereby targeting consumers more effectively." (Hagberg, et al., 2017). To sell advertising, a retailer must be able not only to quantify their shopper audience and identify them in terms of anonymized purchase behavior but be able to access the data by multiple categories to offer advertisers the ability to target specific types of purchasers or product categories, in some cases, as finitely as SKUs. In addition to organizational advantages, employing staff skilled at sorting and evaluating the data to make it available for real-time analysis can help "illustrate consumer behavior, understand their preferences, construct tailored market strategies, identify sales transactions," (Har, et al. 2022) and be used to personalize communication and better connect with customers.

Savvy retailers are already using BDA for "data-driven decision-making," forecasting revenues, maintaining stable inventory levels, enhancing consumer relationships, and eventually increasing revenue and profit," (Har, et al. 2022). But, at the end of 2020, the Boston Consulting Group surveyed U.S. retailers and found that only

about 30 percent of companies have or were actively creating a single customer view across channels, and just one to two percent were already using data to deliver a cross-channel experience. That number has grown considerably, as 26 percent of mid-size (regional) and enterprise-level (national) retailers surveyed in early 2023 reported that organizing their data for this purpose was no longer a challenge (Phronesis Partners/Epsilon Market Research, 2023). While the study did not isolate the positive responses from national retailers, it is plausible that the national cohort of retailers would represent an even higher percentage of those who are first-party-ready. A more recent survey of over 1,100 retail decision-makers worldwide revealed that fully "60% of respondents are currently in the planning or execution phase of their unified engagement platform," (source: SalesForce's 2023 *Connected Shoppers Report*).

Another caution for retailers who are intent on maintaining customer trust are privacy concerns about the first-party consumer data collected largely through opt-in loyalty and rewards programs either online or in-store. Retailers must be careful to protect the confidentiality of the data, and at the same time be able to use it to personalize engagement with customers. Prior research has examined this issue and found that "retailers' media networks are providing data privacy, as well as customer information and controls through transparency and choice," (Bartholomew and Williamson, 2022). In addition, the use of "data clean rooms" where data can be anonymized, is increasing. Data clean rooms offer the opportunity for brands and retailers to collaborate working with information that establishes the portion of purchases that can be attributed to bottom funnel advertising and be seen as truly "incremental" (i.e., compelled by in-store advertising as opposed to coincidental purchase affected by previously seen advertising).

In an effort to go beyond collaboration and create additional transparency, retailers such as Walmart, Kroger, and Target have now introduced 'self-service tools," which allow brand advertisers and agencies to access their anonymized first-party data to place advertising on their online and in-store RMNs without assistance. In addition to making it easier for advertisers to work with their data and place advertising buys, at the same time these retailers have alleviated most of the administrative burden of doing the work for them, providing a win-win for both RMN buyers and sellers.

Other barriers to adoption cited by Lorente-Marinez, et al., (2022) included lack of technical knowledge, other budget priorities, and the existing data culture.

While retailers are working to overcome these issues, they must weigh investment in new technology against the benefit to their customers and whether they see in-store RMNs as a way to differentiate their stores and enhance the in-store customer experience, or as competitive necessity, which Peng, et al. (2010) defined as a strategic emphasis on developing certain intended competitive capabilities," and as Jitpaiboon (2014) suggested, "relies on innovation as a key construct."

In 2012, Dawson and Shaw found that "The changing nature of retail competition has been shown to be a major motivator of wide spectrum of operational changes." Following that line of thought, Shankar, et al., (2021) suggested that one driver of retail technology adoption is competitor innovation, which depends less on consumer benefit, and more on adoption of similar technology by competitors, because competitor adoption "may reduce the perceived risk of a technology for retailers who perceive themselves as 'fast followers' rather than early adopters."

Prior research has also investigated in-store digital signage separate and apart from RMNs. When investigating digital signage as a retail atmospheric tool, Dennis, et al. (2012) found that digital signage had a positive effect on shoppers' approach behaviors such as spending, mediated by perceptions of the retail environment and positive affect. The authors' Limited Capacity Model of Mediated Message Processing (LCM) indicated that "shoppers paid more attention to emotion-eliciting communications." The following year a study by Dennis, et al. (2013) demonstrated the effectiveness of digital signage sensory-affective advertisements. It also showed that digital signage advertisements that were "high in factual information evoked intellectual experience." The authors added, "The findings indicate that incidental brand-related stimuli on digital signage can lead to evaluative judgements such as attitudes. Such stimuli can also work by evoking sensory and affective experiences and eliciting approach behavior toward an advertiser. That study had practical implications as "affective digital signage ads can increase shoppers' approach toward an advertiser and the store that carries the ads, especially in generating loyalty from first-time shoppers."

Wolpert and Roth (2020) investigated technology-based retail services and found that digital signage contributed to a 69 percent increase in customer experience and a 49 percent increase in new product purchases. This is supported in part by Nisbett and Ross' (1980) vividness theory, which stated that vividness represents a "temporally proximal, or emotionally appealing situation." According to Nowlis, et al., (2004) "A vivid situation is on in which a consumer's ability to visualize and imagine is enhanced." Taking that one step further, Blonde and Girandola (2016) found that "an overall positive impact of vividness fostered the acceptance of advocated attitude intention to change,"

which can be seen to lend additional support to the use of in-store video as enhancing customer engagement.

Inman, et al., (2017) argued that new shopper-facing retail technologies "provide value by either increasing revenue through attracting new shoppers or increasing the share of volume from existing shoppers." Examining retailer innovativeness, Omar, et al., (2021) found that product and experience innovativeness contributed directly to brand equity. In a review of high-tech supermarkets Kalyanam, et al., (2006) found that new customer-facing technology can boost sales, lead to increased shopping frequency and a higher level of customer satisfaction. This finding was reinforced by Grewal et. al., (2020). In a study that investigated in-store technologies, but the authors cautioned, "for retailers to stand out and be on the cutting edge, they must carefully consider what will delight the customer."

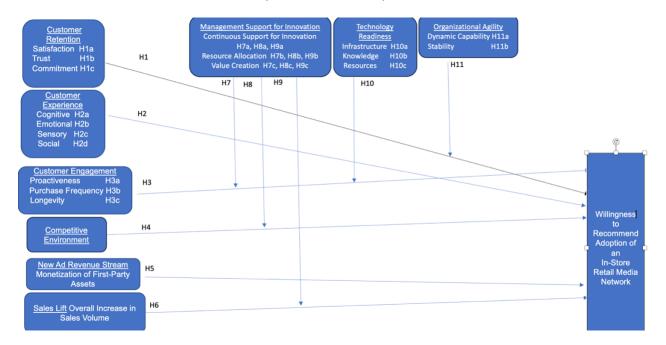
In summary, based on the foregoing, the model for this research incorporates constructs from the theory of retail transformation, customer experience theory, customer retention theory, customer satisfaction theory, theory of customer engagement and commitment-trust theory of relationship marketing. Applying subconstructs that have represented these constructs in prior literature, as well as reported benefits of existing instore RMNs, this study attempted to measure the impact of these constructs on the willingness of the population of interest to recommend an in-store RMN for their respective retail chains, moderated by the constructs of management support for innovation, technology readiness, and organizational agility, shown by Shankar et al., (2021) to drive (or hinder) technology adoption.

# **TABLE 1: CONSTRUCT DEFINITIONS**

Variable	Туре	Definition	Source
Customer Satisfaction	Independent	Pleasurable fulfillment that fills some need, desire, or goal, and that this fulfillment is pleasurable.	Oliver, 1997
Commitment-Trust 1994 Theory	Independent	Building consumer relationships through trust- worthy dialogue.	Morgan & Hunt,
Commitment 1994 (Loyalty)	Independent	Measure of a customer's connection with the organization (relationship marketing)	Morgan & Hunt,
Customer Experience (Customer Experience Theory)	•	Cognitive, emotional, sensory & social responses to the in-store environment.	Brakus, 2001
Customer 2014 Engagement Theory	Independent	A customer's behavioral  manifestation toward a brand or firm, beyond purchase, resulting from motivational drivers.	van Doorn, et al.
Competitive 1981	Independent	Retail environment as a	Markin & Duncan,
Environment (Theory of Retail Trans	sformation)	holistic ecosystem within which value norms & competition have a causal effect on market opportunite leading to innovation within the er	ties
New Advertising Revenue Stream	Independent	Advertisers & their agents determine an advertising budget & select outlets for spending those dollars.	Evans, 2009
Sales Lift	Independent	Sales increase in stores in which digital signage featured information content nearly doubling sales for the advertised product.	Nordfalt, 2014
Management support 2015 for innovation	Moderator	Support of top management  affects innovation & synergy between organizational structure and information technology.	Shaar, et al.,
Technology 2000 Readiness	Moderator	A firm's propensity to embrace & use new technologies.	Parasuraman,
Organizational 2015	Moderator	Refers to firms that are powerful	Bazigos, et al.,
Agility		machines for innovation & learning	g

		supported by top-down innovation.	
Willingness to Webster	Dependent	Behavioral intention that leads to	Merriam-
Recommend Adoption	ı	recommendation of a new technology where intention is influenced by the attitude toward and the general impression of the technology.	

CHAPTER III
MODEL MEASUREMENT, HYPOTHESES, AND CONSTRUCTS



Customer Retention & Subconstructs Satisfaction, Trust and Commitment

H1: As increases in customer retention are perceived to be attributable to RMN instore technology, willingness to recommend adoption of the technology will increase.

H1a: As increases in customer satisfaction are perceived to be attributable to RMN in-store technology, willingness to recommend adoption of the technology will increase.

H1b: As increases in customer trust are perceived to be attributable to RMN instore technology, willingness to recommend adoption of the technology will increase.

H1c: As increases in customer commitment are perceived to be attributable to RMN in-store technology, willingness to recommend adoption of the technology will increase.

Customer retention theory as conceptualized by Dawkins and Reichheld (1990) pointed out that customer retention is so important that "a company with a retention rate that drops several points is not merely 'slipping' it is tumbling toward disaster." The authors study demonstrated that "even small shifts in a company's customer retention rates can have a powerful impact on profits."

Prior research has defined the subconstructs of customer retention as customer satisfaction, customer trust, and customer commitment (i.e., loyalty). Oliver (1997) defined customer satisfaction as a "pleasurable fulfillment, in the sense that consumption fills some need, desire, or goal, and that this fulfillment is pleasurable. Commitment-Trust marketing theory, originated by Morgan and Hunt (1994) stated that both commitment and trust are required to retain successful relationships. Their theory emphasized that building consumer relationships through trustworthy dialogue and unbiased information is seen as an overall assessment of an organization's reliability. Defined by the same theory, customer commitment is a measure of a customer's connection with the organization and is demonstrated in part by those shoppers who participate in a retailer's loyalty program. This construct and its subfactors were measured using a Likert scale to determine the degree to which respondents believe they will be strengthened by the technology and therefore strengthen their willingness to recommend adoption of an in-store RMN.

Customer Experience and Subconstructs Cognitive, Emotional, Sensory, and Social

H2: As increases in customer experience scores are perceived to be attributable to RMN in-store technology, willingness to recommend adoption of the technology will increase.

H2a: As increases in customers' decisions to prioritize the store's brand are perceived to be attributable to in-store RMN technology, willingness to recommend adoption of the technology will increase.

H2b: As increases in customers' emotional attachment to the store brand are perceived to be attributable to RMN in-store technology, willingness to recommend adoption of the technology will increase.

H2c: As increases in customers' positive reactions to stores' environment are perceived to be attributable to RMN in-store technology, willingness to recommend adoption of the technology will increase.

H2d: As increases in customers' feelings of social interaction are perceived to be attributable to RMN in-store technology, willingness to recommend adoption of the technology will increase.

Brakus' (2001) customer experience theory identified measurable subconstructs, including cognitive, emotional, sensory, and social responses to the type of merchandise the retailer offers, the range of available price points, the convenience with which they can navigate the physical store, the degree to which they find the store environment pleasing (i.e., design, scents, temperature, music, et al.) and whether they enjoy the social interaction with staff and other customers to whom they an relate.

Abbot (1955) and Alderson (1957) both individually suggested that "what people really desire is not products but satisfying experiences."

Digital signage has been shown to demonstrate effectiveness of sensory-affective advertisements (Dennis, et al., 2013), which positively affects the customer in-store experience. Research has found that showing a product in a dynamic visual format that enhanced information vividness and led to an increased preference for the displayed product (Roggeveen et al., 2015), which has also been shown to "increase heightened mental processes" (Hoch and Lowenstein 1991) and (message) involvement. In addition, "experience-related innovation capabilities" such as in-store customer-facing technologies, have been shown to contribute to consumers' perception of a retailer's innovativeness (Lin 2015).

This construct and its subfactors were measured on a Likert scale to determine the degree to which respondents believe that they will be strengthened by the technology and therefore strengthen their willingness to recommend adoption of an in-store RMN.

<u>Customer Engagement and Subconstructs Proactiveness, Purchase Frequency, and</u> Longevity

H3: As increases in customer engagement scores are perceived to be attributable to RMN in-store technology, willingness to recommend adoption of the technology will increase.

H3a: As increases in customers' willingness to champion their retail brand and refer it positively to others, are perceived to be attributable to RMN in-store technology, willingness to recommend adoption of the technology will increase.

H3b: As increases in customers' purchase frequency are perceived to be attributable to RMN in-store technology, willingness to recommend adoption of the technology will increase.

H3c: As respondents increasingly perceive in-store RMN technology will increase length of customer relationships over time, they will become more willing to recommend adoption of the technology.

The theory of customer engagement as envisioned by van Doorn, et al. (2010) defined the concept of a customer's behavioral manifestation toward a brand or firm, which went beyond purchase and resulted from motivational 'drivers.' Vargo and Lusch (2010) suggested that customer engagement is centered on specific interactive customer experiences that are co-created with other actors and can be interpreted as "the act of engaging," while Jaakkola and Alexander (2014) suggested that customer engagement is the "customer's provision of resources during non-transactional, joint value processes that occur in interactions with the focal firm or other stakeholders." In 2017, Pansari and Kumar developed yet another theory of customer engagement that argued that "when a

relationship is satisfying and has emotional connectedness, the partners become engaged."

The subconstructs of customer engagement are shown to mediate the effect of customer experience and relies on a consumer's motivational state (Hoyer, et al., 2010; Libai, et al., 2010) in which customers identify with the brand and feel strongly connected in a way that goes beyond sales transactions. This motivational state leads to more frequent purchase behavior, a willingness to support or promote the brand socially, and extended habitual purchasing over time. Innovative brand experiences can deliver unique functional and emotional elements that build strong relationships between the brand and its customers (Lin, 2015). In Pansari and Kumar's (2017) theory of engagement, the authors argued that when a relationship is satisfying and has emotional connectedness, the partners become engaged in their concern for each other.

This construct and its subfactors were measured on a Likert scale to determine the degree to which respondents believe these subfactors will be strengthened by the technology and therefore strengthen their willingness to recommend adoption of an instore RMN.

### <u>Competitive Environment</u>

H4: As perceptions of competitive environment disruption due to competitor adoption of in-store RMN technology increase, willingness to recommend adoption of the technology will increase.

Traditionally, the competitive retail environment for any retail chain is comprised of some number of competitors who have similar product offerings in the same geographical market locations. As more than 15 percent of retail purchases currently

occur digitally, geographic locations still matter, but are no longer as important, to some extent redefining competition via access to digital marketplaces categorically.

Markin and Duncan's (1981) theory of retail transformation viewed the retail environment as a holistic ecosystem within which value norms and competition had a causal effect on market opportunities, and in turn led to innovation by firms within that environment. Their ecosystem model showed that competition within the environment had a direct effect on institutional behavior, which in turn leads to emergent transformation of the ecosystem and a realignment of the retail institutions within it. Their premise was that retailing institutions exist within a dynamic state of interaction with their environment, which compels retail institutions to develop and change in direct response to disruption in their market environment. While retailers continually seek to establish competitive advantages, generally in a way that creates barriers to entry for their competition to retain established differentiation, as Shankar, et. al., (2021) pointed out, competitor innovation often leads to adoption of similar technologies, which eventually transform the environment. Additionally. Dawson and Shaw (2012) found that the "changing nature of retail competition has been shown to be a major motivation of a wide spectrum of operational changes," and that "operating in a dynamic and highly competitive environment compels retailers to adapt and increasingly anticipate disruption by changing or running the risk of inevitable decline," (McGoldrick, 1990).

This most often holds true for retailers who offer similar product offerings, but in the case of retailers most suited to benefit from RMNs, this is defined as retailers who offer similar cross-category merchandise, providing the widest variety of opportunity for brand advertisers. This construct was measured on a Likert scale to determine the degree to which respondents believe this factor will be impacted by competitive disruption and therefore strengthen their willingness to recommend adoption of an in-store RMN.

### New Advertising Revenue Stream

H5: As perceptions increase that in-store RMN technology will drive a new stream of revenue from the monetization of first-party assets, willingness to recommend adoption of the technology will increase.

Digitalization was defined by Parida, et al., (2019) as "the use of digital technologies to innovate a business model and provide new revenue streams and value producing opportunities in industrial ecosystems," also suggesting that profiting from digitalization requires business model innovation. In fact, an in-store RMN is altogether a separate business from retailing, and one that drives much higher operational profit margins upwards to between 70 to 80 percent in-store (Forrester, 2022), enabling retailers to realize an untapped revenue stream from existing assets. Because physical stores possess many surfaces for digital media experiences (e.g., TV walls, front-of-store kiosks, between aisle signage, digital shelving, checkout aisles, smart carts, cooler doors, end caps, etc.), they offer the ability to reach receptive shoppers at point of purchase.

Because it has been shown that in-store digital media will drive sales performance, the bigger opportunity is for brand advertisers as the channel could help brands reach and influence customers at scale in brand-safe, contextually relevant environments (Lipsman, 2023). As a retail channel, RMNs allow brands to reach tens of millions of shoppers every week and more than 100 million every month – a national scale that linear TV now rarely achieves, outpacing huge ecommerce audiences (Lipsman, 2023).

Retailers are beginning to realize that their physical stores are also monetizable media assets, encouraged by brand advertisers spending in excess of \$40 billion on digital RMNs, projected to top \$60 billion in 2024 (Insider Intelligence, 2023). Industry analysts have noted that retail media is the only major category that is set for multiple years of accelerating growth and predict advertising spending will increase by more than 19 percent annually through at least 2027 (Dong, et al., 2023).

This construct was measured on a Likert scale to determine the degree to which respondents believe this factor should be prioritized as a technology investment due not only to its additional revenue potential, but also to help pay for other customer imperatives and thereby strengthening their willingness to recommend adoption of an instore RMN.

### <u>Sales Lift</u>

H6: As perceptions increase that in-store RMN technology will drive an overall lift in chain sales volume, willingness to recommend adoption of the technology will increase.

Digital signage, the delivery system for in-store video messaging, has been demonstrated to evoke affective experience leading to increasing shoppers' intentions to buy and from a store that carries the digital signage ads, demonstrating a positive effect on shoppers' approach behaviors such as spending, (Dennis, et al., 2012).

Research has shown that sales increase in stores in which digital signage featured information content and using the screens for promotional messaging provided the best return, nearly doubling sales for the advertised product (Nordfalt, et al., 2014).

In-store retail technology has been shown to have notable influences on consumer perceptions, increase purchase intention and help retailers leverage their store image,

(Cervantes and Valdez, 2020). Roggeveen, et al., (2015) found that visual formats enhanced information vividness, which increased preference for the displayed product. In a study of high-tech supermarkets (Kalyanam and Wolfram, 2006) in-store customerfacing technology was shown to have a positive impact on overall sales. This construct was measured on a Likert scale to determine the degree to which respondents believe this factor will be increased by the technology and therefore strengthen their willingness to recommend adoption of an in-store RMN.

## **Moderating Variables**

Management Support for Innovation – Continuous Support

H7: As perceptions increase that management will continuously support innovation, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H7a: As perceptions increase that management's continuous support for innovation includes the charge to increase customer engagement, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H7b: As perceptions increase that management's continuous support for innovation includes the charge to anticipate and adapt to the competitive environment, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H7c: As perceptions increase that management's continuous support for innovation includes the charge to recommend technology that provides an overall increase in chain sales volume, it will strengthen the willingness to recommend adoption of instore RMN technology.

Continuous innovation is the ongoing process of introducing new ideas, methods, products, or services within an organization to maintain a competitive edge and drive growth. It is the practice of continually seeking and implementing improvements, advancements, and changes to stay ahead in a rapidly evolving business environment. The fundamental elements are different abilities of a company, serving as assets and unique resources for them to perform innovation activities (Burgelman, et al., 2001). To

survive and compete in a dynamic business environment, companies must change their paradigm to do things differently (Lianto, et al., 2018).

Management's continuous support for innovation is hypothesized in this study's model to moderate the relationship between customer engagement, the competitive environment, and sales lift (defined as an overall increase in chain sales volume), thereby strengthening respondents' willingness to recommend in-store RMN technology. These hypotheses conjecture that the greater the degree of management's continuous support for innovation, which is perceived to strengthen customer engagement, position the retail chain to be more competitive, and do so while generating additional sales volume, will moderate the relationships between these subfactors, thereby increasing the likelihood that respondents will be more willing to recommend adoption of in-store RMN technology. This construct and its subfactors were measured on a Likert scale to determine the degree to which respondents believe management supports continuous innovation that can accomplish these objectives.

### <u>Management Support for Innovation – Resource Allocation</u>

H8: As perceptions increase that management support for innovation will make resources available to fund it, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H8a: As perceptions increase that management's support for innovation to increase customer engagement includes the allocation of resources for this purpose, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H8b: As perceptions increase that management's support for innovation encourages resources to be allocated to new technology for the purpose of remaining competitive in the retail environment, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H8c: As perceptions increase that management's support for innovation encourages resources to be allocated to technologies that provide an overall increase in sales

volume, it will strengthen the willingness to recommend adoption of in-store RMN technology.

Modern retailing is the accumulation of incremental steps over time (Evans, 2010) as the state of retailing at any given point is not only dependent on the cyclical nature of the overall economy in a country or region, but also on specific factors endemic to retailing. To maintain and grow a retail business, which requires a constant need to be cost-driven and efficient, resource allocation includes balancing competing needs and priorities and determining the best course of action to maximize the use of limited resources to get the best return on investment.

While new technology can be impressive, it still presents a significant challenge for retailers who must contend with inter-channel competition, obsolescence of legacy technology, the pace at which management is willing to commit to new technology to remain competitive, coordination of multichannel operations, privacy protection (Evans, 2010) and similar issues that require making hard decisions about spending priorities.

Management's support for innovation as a driver of resource allocation is hypothesized in this study's model to moderate customer engagement, the competitive environment, and do so while generating an increase in overall sales volume. These hypotheses conjecture that the greater the degree of management's support for funding an innovation which is perceived to strengthen customer engagement, position the retail chain to be more competitive, and do so while generating an increase in overall sales volume will moderate the relationships between these subfactors, thereby increasing the likelihood that respondents will be more willing to recommend adoption of in-store RMN technology. This construct and its subfactors were measured on a Likert scale to

determine the degree to which respondents believe management supports continuous innovation that can accomplish these objectives.

### Management Support for Innovation – Value Creation

H9: As perceptions increase that management will support innovation due to the value it creates, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H9a: As perceptions increase that management will support innovation due to the value it creates through increased customer engagement, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H9b: As perceptions increase that management will support innovation due to the value it creates by making the retail brand more competitive, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H9c: As perceptions increase that management's support for innovation due to the value it creates is dependent upon structuring financing to return a monetary investment within an acceptable timeframe, it will strengthen the willingness to recommend adoption of in-store RMN technology.

Organizational value creation is created through the organization's purpose, strategy, and business model for the overarching purpose of creating *financial value* by earning revenue that exceeds expenses. But in addition to financial value, businesses and investors also recognize a brand as a company's most valuable asset (Aaker, 1991) because a "brand" represents a vision about how to develop, strengthen, defend, and manage a business. Stephen King, a London-based advertising executive with the agency WPP, wrote a 1971 essay on branding, in which he said, "A product is something that is made in a factory, but a brand is something that is bought by a customer. A product can be copied by a competitor, but a brand is unique."

Therefore holistically, value creation can be thought of as both tied directly to financial outcomes as well as the added value of what a retail brand stands for in the minds of its customers influencing their decision to do business with the brand.

Management's support for innovation as a driver of value creation is hypothesized in this study's model to moderate customer engagement, the competitive environment, and the promise of generating an increase in overall sales volume. These hypotheses conjecture that the greater the degree of management's support for an innovation which is perceived to create value for the organization will moderate the relationships between customer engagement, positioning the retail chain to be more competitive, and doing so while generating an increase in overall sales volume, strengthening the relationships between these subfactors, thereby increasing the willingness of respondents to recommend adoption of in-store RMN technology. This construct and its subfactors were measured on a Likert scale to determine the degree to which respondents believe management supports continuous innovation that can accomplish these objectives.

<u>Technology Readiness and Subconstructs Infrastructure, Knowledge, and Resources</u>

H10: As perceptions increase that the organization is technologically prepared to adopt in-store RMN technology, it will strengthen the willingness to recommend adoption of the technology.

H10a: As perceptions increase that the organization's infrastructure will be able support in-store RMN technology to increase customer engagement, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H10b: As perceptions increase that organizational knowledge will be able support in-store RMN technology to increase customer engagement, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H10c: As perceptions increase that organizational resources will be able support an investment in-store RMN technology to increase customer engagement, it will strengthen the willingness to recommend adoption of the technology.

Technology readiness refers to a firm's propensity to embrace and use new technologies (Parasuraman, 2000); or as a firm's tendency to adopt and apply new technologies for achieving its goals (Richey and Autry, 2009; Vize, et al., 2013). Vize, et

al., (2013) found that retailers with limited experience of setting up online channels are less ready to embrace web solution services as they are more likely to perceive higher levels of risk associated with technology adoption, and perhaps consider those risks as being greater than the potential benefits.

However, Richey and Autry (2009) suggested that while the relationship between technological readiness, organizational learning, and collaboration is complex, that distinguishable patterns linking the technological readiness of firms to their willingness or need to meaningfully collaborate with technology partners can help overcome a firm's technology readiness shortfall.

Taken together, these hypotheses conjecture that while retailers may not have the organizational knowledge to tackle a project as complex as the design and installation of an in-store RMN, as long as they have the tendency to adopt and apply new technologies, the infrastructure and resources to support it, (or can build a business case to outsource the human resources they would require), a collaboration with qualified and fully vetted third parties would be likely to help them overcome these barriers to adoption to use the technology and moderate the relationship between customer engagement and their willingness to recommend the technology thereby increasing their willingness to recommend in-store RMN technology. This construct and its subfactors were measured on a Likert scale to determine the degree to which respondents believe their organization has sufficient technology readiness to enable them to accomplish this objective.

Organizational Agility and Subconstructs Dynamic Capability and Stability

H11: As perceptions increase that the organization is sufficiently agile to adopt instore RMN technology, it will strengthen the willingness to recommend adoption of the technology.

H11a: As perceptions increase that the organization has the dynamic capability to adopt a complex new technology that will help strength customer retention, it will strengthen the willingness to recommend adoption of in-store RMN technology.

H11b: As perceptions increase that the organization is sufficiently stable to be able to adopt a complex new technology to help strength customer retention, it will strengthen the willingness to recommend adoption of in-store RMN technology.

Organizational agility enables retailers to compete more successfully in today's rapidly changing retail ecosystem, which makes it essential for survival and business success. Agile organizations tend to be powerful machines for innovation and learning, supported by top-down innovation, the ability to capture and share external knowledge throughout the organization (Bazigos, et al., 2015).

Dynamic capability, a subfactor of agility, refers to the ability of firms to operate in environments of rapid technological change and still maintain their competitive advantage. Wealth creation in times of rapid technological change depends in large measure on an organization's ability to hone internal technological, organizational, and managerial processes to be able to identify new opportunities and organize effectively and efficiently to embrace them (Teece, et al., 1997). Eisenhardt and Martin (2000) took the view that dynamic capabilities differ greatly between moderately dynamic and high-velocity markets. They argued that the former is essentially an established routinized response to variation, while in environments that are rapidly changing, organizations are instead required to learn and adapt quickly, making decisions on what has been learned as events are evolving.

Stability, a subfactor of agility viewed largely as a financial component, plays a large part in a firm's ability to be both proactive and resilient in the face of uncertainty.

Sridharan and John (1998) define organizational stability in terms of senior management

tenure, arguing that such consistency has been shown to result in higher profit margins and financial return.

However, stability also contributes to employees' sense of security when an organization is thought to have a stable foundation. Gallup's 2020 survey revealed that in times of uncertainty employees look to management for stability and continually watch management for cues on behavioral predictability, making it essential for management to build trust and confidence in both the management team and throughout the organization.

These hypotheses conjecture that retail organizations that are able to operate and adapt in environments of rapid technological change, are financially stable, and can offer new technology that will deliver the detailed product information shoppers want to help them make smart choices, will moderate the relationship between customer retention and intent to adopt the technology by strengthening relationships with their customers, leading to an increased likelihood that respondents will recommend adoption of in-store RMN technology.

This construct and its subfactors were measured on a Likert scale to determine the degree to which respondents believe their organization is sufficiently agile to enable them to accomplish these objectives.

### Dependent Variable

### Competitive Environment and Competitive Advantage

Markin and Duncan's (1981) *Theory of Retail Transformation* holds that "retailing institutions exist within a dynamic state of interaction with their environment that forces retailers to continually seek to establish competitive advantages. Therefore, it would seem reasonable to consider 'competitive advantage' to be a motivating factor that might make

retail decision-makers and influencers more willing to recommend an in-store technology that could provide a competitive advantage. The two statements (measured on a Likert Scale) that were included to represent 'competitive environment' as a subconstruct of the dependent variable were:

- I would be willing to consider recommending an in-store technology if it would help our stores remain competitive.
- I would be willing to consider recommending an in-store technology if it would help increase our company's market share.

### Sales Lift

Research has shown that sales increase in stores in which digital signage featured information content and using the screens for promotional messaging provided the best return, nearly doubling sale for the advertised product (Nordfalt, et al., 2014); and in a study of high-tech supermarkets (Kalyanam and Wolfram, 2006) in-store customer-facing technology was shown to have a positive impact on overall sales. Therefore, it would seem reasonable to consider 'increased sales' to be a motivating factor that might make retail decision-makers more willing to recommend an in-store technology that could effectively contribute to increased sales. The two statements (measured on a Likert Scale) that were included to represent 'sales lift' as a subconstruct of the dependent variable were:

- I would be willing to consider recommending an in-store technology if it increased sales in our department.
- I would be willing to consider recommending an in-store technology if it increased sales throughout all our stores.

### New Advertising Revenue

An in-store RMN is altogether a separate business from retailing, but it has been shown to drive much higher operational profit margins upwards to between 70 to 80 percent in-store (Forrester, 2022), enabling retailers to realize an untapped revenue stream from existing assets.

Retailers are now realizing that their physical stores are monetizable media assets, encouraged by brand advertisers spending more than \$40 billion on digital RMNs, projected to top \$60 billion in 2024 (Insider Intelligence, 2023).

Therefore, it would seem reasonable to consider a 'new revenue stream' driven by brand advertisers to be a motivating factor that might make retail decision-makers more willing to recommend an in-store technology that could effectively drive new revenue.

The two statements (measured on a Likert Scale) that were included to represent 'new advertising revenue' as a subconstruct of the dependent variable were:

- I would be willing to recommend an in-store technology that would generate new revenue to help meet our department's goals.
- I would be willing to recommend an in-store technology that would generate new revenue to help fund innovation in our department.

#### Customer Experience

According to Denis et al. (2013), in-store digital signage has been shown to demonstrate effectiveness of sensory-affective advertisements, which positively affects the customer in-store experience. Speaking to the social aspect of customer experience, Abbot (1955) and Alderson (1957) both individually suggested that "what people really

desire is not products, but satisfying experiences," where they can enjoy social interaction with staff and other customers, or a shared shopping experience with friends.

Therefore, it would seem reasonable to consider that an in-store technology that could help deliver a positive or 'improved customer experience' could be a motivating factor that might make retail decision-makers more willing to recommend such an instore technology. The two statements (measured on a Likert Scale) that were included to represent customer experience as a subconstruct of the dependent variable were:

- I would be willing to recommend an in-store technology that would make our customers feel more confident about their purchases.
- I would be willing to recommend an in-store technology that would reinforce our customers' positive perception of our brand.

### <u>Customer Engagement</u>

The subconstructs of customer engagement are shown to mediate the effect of customer experience and relies on a consumer's motivational state in which customers identify with the brand and feel strongly connected in a way that goes beyond sales transactions (Hoyer, et al., 2010; Libai, et al., 2010). This motivational state leads to more frequent purchase behavior, a willingness to support or promote the brand socially, and extended habitual purchasing over time. Therefore, it would seem reasonable to consider that an in-store technology that could help deliver improved customer engagement could be a motivating factor that might make retail decision-makers more willing to recommend such an in-store technology. The two statements (measured on a Likert Scale) that were included to represent 'customer engagement' as a subconstruct of the dependent variable were:

- I would be willing to recommend an in-store technology that would increase customer engagement.
- I would be willing to recommend an in-store technology that would encourage our customers to have a positive perception of our store brand.

#### **CHAPTER IV**

#### **METHODS**

The objective of this chapter is to describe the research methods employed during this study. This chapter is comprised of four sections covering the elements of research design, including: 1) Methodology, 1) Research Design, 3) Research Participants, and 4) Data Collection Strategies.

### Research Methodology

This two-part study used a quantitative approach to measure the proposed model and establish the degree to which each identified construct, and its appropriate subfactors suggested by the literature, individually or in combination affected intent to recommend adoption.

### **Research Design**

The first part of the study consisted of an informed pilot with subject matter experts (SMEs) to ensure the questionnaire instrument made sense, was clear and understandable, not open to interpretation, appeared to be logically related to the measurement intention without ambiguity, asked a question about a single issue, was worded in a way not to be leading or introduce bias, was simple, to the point and non-controversial, and easy to understand and answer. Discussion with SMEs covered the degree to which participants believed the survey questions had face validity and established internal reliability of the proposed survey instrument and its constructs as

well as established the feasibility of the proposed approach (i.e., methodology, data collection, and analysis), to be refined through comprehensive data analysis.

The second part of the study was to be an executed pilot study designed to assess the validity of each construct and ensure there is no multicollinearity, but the response rate was too low to realize this objective, which also precluded the objective of stratifying the three respondent categories in order to measure perceptions by respondent category. This issue will be discussed in detail in the Limitations Section as data collection, which ran from September, 2023 through April, 2024, failed to capture participation sufficient to provide conclusive evidence with the exception of the moderating constructs and one independent variable hypothesis.

### **Modeling: Empirical Study Process**

Data management and analysis employed the SPSS quantitative software package, intending to allow the researcher to assess the subfactor of each construct to help isolate those constructs that demonstrated significant affects. Using publicly accessible databases, the investigator created a list of over 1,900 qualified potential respondents with particular attention to ensuring an equal number of qualified informants in each of three job roles. Each potential respondent was confirmed to be employed in U.S. retail or retail grocery chains with 200 or more physical store locations.

This study used a survey instrument vetted ahead of time by professional subject matter experts (SMEs) engaged in the retail sector who were first-hand familiar with instore retail media network technology. Selective sampling was used to target informants in three different areas within the retail structure at the level of manager or higher, including retail merchandisers, defined as traditional retail or retail grocery professionals,

retail marketers, defined as retail marketing professionals, and retail media network professionals in operations, omnichannel operations, or in-store media.

The survey instrument used statements representative of construct definitions in prior literature employing Likert scales designed with best practices for scale development (pretest measures per Babbie, Practice of Social Research, Page 259; Question and Questionnaire Design, Krosnick and Presser, 2009), with the intention of measuring the relative importance of each construct, the degree to which moderators impacted the strength of the relationships of each construct and subconstruct, and had hoped to identify the differences in perspectives between respondents in the three different job categories.

To eliminate question order bias, the survey was randomly distributed in three versions (e.g., listing questions in the original order, listing questions in reverse order, and listing questions in a split-half order) emailed to the population of interest with unambiguous instructions. The survey instrument included "attention" questions and the investigator monitored "time spent" answering questions to ensure that respondents replied in a thoughtful and thorough manner. Participation was wholly voluntary, requiring signed consent (i.e., at the beginning of the questionnaire) before allowing the respondent to proceed.

# **Research Participants**

The recommendations to adopt an in-store retail media network generally involves employees from different departments whose perspectives may depend in part on their responsibilities and the manner in which they are incentivized to meet their performance goals. It is possible that job responsibilities and the way employees are

incentivized may vary depending on the retail organization. For the purpose of this study, respondents included retail merchandisers, retail marketers, and retail media network operators.

Retail merchandisers are charged with creating floor displays in the departments for which they are responsible, in effect designing the shopping experience. These professionals routinely do store checks on their competition to ensure that their stores' product assortment and displays compare favorably. Merchandisers are more likely to be creative, organized, and as innovative as the job allows. The store floor environment and its ambience are their purview.

Retail marketers oversee all aspects of the retailer's marketing strategy including setting goals for increasing revenue, market share and brand awareness. It is marketing's responsibility to develop pricing strategies for products based on competitors' prices, customers willingness to pay, and company cost structures. Marketers are charged with conducting market research to identify potential opportunities for growth in existing or new markets, designing advertising campaigns to create brand awareness, generating leads and promote sales, and contributing to creating an effective store environment that will attract customers with visual appeal. Marketers must analyze weekly sales data to be able to adjust pricing, while looking for opportunities to increase store traffic and boost sales. It is the marketing group that is responsible for identifying new business opportunities, including researching new technologies, markets, and competitors. The marketer's purview includes both the external competitive environment as well as the internal store environment.

Most retailers with digital RMNs have created subsidiary companies structured as independent entities designed to curate product for ecommerce shoppers. For this reason, several retail media network employee titles duplicate store responsibilities at the ecommerce level. Titles vary, but include experiential marketers, channel marketing, marketing planners, retail marketing, market and/or media strategists, brand marketers, ecommerce directors, product management, commerce strategists, and supply chain specialists. However, to generate advertising revenue an RMN also employees a sales staff (e.g., business development, commerce activation, group sales, sales experience, client support) as well as brand managers, brand ambassadors, retail media partnership managers, and staff to handle interfaces with brand/suppliers and programmatic media platforms. The RMN professional's purview has to date been envisioned to be outside of the physical store, but an existing sales force could be similarly motivated to sell "omnichannel" advertising to brands that would appear online, in-app, and in-store as well.

### **Population of Interest, Sample Size & Characteristics**

According to ResearchAndMarkets.com as of 2021 there were over 9,000 retail chains operating 1.9 million physical stores across the U.S., which include both national and regional retail, retail grocery, and convenience store chains. This study is only concerned with chains of 200 or more physical locations in the U.S. and focused on three types of employee respondents, retail merchandisers, retail marketers, and retail media network operators.

According to SurveyAnyPlace (2021), the average survey response rate is 33%, which falls to 30% when the instrument is delivered via email. Because the investigator

anticipated low response rates from this sector, of the initial 1,900 sample size, a response rate of at least 8 percent was assumed reasonable to ensure a return of a minimum 150 completed and usable surveys, with "first-return" quotas by job title to ensure sufficient representation in all three job roles.

However, for a variety of reasons, to be discussed in detail in the Limitations Section, the actual response rate was only 1.3 percent. This despite the fact that most recipients received an original email plus four follow up email reminders. (Only 157 potential respondents received one fewer email due to timing.) Based on Krugman's (1965) "three-hit theory," which specifies three levels of message exposure (i.e., curiosity, recognition, and decision) were necessary before a recipient could be activated to respond, the researcher felt it necessary to provide a minimum of five exposures requesting a response. Responses most often occurred when a fourth or fifth request was received.

### **Data Collection and Analysis**

This study used selective sampling consistent with the identified population of interest sending individually addressed emails to a qualified list of a total 1,900 potential respondents. This was done to avoid organizational spam filters, which are sensitized to prevent email messages that are sent in bulk. Because of the sheer number of respondents, emails were sent in batches of 100 to 300 at a time in a staggered fashion. Beginning in late September 2023, each recipient received an initial email containing an introduction, consent form and instructions with a link to the Qualtrics survey. To attempt to minimize nonresponse bias, the first email reminder was sent one week following the first email to ensure that it was in fact received and a third email (a second reminder)

followed two weeks thereafter. A fourth email (third email reminder) was sent two weeks after the third. In the last month of data collection in an attempt to improve the response rate, a fifth email (fourth follow up email) went to all but 157 potential respondents due to timing.

### Reliability

To ensure that measures were as reliable as possible and free of random error, this research used measures that have proven reliable in prior research, (Babbie, 2018, 14<sup>th</sup> Edition, page 148) with constructs that have been identified and tested in prior research referenced in the theoretical basis section. Reliability testing is further discussed in the Results Section.

### Criterion-Related Validity

Defined as the degree to which a measure relates to or predicts the outcome of some external criterion (Babbie, 2018, 14<sup>th</sup> Edition, page 149), the study used constructs relating to Marking and Duncan's (1981) theory of retail transformation and from the supporting theories: theory of customer experience, theory of customer engagement, customer retention theory, and the commitment-trust theory of relationship marketing.

# Construct Validity

Defined as the degree to which a measure relates to other variables as expected within a system of theoretical relationships (Babbie, 2018, 14<sup>th</sup> Edition, page 149), the researcher represents that prior research has demonstrated a relationship between the variables selected for this study.

### Content Validity

To help ensure content validity, the first part of the study included an informed pilot as well as structured interviews with subject matter experts (SMEs) to achieve consensus on the constructs proposed for the study. These constructs relied heavily the above referenced theories, which were derived from an exhaustive literature review, suggesting that together they covered some portion of the range of meanings of the concept (Babbie, 2018, 14<sup>th</sup> Edition, page 150), and should have explained which combination of factors most affects the intent to recommend adoption of in-store RMNs moderated by management support for innovation, technology readiness, and organizational agility from the perspective of the three respondent groups.

### **Informed Pilot Results Recap**

An informed pilot was conducted the last week in August, 2023 via Zoom. It was held in two parts lasting an hour in duration each. Six attendees included an SME who had worked in retail having managed, architected, and administered in-store retail media networks (RMNs) for both Walmart and Sam's Clubs. The additional five SMEs are in the business of technology solutions specific to retail media networks. All five technology experts have worked on the Sam's Club installation for over ten years, and two of them had worked on the Walmart installation in years prior.

Among the most significant changes the informed pilot group suggested impacted the construction of the measurement model. For example, the SMEs recommended the elimination of the construct "Investment Payback Period" (originally H7) as it was thought to be "above the paygrade" of the target respondents. They cautioned that answers from the three job role cohorts regarding investment payback would not be in

any way meaningful as ROI in the retail sector is largely a discussion between finance and top management.

In place of that modified relationship, the SMEs strongly suggested that it would be more realistic for "management support for innovation" to modify the relationship between "sales lift" and "intent to recommend." H9 was revised to reflect this change.

Recommended changes to the questionnaire instrument were included over 30 changes to the survey, iterated as:

- 1. **H1** Q6. CT3. Changed to: Demonstrate to customers that we value their business.
- 2. **H2** Q12. CXC3. Due to potential overlap with a statemen in H1, changed to: Attract more digital natives (Gen Z and Millennials) comfortable with technology.
- 3. **H2** Q17. CXS2. Add: Transform the in-store atmosphere to make it align more closely with our ecommerce experience.
- 4. There was discussion of removing Customer Experience subfactor "social" seen as relatively "less of a priority," but the investigator chose to leave it in through the first pilot to first determine its significance.
- 5. **H4** Q31. CEV1. Change: "Make" to "Help" our stores remain competitive.
- 6. **H4** Q32. (New) CEV2. ADD: Help increase our market share.
- 7. **H5** INSERT NEW overall statement: Adopting an in-store RMN would help monetize in-store customer traffic generating new revenue to help...
- 8. **H5** Q35. REV1. Change to: Fund other business initiatives in our department.
- 9. **H5** Q36. REV2. Change to: Meet our department's goals.
- 10. **H5** Q37. REV3. Change to: Fund other customer benefits.
- 11. **H6** INSERT NEW overall statement: Adopting an in-instore RMN would help...

- 12. **H6** Q38. SL1. Change to: Increase sales of individually advertised products.
- 13. **H6** Q39. SL2. Change to: Increase sales of all similarly branded products.
- 14. **H6** Q40. SL3. Change to: Increase sales for the entire category, regardless of brand.
- 15. **H7** Q43. MSI3. Change to: Management is continuously supportive of and values innovation that provides an overall increase in chain sales volume.
- 16. **H8** Q46. MSR3. Change to: Management is willing to allocate resources <u>for</u> innovative technology adoption that provides an overall increase in sales volume.
- 17. **H9** Q49. MSV3. Change to: Management is willing to support <u>innovative technology</u> adoption if it creates new monetary value for our company through overall increases in sales volume.
- 18. **H10a** Q52. TRI3. Change to: Our organization's <u>merchandising</u> team is capable of supporting new technology that increases customer engagement.

#### **DEMOGRAPHICS**

- 19. **Q3** DELETE: "Brochures" from signage types.
- 20. **Q4** ADD: "Merchants" to categories that may be responsible for "selling advertising."
- 21. Following **Q6**, if "No" Add Skip Logic to Q13
- 22. **Q8** Reword: Are you interested in expanding your ecommerce RMN to include your in-store assets?
- 23. Following **Q7**, if "No" Add Skip Logic to Q28
- 24. Following **Q11**, if "No" Add Skip Logic to Q28
- 25. Following Q13, if "No" Add Skip Logic to Q28
- 26. **Q15** (What are you testing in the pilot?) Change choices to: Customer satisfaction, Customer engagement, Overall sales lift, Improvement in store operations, Other (please specify).
- 27. DELETE what was Q12 "Do you plan an expanded pilot?"

28. **Q16** (What performance threshold will trigger a system-wide rollout?) Change choices to:

Increase in customer satisfaction, Increase in customer engagement, Increase in overall sales

volume, Improvement in store operations, Other (please specify).

29. **Q17** (If so, what is your timeframe for implementation?) Change choices to: 6 to 12 months,

12 to 24 months, 2+ years.

30. **Q20** DELETE choice "The same way we now monetize our digital RMN." ADD choice

"Other (please specify)."

31. **Q21** (What media measurement platforms...) Change choices to: Intercepts (e.g., Nielsen,

ComScore); Computer vision (e.g., Magic Leap, AdMobilize); Bluetooth/Beacons (e.g., Blue

Zoo); Cellular detection (e.g., Place Exchange, Geopath); Other (please specify); We are not

to that stage yet.

32. **Q22** ADD: Dropdown to OPEX answers: Merchandising, Marketing, RMN, Other); ADD

"Other (please specify)."

- 33. Q23 DELETE all choices <u>except</u>: Technology, Support services, Content/Contextual messaging.
- 34. **Q24** (What do you believe are the biggest obstacles...) Change choices to: Cost, Resources

availability (to build & maintain), No measurable benefit, Perceived negative impact on store

operations, No perceived ROI, Other.

#### **CHAPTER V**

#### STUDY RESULTS

Unfortunately, there were never enough responses to differentiate the intended "pilot" from the full survey. Therefore, when response requests had been exhausted, an exploratory factor analysis (EFA) was performed, followed by testing the constructs for reliability and validity to ensure both consistency and accuracy of the constructs as measures. In all tests for reliability but one, Cronbach's Alpha met or exceeded the .7 threshold. The exception was the measure for 'competitive environment,' for which Cronbach's Alpha was a .622. (See Reliability Analysis in Tables List).

EFA testing used the principal axis factoring method (PAF) using orthogonal rotation (Varimax) applying Kaiser normalization to extract factors that did not load in the component matrix, suppressing loadings below .5. There was no evidence of multicollinearity, but this exercise eliminated a total of 30 factors, which left a minimum of three factors for each construct with the exception of 'sales lift,' which had only two factors that loaded. When the EFA was rerun, no further extraction was required, but the rotated component matrix did reveal six instances of minimal cross-loading between .510 to .569, none of which was thought to be sufficient for removal. (See Rotated Component Matrix in Tables List).

Grand means were then calculated for all independent and moderating variables as well as the dependent variable, in order to conduct linear regressions for each construct during hypothesis testing, as:

# Independent Variables Testing

In Hypothesis one the promise of increased 'customer retention' was posited to lead to an increased willingness to recommend an in-store RMN. However, the adjusted R square of .095 explained barely one percent of the variance indicating no fit. The p value was .073 indicating that the construct was of no significance, rendering hypothesis one null.

#### **Model Summary**

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.365 <sup>a</sup>	.133	.095	.78561	.133	3.530	1	23	.073

a. Predictors: (Constant), GM\_RET

	ANOVA		
Sum of Squares	df	Mean Square	F

Model		Squares	df	Mean Square	F	Sig.
1	Regression	2.178	1	2.178	3.530	.073 <sup>b</sup>
	Residual	14.195	23	.617		
	Total	16.374	24			

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In Hypothesis two the promise of an improvement in 'customer experience' was posited to lead to an increased willingness to recommend an in-store RMN. The adjusted R square of -.007 explained none of the variance indicating no fit. The p value was .374 indicating that the construct was of no significance, rendering Hypothesis two null.

**Model Summary** 

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.186 <sup>a</sup>	.035	007	.82905	.035	.822	1	23	.374

a. Predictors: (Constant), GM\_CX

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Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.565	1	.565	.822	.374 <sup>b</sup>
	Residual	15.808	23	.687		
	Total	16.374	24			

a. Dependent Variable: GM\_DV

a. Dependent Variable:  $GM_DV$ 

b. Predictors: (Constant), GM\_RET

b. Predictors: (Constant),  $GM_CX$ 

In Hypothesis three the promise of an improvement in 'customer engagement' was posited to lead to an increased willingness to recommend an in-store RMN. The adjusted R square of -.026 explained none of the variance indicating no fit. The p value was .543 indicating that the construct was of no significance, rendering Hypothesis three null.

	Model Summary											
					Change Statistics							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change			
1	.128 <sup>a</sup>	.016	026	.83684	.016	.381	1	23	.543			

a. Predictors: (Constant), GM\_CEng

	ANOVA <sup>a</sup>										
Mode	ı	Sum of Squares	df	Mean Square	F	Sig.					
1	Regression	.267	1	.267	.381	.543 <sup>b</sup>					
	Residual	16.107	23	.700							
	Total	16.374	24								

a. Dependent Variable: GM\_DV

In Hypothesis four the opportunity for an in-store RMN to provide a competitive edge within the industry environment was posited to lead to an increased willingness to recommend an in-store RMN. The adjusted R square of .064 explained less than one percent of the variance indicating no fit. The p value was .117 indicating that the construct was of no significance, rendering Hypothesis four null.

	Model Summary										
					Change Statistics						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change		
1	.321 <sup>a</sup>	.103	.064	.79904	.103	2.646	1	23	.117		

a. Predictors: (Constant), GM\_CompEnv

			ANOVA			
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.689	1	1.689	2.646	.117 <sup>b</sup>
	Residual	14.685	23	.638		
	Total	16.374	24			
- D		16.374		.638		

a. Dependent Variable: GM\_DV

b. Predictors: (Constant), GM\_CEng

b. Predictors: (Constant), GM\_CompEnv

In hypothesis 5 the opportunity to create and realize a new revenue stream for the retail chain was posited to lead to an intent to recommend an in-store RMN. The adjusted R square of .173 explained 17 percent of the variance indicating a slight fit. The p value was .022 indicating that the construct relationship with the dependent variable significant proving the hypothesis 5.

				Model S	Summary				
					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.455 <sup>a</sup>	.207	.173	.75120	.207	6.016	1	23	.022

a. Predictors: (Constant), GM\_NewRev

ANOVA							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	3.395	1	3.395	6.016	.022 <sup>b</sup>	
	Residual	12.979	23	.564			
	Total	16.374	24				

a. Dependent Variable: GM\_DV
b. Predictors: (Constant), GM\_NewRev

In Hypothesis six the opportunity to increase the retail chain's overall sales was posited to lead to an increased willingness to recommend an in-store RMN. The adjusted R square of .049 explained none of the variance indicating no fit. The p value was .148 indicating that the construct was of no significance, rendering Hypothesis six null.

				Model S	Summary				
					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.298 <sup>a</sup>	.089	.049	.80535	.089	2.245	1	23	.148

a. Predictors: (Constant), GM\_SalesLift

		Α	NOVA			
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.456	1	1.456	2.245	.148 <sup>b</sup>
	Residual	14.918	23	.649		
	Total	16.374	24			

a. Dependent Variable: GM\_DV

b. Predictors: (Constant), GM\_SalesLift

# Moderating Variables Testing

Hypotheses seven through nine represented 'management support for innovation.' Because the sample size was so small all subfactors for this construct were combined to determine whether this construct had a moderating effect on the relationships between the independent variables and the dependent variable. The results confirmed that 52 percent of the variance was explained, and the p value was significant at <.001, confirming the hypothesis that management support for innovation would likely strengthen the independent variable relationships.

**Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.733 <sup>a</sup>	.538	.518	.57355

a. Predictors: (Constant), MSupp\_GMDV1

**ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.807	1	8.807	26.774	<.001 <sup>b</sup>
	Residual	7.566	23	.329		
	Total	16.374	24			

a. Dependent Variable: GM\_DV

Hypothesis 10a through 10c represented 'technology readiness.' Because the sample size was so small all subfactors for this construct were combined to determine whether this construct had a moderating effect on the relationships between the independent variables and the dependent variable. The results confirmed that 72 percent of the variance was explained, and the p value was significant at <.001, confirming the hypothesis that an organization's technology readiness would likely strengthen the independent variable relationships.

b. Predictors: (Constant), MSupp\_GMDV1

# **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.855 <sup>a</sup>	.732	.720	.43692

a. Predictors: (Constant), TechR\_GMDV1

#### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.983	1	11.983	62.770	<.001 <sup>b</sup>
	Residual	4.391	23	.191		
	Total	16.374	24			

a. Dependent Variable: GM\_DV

b. Predictors: (Constant), TechR\_GMDV1

Hypothesis 11a and 11b represented 'organizational agility.' Because the sample size was so small both subfactors for this construct were combined to determine whether this construct had a moderating effect on the relationships between the independent variables and the dependent variable. The results confirmed that 44 percent of the variance was explained, and the p value was significant at <.001, confirming the hypothesis that organizational agility would likely strengthen the independent variable relationships.

#### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.681 <sup>a</sup>	.464	.441	.61748

a. Predictors: (Constant), OrgAgil\_GMDV1

#### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.604	1	7.604	19.943	<.001 <sup>b</sup>
	Residual	8.770	23	.381		
	Total	16.374	24			

a. Dependent Variable: GM\_DV

b. Predictors: (Constant), OrgAgil\_GMDV1

#### **CHAPTER VI**

#### LIMITATIONS OF THE STUDY

This study was designed was to determine whether one or more benefits (e.g., improved customer retention, customer experience, customer engagement, et al.) would compel respondents to recommend adoption of an in-store RMN, and to better understand which of those benefits would be most persuasive in encouraging their willingness to recommend the technology.

Unfortunately, even with a large pool of qualified potential respondents (1,900), the response rate was significantly lower than the industry average for emailed surveys, (i.e., 1.3 percent versus the industry standard of 30 percent, per SurveyAnyplace, 2021), which precluded the ability to draw any meaningful conclusions.

In hindsight, there are several reasons for the low response rate. In recent years the retail sector has been saturated with surveys from industry analysts and vendors, creating 'survey fatigue.' Nor was the survey request financially incentivized. Potentially, if financial support had enabled incentivization, it is possible that reluctance to respond could have to some degree, been overcome allowing a sufficient sample to be effectively analyzed providing the opportunity to draw significant conclusions.

Interestingly, a few of recipients responded by email with apologies that their management had 'banned' the taking of any surveys, making it necessary for those who did respond, to do so on their own time from their home computers. Another reason for such wholesale bans may not have been solely due to saturation, but the fact (as one respondent shared) that the sector had been victimized by a virus using a survey as the delivery vehicle in 2023, which resulted in company-wide bans and precluded any further survey taking.

#### **CHAPTER VII**

# DISCUSSION AND IMPLICATIONS FOR FUTURE RESEARCH

As established, the response rate for this study was not sufficient to allow an exploration of perceptions by job title, the ability to parse the effects of subfactors, nor to provide any conclusive evidence, with the exception of the moderating constructs and one independent variable hypothesis. Therefore, rather than discussing conclusive evidence, this section offers an observation based on interpretive conjecture.

#### Observation

Because retail is an industry that relies heavily on KPIs and inventory movement to assess a store's performance, it is also likely that the performance of the population of interest is assessed in a similar manner using cost-driven metrics that pertain to their individual purviews. Applying that logic, it becomes understandable that retail employees who are influencers or decision-makers would take a very conservative approach toward recommending new expenditures, unless inherent in that opportunity was a specific benefit to their own department's performance. That may explain why in part, 'soft' measures such as 'customer engagement' or 'customer experience' would not garner enthusiastic support from department managers or directors, while a new revenue stream derived from in-store advertising seen to benefit their respective departments would more likely be endorsed. It would also explain the emphasis that retail executives place, when quoted in industry trade stories referring to implementing an in-store RMN, on not 'negatively impacting the physical in-store experience' as opposed to the view of making any contribution to positively enriching that experience.

Despite the shortcomings of this study, there is a future opportunity to re-address the research question using a different research approach to better understand the motivations of the population of interest, particularly as the movement to in-store RMNs continues to gather momentum. Per Markin and Duncan's (1981) *Theory of Retail Transformation*, which cited the changing competitive environment within the retail ecosystem as a catalyst for change, and McGoldrick's (1990) premise that such a changing environment is what compels retailers to adapt or run the risk of inevitable decline, may be what ultimately coerces acceptance of in-store RMNs. Already regional, small, and mid-size retailers, retail grocery and convenience store chains, have announced they are now exploring or debuting in-store RMN adoption, either on their own, or teaming up to find ways to cooperatively share anonymized customer data to create networks that go beyond their own stores.

In addition, industry associations such as the International Advertising Bureau (IAB) are actively currently working with practitioners (i.e., brands, agencies, suppliers, and analysts) to create a standardized measurement system to create a common understanding of advertising performance both online and in-store, with particular attention to defining purchase incrementality as the result of advertising viewed at the point of purchase rather than an effect of prior influences. The prevailing assumption is that when such commonality is achieved, it will remove the largest obstacle to advertiser spending, further igniting the growth of this phenomenon.

Taken together, this activity is creating an alternative media channel tied directly to customer purchase behavior, which will forever change both the face of media and retail worldwide.

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#### APPENDIX I – SURVEY INSTRUMENT

Strongly		Not		Strongly
Disagree	Disagree	Sure	Agree	Agree

# H1 (a, b, c) Customer Retention (Satisfaction, Trust, Commitment)

# I believe adopting an in-store Retail Media Network would help ...

- 1. CS1. Better meet our customers' needs.
- 2. CS2. Communicate product and pricing information of importance to our customers.
- 3. CS3. Exceed customer expectations.
- 4. CS4. Increase customer satisfaction with our retail brand.
- 5. CS5. Increase customer satisfaction with our product pricing options.
- 6. CT1. Provide more relevant product recommendations.
- 7. CT2. Provide a higher level of in-store service.
- 8. CT3. Demonstrate to customers that we value their business.
- 9. CT4. Demonstrate transparency in pricing alternatives.
- 10. CT5. Demonstrate that our company openly shares product information.
- 11. CC1. Strengthen relationships with our customers.
- 12. CC2. Make it more likely for customers to sign-up for our loyalty program.
- 13. CC3. Customers develop a preference for our retail brand.
- 14. CC4. Demonstrate that our company is committed to helping our customers achieve their goals.
- 15. CC5. Demonstrate our company's commitment to a higher level of in-store service.

# H2 (a, b, c, d) Customer Experience (Cognitive, Emotional, Sensory, Social)

# I believe adopting an in-store Retail Media Network would help ...

- 16. CXC1. Our customers discover new products.
- 17. CXC2. Make the shopping experience easier.
- 18. CXC3. Attract more digital natives (younger shoppers like Gen Z) comfortable with technology.
- 19. CXC4. Our customers find what they are looking for more quickly.
- 20. CXC5. Our customers navigate our stores more easily.
- 21. CXE1. Make the shopping experience more enjoyable.
- 22. CXE2. Customers discover things that delight them.
- 23. CXE3. Make the shopping experience more memorable.
- 24. CXE4. Us better meet our customers' expectations.
- 25. CXE5. Strengthen our store brand's emotional connection with our customers.
- 26. CXS1. Add excitement to customers' everyday shopping.
- 27. CXS2. Transform the in-store atmosphere to make it align more closely with our e-commerce experience.
- 28. CXS3. Raise customer perception of store quality.
- 29. CXS4. Create a positive shopping environment.
- 30. CXS5. Expand the time customers spend in-store during each visit.
- 31. CXL1. Free associates to spend more time making customers feel valued.
- 32. CXL2. Customers make product comparisons.
- 33. CXL3. Customers feel more confident about their purchases.
- 34. CXL4. Create a welcoming atmosphere in our stores.
- 35. CXL5. Our customers identify with our store brand.

# H3 (a, b, c, d) Customer Engagement (Proactiveness, Purchase Frequency, Longevity)

# I believe adopting an in-store Retail Media Network would help ...

- 36. CEP1. Motivate our customers to share their shopping experience with friends and family.
- 37. CEP2. Encourage our customers to recommend our in-store experience to others.
- 38. CEP3. Motivate our customers to become advocates for our retail brand.
- 39. CEP4. Encourage our customers to blog/post about their in-store experience.
- 40. CEP5. Encourage our customers to become brand champions for our stores.
- 41. CEPF1. Encourage our customers to visit our stores to purchase more often.
- 42. CEPF2. Encourage our customers to purchase with our stores rather than a competitor.
- 43. CEPF3. Motivate our customers to become "heavy" purchasers from our stores.
- 44. CEPF4. Encourage our customers to "treat" themselves by purchasing more often.
- 45. CEPF5. Encourage our customers to seek greater variety in addition to making habitual purchases.
- 46. CEL1. Encourage our customers to consider our retail brand "their store."
- 47. CEL2. Customers make our retail brand their "first choice" for all endemic purchases.
- 48. CEL3. Encourage our customers to continue to visit our stores for inspiration.
- 49. CEL4. Reinforce the value our customers see in our retail brand.
- 50. CEL5. Reinforce the positive perception our customers have of our retail brand.

#### **H4** Competitive Environment

# I believe adopting an in-store Retail Media Network would help ...

- 51. CEV1. Our stores remain competitive.
- 52. CEV2. Increase our retail chain's market share.

- 53. CEV3. Differentiate our stores from our those of our competitors.
- 54. CEV4. Position our retail brand as innovative.
- 55. CEV5. Attract customers who prefer a more "modern" shopping experience.

# **H5** New Advertising Revenue Stream

# I believe adopting an in-store RMN would help monetize in-store customer traffic generating new revenue to help...

- 56. REV1. Fund other business initiatives in our department.
- 57. REV2. Meet our department's goals.
- 58. REV3. Fund other customer benefits.
- 59. REV4. Create an opportunity to fund additional departmental innovation.
- 60. REV5. Create the opportunity for our department to try new things.

# H6 Overall Increase in Sales Volume - Sales Lift

# I believe adopting an in-store RMN would help...

- 61. SL1. Increase sales of individually advertised products.
- 62. SL2. Increase sales of all similarly branded products (brand halo).
- 63. SL3. Increase sales for the entire category, regardless of brand.
- 64. SL4. Increase sales in our department.
- 65. SL5. Increase sales throughout all our stores.

# <u>Management Support for Innovation (Continuous Support, Resource Allocation, Value Creation)</u>

# I believe our management is continuously supportive of and values innovation that will

# H7 (a, b, c) Continuous Support Modifying Customer Engagement

- 66. MSI1. Increase customer engagement.
- 42. MSI2. Help our organization remain competitive.

- 43. MSI3. Provide an overall increase in chain sales volume.
- 44. MSI4. Help our customers become advocates for our retail brand.
- 45. MSI5. Help differentiate our stores from those of our competitors.

# H8 (a, b, c) Resource Allocation Modifying Customer Engagement

# I believe our management is willing to allocate resources ...

- 46. MSR1. Necessary to experiment with new ideas that will increase customer engagement.
- 47. MSR2. For innovative technology adoption if it will help our organization remain competitive.
- 48. MSR3. For innovative technology adoption that provides an overall increase in sales volume.
- 49. MSR4. For innovative technology that encourages our customers to purchase from our stores more often.
- 50. MSR5. For innovative technology that differentiates our stores from those of our competitors.

#### H9 (a, b, c) Value Creation Modifying Customer Engagement

# Our management is willing to support innovation if it creates ...

- 51. MSV1. Value that will increase customer engagement.
- 52. MSV2. Value for our company which allows our organization to remain competitive.
- 53. MSV3. New monetary value for our company through an overall increase in sales volume
- 35. MSV4. Value that encourages our customers to become brand champions for our stores.
- 36. MSV5. Value by increasing our store brand's market share.

# H10 (a, b, c) Technology Readiness (Infrastructure, Knowledge, Resources)

# H10a Infrastructure Modifying Customer Engagement

# I would consider recommending adoption of an in-store RMN for our stores if our organization's ...

- 56. TRI1. IT infrastructure is capable of integrating new technology that increases customer engagement.
- 57. TRI2. Operations team is capable of supporting new technology that increases customer engagement.
- 58. TRI3. Merchandising team is capable of supporting new technology that Increases customer engagement.
- 59. TRI4. Network systems are sufficiently robust to be able to process the required data.
- 60. TRI5. Security systems are sufficient to protect customer data from security breaches.

#### **H10b** *Knowledge Modifying Customer Engagement*

# Employees throughout our organization are knowledgeable and up to date because ...

- 61. TRK1. Department heads in our organization keep us informed about any technology that would help increase customer engagement.
- 62. TRK2. Our management shares any external information that could help improve customer engagement.
- 63. TRK3. We regularly share internal updates on our organization's customer engagement statistics as a tool for constant improvement.
- 64. TRK4. Our company has a knowledge management system that records customer engagement statistics to which all employees have access.
- 65. TRK5. Our company has exacting policies which proscribe resolution guidelines for all customer engagement issues.

# H10c Resources Modifying Customer Engagement

- 66. TRR1. Our organization has the resources to invest in technology that will increase customer engagement.
- 67. TRR2. Management is willing to invest to hire talent from outside our organization if we need specific expertise.
- 68. TRR3. Our management is willing to hire outside technology partners to help with projects that require skill sets unavailable inhouse.
- 69. TRR4. Our organization has the resources to invest in technology that will increase customer purchase frequency.
- 70. TRR5. Our organization has the resources to invest in technology that will increase customer loyalty.

# H11 (a, b) Organizational Agility (Dynamic Capability, Organizational Stability)

# H11a Dynamic Capability Modifying Customer Retention

# Our organization ...

- 71. OAD1. Has the capability to pivot to adopt in-store technologies that will help us maintain our competitive market position.
- 72. OAD2. Has a process in place to identify potential market opportunities.
- 73. OAD3. Routinely evaluates new technologies as they are introduced to see if they are a good fit for our organization.
- 74. OAD4. Has the capability to adopt in-store technologies that will encourage our customers to make purchases in our stores more often.
- 75. OAD5. Has the capability to adopt in-store technologies that will encourage our customers to stay loyal to our retail brand.

#### **H11b** Stability Modifying Customer Retention

#### Our organization ...

- 76. OAS1. Is financially stable.
- 77. OAS2. Internally views our senior management as stable and reliable.
- 78. OAS3. Has a vision for the future and a strategic plan to get us there.

- 79. OAS4. Has the ability to maintain customer trust in part because of the perceived stability of our company.
- 80. OAS5. Has the ability to maintain customer loyalty in part because of the Perceived stability of our company.

# Questions for Dependent Variable

81. JRCE1. Customer Engagement / Proactivity:

I am willing to consider recommending an in-store technology that will increase customer engagement.

82. JRCL5. Customer Engagement / Customer Longevity:

I am willing to consider recommending an in-store technology that will encourage our customers to have a positive perception of our brand.

83. JRCLS3 Customer Experience:

I am willing to consider recommending an in-store technology that will help our customers feel more confident about their purchases.

84. JRCSL5 Customer Experience:

I am willing to consider recommending an in-store technology that will help reinforce the positive perception our customers have of our retail brand.

85. JREV1 Competitive Environment:

I am willing to consider recommending an in-store technology that will help our stores remain competitive.

86. JREV5 Competitive Environment:

I am willing to consider recommending an in-store technology that will help increase our company's overall market share.

87. JRRV1 New Advertising Revenue:

I am willing to consider recommending an in-store technology that will help generate new revenue to fund other business initiatives in our department.

88. JRRV4 New Advertising Revenue:

I am willing to consider recommending an in-store technology that will help create an opportunity to fund additional departmental innovation.

89.	JRSL4		ng to consider recommending an in-store technology if it will ales in our department.
90.	JRSL5		ng to consider recommending an in-store technology if it will ales throughout all our stores.
<u>De</u>	mographic	<u>s:</u>	Merchant Marketer RMN Professional
1.	My title is	/I am a	Director
	-		Sr. Director
			Vice President
			C-Suite
2.	My organi	ization is:	0. Traditional Retail
			0. Grocer
			0. Home Improvement
			0. Club
			0. Discounter
			0. C-store
			0. Beauty
			0. Electronics
			0. Other (please specify)
3.			ng digital touch points are in your organization's stores?
	(Please ch	eck all that	± ± • /
			0. Digital Screens
			0. Wraps
			0. Shelf talkers
			0. Shopping cart signage
			0. Other (please specify)
			0. None of the above
4.	What depa	artment is cu	urrently responsible for selling that advertising?
	1	0.	Merchants
		0.	Marketing
		0.	Sales

0. Other (please specify)

0. Mobile apps with touchpoints in your stores
0. QR codes
<ul><li>0. UPC scan capability</li><li>0. Other omnichannel capability (please specify)</li></ul>
0. Other (please specify)
0. None of the above
o. Trone of the above
6. Does your organization currently have a digital RMN as part of your ecommerce strategy?  Y  N
7. If your organization does not have a digital RMN are there plans to build one?  Y N
IF NO SKIP to Q24
8. Are or will the in-store advertising funds part of your RMN revenue goals? $\begin{array}{ccc} Y & N & NS \end{array}$
9. Are or will your organization be
Monetizing its digital RMN through an internal media group?  Y N NS
Using a third-party service/platform?
Y N NS
10. Is there an interest in expanding your digital RMN to include in- store assets? $\frac{Y}{N} = \frac{N}{N} $
IF NO SKIP TO Q24
11. Does your organization have an in-store RMN?
Y N
12. Is your organization planning to build one?  Y N
IF NO SKIP TO Q24
13. How are you measuring – or how will you measure the success of this RMN?  (Please rank #1 as most important and #4 as least important.)  1. Sales Lift 2. ROAS 3. Incrementality 4. Other (please specify)

5. Are your stores using:

14. Status of pilot	ing screens in-store
0.	
0.	Our organization plans to pilot screens in our stores.
0.	Our organization currently has no plans to pilot screens in our stores.
15. If your organiz	zation is now, or is planning to pilot screens in your stores, what will
• •	g for? (Please rank as #1 the most important criterion and #5 the least
important crite	erion.)
1.	Customer satisfaction
	Customer engagement
	Sales lift
	Improvement in store operations
5.	Other (please specify)
16. When the pilo	t results are in, performance thresholds in which measures will most
	a system-wide rollout? (Please rank #1 as most important and #5 as least
important).	
	Increased customer satisfaction
	Increased customer engagement
	Increased sales lift
	Improvement in store operations
3.	Other (please specify)
17. What is the mo	ost likely way that your organization will build an in-store RMN?
	We would most likely do this in-house.
0.	We would most likely out-source this to an experienced industry
	provider.
0.	We would most likely build it in-house aided by an experienced
	industry provider.
18. Which departr	ments within your organization will most likely determine how and
•	ment an in-store RMN?
	Primary Secondary Not Involved
0.	Media Group
0.	Merchants
0.	Store operations
0.	Marketing
0.	IT
19. What is the mo	ost likely way your organization will monetize an in-store RMN?
0.	Utilizing our own sales force
0.	Through third-party programmatic platforms
0.	Through a combination of the foregoing
0.	Other (please specify)

<ul> <li>20. How will your organization's in-store RMN most likely be managed?</li> <li>0. By an internal media group</li> <li>0. Using a third-party service/platform</li> </ul>
<ul> <li>21. What is the likeliest timeframe for implementation of an in-store RMN in your organization's stores?</li> <li>0. 6 to 12 months</li> <li>0. 12 to 24 months</li> <li>0. 2+ years</li> </ul>
<ul> <li>22. Which media measurement platforms have been considered to measure in-store performance?</li> <li>0. Intercepts (e.g., Nielsen, ComScore)</li> <li>0. Computer vision (e.g., AdMobilize, Magic Leap)</li> <li>0. Bluetooth/Beacons (e.g., BlueZoo)</li> <li>0. Cellular detection (e.g., Place Exchange, Geopath)</li> <li>0. Other (please specify):</li> <li>0. We are not yet to that stage.</li> </ul>
23. Which internal group or groups will most likely fund  Merchants Marketing RMN Corp. Dev.  0. CAPEX 0. OPEX 0. Other budget (please specify)
Technology Support Services Content/Contextual Messaging  25. What do you believe are currently the biggest obstacles to your organization implementing an in-store RMN? (Please rank #1 as most important and #5 as least important)  0. Cost 0. Resource availability (e.g., build & maintain) 0. No measurable benefit 0. Perceived negative impact on store operations 0. No perceived ROI 0. Other (please specify)

# TABLE 2

# Reliability Analysis

# **H1 Customer Retention construct**

# **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items	
.845	15	

#### Satisfaction sub-construct

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

# **Reliability Statistics**

Cronbach's Alpha	N of Items
.761	5

# Trust sub-construct Case Processing Summary

		N	%
Cases Valid Excluded Total	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items
.650	5

# Commitment sub-construct

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha		N of Items	
Ī	.723	5	

# **H2 Customer Experience Construct**

#### **Case Processing Summary**

		N	%
Cases Valid Excludeda Total	25	100.0	
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items	
.912	20	

# Cognitive sub-construct

#### **Case Processing Summary**

		N	%
Cases Valid Excluded <sup>a</sup>	Valid	25	100.0
	Excluded <sup>a</sup>	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.731	5

# Emotional sub-construct

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excluded <sup>a</sup>	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items
.698	5

# Customer Experience, continued

#### Sensory sub-construct

#### Case Processing Summary

		N	%
Cases _	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.866	5

# Social sub-construct

#### **Case Processing Summary**

		N	%
Cases Valid Exclud	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items	
.702	5	

# **H3 Customer Engagement**

# **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excluded <sup>a</sup>	0	.0
	Total	25	100.0

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

# **Reliability Statistics**

Cronbach's Alpha	N of Items
.854	15

# Proactiveness sub-construct

# **Case Processing Summary**

		N	%
Exc	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items	
.879	5	

# Customer Engagement (continued)

# Purchase Frequency sub-construct Case Processing Summary

		N	%
Cases	Valid	25	100.0
	Excluded <sup>a</sup>	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.563	5

# Longevity sub-construct

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.617	5

# **H4 Competitive Environment**

**Scale: Competitive Environment** 

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items
.622	5

# **H5 New Advertising Revenue Stream**

# **Case Processing Summary**

		N	%
	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items	
.956	5	

#### **H6 Sales Lift**

#### **Case Processing Summary**

		N	%
Cases Valid Exclude Total	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
753	5

# H7-H9 Management Support for Innovation

# **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excluded <sup>a</sup>	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.961	15

# **H7 Continuous Support**

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items
.935	5

# **H8 Resource Allocation**

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excluded <sup>a</sup>	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.929	5

#### **H9 Value Creation**

#### Case Processing Summary

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items	
.940	5	

# **H10 Technology Readiness**

#### **Case Processing Summary**

		N	%
Ex	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

# **Reliability Statistics**

Cronbach's Alpha	N of Items	
.887	15	

#### Infrastructure sub-construct

#### **Case Processing Summary**

		N	%
Ex	Valid	25	100.0
	Excluded <sup>a</sup>	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items	
.949	5	

# Technology Readiness (Continued)

# Knowledge sub-construct

# Case Processing Summary

		N	%
Ex	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.818	5

#### Resources sub-construct

#### Case Processing Summary

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

Listwise deletion based on all variables in the procedure.

#### **Reliability Statistics**

Cronbach's Alpha	N of Items	
.932	5	

# **H11 Organizational Agility**

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

# **Reliability Statistics**

Cronbach's Alpha	N of Items
.967	10

# Dynamic Capability sub-construct

# **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items
.925	5

# Organizational Agility (Continued)

# Organizational Stability sub-construct

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
Exclude Total	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items	
.961	5	

# **DEPENDENT VARIABLE – Willingness to Recommend**

# **DV Customer Engagement**

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.982	15

# Proactiveness sub-construct Case Processing Summary

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items	
.954	5	

## DV Customer Engagement (Continued)

## Purchase Frequency sub-construct

## **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items	
.969	5	

## Customer Longevity sub-construct

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.976	5

## **DV Customer Experience**

## **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excluded <sup>a</sup>	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items
.988	20

## DV Customer Experience (Continued)

## Cognitive sub-construct

## **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excluded <sup>a</sup>	0	.0
	Total	25	100.0

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

## **Reliability Statistics**

Cronbach's Alpha	N of Items
.980	5

## Emotional sub-construct

## **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

## **Reliability Statistics**

Cronbach's Alpha	N of Items	
.972	5	

## Sensory sub-construct

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items	
.942	5	

## DV Customer Experience (Continued)

#### Social sub-construct

#### **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.956	5

## **DV** Competitive Environment

## **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.973	5

## **DV New Advertising Revenue Stream**

#### Case Processing Summary

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items
.957	5

# **DV Sales Lift**

## **Case Processing Summary**

		N	%
Cases	Valid	25	100.0
	Excludeda	0	.0
	Total	25	100.0

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

Cronbach's Alpha	N of Items
.961	5

		Ro	tated Co	mponent	Matrix <sup>a</sup>				
		2	2		Component				
Please indicate the extent to which you agree or disagree with the following statements. – (TRR5) Our management is willing to invest and our organization has the resources to invest in technology that will increase customer loyalty.	.939	2	3	4	5	6	7	8	9
Please indicate the extent to which you agree or disagree with the following statements. – (OAS5) Our organization has the ability to maintain customer loyalty in part because of the perceived stability of our company.	.936								
Please indicate the extent to which you agree or disagree with the following statements. – (MSV1) Our management is willing to support innovation if it creates value that will increase customer engagement.	.929								
Please indicate the extent to which you agree or disagree with the following statements. – (TRR4) Our management is willing to invest and our organization has the resources to invest in technology that will increase customer purchase frequency.	.927								
Please indicate the extent to which you agree or disagree with the following statements. – (OAS4) Our organization has the ability to maintain customer trust in part because of the perceived stability of our company.	.916								
Please indicate the extent to which you agree or disagree with the following statements. – (OAD5) Our organization has the capability to adopt in-store technologies that will encourage our customers to stay loyal to our retail brand.	.912								
Please indicate the extent to which you agree or disagree with the following statements. – (MSV2) Our management is willing to support innovation if it creates value for our company which allows our organization to remain competitive.	.891								

Please indicate the extent to which you agree or disagree with the following statements (OAS3) Our organization has a vision for the future and a strategic plan to get us there.	.884			
Please indicate the extent to which you agree or disagree with the following statements. – (OAD4) Our organization has the capability to adopt in-store technologies that will encourage our customers to make purchases in our stores more often.	.883			
Please indicate the extent to which you agree or disagree with the following statements. – (TRR1) Our management is willing to invest and our organization has the resources to invest in technology that will increase customer engagement.	.877			
Please indicate the extent to which you agree or disagree with the following statements. – (OAS1) Our organization is financially stable.	.864			
Please indicate the extent to which you agree or disagree with the following statements (MSR2) I believe our management is willing to allocate resources for innovative technology adoption if it will help our organization remain competitive.	.842			
Please indicate the extent to which you agree or disagree with the following statements (MSV5) Our management is willing to support innovation if it creates value by increasing our store brand's market share.	.836			
Please indicate the extent to which you agree or disagree with the following statements (OAS2) Our organization internally views our senior management as stable and reliable.	.824			
Please indicate the extent to which you agree or disagree with the following statements (MSR4) I believe our management is willing to allocate resources for innovative technology that encourages our customers to purchase from our stores more often.	.820			

Please indicate the extent to which you agree or disagree with the following statements (MSR5) I believe our management is willing to allocate resources for innovative technology that differentiates our stores from those of our competitors.	.796				
Please indicate the extent to which you agree or disagree with the following statements (MSR3) I believe our management is willing to allocate resources for innovative technology adoption that provides an overall increase in sales volume.	.792				
Please indicate the extent to which you agree or disagree with the following statements (MSV4) Our management is willing to support innovation if it creates value that encourages our customers to become brand champions for our stores.	.788				
Please indicate the extent to which you agree or disagree with the following statements. – (MSI2) I believe our management is continuously supportive of and values innovation that will help our organization remain competitive.	.785				
Please indicate the extent to which you agree or disagree with the following statements (MSR1) I believe our management is willing to allocate resources necessary to experiment with new ideas that will increase customer engagement.	.778				
Please indicate the extent to which you agree or disagree with the following statements (OAD1) Our organization has the capability to pivot to adopt in-store technologies that will help us maintain our competitive market position.	.760				
Please indicate the extent to which you agree or disagree with the following statements. – (MSV3) Our management is willing to support innovation if it creates new monetary value for our company through an overall increase in sales volume.	.748				

Please indicate the extent to which you agree or disagree with the following statements (MSI3) I believe our management is continuously supportive of and values innovation that will provide an overall increase in chain sales volume.	.746				
Please indicate the extent to which you agree or disagree with the following statements (OAD2) Our organization has a process in place to identify potential market opportunities.	.733				
Please indicate the extent to which you agree or disagree with the following statements. – (OAD3) Our organization routinely evaluates new technologies as they are introduced to see if they are a good "fit" for our organization.	.722				
Please indicate the extent to which you agree or disagree with the following statements. – (TRK1) Employees throughout our organization are knowledgeable and up to date because department heads in our organization keep us informed about any technology that would help increase customer engagement.	.654				
Please indicate the extent to which you agree or disagree with the following statements. – (MSI1) I believe our management is continuously supportive of and values innovation that will Increase customer engagement.	.626				
Please indicate the extent to which you agree or disagree with the following statements. – (TRR2) Our management is willing to invest and our organization has the resources to invest to hire talent outside our organization if we need specific expertise.	.613				518
Please indicate the extent to which you agree or disagree with the following statements. – (MSI4) I believe our management is continuously supportive of and values innovation that will help our customers become advocates for our retail brand.	.550				

Please indicate the extent to which you agree or disagree with the following statements (CXL4) I believe adopting an in-store retail media network would help create a welcoming atmosphere in our stores.	.910			
Please indicate the extent to which you agree or disagree with the following statements (CXS1) I believe adopting an in-store retail media network would help add excitement to our customers' everyday shopping.	.762			
Please indicate the extent to which you agree or disagree with the following statements. – (CXS3) I believe adopting an in-store retail media network would help raise our customers' perception of store quality.	.750			
Please indicate the extent to which you agree or disagree with the following statements (CXS2) I believe adopting an in-store retail media network would help transform the in-store atmosphere to make it align more closely with our e-commerce experience	.717			
Please indicate the extent to which you agree or disagree with the following statements (CXE1) I believe adopting an in-store retail media network would help make our customers' shopping experience more enjoyable.	.668			
Please indicate the extent to which you agree or disagree with the following statements. – (CSX4) I believe adopting an in-store retail media network would help create a positive shopping environment.	.665			
Please indicate the extent to which you agree or disagree with the following statements (CXE5) I believe adopting an in-store retail media network would help strengthen our brand's emotional connection with our customers.	.656			
Please indicate the extent to which you agree or disagree with the following statements. – (CT2) I believe adopting an in-store retail media network would help provide a higher level of in-store service.	.656			

Please indicate the extent to which you agree or disagree with the following statements (CSX5) I believe adopting an in-store retail media network would help expand the time customers spend in store during each visit.	.634		.511		
Please indicate the extent to which you agree or disagree with the following statements. – (REV2) I believe adopting an in-store RMN would help monetize in-store customer traffic generating new revenue to help meet our department's goals.		.911			
Please indicate the extent to which you agree or disagree with the following statements. – (REV3) I believe adopting an in-store RMN would help monetize in-store customer traffic generating new revenue to help fund other customer benefits.		.910			
Please indicate the extent to which you agree or disagree with the following statements (REV5) I believe adopting an in-store RMN would help monetize in-store customer traffic generating new revenue to help create the opportunity for our department to try new things.		.890			
Please indicate the extent to which you agree or disagree with the following statements (REV4) I believe adopting an in-store RMN would help monetize in-store customer traffic generating new revenue to help create an opportunity to fund additional departmental innovation		.838			
Please indicate the extent to which you agree or disagree with the following statements. – (REV1) I believe adopting an in-store RMN would help monetize in-store customer traffic generating new revenue to help fund other business initiatives in our department.		.833			
Please indicate the extent to which you agree or disagree with the following statements (CEV2) I believe adopting an in-store retail media network would help increase our retail chain's market share.		.600		.569	
Diago indicate the extent		F 0 1			

Please indicate the extent to which you agree or disagree with the following statements (SL5) I believe adopting an in-store RMN would help increase sales throughout all our stores.		.591				
Please indicate the extent to which you agree or disagree with the following statements (CEV1) I believe adopting an in-store retail media network would help our stores remain competitive.		.547				
Please indicate the extent to which you agree or disagree with the following statements (CC3) I believe adopting an in-store retail media network would help customers develop a preference for our retail brand.			.834			
Please indicate the extent to which you agree or disagree with the following statements (CT1) I believe adopting an in-store retail media network would help provide more relevant product recommendations.			.821			
Please indicate the extent to which you agree or disagree with the following statements (CC1) I believe adopting an in-store retail media network would help strengthen relationships with our customers.	.510		.710			
Please indicate the extent to which you agree or disagree with the following statements (CT3) I believe adopting an in-store retail media network would help demonstrate to customers that we value their business.			.678			
Please indicate the extent to which you agree or disagree with the following statements (CS1) I believe adopting an in-store retail media network would help better meet our customers' needs.			.599			
Please indicate the extent to which you agree or disagree with the following statements (CS4) I believe adopting an in-store retail media network would help increase customer satisfaction with our retail brand.			.520			
Please indicate the extent to which you agree or disagree with the following statements (CEP2) I believe adopting an in-store retail media network would help encourage our customers				.811		

Please indicate the extent to which you agree or disagree with the following statements (CEP3) I believe adopting an in-store retail media network would help motivate our customers to become advocates for our retail brand.		.793	
Please indicate the extent to which you agree or disagree with the following statements (CEP1) I believe adopting an in-store retail media network would help motivate our customers to share their shopping experience with friends and family.		.731	
Please indicate the extent to which you agree or disagree with the following statements (CEL4) I believe adopting an in-store retail media network would help reinforce the value our customers see in our retail brand.		.701	
Please indicate the extent to which you agree or disagree with the following statements (CEL1) I believe adopting an in-store retail media network would help encourage our customers to consider our retail brand "their store."		.665	
Please indicate the extent to which you agree or disagree with the following statements (CEPF2) I believe adopting an in-store retail media network would help encourage our customers to purchase with our stores rather than with a competitor.		.591	
Please indicate the extent to which you agree or disagree with the following statements (CEP5) I believe adopting an in-store retail media network would help encourage our customers to become brand champions for our stores.	.519	.553	
Please indicate the extent to which you agree or disagree with the following statements (CELS) I believe adopting an in-store retail media network would help reinforce the positive perception our customers have of our retail brand.		.500	
Please indicate the extent to which you agree or disagree with the following statements (TRI4) I would consider recommending adoption of an in-store RMN for our stores if our network systems are sufficiently robust to be able to		.895	

Please indicate the extent to which you agree or disagree with the following statements (TRI5) I would consider recommending adoption of an in-store RMN for our stores if our security systems are sufficient to protect customer data from security breaches.			.851			
Please indicate the extent to which you agree or disagree with the following statements (TRI3) I would consider recommending adoption of an in-store RMN for our stores if our organization's merchandising team is capable of supporting new technology that increases customer engagement.			.807			
Please indicate the extent to which you agree or disagree with the following statements (TRI2) I would consider recommending adoption of an in-store RMN for our stores if our organization's operations team is capable of supporting new technology that increases customer engagement.			.784			
Please indicate the extent to which you agree or disagree with the following statements (TRI1) I would consider recommending adoption of an in-store RMN for our stores if our organization's IT infrastructure is capable of integrating new technology that increases customer engagement.			.647			
Please indicate the extent to which you agree or disagree with the following statements (SL2) I believe adopting an in-store RMN would help increase sales of all similarly branded products (brand halo).				.715		
Please indicate the extent to which you agree or disagree with the following statements. – (CS3) I believe adopting an in-store retail media network would help exceed customer expectations.				.630		
Please indicate the extent to which you agree or disagree with the following statements. – (CXCS) I believe adopting an in-store retail media network would help our customers navigate our stores more easily.					.859	

Please indicate the extent to which you agree or disagree with the following statements (CXC4) I believe adopting an in-store retail media network would help our customers find what they are looking for more quickly.				.744	
Please indicate the extent to which you agree or disagree with the following statements (CXE4) I believe adopting an in-store retail media network would help us better meet our customers' expectations.		.515		.657	
Please indicate the extent to which you agree or disagree with the following statements. – (CXC2) I believe adopting an in-store retail media network would help make our customers' shopping experience easier.				.583	
Please indicate the extent to which you agree or disagree with the following statements. – (CS4) I believe adopting an in-store retail media network would demonstrate that our company is committed to helping our customers achieve their goals.				.536	
Please indicate the extent to which you agree or disagree with the following statements (CXL1) I believe adopting an in-store retail media network would help free associates to spend more time making our customers feel valued.					.685
Please indicate the extent to which you agree or disagree with the following statements (CEV3) I believe adopting an in-store retail media network would help differentiate our stores from those of our competitors.					.674
Please indicate the extent to which you agree or disagree with the following statements. – (MSI5) I believe our management is continuously supportive of and values innovation that will help differentiate our stores from those of our competitors.					.571

# VITA

# GERI D. WOLFF

1971-1976	Media Planner-Buyer F. William Free Advertising, Miami, Florida Office
1976-1982	Vice President Doremus & Company, Miami, Florida Office
1983-1990	Senior Vice President/Partner Marketing & Media Director McFarland & Drier Advertising, Miami, Florida
1984-1986	Florida International University Adjunct Professor/Marketing & Media, North Campus
1985	University of Miami Adjunct Professor/Marketing & Media, Main Campus
1985-1986	Florida International University: Curriculum Advisory Committee
1986-1987	University of Miami: Personnel Evaluation Committee
1986-1988	Barry University: Master of Business Administration
1988-1989	Barry University: Marketing Advisory Committee
1990-1995	Vice President Marketing Carnival Cruise Lines, Miami, Florida
1991-1992	Florida International University: Curriculum Advisory Committee
1994-1995	University of Miami: Visiting Evaluation Committee
1996-Present	President, CEO Market Works International, North Palm Beach, Florida
2021-Present	Doctor of Business Administration Candidate (Summer 2024) Florida International University, Miami, Florida