



Exploring the influence of Offline Store Design on Online Store Design: Moderating role of Channel Integration in Multichannel Fashion Industry

Munaza Kanwal¹, Muhammad Rizwan²

¹ PhD. Scholar, Institute of Business Management and Administrative Sciences, The Islamia University of Bahawalpur, Pakistan. Email: munaza.iub@gmail.com

² Lecturer, Institute of Business Management and Administrative Sciences, The Islamia University of Bahawalpur, Pakistan. Email: rizwan.arshad@iub.edu.pk

ARTICLE INFO

Article History:

Received: May 15, 2025

Revised: June 28, 2025

Accepted: June 29, 2025

Available Online: June 30, 2025

Keywords:

Channel Integration

Multichannel Environment

Offline Store Design

Online Store Design

Fashion Industry

Pakistan

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

The development of internet technology has transformed the online shopping landscape, presenting customers with enhanced options during their purchasing experience, delivering superior products and services, and enabling businesses to establish an extra channel for growth. This study examines the dynamic association among offline Store Design (OFSD) and online Store design (ONSD), with the moderation effect of Channel Integration in Pakistan fashion industry. As the number of channels rises, the issues of synergies and coordination among various channels become more difficult to manage. The moderation of channel integration among offline Store design (OFSD) and online store design elucidates the conflicting outcomes in multichannel literature. The cross-sectional approach is used to collect data quantitatively. The survey distributed to 384 customers of various Pakistani online fashion enterprises, which collected using a simple random sampling technique. The findings show a significant correlation between offline store design and online store design ONSD with a moderating effect of channel integration. Consequently, businesses that operate across multiple channels need to acknowledge the significance of channel integration in terms of its ability to influence behavioral intentions during interactions.

Corresponding Author's Email: munaza.iub@gmail.com

1. Introduction

The growth of internet technology transformed the online buying landscape. It provided customers with enhanced choices during their purchasing process, thereby offering superior products and services (Pappas et al., 2017), while simultaneously affording business firms an extra avenue for growth (Beckers, Cárdenas, & Verhetsel, 2018). Online shopping involves acquiring internet-based firms' goods and services. This process includes accessing the online store, searching for desired products, selecting items, completing purchases, making payments, and utilizing the chosen products to fulfil personal needs and desires (Kim & Lee, 2014). The worldwide internet-based sales projected to reach US\$ 7.39 trillion in 2025, beyond the US\$ 6.15 trillion recorded in 2023, with an anticipated rise to US\$ 8.03 trillion by 2027 (Statista, 2025). Over the course of the last ten years, online sales have increased at a rate that has never seen before (Changchit et al., 2019). According to Nguyen, Nguyen and Tan (2021), the most popular type of products that purchased online are those that are related to fashion. Notwithstanding the global surge in online sales, the online purchasing procedure in Pakistan remains in its nascent phase (Nilashi et al., 2016). The advancement of e-commerce sales in Pakistan has been sluggish in comparison to its regional counterparts. Online sales in Pakistan reached to US\$ 6.4 billion in 2023, while figures for other regional countries were US\$ 2.17 trillion in China, US\$ 57 billion in India, and US\$ 41.8 billion in Saudi Arabia (Rizwan et al., 2021). Internet sales in these countries have also increased relative to others. Malaysia has US\$ 6 billion in online sales, and Bangladesh has US\$ 1.313 billion (Rizwan et al., 2021).

The significant gap in the existing literature recommended by Loureiro and Roschk (2014), is to investigate how the designs of existing offline and online stores interact with one another to influence their ability to generate expectations, stimulate emotions, or alter behavior. The second important gap is that the previous literature shows the inconsistent findings among various offline and online channels reported by numerous studies. These inconsistent findings pertain to the interaction among the numerous conceptions of distinct channels. Numerous studies validate the substantial correlation among the variable of various channels. Other research, in contrast, was unable to find any evidence supporting these correlations in its empirical findings. Due to the inconsistent findings of different previous studies as explained below, this study considers the channel integration as a moderator on the link between offline and online channel in Pakistan fashion industry as proposed by Montaguti, Neslin and Valentini (2016) that channel integration can act as a moderator to enhance the general customer experience across all platforms. The inconsistent findings from previous studies were conducted by Rizwan et al. (2021), confirmed that offline and online satisfaction has significant association. At the same time, (Pauwels & Neslin, 2015), discovered that the association between offline satisfaction and online satisfaction was not significant; however, the relationship between offline and online loyalty was significant. According to the findings of a further study (Frasquet & Miquel, 2017), offline loyalty was not found to be a factor that influences online loyalty. According to the findings of a study by Kim and Jones (2009), there are noteworthy correlations between offline and online attitudes as well as between offline and online purchase intentions. According to Yang, Chen and Wei (2015), the quality of the online service does not influence the behaviors associated with the channel. Trust in online services has a positive and significant impact on the level of confidence that individuals have in online banking. Although several research investigations have been conducted, there has not been a significant association shown between trust in different ways.

2. Literature Review

Prior study by Sousa and Voss (2012), indicates that firms enhance their traditional channels with an internet-based channel achieve greater operational success than those that rely solely on traditional channels. Due to the rapid growth of the internet, many traditional organizations are considering expanding their channel portfolio to include several channels to boost business operations and long-term profitability (Wu, 2011). Shopper behavior of multichannel has both advantages and disadvantages for businesses. To fulfil their purchasing needs for diverse products customers are utilizing several channels. From a multichannel viewpoint, to understand shopper attitude is crucial for grasping the emergence of new channels. Research has revealed that multichannel customers are more advantageous than single-channel clients. Buyers may prefer the web channel due to its ease of accessing information about price comparison and product variety. A firm can achieve greater sales by leveraging various prospects compared to a singular channel strategy (Wu, 2014). When clients engage with several firm channels, they tend to enhance their views of overall satisfaction and service excellence. These firms are exerting more effort to develop multichannel strategies for consumer connection and retention. Verhoef, Kannan and Inman (2015), states that the firms are exerting additional effort to develop multichannel strategies aimed at connecting with and retaining clients throughout their buying journey. Dennis (2017), describe that the initiatives bolster their conventional channel to increase sales volume, but supplementary sales may also be derived from the extended channel. Consequently, by improving the company's overall performance, channel portfolio expansion can be possible. The key advantage of incorporating an innovative channel is boosting the firm's sales volume. Incorporating more channels will facilitate the acquisition of new clients, thus expanding the customer base, and will also sustain ties with existing customers through retention efforts. However, incorporating numerous channels would also enhance clients' trust and familiarity. Avery et al. (2012), describes the synergistic impact produced by the addition of channels yields substantial advantages and enhances one another to more effectively meet customer needs. Thus, these channels generate synergies that enhance the company's ability to service clients more effectively. New channels may cause customers to migrate to their preferred channels rather than using numerous channels. Firms face profitability issues due to this cannibalization process, as the incremental revenue does not offset the additional cost of operating a new channel.

2.1. Offline Store Design

The offline store design, commonly referred to as layout design, pertains to the arrangement of product displays, fixtures, and items within a retail environment (Kotni, 2016).

It affects the consumer's experience in the store and the probability of acquiring displayed products. Consequently, numerous research studies by Krasonikolakis et al. (2018), have sought to comprehend the significance of store design across diverse settings, such as channel-specific environments. Thus, store design (OFSD) denotes design or layout in a conventional physical setting. Bartikowski and Singh (2014), proposed that retailers manipulate the atmosphere of their stores through layout, color, lighting, and music to affect customers' purchasing decisions. Strebel, Erdem and Swait (2004), claimed that a key element influencing consumer behavior is store design. Consumers want enjoyable shopping experiences, and entertainment as they expect to be satisfied. Kotni (2016), retailers (often mistakenly) think that stocking more products will result in higher sales. Nonetheless, the retail environment's capacity to convert customer demand into a purchase is decided by several factors, including store layout, navigation, product profiling, and presentation (Kotni, 2016).

The physical shop space continues to be the most significant medium for dealers to communicate with their customers, despite the digitization of the retail industry (Stevens, 2013). Successful store design should leave an impression on customers in a variety of ways, and the variety of retail formats provides context for design. This emphasizes the value of specificity in store design (Plunkett & Reid, 2012). Researchers in marketing were interested in the store's layout and how it related to products were displayed and presented because of how it affected customer behavior and added to the "atmosphere" of the store (Kotni, 2016). Through the SOR model established by Donovan (1994), store design with affective consumer responses, shop settings and customer behavior have since been extensively studied. Affective reaction, shopping length, merchandise evaluations, shopping pleasure, and purchase intention are only a few of the effects in retail settings that are demonstrated in more in-depth investigations of isolated ambient cues, including music, lighting, color, fixture, presentation, and layout. There are several aspects of layout that can be addressed, including the arrangement of products in groups, the use of shelves, the allocation of floor space among departments, and the decoration of the walls. According to Banat and Wandebori (2012), the layout refers to how the selling area is divided, how space is used, and how things are arranged (Ahmed, Azhar, & Mohammad; Dler M Ahmed, Z Azhar, & Aram J Mohammad, 2024; Dler Mousa Ahmed, Zubir Azhar, & Aram Jawhar Mohammad, 2024; Mohammad, 2015a, 2015b; Mohammad & Ahmed, 2017).

2.2. Online Store Design

The online store design includes technical elements i.e., navigation, layout, appearance (McKnight, Choudhury, & Kacmar, 2002). In the realm of online shopping, websites design attributes that affect consumer behavior (Wells, Valacich, & Hess, 2011). There are various other types of information that can be included on a website, such as text, colours, photos, audio, videos, and animations. Companies can benefit from developing trust with their customers and guiding visitors to act by having a website that is built successfully. Researchers have classified the multidimensional notion of website design in various ways. According to the findings of an empirical study that was carried out by Cyr (2008), website design can be broken down into three distinct components: visual design, information design, and navigation design. Websites with aesthetic beauty tend to attract customers more than those with less appeal (Wu, 2014). The implementation of visual design elements affects equilibrium, emotional resonance, aesthetics, and cohesiveness of overall appearance. Cyr (2008) asserts that the website integrates a diverse range of font styles, colors, graphics, and forms.

According to earlier studies (Urban, Sultan, & Qualls, 2000), a site's graphic interface should be uniform throughout and complement the content of the site to give users a convenient, enjoyable, and secure experience. Online users access websites to obtain information, including pricing details, product specifications, and promotional offers. Consequently, websites can engage, maintain, and motivate online users by offering valuable content (Gao & Su, 2017). According to their research, information design significantly affects client trust while shopping online. "Knowledge" is a key factor in determining how quickly a person picks up current information. People's propensity to learn and absorb information has an impact on this knowledge Ratten and Ratten (2007). Graphical and informational design were supported by Loureiro and Roschk (2014), as valid and trustworthy measurements of e-atmospherics in a variety of scenarios. It has been asserted (Essawy, 2019), that the information design altered the emotional states of the clients and encouraged favorable purchasing intentions. When websites used effective information design, the customer's favorable sentiments were more intense. These

results are consistent with earlier research on e-commerce (Wu, 2013). Essawy (2019), study findings show an opposite pattern in terms of graphic design. The effects of graphical design on favorable feelings and purchasing intentions were not shown to be significant in the data. According to Cyr (2008), "a customer who has trouble searching for and finding the necessary information is likely to leave the site," regardless of how comprehensive a site's information offering may be (Dhivya et al., 2023; Ragmoun, 2023; Ragmoun & Alfalih, 2024; Ragmoun & Ben-Salha, 2024).

Furthermore, effective website navigation enables consumers to acquire relevant and extensive information more efficiently, thereby influencing online purchase intentions. Adequate navigation is essential; otherwise, online consumers may experience confusion, disorientation, and reluctance to revisit the site (Winnie, 2014). Additionally, in the age of online banking, customers will rely on criteria like website functionality and aesthetics when selecting internet banking offers, because the online service is identical across all of them (Hewer & Howcroft, 1999). Most online users consider website layout and design to be important (Poon, 2007). Customers who engage in internet banking connect with the webpage that enables them to research or make purchases of goods and services related to banks. It suggested two phases of website quality before and after the launch of the internet services should be included (Santos, 2003). They added that several factors are required for website quality consideration, including ease of use, attractiveness, ongoing upkeep and enhancement, well-organized material, and beautiful design. Cyr (2008) and Ganguly et al. (2010) have demonstrated that information design has a major impact on customer online trust.

2.3. Relationship between Offline store design and Online store design

Customer impressions of a firm can aid in firm appraisal, generating various responses and influencing future behavior. Nevertheless, the current frameworks often overlook the potential links across several types of customer evaluations. The linkages between online and offline assessments have been extensively studied in various channels, although this research frequently neglects this interplay (Bonsón Ponte, Carvajal-Trujillo, & Escobar-Rodríguez, 2015). These firms and customers have different store design perspectives, so they can evaluate online quality after consumption. Thus, their offline experience is used to evaluate online experience. According to Cui et al. (2018), any previous channel experience predicts the excellence of additional enlarged channels. Several prior research studies by Fadhel et al. (2020), empirically validated the affirmative impact of offline perceptions on the company's extended channel. A separate study indicated that client perceptions about a firm influence their evaluation of its online platform. Beckers, Cárdenas and Verhetsel (2018), used an expectation transfer model to study how customer experience in one area affects consumer appraisal of a new domain. The study's findings confirmed that customer experiences in the offline environment significantly influence perceptions of online channel. Therefore, it is reasonable to presume that a favorable assessment of prior channel can be applied to extended channel. Offline and additional online services form the basis of the user's website's quality perceptions. Thus, the offline store design affects user trust and knowledge of the online store design, which are essential for both channels to work (Changchit et al., 2019).

2.4. Channel Integration in a Moderating Role

The emerging online channel is seen as a novel entity for assessment, possessing numerous qualities like those of the firm's initial offline channel within the framework of multichannel marketing. Customers naturally target the new internet channel. Online channel source and channel depend on source-target association, this approach follows categorization theory by Xuan (2007), research. According to Carlson and O'Cass (2012), they proposed that increasing the congruence between a company's traditional and internet channels would reduce the significance that clients assign to evaluating the characteristics of the "piecemeal processing" online channel and would make it easier for customers to transfer their previous attitudes to the company's "category-based processing" of new online channel. Hult et al. (2019) assert that the synergy among various channels signifies the quality of fitness, which may be attained when customers perceive the performance of different channels as comparable. Creating constructive collaboration among channels in a multichannel situation can increase the value of several channels beyond their individual worth. Consequently, the overall satisfaction of multichannel clients is typically indicated by the amalgamation of satisfaction derived from various channels and their cumulative experiences across these channels. To have synergistic benefits, various

channels must be integrated to accommodate customer needs, enabling customers to execute their purchasing decisions across numerous channels (Avery et al., 2012).

2.5. Theory of Brand Extension

According to brand extension theory, corporations exploit favorable consumer experiences with the parent brand to increase the new product's performance during brand extension. Similarly, the organization benefits from clients' positive offline channel extension experiences, which helps the new online channel prosper. Often, a brand extension focusses on a distinct segment within the overall market. The Brand Extension Theory (BET) denotes a firm's use of an established brand name to facilitate entry into a new market sector or product category (Ke & Wagner, 2022). BET is recognized as the most prevalent method employed by commercial firms to mitigate the risks and costs associated with launching a new product or entering a new market segment (Al-hawari & Mouakket, 2012). Brand extensions are commonly employed to introduce novel items linked to an established firm's brand name; hence, they mitigate inherent risks by leveraging earlier consumer experiences to influence the evaluation of the extended product (Ke & Wagner, 2022). Numerous fashion-related firms introduce additional product lines utilizing the brand extension mechanism based on their parent brand's name. Consequently, meticulous planning and brand expansion strategies allow businesses to penetrate completely new product areas. It was further noted that if all procedures are executed consistently and with sufficient diligence, brand extensions are expected to bridge the gap between two distinct product sectors. The influence of original brand quality on an expanded product is tempered by the specified attributes (Ke & Wagner, 2022).

While several preliminary research studies, including one on brand extension, demonstrated adequate internal validity, numerous scholars have raised concerns over the issue of generalizability. Various additional studies replicated brand extension research; however, they produced varying results. Ke and Wagner (2022), meta-analysis assessed the generalizability of the brand extension model. Brand extension assessment is considered a cognitive process that encompasses customer attitudes towards both affective and cognitive traits related to the parent brand, as well as the level of knowledge concerning the extended product category (Acquila-Natale & Iglesias-Pradas, 2020). The customer's positive perception of the parent brand can result in a more favorable evaluation of the extension. Consequently, awareness and understanding of the parent brand were effectively conveyed to the extension during the evaluation process. The categorization theory is often employed in the examination of cognitive processes related to brand extension. The evaluation of latest information by customers is associated with pre-existing mental categories; Endeavor to connect latest information with established mental categories and examine the correlation between new product category information and prior brand knowledge. Consequently, the product category considered more compatible with current categories is processed with ease, and the information contained in the existing categories is seamlessly transferred to the extension assessment (Anderson, Eshima, & Hornsby, 2019).

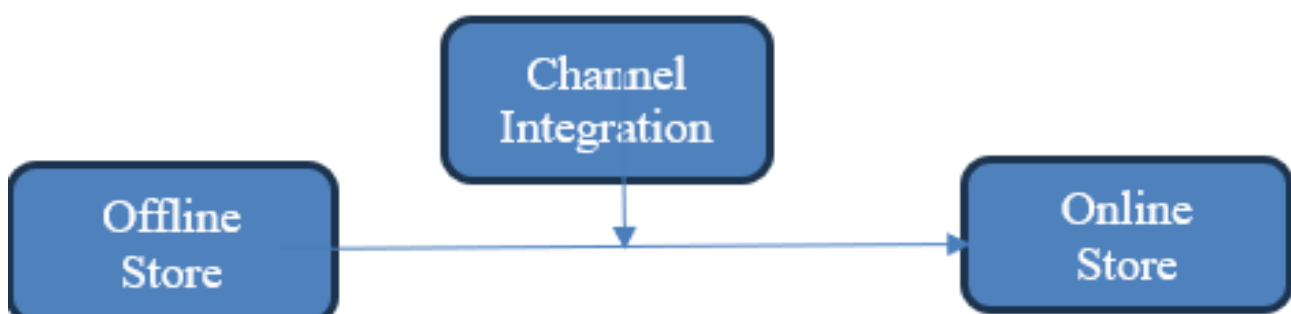
2.6. Research Hypothesis

H1: "Offline store design positively influences on Online store design".

H2: "The relationship between offline store design and online store design are significantly moderated by Channel integration".

3. Research Framework

Figure 1: Conceptual Framework



4. Methodology

The key objective of the research was to analyze the connections that exist between the offline channel and the way the online channel is built. Quantitative data is collected utilizing a structured survey and empirical analysis in this study. It seeks to formulate inferences regarding the general population that are deficient in qualitative methodology (Borsboom et al., 2021). Data about the main determinants of this study was collected from the population by using a cross-sectional methodology. Self-managed surveys are more efficient, to gather the essential information in a quicker time, generate a greater response rate, and incur less costs for researchers.

4.1. Population of the Current Study

Specific studies examine the characteristics of a research population, which consists of data and information (Anderson, Eshima, & Hornsby, 2019). Furthermore, the population encompasses the entire spectrum of individuals required for a certain research topic. A sub-collection chosen from a population of interest is referred to as a "sample." It can also be quantitatively defined as a portion of the target population under study (Borsboom et al., 2021). This study focusses on fashion industry clients who have made at least one online purchase. The current study proposes analyzing the repurchase behavior of online shoppers in comparison to the broader online community. The rationale for choosing online buyers as participants in online buying research is their elevated likelihood of repurchasing and their propensity to engage in online buying in the future (Famiyeh, Asante-Darko, & Kwarteng, 2018).

4.2. Sample Size

Resource constraints frequently hinder optimal research performance: yet an adequate sample size and improved sampling methodology could enhance research efficiency (Babulal et al., 2019). Consequently, an adequate sample size is crucial in research. The 50/50 split is a methodology that accounts for the most conservative scenario in which the entire population is completely divided. An approximately 384 sample size is measured suitable for the generalizability of findings in research on human aspects or behavior. Babulal et al. (2019) proposed a formula for determining the requisite sample sizes; the present study population comprises online customers of fashion industry who have made at least one purchase via the internet.

$$Ns = \frac{(Np)(P)(1-P)}{(Np-1)\left(\frac{B}{C}\right)^2 + (P)(1-P)}$$

According to the 2024 Annual Report, there were 116 million online buyers in the Pakistan (Statista, 2025). Consequently, the total projected number of potential respondents for this study was 116 million. By applying the sample size calculation formula for the current study, it is determined that a population of 100,000 requires 384 samples, which is also the maximum number needed for any population larger than 100,000. A sample of 384 respondents is deemed suitable for evaluating the study hypotheses at a 95% confidence level and a 5% margin of error (Borsboom et al., 2021). Therefore, a minimum of 384 online shoppers must engage in the current study.

$$Ns = \frac{(111000000)(0.5)(1-0.5)}{(111000000-1)\left(\frac{0.05}{1.96}\right)^2 + (0.5)(1-0.5)}$$

$$Ns = 384$$

4.3. Sampling Design

The sampling design delineates pertinent information concerning the study population, determination of sample size, sampling technique, and data collection strategy. Data gathering can be conducted using non-probability, simple random sampling techniques through self-administered questionnaire. The present study established certain criteria for selecting sample participants (Pakistani individuals and experienced online consumers). The study's responses were limited by two criteria. Participants had to be Pakistani, and we excluded non-Pakistani respondents from the final data analysis. A standardized questionnaire was created to obtain essential information from prospective survey participants. Individuals who had previous experience shopping online were the ones that participated in this study. To interact with these

respondents, and data collection, top 10 Pakistani fashion brands were selected. Participants and respondents to the survey were customers who purchase fashion items both online and in physical stores.

4.4. Research Instruments

Online store design was assessed using a scale modified from McKnight, Choudhury and Kacmar (2002). These items were slightly adjusted to enhance their compatibility within a multichannel buying setting. A seven-point Likert ranges from 1 to 7, where 1 signifies strongly disagree and 7 indicates strongly agree was employed. The Cronbach's alpha, for the scale derived from the study was 0.87. The offline store design scale is derived from research conducted by Kotni (2016). This inquiry has resulted in the modification and rephrasing of the scale to adopt it. During the previous research, the Cronbach alpha for the scale was found to be 0.88. In the current study, the objective was to evaluate the moderation of channel integration (10 items) among offline and online factors. According to the findings of the previous research Li and Hsu (2018), Cronbach's alpha level for the scale was 0.89.

5. Results and Analysis

This study used the Smart PLS (4.0) to explain structural equation modal (PLS-SEM) and SPSS (18.0) statistical tools for demographic data analysis. Results were provided in frequencies and percentages to display demographic data by using SPSS. The overall frequency is 360 respondents in this survey. Most participants were female (60%) compared to males (40%). Current research ascribed more females to the selected brands. All selected brands target females and offer stylish things associated with women. Most participants were aged 26-30 years (35.6%) and 31-35 years (29%). Approximately 21.1% were between 36 and 40. Concerning income distribution, almost 5.2% earned between 50,000 and 75,000, and 11.3% earned between 75000 to 100000, 21.2% between 100000 to 125000, 32% between 125000 to 150000 and 33.3% above 150000. Over 43% of the respondents possessed a master's degree, 28.5% held a bachelor's degree, 20.1% obtained an MS/MPH degree, 5% had an intermediate degree, and 3.1% earned a Ph.D. degree. There were around 22% of people who had their own businesses, 11.8% of people who were students, and 35.5% of respondents were employed. The percentage of people who used the internet for less than one hour was 1.4%; 27.7% used it for one hour per day, 28.5% used it for two hours per day, and 25.4% used it for more than one hour per day. Regarding the second variable, the principal motivation for internet usage was as follows: 14.6% for information search, 37.9% of people used the internet for the purpose of purchasing various things from online retailers, 17.4% for academic purposes, 14.7% for banking activities, 12.1% for enjoyment, and 3.2% for jobs. At least one item had been purchased from an online merchant by each of the participants, indicating that they were all experienced internet shoppers.

Table 1: Demographic profile Analysis

Variable	Category	Frequency	Percentage
Gender	Male	154	40%
	Female	206	50%
Age	26-30 Years	116	35%
	31-35 Years	113	29%
	36-40 Years	79	2.11%
	Above 40 Years	52	14.5%
	Above 40 Years	52	14.5%
Income (Rs)	50000-75000	17	5.2%
	75000-100,000	44	11.3%
	100,000-125000	76	21.2%
	125000-150000	111	32%
	Above 150000	112	30.3%
Education	Intermediate	10	5%
	Bachelor	102	28.5%
	Master	155	43.3%
	MS/MPhil	72	20.1%
	PhD	11	3.1%
	Student	44	11.8%
	Employed	127	35.5%
	Business Owner	78	21.8%
	Housewife	111	31%

Frequency of Internet use	Less than 1 hour	7	1.4%
	1 hour	99	27.7%
	2 hours	102	28.5%
	3 hours	91	25.4%
	4 hours	61	17%
Purpose for internet use	Information search	56	14.6%
	Work	10	3.2%
	Entertainment	47	12.1%
	Study	66	17.4%
	Purchasing	132	37.9%
	Banking	49	14.7%

5.1. Reliability & Validity

Consideration of reliability and validity is essential while assessing the internal consistency and validity of the utilized instrument. The reliability of each component under investigation was checked in the study. Within the scope of this investigation, the reliability coefficient of Cronbach's alpha, CR, AVE, HTMT was utilized to assess the consistency of the scale. The result of this study shows that the value of Cronbach alpha of all the items beyond the threshold value (0.7) and the value of CR were between 0.876 to 0.921 which meet the optimal criteria shown in Table II. Furthermore, the Average Variance Extracted (AVE) becomes the base of convergent validity with an acceptable value of (0.5) by (Hair, 2011) and the results show the AVE between 0.539 to 0.639 meet the threshold criteria.

5.2. Regression Analysis & Effect size

The results show the regression analysis and Effect size analysis using PLS 4.0 in Table IV. The R² value of endogenous variable is 0.083. It shows that the independent variable causes 8.3% change in dependent variable and effect size F² test measures the impact on endogenous cause by the exogenous variable by measuring the change in R² when that variable is removed from the modal variable and the f-square value consider 0.02 as small, 0.15 as moderate and 0.35 as high effect. The result shows a small effect of exogenous variable on endogenous variable as shown in Table IV.

Table 2

Constructs		No of items	Factor loadings	Cronbach Alpha	CR	AVE
Online Design	Store	ONSD1	0.793	0.813	0.876	0.639
		ONSD2	0.762			
		ONSD3	0.838			
		ONSD4	0.803			
Offline Design	Store	OFSD1	0.798	0.892	0.913	0.571
		OFSD2	0.842			
		OFSD3	0.769			
		OFSD4	0.688			
		OFSD5	0.819			
		OFSD6	0.774			
		OFSD7	0.746			
		OFSD8	0.575			
Channel Integration		ChInteg1	0.742	0.907	0.921	0.539
		ChInteg2	0.836			
		ChInteg3	0.803			
		ChInteg4	0.810			
		ChInteg5	0.707			
		ChInteg6	0.641			
		ChInteg7	0.724			
		ChInteg8	0.709			
		ChInteg9	0.695			
		ChInteg10	0.649			

Table 3: Discriminant validity: Heterotrait-Monotrait Ratio (HTMT)

	ChInteg	OFSD	ONSD
ChInteg			
OFSD	0.191		
ONSD	0.132	0.207	

Table 4: R-square and F-square

Construct	F2	R2
ONSD		0.083
Chinteg	0.030	
OFSD	0.051	
Chinteg*OFSD	0.024	

5.3. Hypothesis Testing

H1: Offline Store Design is positively correlated with online store design.

There is a strong and significant correlation between the design of physical stores and their online counterparts ($\beta=0.219$, $t=4.812$). Therefore, H1 was supported.

Table 5

Hyp	Structural Path	Beta(β)	S. E	t-Value	p-Value	Decision
H1	OFSQ->ONSQ	0.219	0.046	4.812	0.000	Supported

5.4. Test of Moderation

Research on the moderating effect by Hair et al. (2012) indicates that channel integration will enhance the interaction between the offline and online dimensions. A higher level of channel integration moderates the association between offline shop design (OFSD) and online store design (ONSD), according to the results of Hypothesis 2 as shown in fig 2 through (PLS-SEM). According to the findings of this study, the size of the interaction term has a significant impact on the correlation between offline shop design and online shop design (ONSD) as shown fig 3 interaction plot. This indicates that in cases of high channel integration, offline store design significantly affects ONSD.

Table 6

Hyp	Structural Path	Beta(β)	S. E	t-Value	p-Value	Decision
H2	ChInteg*OFSQ->ONSQ	0.148	0.062	2.397	0.017	Supported

Figure 2: Structural Equation Model: Offline store design (OFSD), Online store design (ONSD), Channel Integration (chinteg)

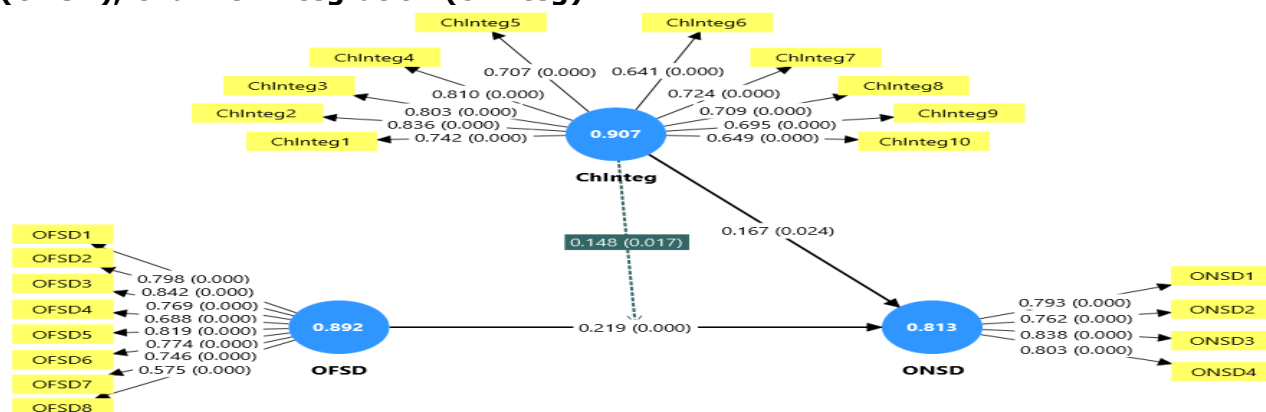
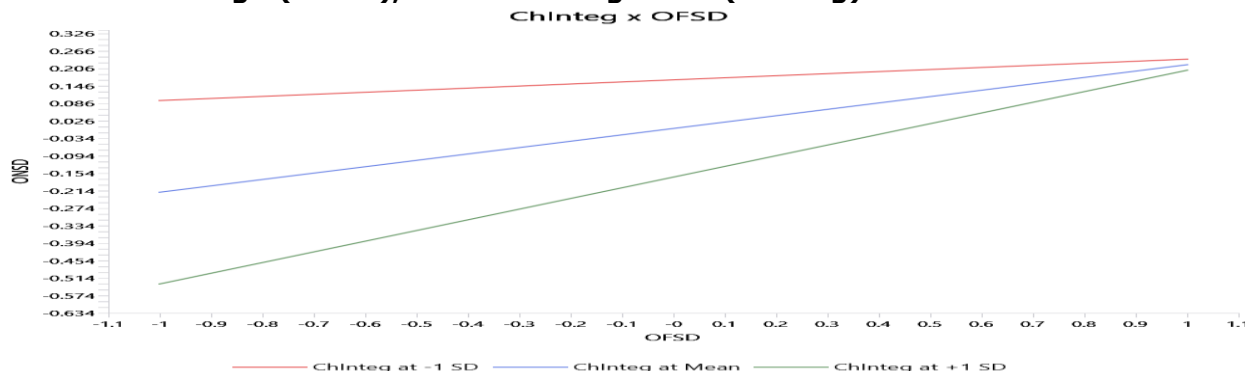


Figure 3: Structural Equation Model: Interaction Plot Offline store design (OFSD), Online store design (ONSD), Channel Integration (chinteg)



6. Discussion

The present study defines store design as customers' overall evaluation of offline and online channels. This elucidates the Caliber of services provided by these channels throughout the purchasing procedure, including the exchange-refund policy for returns, the availability of accommodating shipping options, and the convenience of payment methods. Consequently, these channel-related offerings enhance customers' evaluations of the firm's various channels. This study found that offline store design and online store design (ONSD) interact significantly. The results of this study suggest that consumers' expectations for the layout of a company's online store are significantly influenced by their good impressions of the design of the company's physical store. In a multichannel environment, clients may engage with various channels of firms and can alternate their channel usage among the available options. As the number of channels increases, so does the probability of channel switching, depending on each channel's value and ability to persuade customers to buy. Before interacting online, these clients may see the offline encounter to reduce risk. Consequently, favorable online store design experiences tend to boost customers' confidence in the firm's ability to deliver exceptional web quality in its online operations. Prior work indicates that customers' previous perceptions of offline store design influence their positive attitudes towards online channels. As a result, consumers will have a positive impression of a company's online channel if they have positive experience with the shop design in the offline channel. By cultivating cross-channel synergy, online firms that maintain a prominent level of store design in their traditional offline channels will experience seamless acceptance of their expanded online platforms (Yang, Chen, & Wei, 2015).

Within the framework of this study, "channel integration" denotes a systemic feature that impacts users' assessments of various channels and, by extension, their decisions on channel adoption. The cross-channel approach refers to the possibility of integrating various channels, which indicates the possibility of a client making a smooth transition between the various channels that are available to them. There is a phenomenon known as the halo effect, which allows favorable views that have been fostered in one channel to be transferred to another channel. The degree of channel integration increases the likelihood of this transfer of perceptions. Consequently, channel integration has the potential to improve channel performance as well as the customer experience across different channels, thereby promoting synergy across different channels. When the marketing initiatives of channels are carried out in a manner that is integrated and complementary to one another, the impact of cross-channel synergy can be magnified. Combining several channels to better fulfil client needs and utilizing numerous channels within the same firm is necessary to produce synergistic effects.

According to the results of the present research, consumers' views on the integration of offline and online channels positively affect their views on the shift from offline to online channels. (Sousa & Voss, 2012), findings support the idea that source-target similarity and compatibility improve perception transfer from one channel to another. The findings provided evidence in favor of the hypothesis put forth by Kim and Jones (2009) who stated that channel integration might potentially act as a moderating variable that influences customers' initial impressions of a newly established channel operated by a company. In recognition of the relevance of channel integration, various multichannel companies have begun their integration efforts for various channels. Numerous companies have incorporated a variety of internet elements into their offline channels, as seen by Louis Vuitton, which have built multiple aided online terminals and self-service kiosks to improve the comfort of their offline channels for their customers. According to channel integration studies, banks can support offline consumers with online banking by offering information about their online channel through self-service counters and online terminals. It can mitigate the negative effects of products being unavailable offline, maximize synergy across channels, and give offline customers useful resources.

7. Conclusion

This study produced an evaluative framework that incorporates the essential features of channel integration in customers' evaluations of store design transfer from offline to online channels. The researchers examined the current role of store design in online fashion sector firms in Pakistan and identified various challenges that require further research and improvement. Channel integration serves as a moderator, with most clients being female. The study's findings point to a strong relationship between brick-and-mortar and virtual store layouts. A middle ground between OFSD and ONSD is the idea of channel integration, which governs how the two

interact with one another. Consequently, multichannel firms must recognize the significance of channel integration in influencing behavioral intentions throughout multichannel interactions.

7.1. Managerial Contributions

The study's multiple recommendations can benefit multichannel businesses. The study's findings support the relationship between offline shop design and online construct (ONSD). A multichannel corporation must increase offline client impressions to compare the online channel to them. Both online and offline customer perceptions are vital to the success of the channel. The study's findings indicate a cross-channel influence of store design from offline to online. By demonstrating that channel integration mitigates the effect of offline consumer encounters on creating favorable online attitudes, the present study significantly contributes to the literature. Consequently, multichannel firms must recognize that channel integration influences behavioral intents in interactions across multiple channels. By maintaining a unified multichannel system, Pakistan fashion industry can improve their customers' evaluation of their marketing channels, which in turn increases customer satisfaction and the likelihood that they will repurchase through an alternative channel. To be more specific, fashion industry firms can improve their channel integration by offering uniform marketing policies, merchandise, pricing, and other information across all their various marketing channels. Additionally, they can offer delivery alternatives and customer service.

7.2. Limitations and Future Recommendations

The study possesses various limitations that necessitate future research to enhance understanding of the multichannel environment.

1. Data obtained from customers of multichannel fashion companies in Pakistan was used to validate the hypothesized relationships in the model, limiting the results' applicability outside of that specific industry. This limitation can be overcome by doing further studies that compare the relationships discussed here across different types of businesses operating in different types of retail settings, such as those dealing with electronics, mobile phones, hotels, banks, insurance, and sports organizations.
2. Moreover, we should corroborate the findings in alternative cultural contexts to assess their generalizability. Future research is essential to replicate the present results across various sectors, nations, and cultures.
3. This study also uses cross sectional method; the longitudinal study can be done in future as the behavior of customers changes from time to time.
4. In the second place, the moderating impact of channel integration in the process of the transmission of impressions that are related to channels. Multiple other variables could be investigated to determine the moderating influence that they have on the transfer of client perception. To find context-specific effects of channel integration and transference, products (low involvement vs. high involvement), customer contexts (business-to-business vs. customer-to-customer), and multichannel retailers (hedonic vs. functional) should be examined.

References

- Acquila-Natale, E., & Iglesias-Pradas, S. (2020). How to measure quality in multi-channel retailing and not die trying. *Journal of Business Research*, 109, 38-48. <https://doi.org/10.1016/j.jbusres.2019.10.041>
- Ahmed, D. M., Azhar, Z., & Mohammad, A. J. The Corporate Governance and International Standards for Accounting Role in Reducing Information Asymmetry.
- Ahmed, D. M., Azhar, Z., & Mohammad, A. J. (2024). Integrative Impact of Corporate Governance and International Standards for Accounting (IAS, IFRS) in Reducing Information Asymmetry. *Polytechnic Journal of Humanities and Social Sciences*, 5(1), 567-582.
- Ahmed, D. M., Azhar, Z., & Mohammad, A. J. (2024). The Role of Corporate Governance on Reducing Information Asymmetry: Mediating Role of International Standards for Accounting (IAS, IFRS). *Kurdish Studies*, 12(1).
- Al-hawari, M. A., & Mouakket, S. (2012). Do offline factors trigger customers' appetite for online continual usage?: A study of online reservation in the airline industry. *Asia Pacific Journal of Marketing and Logistics*, 24(4), 640-657. <https://doi.org/10.1108/13555851211259061>

- Anderson, B. S., Eshima, Y., & Hornsby, J. S. (2019). Strategic entrepreneurial behaviors: Construct and scale development. *Strategic Entrepreneurship Journal*, 13(2), 199-220. <https://doi.org/10.1002/sej.1306>
- Avery, J., Steenburgh, T. J., Deighton, J., & Caravella, M. (2012). Adding Bricks to Clicks: Predicting the Patterns of Cross-Channel Elasticities over Time. *Journal of Marketing*, 76(3), 96-111. <https://doi.org/10.1509/jm.09.0081>
- Babulal, G. M., Vivoda, J., Harmon, A., Carr, D. B., Roe, C. M., & Zikmund-Fisher, B. (2019). Older Adults' Expectations about Mortality, Driving Life and Years Left without Driving. *Journal of Gerontological Social Work*, 62(8), 912-929. <https://doi.org/10.1080/01634372.2019.1663460>
- Banat, A., & Wandebori, H. (2012). Store design and store atmosphere effect on customer sales per visit economics. *Management and Behavioral Sciences*, 84-89.
- Bartikowski, B., & Singh, N. (2014). Doing E-Business in France: Drivers of Online Trust in Business-to-Consumer Websites. *Global Business and Organizational Excellence*, 33(4), 28-36. <https://doi.org/10.1002/joe.21551>
- Beckers, J., Cárdenas, I., & Verhetsel, A. (2018). Identifying the geography of online shopping adoption in Belgium. *Journal of Retailing and Consumer Services*, 45, 33-41. <https://doi.org/10.1016/j.jretconser.2018.08.006>
- Bonsón Ponte, E., Carvajal-Trujillo, E., & Escobar-Rodríguez, T. (2015). Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents. *Tourism Management*, 47, 286-302. <https://doi.org/10.1016/j.tourman.2014.10.009>
- Borsboom, D., Van Der Maas, H. L. J., Dalege, J., Kievit, R. A., & Haig, B. D. (2021). Theory Construction Methodology: A Practical Framework for Building Theories in Psychology. *Perspectives on Psychological Science*, 16(4), 756-766. <https://doi.org/10.1177/1745691620969647>
- Carlson, J., & O'Cass, A. (2012). Optimizing the Online Channel in Professional Sport to Create Trusting and Loyal Consumers: The Role of the Professional Sports Team Brand and Service Quality. *Journal of Sport Management*, 26(6), 463-478. <https://doi.org/10.1123/jsm.26.6.463>
- Changchit, C., Cutshall, R., Lonkani, R., Pholwan, K., & Pongwiritthong, R. (2019). Determinants of Online Shopping Influencing Thai Consumer's Buying Choices. *Journal of Internet Commerce*, 18(1), 1-23. <https://doi.org/10.1080/15332861.2018.1496391>
- Cui, J.-R., Zhou, J.-Y., Xu, Z., Zhang, Z.-W., & Li, Q. (2018, 11/2018). Review of Active Power Measuring Methods for Vehicle-To-Grid (V2G). 2018 Chinese Automation Congress (CAC),
- Cyr, D. (2008). Modeling Web Site Design Across Cultures: Relationships to Trust, Satisfaction, and E-Loyalty. *Journal of Management Information Systems*, 24(4), 47-72. <https://doi.org/10.2753/MIS0742-1222240402>
- Dennis, S. (2017). Omnichannel is dead. Long live omnichannel. *Forbes*.
- Dhivya, D. S., Hariharasudan, A., Ragmoun, W., & Alfalih, A. A. (2023). ELSA as an Education 4.0 Tool for Learning Business English Communication. *Sustainability*, 15(4), 3809. <https://doi.org/10.3390/su15043809>
- Donovan, R. (1994). Store atmosphere and purchasing behavior. *Journal of Retailing*, 70(3), 283-294. [https://doi.org/10.1016/0022-4359\(94\)90037-X](https://doi.org/10.1016/0022-4359(94)90037-X)
- Essawy, M. (2019). The impacts of e-atmospherics on emotions and on the booking intentions of hotel rooms. *Tourism and Hospitality Research*, 19(1), 65-73. <https://doi.org/10.1177/1467358417692393>
- Fadhel, I. E. I., Idrus, S. Z. B. S., Abdullah, M. S. Y., Ibrahim, A. A. E. A., Omar, M., & Khred, A. (2020). A New Perspective of Web-Based Systems Quality Engineering Measure by Using Software Engineering Theory (ISO 25010): An Initial Study. *Journal of Physics: Conference Series*, 1529(2), 022004. <https://doi.org/10.1088/1742-6596/1529/2/022004>
- Famiyeh, S., Asante-Darko, D., & Kwarteng, A. (2018). Service quality, customer satisfaction, and loyalty in the banking sector: The moderating role of organizational culture. *International Journal of Quality & Reliability Management*, 35(8), 1546-1567. <https://doi.org/10.1108/IJQRM-01-2017-0008>
- Frasquet, M., & Miquel, M.-J. (2017). Do channel integration efforts pay-off in terms of online and offline customer loyalty? *International Journal of Retail & Distribution Management*, 45(7/8), 859-873. <https://doi.org/10.1108/IJRDM-10-2016-0175>
- Ganguly, B., Dash, S. B., Cyr, D., & Head, M. (2010). The effects of website design on purchase intention in online shopping: the mediating role of trust and the moderating role of culture.

- Gao, F., & Su, X. (2017). Omnichannel Retail Operations with Buy-Online-and-Pick-up-in-Store. *Management Science*, 63(8), 2478-2492. <https://doi.org/10.1287/mnsc.2016.2473>
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433. <https://doi.org/10.1007/s11747-011-0261-6>
- Hewer, P., & Howcroft, B. (1999). Consumers' channel adoption and usage in the financial services industry. *Journal of Financial Services Marketing*, 3, 344-358.
- Hult, G. T. M., Sharma, P. N., Morgeson, F. V., & Zhang, Y. (2019). Antecedents and Consequences of Customer Satisfaction: Do They Differ Across Online and Offline Purchases? *Journal of Retailing*, 95(1), 10-23. <https://doi.org/10.1016/j.jretai.2018.10.003>
- Ke, X., & Wagner, C. (2022). Global pandemic compels sport to move to esports: understanding from brand extension perspective. *Managing Sport and Leisure*, 27(1-2), 152-157. <https://doi.org/10.1080/23750472.2020.1792801>
- Kim, J., & Lee, H.-H. (2014). "I Love the Value From Shopping at Mass Merchants!" Consequences of Multichannel Shopping Value. *Journal of Marketing Channels*, 21(1), 18-30. <https://doi.org/10.1080/1046669X.2013.830801>
- Kim, S., & Jones, C. (2009). Online shopping and moderating role of offline brand trust. *Direct Marketing: An International Journal*, 3(4), 282-300. <https://doi.org/10.1108/17505930911000874>
- Kotni, V. (2016). Impact of store layout design on customer shopping experience: A study of FMCG retail outlets in Hyderabad, India. VV Devi Prasad Kotni (2016). Impact of Store Layout Design on Customer Shopping Experience: A Study of FMCG Retail Outlets in Hyderabad, India. Proceedings of Annual Australian Business and Social Science Research Conference,
- Krasonikolakis, I., Vrechopoulos, A., Pouloudi, A., & Dimitriadis, S. (2018). Store layout effects on consumer behavior in 3D online stores. *European Journal of Marketing*, 52(5/6), 1223-1256. <https://doi.org/10.1108/EJM-03-2015-0183>
- Li, M., & Hsu, C. H. C. (2018). Customer participation in services and employee innovative behavior: The mediating role of interpersonal trust. *International Journal of Contemporary Hospitality Management*, 30(4), 2112-2131. <https://doi.org/10.1108/IJCHM-08-2016-0465>
- Loureiro, S. M. C., & Roschk, H. (2014). Differential effects of atmospheric cues on emotions and loyalty intention with respect to age under online/offline environment. *Journal of Retailing and Consumer Services*, 21(2), 211-219. <https://doi.org/10.1016/j.jretconser.2013.09.001>
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and Validating Trust Measures for e-Commerce: An Integrative Typology. *Information Systems Research*, 13(3), 334-359. <https://doi.org/10.1287/isre.13.3.334.81>
- Mohammad, A. J. (2015a). *The effect of audit committee and external auditor characteristics on financial reporting quality* Master Thesis, Universiti Utara Malaysia].
- Mohammad, A. J. (2015b). Human capital disclosures: Evidence from Kurdistan. *European Journal of Accounting Auditing and Finance Research*, 3(3), 21-31.
- Mohammad, A. J., & Ahmed, D. M. (2017). The impact of audit committee and external auditor characteristics on financial reporting quality among Malaysian firms. *Research Journal of Finance and Accounting*, 8(13), 9-16.
- Montaguti, E., Neslin, S. A., & Valentini, S. (2016). Can Marketing Campaigns Induce Multichannel Buying and More Profitable Customers? A Field Experiment. *Marketing Science*, 35(2), 201-217. <https://doi.org/10.1287/mksc.2015.0923>
- Nguyen, L., Nguyen, T. H., & Tan, T. K. P. (2021). An empirical study of Customers' satisfaction and repurchase intention on online shopping in Vietnam. *The Journal of Asian Finance, Economics and Business*, 8(1), 971-983.
- Nilashi, M., Jannach, D., Ibrahim, O. B., Esfahani, M. D., & Ahmadi, H. (2016). Recommendation quality, transparency, and website quality for trust-building in recommendation agents. *Electronic Commerce Research and Applications*, 19, 70-84. <https://doi.org/10.1016/j.elerap.2016.09.003>
- Pappas, I. O., Kourouthanassis, P. E., Giannakos, M. N., & Lekakos, G. (2017). The interplay of online shopping motivations and experiential factors on personalized e-commerce: A

- complexity theory approach. *Telematics and Informatics*, 34(5), 730-742. <https://doi.org/10.1016/j.tele.2016.08.021>
- Pauwels, K., & Neslin, S. A. (2015). Building With Bricks and Mortar: The Revenue Impact of Opening Physical Stores in a Multichannel Environment. *Journal of Retailing*, 91(2), 182-197. <https://doi.org/10.1016/j.jretai.2015.02.001>
- Plunkett, D., & Reid, O. (2012). Detail in contemporary retail design. (No Title).
- Poon, W. C. (2007). Users' adoption of e-banking services: the Malaysian perspective. *Journal of Business & Industrial Marketing*, 23(1), 59-69. <https://doi.org/10.1108/08858620810841498>
- Ragmoun, W. (2023). Ecological footprint, natural resource rent, and industrial production in MENA region: Empirical evidence using the SDM model. *Heliyon*, 9(9), e20060. <https://doi.org/10.1016/j.heliyon.2023.e20060>
- Ragmoun, W., & Alfalih, A. A. (2024). Inclusive Special Needs Education and Happiness of Students with Physical Disabilities in Saudi Arabia: The Role of School Satisfaction and Self-Concept. *Education Sciences*, 14(2), 209. <https://doi.org/10.3390/educsci14020209>
- Ragmoun, W., & Ben-Salha, O. (2024). The contribution of green technological innovation, clean energy, and oil rents in improving the load capacity factor and achieving SDG13 in Saudi Arabia. *International Journal of Renewable Energy Development*, 13(6), 1125-1135. <https://doi.org/10.61435/ijred.2024.60683>
- Ratten, V., & Ratten, H. (2007). Social cognitive theory in technological innovations. *European Journal of Innovation Management*, 10(1), 90-108. <https://doi.org/10.1108/14601060710720564>
- Rizwan, M., Khan, W. A., Azhar, M. S., & Sarwar, S. (2021). The role of channel integration in customers' perceptions transfer from offline channel to online channel service quality. *Journal of Management Practices, Humanities and Social Sciences*, 5(2), 60-73.
- Santos, J. (2003). E-service quality: a model of virtual service quality dimensions. *Managing Service Quality: An International Journal*, 13(3), 233-246. <https://doi.org/10.1108/09604520310476490>
- Sousa, R., & Voss, C. (2012). The impacts of e-service quality on customer behaviour in multi-channel e-services. *Total Quality Management & Business Excellence*, 23(7-8), 789-806. <https://doi.org/10.1080/14783363.2012.661139>
- Strebel, J., Erdem, T., & Swait, J. (2004). Consumer search in high technology markets: Exploring the use of traditional information channels. *Journal of consumer psychology*, 14(1-2), 96-104. https://doi.org/https://doi.org/10.1207/s15327663jcp1401&2_11
- Urban, G. L., Sultan, F., & Qualls, W. J. (2000). Placing trust at the center of your Internet strategy. *Sloan management review*, 42(1), 39-48.
- Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From Multi-Channel Retailing to Omni-Channel Retailing. *Journal of Retailing*, 91(2), 174-181. <https://doi.org/10.1016/j.jretai.2015.02.005>
- Wells, Valacich, & Hess. (2011). What Signal Are You Sending? How Website Quality Influences Perceptions of Product Quality and Purchase Intentions. *MIS Quarterly*, 35(2), 373. <https://doi.org/10.2307/23044048>
- Winnie, P.-M. W. (2014). The Effects of Website Quality on Customer e-Loyalty: The Mediating Effect of Trustworthiness. *International Journal of Academic Research in Business and Social Sciences*, 4(3), Pages 19-41. <https://doi.org/10.6007/IJARBS/v4-i3/670>
- Wu, H.-C. (2014). The effects of customer satisfaction, perceived value, corporate image and service quality on behavioral intentions in gaming establishments. *Asia Pacific Journal of Marketing and Logistics*, 26(4), 540-565. <https://doi.org/10.1108/APJML-03-2014-0049>
- Wu, I.-L. (2013). The antecedents of customer satisfaction and its link to complaint intentions in online shopping: An integration of justice, technology, and trust. *International Journal of Information Management*, 33(1), 166-176. <https://doi.org/10.1016/j.ijinfomgt.2012.09.001>
- Wu, K.-W. (2011). Customer Loyalty Explained by Electronic Recovery Service Quality: Implications of the Customer Relationship Re-Establishment for Consumer Electronics E-Tailers. *Contemporary Management Research*, 7(1). <https://doi.org/10.7903/cmr.1101>
- Xuan, W. (2007). *Factors affecting the achievement of success in e-tailing in China's retail industry: a case study of the Shanghai Brilliance Group Southern Cross University*].
- Yang, S., Chen, Y., & Wei, J. (2015). Understanding Consumers' Web-Mobile Shopping Extension Behavior: A Trust Transfer Perspective. *Journal of Computer Information Systems*, 55(2), 78-87. <https://doi.org/10.1080/08874417.2015.11645759>