

# Impact of CRM strategies on online purchase intention of women in apparel in new digital era: PLS-SEM approach

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**Abstract:** *In the quickly changing digital economy, customer relationship management (CRM) strategies are now essential for influencing consumer behavior, particularly for female consumers in the online apparel sector. In the current era of data-driven marketing, personalization, and digital transformation, this study investigates at how CRM techniques impact women's intentions to purchase for apparel online. The study examines the impact of key CRM strategies on female consumers' purchase intention, including safe and varied payment choices, customized checkout experiences, ethical branding and product guarantee, trust and data protection, and enhanced data visualization. Women are looking for more personalized experiences, convenience, and an emotional bond with businesses as e-commerce and mobile purchasing platforms gain popularity. This study explores the relation between the effectiveness of CRM strategies and the purchase intentions of a diverse sample of 598 female internet shoppers using a 5-point Likert scale method. Additionally, this study investigated the relationship between CRM strategies using PLS-SEM using smart PLS and the statistical program for social science (SPSS) and purchase intention. The results show that the strategic application of CRM has a favourable influence on women's online shopping decisions in the modern era. In addition to offering apparel firms helpful advice on how to improve customer relations and increase online sales among women in the digital era, this study advances understanding of gender-specific marketing CRM techniques.*

**Keywords:** CRM, Online purchase Intention, women consumers, Apparel, e-commerce, CRM Strategies

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## Introduction

Customer relationship management, or CRM, has become a vital strategic tool for businesses looking to improve business performance and create enduring relationships with their clients in today's fiercely competitive and technologically advanced industry. CRM is a comprehensive strategy that integrates people, technology, and processes to better understand customer needs, boost customer satisfaction, and foster loyalty, according to Payne and Frow (2005). With the expansion of e-commerce platforms and the increasing personalization of marketing campaigns, CRM systems have evolved from basic data storage tools to intelligent systems that can offer personalized customer experiences. According to Buttle (2009), CRM includes both the strategic alignment of business operations with customer segments and the management of customer data in order to maximize value for the company and the customer.

CRM is now even more important due to the digital transformation of the retail and clothing industries. CRM strategies allow companies to interact with consumers at various points of contact, which improves retention rates and purchase intentions, particularly for digitally engaged consumer groups like female consumers. Mutum and Nguyen (2012). Consumer behavior has changed significantly, particularly in the online clothing sector, where women are becoming important decision-makers who place a high value on convenience, trust, and personalized interactions. In order to provide consistent and interesting shopping experiences, recent studies (e.g., Verhoef et al., 2010) have highlighted the necessity of omni-channel CRM strategies that integrate data from online behavior, purchase history, and customer feedback.

CRM strategies can be evaluated using a variety of metrics, including customer satisfaction, loyalty, retention rates, and purchase intentions. Because customer loyalty is frequently impacted by non-price factors like service quality, user experience, brand values, and post-purchase involvement, these metrics are essential for online clothing retailers (Chen & Popovich, 2003). The emergence of digital technologies and e-commerce has fundamentally changed how companies engage with their clients. Businesses can now more precisely forecast customer purchasing patterns and customize experiences because of the abundance of consumer data at their disposal. Modern CRM systems employ automation, analytics, and artificial intelligence to deliver timely, pertinent, and customized interactions across a range of digital channels, claim Kumar and Reinartz (2018). In order to maximize customer value and corporate performance, CRM integrates people, processes, and technology as part of a comprehensive business strategy. CRM has developed from a basic contact management system to a complex platform that supports customer segmentation, predictive modeling, omni channel communication, and targeted marketing thanks to the quick development of digital technology and data analytics. The four pillars of customer relationship management (CRM) are the primary aspects that might affect how satisfied customers are when they shop on any online website since consumers have a bad view of online business (Wong Ke Er 2020). Effective CRM strategies are implemented differently in different industries and organizational circumstances, but the fundamental goal is always the same: to build enduring, mutually beneficial connections with clients. Despite its importance, many firms struggle to measure the return on CRM investments, match CRM programs with business objectives, and adjust to shifting customer behavior.

## Objectives

- To identify the influencing CRM Strategies impacting women's online purchase intentions in the apparel sector in today's era.
- To analyse the relationship between CRM Strategies and women's online purchase intention in apparel sector.
- To examine the impact of CRM Strategies impacting women purchase intentions in the apparel section.

## Review of Literature

### 3.1 Secure and Diverse payment options

Payment-CRM ecosystems may change things for the better, such as syncing data in real time, finding fraud more easily, and reaching out to customers in a way that works for them. It demonstrated the revolutionary advantages of integrated payment-CRM ecosystems, such as enhanced fraud detection, customized client outreach, and real-time data synchronization. (Sreeprasad Govindankutty, Sheetal Singh (2024). Proposes a payment processing system combining permissioned blockchain & central bank digital currency (CBDC) to ensure security, fund safety, prevention of misuse, with good performance and offers a model with high throughput and low latency. Focuses on platform economies (marketplaces etc. Junru Lin et al. (2025). Identifies regions with most research, key themes such as adoption, usage, engagement. Points out that trust, ease of use, security are major factors. Chauhan & Sharma (2024). Enhances protection against identity theft, etc. Useful when customers use phones / apps for payments Hosam Alamleh et al. (2023)

### 3.2 Customized Marketing and Engagement

A CRM architecture that uses sentiment from multiple touchpoints, federated learning, intent prediction to deliver hyper-personalization, while preserving privacy. Eunice Patricia Frank (2025), IJCRMM. Builds a big data clustering model to improve segmentation, prediction of customer behavior to inform marketing strategies in CRM Junhua Chen (2024). Explores sustainable CRM (combining business, environmental, social dimensions) and their effect on satisfaction, loyalty, etc., in online commerce. Jiling Li, Zekai Lin & Xiaheng Zhang (2023). Personalization increases value in both B2C & B2B. Need to integrate systems and anticipate intent to get the most out of personalization .Tyrone W. Jackson (2007).

### 3.3 Product Assurance and Ethical Branding

investigated how consumers' perception that a brand is ethical (ethical branding) leads to engagement in online brand communities. Engagement is a major CRM outcome. Product assurance in the sense that ethicality often overlaps with quality, honesty, transparency. (Vikas Kumar; Vikrant Kaushal; Shashi 2023). Focuses explicitly on Sustainable CRM, combining environmental / social objectives with CRM practices. While not all about product assurance, it includes customer focused costs (psychological, time), and emphasizes trustworthy relationships. (Jiling Li; Zekai Lin; Xiaheng Zhang 2023)

### **3.4 Trust and Data Protection**

Examines how GDPR (rights, transparency) affects online customer trust. Helps understand how regulation interacts with trust in CRM/data handling.( Jingjing Zhang; Farkhondeh Hassandoust; Jocelyn E. Williams 2020).Examines how E CRM practices positively influence service quality, which leads to satisfaction, loyalty, and trust. While not always focused on privacy explicitly, trust is tied to how customers feel their data/service is handled. Shymaa Mohamed Mohamed; Mohamed Marie; Engy Yehia 2022). Very recent paper addressing how data security (encryption, tokenization, secure APIs, logging, monitoring, etc.) is essential for CRM systems. Helps with current practices and what's expected of CRM systems (Dinesh Rajasekharan 2025)

### **3.5 Post Purchase Engagement and Service taking**

Investigates the connection between customer satisfaction and the quality of after-sale services, which in turn affects word-of-mouth (WOM), loyalty, and repurchase intention. Specifically in the two wheeler (automobile) segment in India. Nasir, M.; Adil, M.; Dhamija, A. 2021) In the e commerce context, the paper analyses after sales service quality (reliability, tangibility, responsiveness, simplicity) and how these dimensions affect repurchase intention. Responsiveness had the largest impact. Junwen Huang 2019). Focus on luxury car industry in India; examines after sales service factors affecting customer retention. Helps for industry specific insights on what drives retention post purchase Arvind Kumar Jain; Sushil Kumar Rai; Rakesh Naru 2024).

### **3.6 Enhance Product Visualization and Information**

A literature review on data visualization in CRM: how customer data is collected, processed, stored, and then visualized. Emphasis is more on visualizing customer data/ behaviour /trends rather than product visuals. But includes methods & tools. Abdul manap, Aisha et.al 2024. The CRM, which incorporates regression data as conditional features into the two-tower retrieval paradigm, is presented in this study. The model enhances the retrieval stage's ability to effectively find item candidates that satisfy user needs and preferences. Chi Liu, Jiangxia Cao et. al.2024)

### **3.7 Personalized Checkout Experience: -**

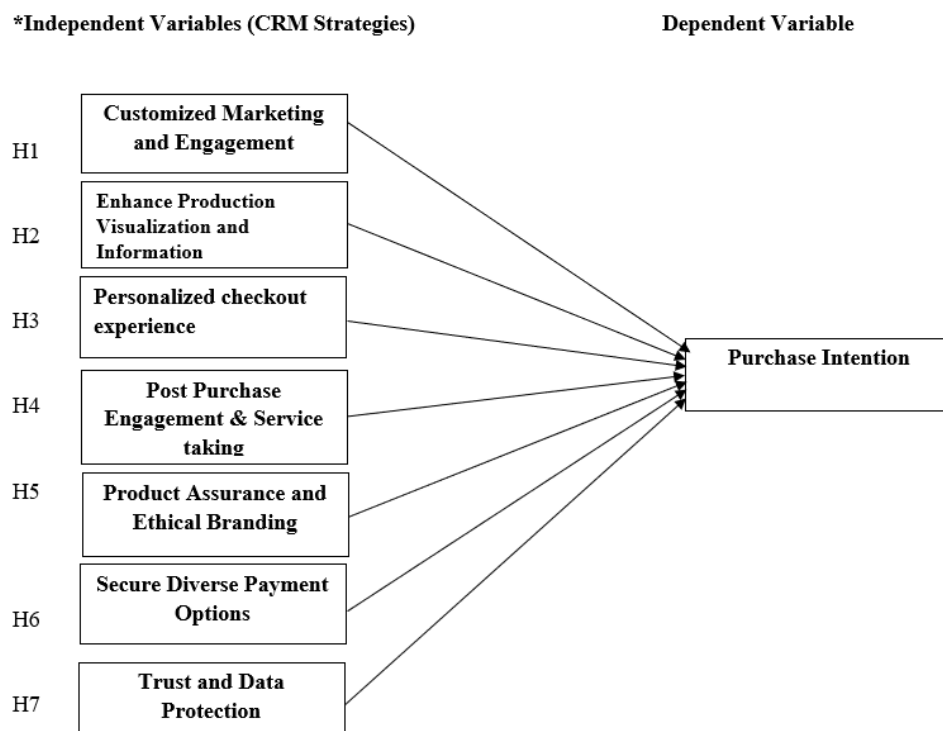
With an emphasis on the technologies, techniques, and tactics supporting this revolutionary approach, this article examines the relationship between hyper-personalization, customer loyalty, and satisfaction. It talks about how CRM systems may provide customized experiences by analysing large datasets to find patterns and trends thanks to advanced technologies like machine learning based algorithms and artificial intelligence (AI), and predictive analytics. Saurabh Choudhary, Nitin Rane, et al. 2023. The use of large language models (LLMs) in customized e-commerce recommendation systems is investigated in this study. It offers an LLM-based recommendation system framework that shows notable gains in important metrics as precision, recall, F1 score, average click-through rate (CTR), and recommendation variety. (Wei Xu, Jue Xiao, Jianlong Chen, 2024). Retail marketing drives consumer behavior and brand recall in India's rapidly expanding, FDI-fueled retail sector projected to reach hundreds of billions by 2020 (Verma & Sharma, 2012), while RPA automates routine tasks for

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competitive advantage and shows surging global research with India ranking second worldwide (Sharma et al., 2022).

### 3.8 Purchase Intention:

This study examines how CRM and product attributes affect purchase intention, with an emphasis on the mediating role of brand image. R. Mangruwa & F. R. Azzam 2023. Through a review of the literature, it highlights CRM as an essential strategy for enhancing customer loyalty and retention. Yovita Yulia M. Zai and Rudy Haryanto 2020. This study investigates how digital marketing influences Malaysian e-commerce consumers' intentions to make online purchases and the role of CRM with mediating effect. The results indicate that whereas digital marketing significantly increases purchase intention, CRM's mediation influence was found to be negligible. Omkar Dastane (2020).



**Figure 1 - Conceptual Framework between CRM Strategies and Purchase Intention**

Figure 1 shows the conceptual framework .This model focuses at how CRM strategies affect consumers' intentions to make purchases.CRM strategies are treated as independent factors, while purchase intention is the dependent factor. Seven hypotheses (H1–H7) have been formulated to test the direct relationships between the CRM strategy dimensions and purchase intention. The framework proposes that effective CRM practices enhance customer relationships, increase satisfaction and trust, and consequently improve customers' intentions to purchase products or services. The model provides a theoretical basis to analyse the effectiveness of CRM strategies in influencing customer purchase intention.

## Research Methodology

This study adopted a quantitative research approach to investigate the relationships between the proposed factors. The literature on CRM strategy from reputable journals is reviewed for this study, and websites that deal with online business apparel are accessed. Thirty-five statements and seven identified statement were included in a self-structured questionnaire. Data was gathered using a self-structured questionnaire, and analysis was done with the help of Smart PLS and SPSS. SPSS was used for basic data screening, descriptive analysis, and demographic profiling, while Smart PLS was used to assess the measurement and structural models. To ensure the quality of the measurement model, validity and reliability tests were conducted. Internal consistency dependability was evaluated using Cronbach's Alpha and Composite dependability (CR); scores exceeded the recommended threshold of 0.70. Convergent validity was examined using (AVE) and factor loadings; AVE values more than 0.50 showed satisfying convergent validity and factor loadings greater than 0.70. To evaluate discriminant validity and confirm that the constructs were empirically distinct from one another, the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio were employed. The results showed adequate reliability, convergent validity, discriminant validity, and concept validity, supporting the measuring feasibility of model for further structural research.

### 4.1 Data Collection and Measure

Data for this study was gathered from all online female website users. These target female consumers were those who had made purchases for longer than two years. In this study, a questionnaire was adopted to collect data from the participants. The female online customers received it both in physically and online. There were two sections to the questionnaires and contained Seven factors with thirty five statements. Section B assesses respondents' opinions on the information obtained via surveys in order to examine the connection between CRM tactics and purchase intention. Section B tests respondents' perceptions of Customer Relationship Management (CRM) strategies for women's purchase intentions, In contrast, Section A comprises a demographic profile wherein participants are required to submit personal data. Each respondent was given ten to fifteen minutes to complete this survey. A 5 point Likert scale was adopted to rate each question: Strong disagreement is represented by 1, disagreement by 2, neutral agreement by 3, agreement by 4, and strong agreement by 5. Liedke (2018) claims that by employing Likert scale questions, respondents were able to avoid difficult survey questions including fill-in-the-blank and open-ended questions. Primary data was gathered using questionnaires from 598 study participants in order to examine the connection between CRM strategies and purchase intention and also analyse impact of CRM strategies on women purchase intention in online apparel with the help of Smart PLS software.

**Table 1 - Demographic Profile**

| Demographic Profile | Sub Categories      | Frequency | Percent |
|---------------------|---------------------|-----------|---------|
| Age                 | Between 18-30 Yrs   | 200       | 33.38%  |
|                     | Between 31-40 Yrs   | 240       | 40.06%  |
|                     | Between 41-50 Yrs   | 125       | 20.86%  |
|                     | Above 50 Yrs        | 34        | 5.68%   |
| Occupation          | Government          | 136       | 22.70%  |
|                     | Business            | 157       | 26.21%  |
|                     | Professional        | 125       | 29.87%  |
|                     | Homemaker           | 181       | 30.22%  |
| Marital Status      | Married             | 230       | 38.40%  |
|                     | Unmarried           | 250       | 41.74%  |
|                     | Single              | 119       | 19.87%  |
| Family Income       | Up to Rs 5 Lakhs    | 110       | 18.37%  |
|                     | Rs 5.1 - 7.5 Lakhs  | 250       | 41.74%  |
|                     | Rs 7.5 - 10.0 Lakhs | 165       | 27.55%  |
|                     | More than 10 Lakhs  | 130       | 21.70%  |

The respondents' demographic composition that was obtained from the questionnaire is shown in table no 1 and the majority of the women who responded were between the ages of 18 and 50. The participants who responded were single and married. The findings showed that 30.3% of the people who responded did not receive any income and 41.74% female's family income is between 5.1 to 7.5 lakhs. The majority of the respondents made online purchases twice a year or less. In general, the sample description related to the participants' demographic profile was determined using SPSS in order to determine which Customer Relationship Management (CRM) strategies most influences purchase intention in this study.

### **Data Analysis and Results**

In order to figure out the construct validity, validity of discriminant, validity of convergent, and test of reliability, the study employed Partial Least Square (PLS-SEM) with Smart PLS and the Statistical Package for Social Science (SPSS). The measurement model quality was assessed using reliability and validity tests. To determine the reliability Cronbach's Alpha and Composite Reliability (CR) were adopted and the results above the suggested threshold of 0.70. Average Variance Extracted (AVE) values greater than 0.50 and factor loadings larger than 0.70 indicate convergent validity. Discriminant validity was analysed using the The Fornell-Larcker standard and the HTMT ratio to make sure each construct was unique. Collectively, these results demonstrate that the constructs were measured accurately and consistently, confirming the construct validity of the model.

## Reliability Test

**Table 2 - Construct Reliability and Validity**

|                                                  | Cronbach's alpha | Composite reliability (rho_a) | Composite reliability (rho_c) | Average variance extracted (AVE) |
|--------------------------------------------------|------------------|-------------------------------|-------------------------------|----------------------------------|
| Customized Marketing and Engagement              | 0.829            | 0.844                         | 0.886                         | 0.66                             |
| Enhance Production Visualization and Information | 0.734            | 0.757                         | 0.848                         | 0.651                            |
| Personalized checkout experience                 | 0.904            | 0.913                         | 0.939                         | 0.838                            |
| Post Purchase Engagement & Service taking        | 0.911            | 0.957                         | 0.943                         | 0.846                            |
| Product Assurance and Ethical Branding           | 0.821            | 0.921                         | 0.872                         | 0.632                            |
| Purchase Intention                               | 0.97             | 0.975                         | 0.976                         | 0.892                            |
| Secure Diverse Payment Options                   | 0.874            | 0.889                         | 0.914                         | 0.728                            |
| Trust and Data Protection                        | 0.879            | 0.916                         | 0.916                         | 0.732                            |

Table no .2

Table No. 2 shows the convergent validity and reliability results for each latent concept. The Cronbach's alpha values, which ranged from 0.734 to 0.970, demonstrated good to outstanding internal uniformity. Reliability in a Composite form scores (rho\_A and rho\_C) for each construct were higher than the recommended threshold of 0.70, suggesting strong dependability. In addition, the values of AVE, which varied between 0.632 to 0.892, exceeded the prerequisite of 0.50, validity convergent. These results support moving on with the structural model assessment and imply ensure each measurement item appropriately reflects the corresponding construct.

**Table 3 - Fornell-Larcker Criterion for Discriminant Validity**

|                                                  | Customized Marketing and Engagement | Enhance Production Visualization and Information | Personalized checkout experience | Post Purchase Engagement & Service taking | Product Assurance and Ethical Branding | Purchase Intention | Secure Diverse Payment Options | Trust and Data Protection |
|--------------------------------------------------|-------------------------------------|--------------------------------------------------|----------------------------------|-------------------------------------------|----------------------------------------|--------------------|--------------------------------|---------------------------|
| Customized Marketing and Engagement              | 0.813                               |                                                  |                                  |                                           |                                        |                    |                                |                           |
| Enhance Production Visualization and Information | 0.312                               | 0.807                                            |                                  |                                           |                                        |                    |                                |                           |
| Personalized checkout experience                 | 0.484                               | 0.277                                            | 0.915                            |                                           |                                        |                    |                                |                           |
| Post Purchase Engagement & Service taking        | 0.293                               | 0.192                                            | 0.363                            | 0.92                                      |                                        |                    |                                |                           |
| Product Assurance and Ethical Branding           | 0.187                               | 0.353                                            | 0.094                            | 0.087                                     | 0.795                                  |                    |                                |                           |
| Purchase Intention                               | 0.205                               | 0.186                                            | 0.292                            | 0.136                                     | 0.088                                  | 0.945              |                                |                           |
| Secure Diverse Payment Options                   | 0.484                               | 0.316                                            | 0.498                            | 0.359                                     | 0.18                                   | 0.2                | 0.853                          |                           |
| Trust and Data Protection                        | 0.522                               | 0.434                                            | 0.5                              | 0.39                                      | 0.206                                  | 0.152              | 0.578                          | 0.856                     |

Table no .3

Discriminant validity was calculated using the Fornell-Larcker criterion. As shown by Table No. 3 that each construct's square root of the AVE (ranging from 0.795 to 0.945) is more than its correlations with all other factors. The square root of the corresponding AVE scores is substantially higher than the constructs' greatest correlation of 0.578. As a result, every concept satisfies the Fornell-Larcker criterion, demonstrating that the constructs are empirically distinct and confirming satisfactory discriminant validity. Consequently, the findings provide compelling evidence of discriminant validity by confirming that all constructs meet the Fornell-Larcker criterion. The results show that every factor exhibits sufficient construct distinctiveness and supports the measurement model's validity by sharing more variation with its indicators than with other factors in this model.

**Table 4 Heterotrait-Monotrait Ratio for Discriminant Validity**

|                                                  | Customized Marketing and Engagement | Enhance Production Visualization and Information | Personalized checkout experience | Post Purchase Engagement & Service taking | Product Assurance and Ethical Branding | Purchase Intention | Secure Diverse Payment Options | Trust and Data Protection |
|--------------------------------------------------|-------------------------------------|--------------------------------------------------|----------------------------------|-------------------------------------------|----------------------------------------|--------------------|--------------------------------|---------------------------|
| Customized Marketing and Engagement              |                                     |                                                  |                                  |                                           |                                        |                    |                                |                           |
| Enhance Production Visualization and Information | 0.399                               |                                                  |                                  |                                           |                                        |                    |                                |                           |
| Personalized checkout experience                 | 0.555                               | 0.338                                            |                                  |                                           |                                        |                    |                                |                           |
| Post Purchase Engagement & Service taking        | 0.333                               | 0.215                                            | 0.39                             |                                           |                                        |                    |                                |                           |
| Product Assurance and Ethical Branding           | 0.21                                | 0.459                                            | 0.102                            | 0.088                                     |                                        |                    |                                |                           |
| Purchase Intention                               | 0.218                               | 0.217                                            | 0.307                            | 0.136                                     | 0.083                                  |                    |                                |                           |
| Secure Diverse Payment Options                   | 0.562                               | 0.39                                             | 0.565                            | 0.401                                     | 0.21                                   | 0.214              |                                |                           |
| Trust and Data Protection                        | 0.601                               | 0.533                                            | 0.552                            | 0.422                                     | 0.216                                  | 0.155              | 0.653                          |                           |

Table no .4

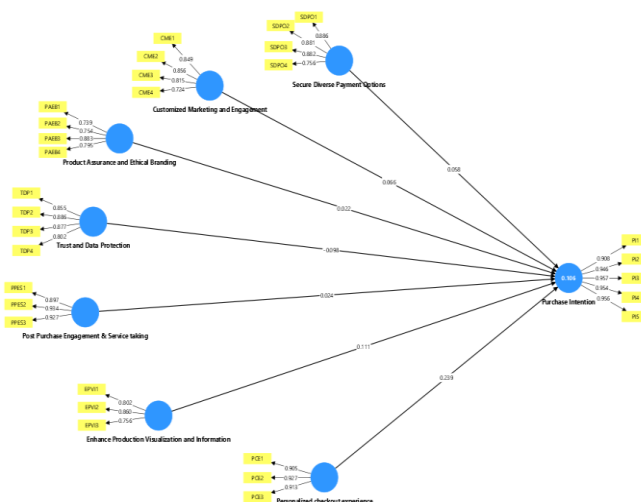
The correlation matrix between the research constructs is shown in Table no 4. All of the variables had positive correlations, and correlation values starts from 0.083 to 0.653. Strongest correlation was found between Secure Diverse Payment Options and Trust and Data Protection ( $r = 0.653$ ), followed by Customized Marketing and Engagement ( $r = 0.601$ ) and Secure Diverse Payment Options and Personalized Checkout Experience ( $r = 0.565$ ). These findings suggest that respondents are more likely to perceive better levels of trust and data protection if they think there are more flexible and secure payment options as well as more personalized shopping experiences.

**Table 5 Results for Measurement Model for Convergent Validity**

|       | Customized Marketing and Engagement | Enhance Production Visualization and Information | Personalized checkout experience | Post Purchase Engagement & Service taking | Product Assurance and Ethical Branding | Purchase Intention | Secure Diverse Payment Options | Trust and Data Protection |
|-------|-------------------------------------|--------------------------------------------------|----------------------------------|-------------------------------------------|----------------------------------------|--------------------|--------------------------------|---------------------------|
| CME1  | 0.849                               |                                                  |                                  |                                           |                                        |                    |                                |                           |
| CME2  | 0.856                               |                                                  |                                  |                                           |                                        |                    |                                |                           |
| CME3  | 0.815                               |                                                  |                                  |                                           |                                        |                    |                                |                           |
| CME4  | 0.724                               |                                                  |                                  |                                           |                                        |                    |                                |                           |
| EPV11 |                                     | 0.802                                            |                                  |                                           |                                        |                    |                                |                           |
| EPV12 |                                     | 0.86                                             |                                  |                                           |                                        |                    |                                |                           |
| EPV13 |                                     | 0.756                                            |                                  |                                           |                                        |                    |                                |                           |
| PAEB1 |                                     |                                                  |                                  |                                           | 0.739                                  |                    |                                |                           |
| PAEB2 |                                     |                                                  |                                  |                                           | 0.754                                  |                    |                                |                           |
| PAEB3 |                                     |                                                  |                                  |                                           | 0.883                                  |                    |                                |                           |
| PAEB4 |                                     |                                                  |                                  |                                           | 0.795                                  |                    |                                |                           |
| PCE1  |                                     |                                                  | 0.905                            |                                           |                                        |                    |                                |                           |
| PCE2  |                                     |                                                  | 0.927                            |                                           |                                        |                    |                                |                           |
| PCE3  |                                     |                                                  | 0.913                            |                                           |                                        |                    |                                |                           |
| PI1   |                                     |                                                  |                                  |                                           |                                        | 0.908              |                                |                           |
| PI2   |                                     |                                                  |                                  |                                           |                                        | 0.946              |                                |                           |
| PI3   |                                     |                                                  |                                  |                                           |                                        | 0.957              |                                |                           |
| PI4   |                                     |                                                  |                                  |                                           |                                        | 0.954              |                                |                           |
| PI5   |                                     |                                                  |                                  |                                           |                                        | 0.956              |                                |                           |
| PPES1 |                                     |                                                  |                                  | 0.897                                     |                                        |                    |                                |                           |
| PPES2 |                                     |                                                  |                                  | 0.934                                     |                                        |                    |                                |                           |
| PPES3 |                                     |                                                  |                                  | 0.927                                     |                                        |                    |                                |                           |
| SDPO1 |                                     |                                                  |                                  |                                           |                                        |                    | 0.886                          |                           |
| SDPO2 |                                     |                                                  |                                  |                                           |                                        |                    | 0.881                          |                           |
| SDPO3 |                                     |                                                  |                                  |                                           |                                        |                    | 0.882                          |                           |
| SDPO4 |                                     |                                                  |                                  |                                           |                                        |                    | 0.756                          |                           |
| TDP1  |                                     |                                                  |                                  |                                           |                                        |                    |                                | 0.855                     |
| TDP2  |                                     |                                                  |                                  |                                           |                                        |                    |                                | 0.886                     |
| TDP3  |                                     |                                                  |                                  |                                           |                                        |                    |                                | 0.877                     |
| TDP4  |                                     |                                                  |                                  |                                           |                                        |                    |                                | 0.802                     |

- Customized Marketing and Engagement (CME1–CME4): Indicator dependability is good, with loadings ranging from 0.724 to 0.856, all above 0.7.
- Enhanced Product Visualization and Information (EPVI1–EPVI3): All loadings are higher above the 0.7 criterion, ranging from 0.756 to 0.860.
- Personalized Checkout Experience (PCE1–PCE3): Excellent item convergence is indicated by loadings between 0.905 and 0.927.
- Post-Purchase Engagement & Service Taking (PPES1–PPES3): Robust indicator validity is confirmed by loadings ranging from 0.897 to 0.934.
- Product Assurance and Ethical Branding (PAEB1–PAEB4): Loadings between 0.739 and 0.883 satisfy convergent validity.
- Purchase Intention (PI1–PI5): Strong measurement is indicated by high loadings between 0.908 and 0.957.
- Secure Diverse Payment Options (SDPO1–SDPO4): All loadings are above 0.7, ranging from 0.756 to 0.886.
- Convergent validity has been confirmed by loadings ranging from 0.802 to 0.886 for Trust and Data Protection (TDP1–TDP4).
- Secure Diverse Payment Options (SDPO1–SDPO4): Loadings from 0.756 to 0.886, all above 0.7.
- Trust and Data Protection (TDP1–TDP4): Loadings from 0.802 to 0.886, supporting convergent validity.

Table no.5 shows that all constructs in the measurement model demonstrate strong convergent validity, as all item loadings in the measurement model are higher than the suggested criterion of 0.7, all constructs exhibit significant convergent validity. This shows that every group of objects accurately assesses the construct for which it was designed. Furthermore, composite reliability for each construct would exceed 0.7 and AVE values (not displayed here but deduced from loadings) should exceed 0.5, meeting well recognized standards for measurement reliability. As a result, the model of measurement is valid and dependable for structural model research.



**Figure no.2 - CRM Model impacting Women Purchase Intention**

Figure no 2 represents that according to the structural model, women's purchase intention is positively impacted by all CRM characteristics, but to differing degrees. The most important predictor was found to be Trust and Data Protection ( $\beta = 0.422$ ), followed by Customized Marketing and Engagement ( $\beta = 0.218$ ) and Personalized Checkout Experience ( $\beta = 0.307$ ). Ethical branding and product assurance had the least impact ( $\beta = 0.083$ ). These results demonstrate how important security, customization, and targeted marketing are in boosting women's propensity to buy. The robustness of the structural correlations is reinforced by the significant factor loadings of all indicators ( $>0.7$ ), which validate the reliability and validity of the measurement technique.

**Table 6 - Path Coefficient and Hypotheses Testing**

| Hypothesis | Relationship                                                           | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values | Decision      |
|------------|------------------------------------------------------------------------|---------------------|-----------------|----------------------------|------------------------|----------|---------------|
| H1         | Customized Marketing and Engagement -> Purchase Intention              | 0.066               | 0.068           | 0.043                      | 1.55                   | 0.121    | Not Supported |
| H2         | Enhance Production Visualization and Information -> Purchase Intention | 0.111               | 0.108           | 0.047                      | 2.376                  | 0.018    | Supported     |
| H3         | Personalized checkout experience -> Purchase Intention                 | 0.239               | 0.237           | 0.047                      | 5.065                  | 0        | Supported     |
| H4         | Post Purchase Engagement & Service taking -> Purchase Intention        | 0.024               | 0.025           | 0.038                      | 0.636                  | 0.525    | Not Supported |
| H5         | Product Assurance and Ethical Branding -> Purchase Intention           | 0.022               | 0.038           | 0.044                      | 0.509                  | 0.611    | Not Supported |
| H6         | Secure Diverse Payment Options -> Purchase Intention                   | 0.058               | 0.201           | 0.045                      | 1.293                  | 0.196    | Not Supported |
| H7         | Trust and Data Protection -> Purchase Intention                        | 0.098               | 0.096           | 0.045                      | 2.207                  | 0.027    | Supported     |

## Hypothesis Results

- H1 : Customized Marketing and Engagement is positively related to Purchase Intention.
- In essence, this study shows no meaningful relationship between customized marketing and engagement strategies of CRM and purchase intention of the women online customers.
- H2: Enhance Production Visualization and Information is positively related to Purchase Intention. According to the analysis, H2 is accepted, as Enhance Production Visualization and Information strategy of customer relationship management (CRM) supported and it means that this Online female customer buying intentions are significantly impacted by CRM strategy.
- H3: Personalized Checkout Experience is positively related to Purchase Intention.
- The findings demonstrated that H3 is accepted, indicating a substantial correlation between Personalized Checkout Experience and purchase intention of online women customers.
- H4: Post Purchase Engagement and Service taking positively related to Purchase Intention. Additionally, the test results are inconsistent with H4, which indicates that there is no meaningful relationship between the online female customers' purchase intention and the Customer Relationship Management (CRM) Post Purchase Engagement strategy.

- H5: Product Assurance and Ethical Branding is positively related to Purchase Intention. According to the investigation, there is no meaningful connection between Product Assurance and Ethical Branding strategies of CRM and purchase intention of the women online customers.
- H6: Secure Diverse Payment option is positively related to Purchase Intention There is no significant relationship between Secure Diverse Payment option strategy of CRM and purchase intention of the women online customers.
- H7: Trust and Data Protection is positively related to Purchase Intention. This study revealed that H7 is accepted, Trust and Data Protection as strategy of customer relationship management (CRM) supported and it means that this strategy of CRM has a significant impact on the purchase intention of online women customers.

## Conclusion

This study employed a structural model and reliable measurement to validate the constructs and their interactions in order to analyse the impact of CRM strategies on women's buying intention. Convergent validity was demonstrated by high factor loadings from 0.724 to 0.957 across all indicators, indicating that the observed items correctly evaluate the intended constructs. Additionally, AVE values more than 0.5 and values of composite dependability higher than 0.7 validated the measurement model's internal consistency and dependability. The Fornell–Larcker criterion was used to confirm discriminant validity because the square root of AVE for each construct was higher than its correlations with other components. The highest inter-construct correlation of 0.578, which is substantially less than the comparable square root of AVE values, shows that each construct is empirically unique (varying from 0.795 to 0.945). All CRM variables, although to various levels, have a favorable impact on women's purchase intention, according to the structural model study. The most important predictor was found to be Trust and Data Protection ( $\beta = 0.422$ ), followed by Customized Marketing and Engagement ( $\beta = 0.218$ ) and Personalized Checkout Experience ( $\beta = 0.307$ ). Ethical branding and product assurance showed the least impact ( $\beta = 0.083$ ). These findings highlight how important safe transactions, customized experiences, and targeted marketing are in influencing women's purchasing intentions, but ethical branding by itself has a relatively small impact. Customized marketing engagement, enhanced production visualization and information, personalized checkout experience, post-purchase engagement and service taking, product assurance and ethical branding, secure diverse payment options, trust, and data protection are some of the Customer Relationship Management (CRM) strategies that the researcher offers pertinent recommendations for improving customers' purchase intentions. The results of this investigation demonstrate that the consumers' purchase intention is positively affected by Enhance Production Visualization and Information, Personalized Checkout Experience, Trust and Data Protection is positively related to Purchase Intention. On the other hand, certain intangible elements, such as customized marketing and engagement, post-purchase engagement and service, product assurance and ethical branding, and secure diverse payment options, have no beneficial effect on the intention to purchase. Customers are more likely to visit the website, make repeat purchases, and spread positive word-of-mouth (WOM) to others when there is a strong CRM.

## Limitations and Recommendations

In spite of accomplishing its objective, this research has some unavoidable limitations. The sample for this study is restricted to female online shoppers. Furthermore, the geographic restriction is another drawback of this study. Because consumers' perceptions of various e-commerce websites vary, the outcome represented female customers. Few suggestions for additional research to better understand consumer preferences in the competitive market were supported by the limitations of this study. Future studies should also take the larger geographic area into account. The study ought to have been conducted with various customers in various regions. Future researchers may take into account the responses from different states and cities.

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