e - CRM Strategy on the Digitalised Textile Industry (DTI) in Coimbatore – An Explorative Study

V. Vimala*

Abstract

In the modern scenario, due to generous attractiveness towards digitalised textile industries (DTIs), the application of the best CRM and e-CRM techniques and strategies has made the revolutionized change in the textile industry by enabling customers to make effective use of digitalised textiles products and service. However, there is some general idea in the new process of DTI's products and services to their customers in the current trend. DTI has new dimensions to textiles products and services by applying the e-CRM strategies and techniques to carry out monetary transactions through the Internet mode. Textile industry have taken several measures to ensure the better services and quality products to their customers e-CRM adoption and digitalising the system to face the new challenges and opportunities for the economic development to increase the profit of the textile industries in India. The study is carried out with the help of a suitable research instrument and 103 textile industry and retail shops in north Coimbatore and their after the analysis is made to know the benefits, impacts and adoption of e-CRM strategies and techniques for DTIs to provide quality services and to reap the maximum profits from textile industries.

INTRODUCTION

Digital Textiles (DT) upgraded its foremost market tracker for the digital textile industry. The digital textile market developed its technology in their production, to increase the market size and other features to assess the opportunity in the global market. The digital transformation drive is rigorous procedure, particularly when applied to textiles industry and it is built upon the finer details. For instance, the dye stock administration, workforce management, equipment monitoring. Supply chain visibility, well-built partner association, predictive information and analysis are the core requirements for the success. The digitally transformed textile business are well-suited to handle and go beyond customer expectations, adopt transparency, value chain, and identify profit-generating customer relationships in all the business segments to increase the demand-driven economy in the country.

Review of Literature

The review of literature for the present research work are carried out and are mentioned below –

Keywords:

Digital Textile Industries (DTI), Textile Industry, CRM, e-CRM strategies and Textile Management Techniques

* Assistant Professor (SS), Department of Commerce, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, 641 043.
Email ID: vim2achar@gmail.com, vimala_comm@avinuty.ac.in.

Jodie Keane and Dirk Willem (2008)[1] in his explorative study, *The role of textile and clothing industries in growth and development Strategies* examined the of textile and clothing industries developmental strategies and suggested textiles and clothing industries are key in increasing the socio-economic status. Einer (2011)[2], in his research paper, *e – CRM: Strategies for the Internet Customer,* he analyzed CRM significance, customer loyalty in helping businesses to increase profit from low-value customers.

Dr. Jesko von Windheim (2014)[3], in their project work, *Strategy and Tools for Sustainable Textile Product Development* described the strategy and interactive approach to environmental issues and emphasised the product value strategy on proper materials sourcing and supplier facility assessment. Masoud Nikzad Shahrivar and Ali Reza Dehghani Sari (2015)[4], in their article, *Evaluating the Critical success factors of strategic customer relationship management (SCRM) in the textile industry (with Fuzzy Approach)* discussed the strategic CRM approach to perceive and influence the behavior of the customer in purchasing, maintaining and making profitability.

Pravin Wararkar, Sandip Patil and Kishor Wararkar (2017)[5] Strategic Management Planning for Textile Industry in India in Accordance with Indian Textile Market in their research article explained the supply chain Management framework, strategic planning, Indian textile and apparel industry, implementation phase of the strategic planning and model of supplier relationship management. Dr. M. Dhanabhakam (2018)[6], in his report, *Indian textile Industry: Brand strategy and export competitiveness*, studied the SWOT analysis in brand building, competitiveness of Indian textile industry and the challenges faced by the textile industry.

The review of literature indicates clearly that there is very few work and studies is carried out on *e – CRM* strategies on digitalised textiles industries and it found that there is research gap on digitalised textiles industry.

Objectives of the study

The Objectives of the study are -

01. To know the awareness of *e –* CRM strategies and techniques in digitalized textile industries.

02. To understand the *e –* CRM challenges, opportunities and its impacts on the textile industries and

03. To analyze the impact of *e –* CRM strategies and techniques adopted in selected digitalized textile industries

Hypothesis of the study

01. H_{01}: *e –* CRM strategies and techniques are not strongly associated with the DTI

02. H_{02}: The impact of *e –* CRM factors affect the economic development of the DTI

Sample Design

The multi stage sampling technique adopted for selection of respondents for present research the study. In first stage textile industries are selected, in second stage sector wise classification is made where it is identified that about 1719 textile industries in India, in third stage, region-wise segregation made out of which 752 textile industries are in Tamilnadu, and in fourth stage, district and taluks wise 115 textile industries in Coimbatore, among the 18 textile industries are purposively selected for the study which is located in North Coimbatore. The primary data are prepared with structured Questionnaire and distributed to 18 digitalised textile industries. The researcher personally collected data from a total of 103 *e – CRM* users of both digitalised textile and retail shops in Coimbatore district. For the purpose of analysis, ANOVA, T – Test and correlation are the statistical tools and techniques are used based on the applicability of data available.

Analysis and Interpretation

Table – 1: Socio – Economic Profile of the respondents of DTI, Coimbatore

S.NO	Description	Category Male	Gender		Respondent (in No.)	Percent (in %)
			Female			
01.	Age 30-40 40-50 50-60 60 and above	20-30	11	35	46	*44.7*
			26	14	*40*	39.8
			05	02	07	*07.8*
			05	01	*06*	04.9
			03	01	*04*	02.9
TOTAL			**50**	**53**	**103**	**100**
02.	Gender	Male	50	-	*50*	48.5
		Female	-	53	*53*	51.5
TOTAL			**50**	**53**	**103**	**100**
03.	Qualification PUC Degree Professional Post Graduate	Up to SSLC	10	05	*15*	14.6
			06	10	06	*15.5*
			17	14	31	*30.1*
			10	07	*17*	16.5
			07	17	24	23.3
TOTAL			**50**	**53**	**103**	**100**
04.	Occupation	Agriculturist	08	06	*14*	13.6
		Business	11	10	*21*	20.4
		Private sector	03	11	*14*	13.6
		Public sector	14	18	*32*	31.1
		Home makers	01	0	01	*01.0*
		Professional	12	07	*19*	18.4
		Retired	01	01	02	01.9
TOTAL			**50**	**53**	**103**	**100**
05.	Income	Below 10000	03	05	*08*	7.8
		10000-20000	19	16	*35*	34.0
		20000-30000	08	10	08	*17.5*
		30000-40000	08	06	04	*13.6*
		40000-50000	03	06	*09*	08.7
		50000-100000	05	06	*11*	10.7
		100000 and above	04	04	*08*	07.8
TOTAL			**50**	**53**	**103**	**100**
06	Marital Status	Single	16	27	*43*	41.7
		Married	34	26	*60*	58.3
TOTAL			**50**	**53**	**103**	**100**
07.	Family Members	Up to 3	19	19	*38*	36.9
		4 – 5	29	28	*57*	55.3
		6 and above	02	06	*08*	07.8
TOTAL			**50**	**53**	**103**	**100.0**

Source: Survey Data, January – March, 2018, N = 103 Samples

Table – 2: Type of Textile Industries in Coimbatore

Sl. No	Type of Textile Industry	Respondent	Percentage (%)
01.	Digitalized Textile Industry (DTI)	65	*63.1*
02.	Non – Digitalized Textile Industry (NDTI)	28	27.2
03.	Organic Textile Industry (OTI)	10	9.7
TOTAL		**103**	**100**

Source: Survey Data, January – March, 2018, N = 103 Samples

Table – 3: Awareness of Digital Textile Industries Product, Services and techniques

Sl. No.	Description	Awareness				
		1	**2**	**3**	**4**	**5**
A.	**Products used in Digital Textile Industries**					
01.	Continuous Fabric Loop Ager	43 (41.7%)	13 (17.5%)	17 (16.5%)	01 (17.5%)	07 (6.8%)
02. Industrial Fabric Washing Machine		14 (13.6%)	50 (48.5%)	30 (29.1%)	04 (3.9%)	05 (4.9%)
03.	Digital Textile Printing Ink	24 (23.3%)	26 (25.2%)	41 (39.8%)	10 (9.7%)	02 (1.9%)
04.	Fabric Coating Machine	22 (21.4%)	29 (28.2%)	31 (30.1%)	14 (13.6%)	07 (6.8%)
05.	Fabric Padding Machine	17 (16.5%)	28 (27.2%)	36 (35.0%)	17 (16.5%)	05 (4.9%)
06.	Digital Textile Printing Machine	10 (9.7%)	42 (40.8%)	28 (27.2%)	16 (15.5%)	07 (6.8%)
B.	**Services of Digital Textile Industries**					
07.	Digital textile Printing	25 (24.3%)	39 (37.9)	25 (24.3%)	11 (10.7%)	03 (2.9%)
08.	Kaftan Printing	18 (17.5%)	33 (32.0%)	32 (31.1%)	16 (15.5%)	04 (3.9%)
09.	Lycra Printing	20 (19.4%)	27 (26.2%)	31 (30.1%)	19 (18.4%)	06 (5.8%)
10.	Stoles Printing	17 (16.5%)	25 (24.3%)	33 (32.0%)	20 (19.4%)	08 (7.8%)
11.	Silk Printing	27 (26.3%)	25 (24.3%)	26 (25.2%)	16 (15.5%)	09 (8.7%)
C.	**Techniques adopted in Digital Textile Industries**					
12.	Jet Spray Printing	17 (16.5%)	38 (36.9%)	33 (32.0%)	14 (13.6%)	1 (1%)
13.	Electrostatic Printing	19 (18.4%)	29 (28.2%)	34 (33.0%)	19 (18.4%)	2 (1.9%)
14.	Photo Printing	16 (15.5%)	29 (28.2%)	34 (33.0%)	16 (15.5%)	8 (7.8%)
15.	Differential Printing	15 (14.6%)	34 (33.0%)	29 (28.2%)	19 (18.4%)	6 (5.8%)
16.	Laser Technique	22 (21.4%)	27 (26.2%)	29 (28.2%)	18 (17.5%)	7 (6.8%)
17.	Wearable Technique	24 (23.3%)	32 (31.1%)	27 (26.2%)	14 (13.6%)	6 (5.8%)

Source: Survey Data, January – March, 2018, N = 103 Samples, [Very Aware (VA) –1, Extremely Aware (EA) – 2, Moderately Aware (MA) – 3, Slightly Aware (SA) – 4, Not at all Aware (NA) – 5]

Table – 4: Different Modes of Awareness level of *e* – CRM on Textile Industries

Sl. No.	Particulars	SA	A	N	DA	SDA
A.	Traditional based					
01.	Advertisements	73 (70.9%)	15 (14.65)	07 (6.8%)	06 (5.8%)	02 (1.9%)
02.	Newspapers	27 (26.2%)	44 (42.7)	19 (18.4%)	10 (9.7%)	03 (2.9%)
03.	Employers of the Textile Industry	05 (4.9%)	42 (40.8%)	44 (42.7%)	08 (7.8%)	04 (3.9%)
04.	Family Members / Relatives	09 (8.7%)	35 (34.0%)	36 (35.0%)	13 (12.6%)	10 (9.7%)
05.	Friends	10 (9.7%)	29 (28.2%)	42 (40.8%)	10 (9.7%)	12 (11.7%)
06.	Radio	13 (12.6%)	30 (29.0%)	38 (36.9%)	15 (14.6%)	07 (6.8%]
07.	Television	14 (13.6%)	39 (37.9%)	30 (29.1%)	10 (9.7%)	10 (9.7%)
B.	Technology Based					
01.	*e* – newspaper	41 (39.8%)	47 (45.6%)	09 (8.7%)	01 (1.0%)	05 (4.9%)
02.	*e* – mail	35 (34.0%)	48 (46.6%)	15 (14.6%)	02 (1.9%)	03 (2.9%)
03.	Youtube / ytube	31 (30.1%)	41 (39.8%)	22 (21.4%)	08 (7.8%)	01 (1.0%)
04.	Watsapp / android facilities	25 (24.3%)	40 (38.8%)	33 (32.0%)	03 (2.9%)	02 (1.9%)
05.	Google adsence	42 (40.8%)	24 (23.3%)	21 (20.4%)	12 (11.7%)	04 (3.9%)
06.	Websites / Blogs (such as flipkart, amazon , jabong)	43 (41.7%)	35 (34.0%)	15 (14.6%)	09 (8.7%)	01 (1.0%)

Source: Survey Data, January – March, 2018, N = 103 Samples, [Strongly Agree (SA) - 1, Agree (A) - 2, Neutral (N) - 3, Disagree (DA) - 4, Strongly Disagree (SDA) – 5]

Table – 5: Perception towards the *e* – CRM strategies and techniques in DTI

Sl. No.	*e* – CRM Techniques	Perception				
		1	2	3	4	5
01.	Customer analytic technique	56 (54.4%)	35 (34.0%)	05 (4.9%)	04 (3.9%)	03 (2.9%)
02.	Data – mining technique	20 (19.4%)	46 (44.7%)	30 (29.1%)	03 (2.9%)	04 (3.9%)
03.	Campaign management technique	18 (17.5%)	38 (36.9%)	36 (34.9%)	09 (8.7%)	02 (1.9%)
04.	Real time decision engine	22 (21.4%)	27 (26.2%)	35 (34.0%)	19 (18.4%)	-
05.	ERP System	27 (26.2%)	34 (33.0%)	19 (18.4%)	20 (19.4%)	03 (2.9%)

Source: Survey Data, January – March, 2018, N = 103 Samples, [Very High Perception (VHP) – 1, Moderately High Perception (MHP) – 2, Indifference (ID) – 3, Moderately Low Perception (MLP) – 4, Very Low Perception (VLP) – 5]

Table – 6: Benefits of e – CRM in DTI

Sl. No	Particulars	1	2	3	4	5
01.	Mass Customization (Expansion of customers)	64 (62.1%)	18 (17.5%)	04 (3.9%)	09 (8.7%)	08 (7.8%)
02.	Matching the customers behaviour with suitable offers	27 (26.2%)	32 (31.1%)	27 (26.2%)	10 (9.7%)	07 (6.8%)
03.	Greater efficiency and cost reduction	11 (10.7%	37 (36.0%)	35 (34.0%)	10 (9.7%)	10 (9.7%)
04.	Reduction in customer recruitment cost	14 (13.6%)	30 (29.1%)	31 (30.1%)	16 (15.5%)	12 (11.7%)
05.	Customer interaction and relationship	19 (18.4%)	19 (18.4%)	25 (24.3%)	24 (23.3%)	16 (15.5%)
06.	Quality of Services and Delivery	26 (25.2%)	21 (20.4%)	25 (24.3%)	20 (19.4%)	11 (10.7%)

Source: Survey Data, January – March, 2018, N = 103 Samples, [Very Important (VI) – 1, Important (I) – 2, Moderately Important (MI) – 3, Little Important (LI) – 4, Not at all Important (NI) – 5]

Table – 7: Importance of *e* – CRM Strategies in DTI

Sl. No.	*e* – CRM Strategies	1	2	3	4	5
01.	*e* – Profiling	59 (57.3%)	24 (23.3%)	12 (11.7%)	03 (2.9%)	05 (4.9%)
02.	Building user interface	24 (23.3%)	49 (47.6%)	16 (15.5%)	02 (1.9%)	12 (11.7%)
03.	*e* – Customization	26 (25.2%)	32 (31.0%)	34 (33.0%)	07 (6.8%)	04 (3.9%)
04.	*e* – Services and Sales	33 (32.0%)	30 (29.1%)	30 (29.1)	07 (6.8%)	03 (2.9)
05.	Sharing of e – Information	24 (23.3%)	32 (31.1%)	35 (34.0%)	04 (3.9%)	08 (7.8%)

Source: Survey Data, January – March, 2018, N = 103 Samples, [(VI) Very Important (VI) – 1, Important (I) – 2, Moderately Important (MI) – 3, Little Important (LI) – 4, Not at all Important (NI) – 5]

Table – 8: *e* – CRM factors influence the Textile Industry

Sl. No.	Influential Factors of e – CRM	Influence				
		1	2	3	4	5
A.	**Economic Factors** **Transportation cost is reduced in case of buying and selling process**					
01.	Demand and Supply	37 (35.9%)	24 (23.3%)	19 (18.4%)	13 (12.6%)	10 (9.7%)
02.	Inflation /Recession	13 (12.6%)	31 (30.1%)	28 (27.2%)	25 (24.3%)	06 (5.8%)
03.	Cost	06 (5.8%)	29 (28.2%)	37 (35.9%)	19 (18.4%)	12 (11.7%)
04.	Price	13 (12.6%)	23 (22.3%)	29 (28.2%)	27 (26.2%)	11 (10.7%)
05.	Income level	13 (12.6%)	22 (21.4%)	20 (19.4%)	21 (20.4%)	27 (26.2%)

B.	**Socio – Cultural Factors**					
01.	Privacy ,personalization and responsiveness	21 (20.4%)	29 (28.2%)	21 (20.4%)	18 (17.5%)	14 (13.6%)
02.	Increase Socio – Cultural affinity	12 (11.7%)	28 (27.2%)	39 (37.9%)	15 (14.6%)	09 (8.7%)
03.	Understand the Contemporary	16 (15.5%)	16 (15.5%)	41 (39.8)	25 (24.3%)	05 (4.9%)
04.	Privacy as control of personal information	12 (11.7%)	28 (27.2%)	25 (24.3%)	31 (30.1%)	07 (6.8%)
C.	**Psychological Factors**					
01.	Pride and Vanity	25 (24.3%)	23 (22.3)	22 (21.4%)	12 (11.7%)	21 (20.4%)
02.	Change in behavior and attitudes	08 (7.8%)	36 (35.0%)	33 (32.0%)	15 (14.6%)	11 (10.7%)
03.	Change in the Perception	09 (8.7%)	19 (18.4%)	22 (21.4%)	35 (34.0%)	18 (17.5%)
04.	Taste and Preference	06 (5.8%)	18 (17.5%)	31 (30.1%)	25 (24.3%)	23 (22.3%)
D.	**Technological Factors**					
01.	Engine efficiency	15 (14.6%)	14 (13.6%)	38 (36.9%)	16 (1505%)	20 (19.45)
02.	Internet Connectivity	09 (8.7%)	24 (23.3%)	31 (30.1)	30 (29.1%)	09 (8.7%)
03.	Wireless Charging	11 (10.7%)	30 (29.1%)	28 (27.2%)	22 (21.4%)	12 (11.7%)
04.	Automation	12 (11.7%)	30 (29.1%)	25 (24.3%)	29 (28.2%)	07 (6.8%)
05.	Security in cryptography	13 (12.6%)	15 (14.6%)	24 (23.3%)	32 (31.1%)	19 (18.4%)

Source: Survey Data, January – March, 2018, N = 103Samples, [Not at all Influential (NI) – 1, Slightly Influential (SI) – 2, Somewhat Influential (SWI) – 3, Very Influential (VI) – 4, Extremely Influential (EI) - 5]

Table – 9: Challenges faced by *e* – CRM users

Sl. No	Challenges of *e* – CRM	SA	A	N	D	SD
01.	Data security and privacy	72 (69.9%)	25 (24.3%)	06 (5.2%)	-	-
02.	It would take lots of timer to learn	36 (35.0%)	49 (47.6%)	15 (14.6%)	03 (2.9%)	-
03.	It may not perform well due to network problem	18 (17.5)	44 (42.7)	37 (35.9%)	01 (1.0%)	03 (2.9%)

04.	Not updating the catalogues in time	25 (24.3%)	53 (51.5%)	18 (17.5%)	04 (3.9%)	03 (2.9%)
05.	Most of the customers prefer traditional CRM	26 (25.2%)	36 (35.0%)	30 (29.1%)	07 (6.8%)	04 (3.9%)
06.	Infrastructure development	15 (14.6%)	27 (26.2%)	44 (42.7%)	13 (12.6%)	04 (3.9%)
07.	Time management and training	21 (20.4%)	39 (37.9%)	31 (30.1%)	09 (807%)	03 (2.9%)
08.	Creating e – CRM strategies	13 (12.6%)	42 (40.8%)	33 (32.0%)	10 (9.7%)	05 (4.9%)
09.	Managing applications	24 (23.3%)	38 (36.9%)	30 (29.1%)	09 (8.7%)	02 (1.9%)

Source: Survey Data, January – March, 2018, N = 103 Samples, [Strongly Agree (SA) – 1, Agree (A) – 2, Neutral (N) – 3, Disagree (DA) – 4, Strongly Disagree (SDA) – 5]

Table – 10: Opportunities available to the *e* – CRM users

SI. No.	Opportunity of *e* – CRM	SA	A	N	D	SD
01.	Personalization	50 (48.5%)	34 (33.0%)	12 (11.7%)	05 (4.9%)	02 (1.9%)
02.	Managing customers touch points	29 (28.2%)	51 (49.5%)	19 (18.4%)	04 (3.9%)	-
03.	Time management	30 (29.1%)	25 (24.3%)	42 (40.8%)	05 (4.9%)	01 (1.0%)
04.	e – Loyalty	28 (27.2%)	25 (24.3%)	40 (38.8%)	09 (8.7%)	01 (1.0%)
05.	Digital channels / tools	22 (21.4%)	35 (34.0%)	25 (24.3%)	16 (15.5%)	05 (4.9%)
06.	Marketing automation software	29 (28.2%)	28 (27.2%)	21 (20.4%)	14 (13.6%)	11 (10.6%)

Source: Survey Data, January – March, 2018, N = 103 Samples

[Strongly Agree (SA) – 1, Agree (A) – 2, Neutral (N) – 3, Disagree (DA) – 4, Strongly Disagree (SDA) – 5]

Testing of Hypothesis

(A)   **Test of Hypothesis – I**

H_{a1}: *e* – CRM strategies and techniques are strongly associated with the DTI

Reliability Statistics

Cronbach's Alpha	No. of Items
.836	10

The Cronbach's alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tool, correlation and regression were applied.

Table – 11: *e* - CRM strategies and techniques of DTI in Coimbatore

Correlations						
(a) *e* – CRM Techniques		**CAT**	**DMT**	**CMT**	**RTME**	**ERP**
CAT	Pearson Correlation	1				
	Sig. (2-tailed)	.000				
DMT	Pearson Correlation	.297**	1			
	Sig. (2-tailed)	.002				
CMT	Pearson Correlation	.383**	.345**	1		
	Sig. (2-tailed)	.000	.000			
RTMT	Pearson Correlation	.038	.214*	-.013	1	
	Sig. (2-tailed)	.700	.030	.896		.001
ERP	Pearson Correlation	.023	.116	.044	.319**	1
	Sig. (2-tailed)	.821	.245	.661	.001	
(b) *e* – CRM Strategies		**EP**	**BUI**	**EC**	**ESS**	**SEI**
EP	Pearson Correlation	1				
	Sig. (2-tailed)	.000				
BUI	Pearson Correlation	.436**	1			
	Sig. (2-tailed)	.000				
EC	Pearson Correlation	.311**	.295**	1		
	Sig. (2-tailed)	.001	.003		.	
ESS	Pearson Correlation	.323**	.355**	.182	1	
	Sig. (2-tailed)	.001	.000	.066		
SEI	Pearson Correlation	.390**	.456**	.317**	.360**	1
	Sig. (2-tailed)	.000	.000	.001	.000	
**. Correlation is significant at the 0.01 level (2–tailed).						
*. Correlation is significant at the 0.05 level (2–tailed).						

Sources: Survey Data, January – March 2018, [CAT – Customer Analytic Technique , DMT – Data – Mining Technique, CMT – Campaign Management Technique, RTDE – Real Time Decision Engine, ERP – ERP System, EP – *e* – Profiling, BUI – Building User Interface, EC – *e* – Customization, ESS – *e* – Services and Sales, SEI – Sharing E – Information]

From the table – 11, it is proved that the correlation of *e* – CRM strategies and techniques are highly related with each other and all the factors indicates that strongly associated and correlated with each factors in the present research. It also identified that there is a high degree of positive correlation between the *e* – CRM strategies and techniques in textile industries. It is inferred that there is a significant relationship between the *e* – CRM strategies and techniques. So null hypothesis rejected and alternative hypothesis is accepted.

(B) Test of hypothesis – II

H_{02}: The impact of e – CRM factors affects the economic development of the DTI

Reliability Statistics

Cronbach's Alpha	No. of Items
.862	28

The Cronbach's alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tool ANOVA is applied in the present study.

Table – 12: ANOVA indicates the factors influencing *e – CRM* **in DTI in four dimensions (Economic, Socio-cultural, and Technological and Psychological factors)**

(A) Economic Factors		Sum of Squares	Df	Mean Square	F	Sig.
Demand and Supply	Between Groups	17.353	4	4.338	2.552	.044
	Within Groups	166.627	98	1.700		
	Total	183.981	102			
Inflation	Between Groups	24.676	4	6.169	5.844	.000
	Within Groups	103.441	98	1.056		
	Total	128.117	102			
Cost	Between Groups	27.262	4	6.815	7.205	.000
	Within Groups	92.699	98	.946		
	Total	119.961	102			
Price	Between Groups	55.137	4	13.784	14.867	.000
	Within Groups	90.863	98	.927		
	Total	146.000	102			
(B) Socio – Cultural Factors		Sum of Squares	Df	Mean Square	F	Sig.
PPR	Between Groups	44.527	4	11.132	7.998	.000
	Within Groups	136.405	98	1.392		
	Total	180.932	102			
UC	Between Groups	27.640	4	6.910	7.075	.000
	Within Groups	95.720	98	.977		
	Total	123.359	102			
PCPI	Between Groups	25.532	4	6.383	5.739	.000
	Within Groups	108.993	98	1.112		
	Total	134.524	102			
(C) Psychological Factors		Sum of Squares	Df	Mean Square	F	Sig.
Pride	Between Groups	52.586	4	13.146	7.908	.000
	Within Groups	162.909	98	1.662		
	Total	215.495	102			
Change-in perception	Between Groups	66.159	4	16.540	19.156	.000
	Within Groups	84.618	98	.863		
	Total	150.777	102			
Taste	Between Groups	19.917	4	4.979	3.975	.005
	Within Groups	122.762	98	1.253		
	Total	142.680	102			
(D) Technological Factors		Sum of Squares	Df	Mean Square	F	Sig.
Engine efficiency	Between Groups	30.478	4	7.619	5.406	.001
	Within Groups	138.124	98	1.409		
	Total	168.602	102			
Wireless charging	Between Groups	34.026	4	8.507	7.605	.000
	Within Groups	109.624	98	1.119		
	Total	143.650	102			
Automation	Between Groups	4.024	4	1.006	.760	.554
	Within Groups	129.801	98	1.325		
	Total	133.825	102			
Security	Between Groups	14.494	4	3.623	2.331	.061
	Within Groups	152.341	98	1.555		
	Total	166.835	102			

[Privacy, Personalization and Responsiveness – PPR, Understand Contemporary, Privacy as Control of Personal Information – PCPI]

The significant value (p – value) of the economic factor in the research work indicates less than .05. Where the inflation factor is 0.044 and other two factors cost and price is 0.000. Because of this, we can conclude that there is a statistically significant difference between the mean number of words remembered for all of our conditions (Inflation, cost and price). Economic factors strongly influence the e – CRM among the selected digital Textile Industries and Non – Digitalised Textiles Industries in the north Coimbatore of Tamil Nadu State. It is proved that the socio-cultural and psychological factor is strongly influences the textiles industries with adoption of e – CRM strategies and techniques in the selected area of the research. Where as in case of technological factors, its unexpected that automation and security factors doesn't affect the e – CRM strategies and techniques and its adoptions as the p – value is 0.554 and 0.061 respectively, hence we can conclude that expect few technological factors in the study all other factors influences the textiles industries as whole in the research work.

With the help ANOVA it is also able to prove that factors influencing the implementation of e – CRM in the both Digitalised Textile Industries (DTIs) and Non – Digitalised textile (NDTIs) industries of Coimbatore. The ANOVA results shows that the calculated value in this case, f statistic calculated from the data would arrive by chance if the null hypothesis was true with a probability of 0.008, will reject the null hypothesis and conclude that there are some influential factors affect the e – CRM how in the selected sample area. By simply inspecting the means in the descriptive table, got with the ANOVA output, and should suspect that the difference between the low and high difference of opinions groups might be significant, since that is the biggest difference, but how about the difference between the low and the medium groups. This is the information that can be got from our multiple comparison tests. So the null hypothesis was rejected.

Findings of the study

The major findings of the study are –

(a) **Socio – Economic profile of selected customers**

  ∗ It is evidenced from the study that, 47.5 per cent fall under the age group of 20 – 30 years and only 2.9 per cent fall under the age group of 60 and above who are using e – CRM strategies and techniques in DTIs;

  ∗ It is very surprise to notice that the majority of the respondents are female, which accounts to 51.5 per cent and the rest of them are male about 48.5 per cent;

  ∗ In terms of qualification, it is identify that, 30.1 per cent of the respondents are degree holders and only 15.5 per cent of the respondents who are qualified up to PUC

  ∗ It is evidenced that 31.4 per cent of the respondents are public sectors employers and employees and one per cent of the respondents are homemakers;

  ∗ In terms of income generation, 34 per cent of the respondents belongs to the income group of Rs.10000 – Rs. 20000 and only 7.8 per cent of the respondents belong to the income group of Rs.10000

  ∗ 55.3 per cent of the respondents belongs to the family size of 4 – 5 in numbers; and

  ∗ In case of marital status , it identified that, 58.3 per cent of the respondents are married and 41.7 per cent were single;

(b) **Textile Industries preferred by the respondents of DTI, Coimbatore**

  ∗ It is identified that, 63.1 per cent of the respondents mostly prefer DTI and only 9.7 per cent of respondent prefer OTI.

(c) **e – CRM awareness level among the respondents of DTI**

  ∗ The respondents of DTI are aware about e – CRM strategies and techniques through the advertisement which accounts to 70.9 per cent where as only one per cent of the respondents were aware through whatsapp / android facilities.

(d) **Perception of e – CRM techniques towards DTI**

  ∗ 54.4 per cent of the respondents are highly satisfied and strongly perceived that the e–CRM techniques helps to maintain the effective relationship.

(e) **e – CRM strategies and techniques for maximization of profit of TIs**

  ∗ e – CRM strategies and techniques specifically used in maximizing the profit of textile industries.

  ∗ In terms of e – CRM strategies and techniques usages, about 35.2 per cent of the respondents almost never use.

(f) **e – CRM tools for marketing textile products of DTI**

  ∗ e – CRM tools for marketing textile products frequently used by the respondents in textile industries.

* 55 per cent of the respondents mostly use mobile apps to market their products; 49.6 per cent of the respondents are using telemarketing tools to market their products only two per cent of the respondents uses opportunities management tools in textile industries.

(g) **Benefits of implementing the *e – CRM* and its strategies in DTI**

* 62.1 per cent of the respondents benefits e-CRM strategy; 36.0 per cent of the respondents give more important for greater efficiency and cost reduction.

* Only 6.8 per cent of the respondents not at all give importance to the *e* – CRM Strategies.

* About 31.1 per cent of the respondents agree that *e* – CRM strategies and techniques lead to undo influence by security in cryptography.

* 39.8 per cent of respondent opined that *e* – CRM strategies influences the DTI.

(h) **Challenges and opportunities of *e – CRM* in DTI**

* The respondents opined that 69.9 per cent of the respondents are facing the challenges to data security and privacy in the adoption of *e* – CRM strategies and techniques, 47.6 per cent of the respondents said it takes lots of timer to learn about the *e* – CRM strategies and techniques.

* *e* – CRM strategies and techniques provides lot of opportunities to DTI, where it proved that 49.5 per cent of the respondents are agree that they have opportunities to use many *e* – CRM strategies and techniques in their TI.

(i) **Components of *e – CRM* in Textile Industries**

* 70.4 percent of the respondents are mostly adopting operational components in Textile Industries.

* In analytic components, only 23.3 percent only use these components in their Textile Industry (TI).

CONCLUSION

To sum up the present research study focused on *e* – CRM strategies and techniques adopted in DTI, Coimbatore district, where it reveals that selected e – CRM users have positive impact on the awareness, perception, satisfaction level of e – CRM strategies and techniques in DTI. The present research evidenced that challenges and opportunities faced by the DTI in the current scenario for their sustainability and maximisation of profit which plays a crucial role in the economic development of GDP in the nation.

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