



International Journal of Engineering, Business and Enterprise Applications (IJEBA)

(Open Access, Double Blind Peer-reviewed, Refereed and Indexed Journal)

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A Study on the Role of Information Technology in Cross Cultural Consumer Behaviour

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Abstract: Information technology unites consumers of different cultures, regions, and countries. Consumers disclose different attitudes, preferences and behaviours while making a purchase decision. Information technology plays key role in making suitable strategies to form cross cultural consumer behaviour. It mainly depends on the perception, searching behaviour and trust. Therefore, this study has been commenced to check the consumer perception, consumer searching behaviour and consumer trust on the information technology in cross cultural consumer behaviour. This study was conducted with a sample of 100 consumers; data has been collected by employing questionnaire. It consists of four parts such as, socio-economic background, consumer perception, consumer searching behaviour, and trust on information technology. This study used simple percentage analysis, Friedman's chi-square test, t-test, and factor analysis to analyse the data collected. It was concluded that information technology plays significant role in forming cross cultural consumer behaviour.

Keywords: Consumer, Consumer Behaviour, Perception, Searching behavior, Trust, Cross Culture, Information Technology

I. INTRODUCTION

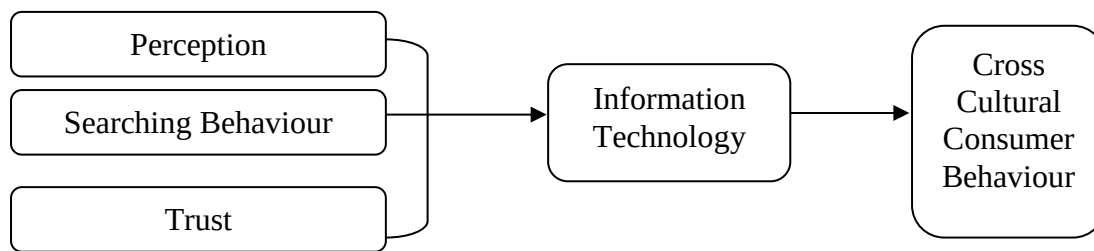
The concept and role of information technology has been deeply examined in consumer behaviour. Information technology enables the consumers to access global information concerning product, price, promotion, and so on. User friendly technology like internet acts as electronic medium of exchange offers many opportunities to the marketers to take up innovative and virtual marketing tools. Information technology tools have incredible change in the mode of communication, work patterns, execution of commercial transactions among the consumers. On account of changes in the environment, a new consumer and new marketplace is evolving. The developments in technology, emergence of online marketing, changing mindset of consumers towards online shopping have encouraged the use of information technology in marketing. Information technology is rapidly changing the way consumers do purchase all over the globe. In the business to consumer segment, sales through information technology has been enhancing radically over the past one decade. Information technology has essential role to play in marketing of goods and services in the highly competitive world. Information technology based services continues on rising in business to consumer and business to business atmosphere.

II. RATIONALE FOR THE STUDY

Consumers from both developed and developing countries are interested to adopt new shopping outlets, in order to purchase various goods and services. Consumers are keen in expecting innovation in marketing channels. The changing pattern of lifestyles, preferences, and needs have significant influence on transforming cross cultural values among the consumers. Cross culture can be explained as the interaction of customers through active presence of various information technology channels, and bringing different viewpoints, values and buying practices. Therefore, information technology assists the consumer to look for information in a website or may search for information concerning purchase of a product. Information technology disseminates information, improves consumer value, displays cross culture, enhances customer satisfaction, ensures reliability and forms positive perception, which consequently leads towards high market share and profitability. Consumer perception plays significant role in the use of information technology tools like online purchases, mobile banking, use of cards, and other methods. Perception on information technology gives some sort of sophistication in the form of politeness, luxury, time saving, and stylish and privileged consumer appearance. It detains consumer mindset towards the use of information technology outlets and gives assurance to do further purchase.

Traditionally, consumers make purchases based on earlier experience or recommendation of others. While making first time purchase they largely seek opinion of others, and make purchase based on their positive feedback on it. Information technology tools furnish all required information pertaining to a product or service, which decreases the time used for information search. Information technology motivates searching behaviour of consumers on price, brand, specifications, retail outlets, and so forth. Therefore, searching behaviour has been promoted voluntarily among the consumers through the emergence of information technology. Finally, trust on information technology increases consumer buying preference and behaviour, and transforms from physical purchase to online purchase. Put together, it forms cross cultural values on consumer behaviour. The cultural differences among consumer plays significant role in the upgrading of successful marketing and branding strategies. This is resulted due to the cross cultural phenomenon happens accordingly based on the diverse cultural elements that subsist among consumers and it is a noteworthy factor that impacts buying behaviour of consumers. In consumer perspective, perception, searching behaviour, and trust have effective role in determining cross cultural consumer behaviour. The impact of personal qualities, behavioural traits and external forces in entrepreneurial success is exhibited in the following framework.

Figure – 1: Framework on Role of IT in Cross Cultural Consumer Behaviour



III. REVIEW OF LITERATURE

Lindroos & Pinkhasov (2003) examined that new technologies are constantly rising, and changing the relationship of an organization, which creates with its customers. Andrews et al. (2007) stated that for a organization internet is contributing to dispersing information, getting better consumer value, increasing satisfaction of consumer, reliability and retention in addition to consumer perception which sequentially leads in the direction of better profitability and higher market share. Ratchford et al. (2003) studied that e-consumer behaviour is getting importance due to plenty of online shopping. Narwal & Sachdeva (2013) checked that emerging technologies that so as to increase approval potential, next generation products and services must show enhanced elements such as ubiquity, personalization, mobility, context awareness and protection. Onete et al. (2010) revealed that the new consumer is characterized mostly by cynical attitude manifested for traditional advertising and internet obsession, the marketers enjoy growing confidence on the part of consumers and from which it gets information that information technology guides actual purchasing decision.

Cayla & Arnould (2008) divulged that cultural awareness of consumer determinants and making use of information are the key factors crucial to attain global market success. Meyer and Gdyni (2017) stated that transnational corporations make use of cultural behaviour determinants in their business activities and set standards accordingly. Moon (2004) disclosed that consumer adoption of the internet as information searching tool, it shapes the consumer behaviour in cross cultural perspective. Asamoah & Chovancova (2016) revealed that cultural values are main dimensions of the consumer behaviour; it plays effective role in developing relevant marketing and branding strategies. Herrmann & Heitmann (2006) showed that cultural variations lead to the similarities or dissimilarities to the reaction of consumers and these are reflected with their socio economic background.

IV. OBJECTIVE OF THE STUDY

This study has been initiated with the following objectives. These are as follows:

1. To scrutinize the socio-economic background of consumers.
2. To assess the consumer perception on role of information technology in cross cultural consumer behavior.
3. To examine the consumer searching behavior on role of information technology in cross cultural consumer behavior.
4. To investigate the consumer trust on role of information technology in cross cultural consumer behavior.

V. RESEARCH METHODOLOGY

This study has been formulated with a sample of 100 consumers who have knowledge on purchase by using information technology channels. This survey is conducted in various parts of Coimbatore district in Tamil Nadu. The sample is gathered by employing simple random sampling. The required sample has been identified from shopping malls, industrial offices, and employment places. Sampling has been administered by interviewing the randomly selected consumers. Structured and non-disguised questionnaire is disseminated to collect data. The questionnaire has been divided into four parts; the first part consists of socio-economic background of consumers, second part contains perception of consumers, third parts consists of searching behaviour of consumers, and fourth part contain consumer trust on information technology and its role on cross cultural consumer behaviour. In order to conduct this study in a fruitful manner, the survey instrument has been pre-tested with 20 consumers, which guided to explore the attributes connected with cross cultural consumer behaviour. It is conducted with primary data and used descriptive research. This study widely employed simple percentage analysis, descriptive statistics, t-test and factor analysis to analyze data.

VI. RESULTS AND DISCUSSIONS

A. Socio-Economic Background of Consumers

The socio-economic background of consumers have been tested through the attributes like, gender, age, marital status, educational qualification, monthly income, occupation, mode of purchase, and area of residence.

Table – 1: Analysis of Socio-Economic Background

Characteristics	Distribution	Sample	Frequency
Gender	Male	77	77%
	Female	23	23%
Age	18 – 25 years	45	45%
	26 – 45 years	39	39%
	46 years & above	16	16%
Marital Status	Married	68	68%
	Unmarried	32	32%
Educational Qualification	School education	17	17%
	Degree/ Diploma	49	49%
	PG/ Professional	34	34%
Monthly Income	Less than Rs.25,000	22	22%
	25,001 – 50,000	58	58%
	More than Rs.50,000	20	20%
Occupation	Employed	29	29%
	Business/ Profession	37	37%
	Others	34	34%
Mode of Purchase	Cash	46	46%
	Cards	42	42%
	Fund Transfer	12	12%
Area of Residence	Rural	42	42%
	Urban	58	58%

(Source: Primary data)

Table-1 presents the socio-economic background of consumers, gender of the consumer shows that 77% are male and 23% are female. Age of the consumers reveals that 45% are in 18 – 25 years of age, 39% are in 26 – 45 years of age, and 16% are in 46 years and above. Marital status shows that 68% are married and 32% are unmarried. Educational qualification discloses that 17% are falling under school education category, 49% are completed their degree or diploma, and rest 34% are completed professional or post graduate degree. Monthly income reveals that 58% are in Rs.25,001 to 50,000, 22% are in less than Rs.25,000, and 20% are in more than Rs.50,000. Occupation shows that 29% of the respondents are employed in government and private organizations, 37% are belonging to business or profession category and rest 34% are students, retired, and housewife category. Mode of purchase shows that 46% prefer cash purchase, 42% uses credit or debit cards, and rest 12% prefer fund transfer through online banking. Area of residence discloses that 42% are rural and 58% are urban category.

B. Perception on IT in Cross Cultural Consumer Behaviour

Information technology plays significant role in establishing cross cultural behavioural set among consumers. Consumers have certain perception on IT, it shapes cross cultural behaviour among consumers. In order to identify consumer perception, Friedman chi-square test has been administered. Null hypothesis has been framed and it states that the rank of consumer perception variables do not differ from the expected value. For a constant sample size, higher the value of chi-square test, the higher is the difference among each variable

rank sum and its expected value. Put together, the chi-square value is 139.235 for these ranking, degrees of freedom are up to the number of variable less than 1, and asymptotic significance is estimated probabilities of achieving factors are not essentially different. Consequently, chi-square result with 15 degrees of freedom is unlikely to have happened by change, it is measured that the 100 consumer do not influenced by all these variables.

Table-2: Descriptive Statistics

Perception on IT	Mean Rank	Mean Score	Std. Deviation	Chi-Square
Safety	10.44	3.744	1.36889	139.235 P value 0.00*
Convenience	8.75	3.368	1.36782	
Information availability	7.63	2.746	1.84645	
Simplicity of technology	9.74	3.357	1.73568	
Quality of technology	6.47	2.643	1.88873	
Independence	8.62	2.658	1.63305	
Self-control on technology	7.74	3.575	1.77793	
Preservation of resources	7.83	2.879	1.64002	
Innovation	9.73	3.463	1.42772	
Less cost on purchasing	6.27	2.678	1.14351	
No time restraints	7.59	3.568	1.64456	
Easy to access	8.34	2.643	1.36890	
Privacy	7.61	3.547	1.63438	
Fast service	6.43	3.432	1.34688	
Customer need recognition	7.38	2.322	1.53466	

(Source: Primary data)

* Significant at 1% level

Table-2 reveals that the consumer perception on IT in cross cultural consumer behaviour, the Friedman's test is performed and the results are presented. It could be determined that among the various factors, safety (10.44) is ranked first; it is followed by simplicity of technology (9.74), innovation (9.73), are ranked as second, and third respectively. Moreover, convenience (8.75), independence (8.62), easy to access (8.38) are ranked as fourth, fifth, and sixth respectively. Subsequently, preservation of resources (7.83), self-control in technology (7.74), information availability (7.63), privacy (7.61), not time restraints (7.59), customer need recognition (7.37), quality of technology (6.47), fast service (6.43), and less cost on purchasing (6.27) are ranked. Null hypothesis is accepted and it can be concluded that consumer perception have significant relationship with cross cultural consumer behaviour.

C. Searching Behaviour on IT in Cross Cultural Consumer Behaviour

Consumer searching behaviour by using information technology forms cross cultural behaviour. Mostly consumers are imitated the process of searching information from worldwide consumers. As a result, searching behaviour transforms cross cultural behaviour among the consumers. Searching habit and behaviour shows variation among different attributes of consumers. Therefore, searching behaviour of consumers, they are classified into rural and urban category. The consumers are requested to rank the variables at five point scale that is highly agree, agree, neither agree or disagree, disagree, and highly disagree with ranks of 5, 4, 3, 2, and 1 respectively. The mean scores of the characteristics are computed and it has been analyzed by using t-test, which is given in table-3.

Table – 3: Mean Score Analysis

S. No	Variables	Mean Score		t-test
		Urban	Rural	
1.	Ease of information searching	4.131	3.862	2.421
2.	Feedback of users	3.889	3.771	2.362
3.	Lower price	4.098	4.236	-2.256
4.	No risk on purchase	3.867	4.092	2.368
5.	Personal opinion of others	4.136	3.881	-2.594
6.	Online discussion	4.085	3.812	-1.567
7.	Low cost technology	3.951	4.138	2.594
8.	Easy to handle	4.251	3.989	1.363*
9.	Mobile devices enough	3.797	4.257	2.636
10.	Reliable transactions	3.843	3.968	2.285

(Source: Primary data)

* Significant at 1% level

Table-3 furnishes that the searching behaviour among rural and urban residents are differed from each other. The main searching behaviour among urban consumers are easy to handle, personal opinion of others, ease of information searching, lower price, and online discussion options; since their mean scores are 4.251, 4.136, 4.131, 4.098, and 4.085 respectively. Among the rural consumers, the significant searching behaviours are mobile devices enough, lower price, low cost of technology, and no risk on purchase in searching behaviour: since their respective mean scores are 4.257, 4.236, 4.138, and 4.092 respectively. In relation to consumer information searching behaviour, more or less all the variables are significant at 5% level. It designates that the both rural and urban consumers posses equal searching behaviour and their cross cultural behaviour found equally.

D. Trust on IT in Cross Cultural Consumer Behaviour

Consumer trust on information technology in cross cultural behaviour has been checked by using rotated component matrix, the results are provided as under.

Table – 4: Rotated Component Matrix

Labels	Variables	Multi use of IT	Consumer Satisfaction	Reasonable Price	Buying Decisions	Cultural Values
TCC16	Increases efficiency	.832	.079	.086	.187	.217
TCC07	Decreases cost	.826	-.037	-.073	.113	.162
TCC21	Offers discount	.792	.153	.163	-.079	.216
TCC06	Saves time of visit	.765	.173	-.068	.175	.173
TCC20	Saves cost of transport	.747	.084	.211	.059	.084
TCC23	Opt for tech-savvy consumers	.686	.174	.174	.224	.088
TCC08	Ensures satisfaction	.235	.819	.084	.175	.132
TCC15	Establishes better relationship	.197	.753	.092	.143	-.184
TCC22	Feedback on use	.179	.728	.174	.095	.086
TCC01	Increases confidence	.268	.671	.183	.153	.213
TCC26	Furnishes information	-.114	.649	.091	.047	.178
TCC10	Helps to compare	.147	.623	.089	-.084	-.064
TCC25	Encourage to purchase new products	.294	.594	.147	.241	-.047
TCC18	Creates awareness	.146	.565	.126	.237	.114
TCC03	Sets low prices	.096	.153	.751	.133	.067
TCC24	Helps to access records	.073	.212	.721	.103	.086
TCC09	Efficient planning	.194	-.142	.703	.225	.115
TCC11	Makes easy to purchase	.164	.231	.674	.097	-.085
TCC17	Trustful delivery	.064	.132	.621	-.021	.046
TCC19	Convenient payment options	.192	-.175	.153	.782	.305
TCC02	Facilitates to make decisions	.213	.076	.131	.769	.146
TCC14	Customizes products	.067	.163	.223	.688	.133
TCC12	Easy to judge quality	.137	.077	.115	.581	.059
TCC04	Imitation of buying habit	.146	.037	.056	.114	.811
TCC05	Follows herd behavior	.038	.065	.073	.162	.735
TCC13	Lavish look	.093	-.165	.039	.214	.635
Eigen values		6.674	4.868	2.343	1.811	1.257
% Variance		18.26	13.38	11.38	8.74	6.32
Cumulative % Variance		18.26	31.64	43.02	51.76	58.08
Cronbach's α		0.782	0.779	0.751	0.683	0.656

(Source: Primary data)

Table-4 reveals rotated component matrix and factor loadings extracted, significant values are highlighted in bold. The cut-off rate is fixed as 0.5 for factor loadings. The exploratory factor analysis shows that consumer trust on information technology in cross cultural consumer behaviour and it accounts for cumulative variance of 58.08% explained in the data. The Cronbach's alpha values for the factors intended possess good reliability values i.e., $\alpha > 0.5$. Consequently, the factors are identified and named as multi use of IT, consumer satisfaction, reasonable price, buying decisions, and cultural values. Multi use of IT is the main factor, it is observed with the explained variance of 18.26%. It is loaded with six factors increases efficiency, decreases cost, offers discount, saves time of visit, saves cost of transport, and opt for tech-savvy consumers. It ensures high level of trust on information technology in cross cultural behaviour. Consumer satisfaction has been considered as a significant factor with explained variance of 13.38%. It consists of ensures satisfaction,

establishes better relationship, feedback on use, increases confidence, furnishes information, helps to compare, encourage to purchase new products, and creates awareness. Reasonable price explains 11.38% of variance in data; it is loaded with five factors like, sets low prices, helps to access records, efficient planning, makes easy to purchase, trustful delivery. Moreover, buying decisions are loaded with convenient payment options, facilitates to make decisions, customizes products, and easy to judge quality and accounts 8.74% variance in data. Finally, cultural values are loaded with three variables such as, imitation of buying habit; follows herd behaviour, and lavish look, which together explains 6.32% variance in data. It proved that trust on information technology have significant relationship with cross cultural consumer behaviour.

VII. FINDINGS AND CONCLUSION

An examination of the results makes it abundantly clear that information technology has significant positive relationship with cross cultural consumer behaviour. Consumers perceive more information while making purchasing decisions with the help of information technology. It directly brings information concerning, consumer beliefs, values, tastes, and preference on purchasing a product or service. Therefore, this study paid attention in this connection to check the role of information technology in cross cultural consumer behaviour. The socio-economic background of consumers shows that 77% are male, 45% are in 18-25 years of age, 68% are married, 47% are completed degree or diploma, 58% are in the monthly income group of Rs.25,001 to 50,000. Similarly, 37% are in business or professional category, 46% are in cash purchase category, and 58% are urban residents. Friedman's test presents that safety, simplicity of technology, and innovation are the significant consumer perception on the role of IT in cross cultural consumer behaviour. The foremost searching behaviour among urban consumers is easy to handle, personal opinion of others, ease of information searching, lower price, and online discussion options. Equally, mobile devices enough for purchase, lower price, low cost of technology, and no risk on purchase in searching behaviour among rural consumers are statistically significant at 5% level. The exploratory factor analysis on influence of external forces explains 58.08% variance in data, with five broad factors such as multi use of IT, consumer satisfaction, reasonable price, buying decisions, and cultural values. It is concluded that information technology plays significant and direct role in forming cross cultural consumer behaviour.

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