



## DECISION MAKING STYLES ADOPTED BY CONSUMERS IN ONLINE BUYING- AN EMPIRICAL STUDY ON INTERNET SHOPPERS IN HARYANA

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### Abstract

**Purpose-** The potential growth of online shopping has triggered the idea of conducting a study on online shopping in India. this paper investigates the various decision-making styles adopted by consumers in online buying. The Consumer Style Inventory (CSI), developed by Sproles and Kendall (1986) for examining different consumer decision-making styles, was adapted in this study. **Design/Methodology/Approach-** Present study is a descriptive study, data was collected from the respondents who were spotted in shopping malls in Haryana through mall intercept survey with the help of structured and undisguised questionnaire comprising 23 closed ended questions in the matrix form. Data gathered through the survey was analyzed and interpreted with the help of SPSS software and tested by statistical tools like: factor analysis; t-test; and two independent samples t-test (Levene's test of equality of variance) ANOVA and Duncan's mean test. **Findings-** the research results reveal various decision-making styles adopted by online buyers, study also reveals that there is a significant difference in the buying approach of online shoppers based on their respective decision-making styles across various demographic variables. **Practical implications -** These findings enable the e-commerce companies to gain a meaningful insight of understanding the typical decision-making styles adopted by online buyers. The study also provides a powerful tool for e-commerce marketers for strategy formulation in the areas of marketing, brand positioning, pricing policy, and distribution etc.

**Keywords:** Decision Making Style, Online Buying, Demographics.

### Introduction

The consumers while making online buying decisions are affected by many factors, viz., brand awareness, brand image of website, price, discounts, navigation ease, explicitness of information etc. (Korgaonkar & Wolin, 1999). Globalization and increasing competition, and short product life cycles etc. cultivate asymmetric consumer behavior and pose a number of marketing challenges for e-commerce firms (Mitchell & Walsh, 2004). In order to survive in this industry, it is vital for e-commerce companies to develop and leverage core marketing capabilities. This paper investigates the various decision-making styles adopted by consumers in online buying, The Consumer Style Inventory (CSI), developed by Sproles and Kendall (1986) for examining different consumer decision-making styles, was adapted in this study. A questionnaire survey was employed as the tool to collect primary data and the research instrument was administered to shoppers who were spotted in shopping malls of Haryana. The results show that seven decision-making styles (Image conscious, brand conscious, Carefree oriented, Value conscious, Meticulous, confused by over-choice, Fun oriented) were identified. We have slightly modified the consumer style inventory (CSI) proposed by Sproles and Kendall (1986) to adjust to the requirement of study, some factors focusing on the image consciousness and carefree orientations in making a decision towards online buying were added in the scale that were missing in the earlier studies.

### Literature Review

Joines, 2003 stated that intense competition in e-commerce trade has forced the marketers to have better understanding of online buying behaviour, especially decision-making behaviours. In the earlier studies, the consumer decision-making issues were mainly focused on the decision-making process. Sproles and Kendall (1986) investigated the consumer decision-making processes by profiling consumers into different decision-making styles. As per the study conducted by Sproles, (1985) and Sproles and Kendall, (1986) Consumer decision-making styles consistently dominate a consumer's approach in making purchase choices. Sproles, (1979) stated that ultimate purchase acceptance or rejection by consumers is influenced by his decision-making style. Sproles, (1985) stated that consumer may also simply emphasize on some typical dimensions or characteristics that are quite obvious and also, they are conscious of those dimensions. Lysonski, Zotos, Durvasula (1996) stated that consumers instead of going through a series of steps or processes rationally would rather rely on simple strategies to make purchase decisions. Siu, Wang, Chang, (2000) in their studies observed that five decision-making styles are valid and reliable in Chinese culture: perfectionist, novelty-fashion conscious, recreational, price conscious, and confused by over-choice. Judith, Eun, Lynn (2005) realized that Image, quality, colour/style, and design/beauty are important criteria when purchasing online. (Soruce, 2005) found that site preferences are associated with the lifestyle and age. Jalees, (2007) ascertained the determinants of compulsive buying behaviour and their relationship with the dependent variable like tendency to spend, Reactive aspect, post purchase guilt, perceived social status, materialism etc. (Zhang, 2007) in his study scrutinized how family communication patterns and lifestyles are linked to online purchases of sports shoes and casual clothing for



young adult. Status branding, brand attitude, paying premium for branded goods, self-concept and reference groups have positive effects on female online buying behaviour. (Zeb, Rashid, Javeed, 2011). Consumer Style Inventory (CSI) which is used to measure consumer decision-making styles was developed on the basis of a sample of United States (U.S.) youngster and it has also been applied across different cultures and countries, including the U.S. (Sproles, 1985, Sproles and Kendall, 1986, Lysonski et al., 1996), New Zealand (Lysonski et al., 1996), Greece, India (Lysonski et al., 1996), United Kingdom (Mitchell and Bates, 1998), China (Fan and Xiao, 1998, Hui et al., 1999, Hui et al., 2000) and Germany (Walsh et al., 2001). However, the research in connection with identifying decision-making style adopted by online buyers in India is lacking. In the light of the limitations in the previous studies in the Indian Context, this study attempts to provide useful insights by studying the Indian consumers' decision-making styles of online shoppers in Haryana.

## Research Methodology

### Sampling and Data Collection

For present study the data was collected from the respondents who were spotted in shopping malls in Haryana through mall intercept survey with the help of structured and undisguised questionnaire comprising 23 closed ended questions in the matrix form. Based on the parameters of interest, an optimum sample size of 250 respondents was selected to full-fill the sample requirements of representation, flexibility and reliability, the questionnaires were administered personally as well as by using the online interface. The survey was conducted during September 2017 to January, 2018. Out of 250 respondents, 139 were male and 111 were females, 90 were from urban areas, 115 were from semi-urban areas and 45 were from rural areas. 90 were from below 25000/month household income, 101 were from Rs 25,000 to Rs 50,000/month household income and 59 were from Rs 50,000 and above household income bracket. A convenience sampling method was used to select the respondents for the study. Respondents were asked to state their level of acceptance for each of the items (perception statements about online buying) in the scale using a five-point from 'Completely Agree-5' to 'Completely Disagree-1'.

### The Survey Instrument

The survey instrument was adopted from the consumer style inventory (CSI) proposed by Sproles and Kendall (1986). This is the only validated scale existing in the literature for identifying the various decision-making styles towards online buying. Hence the scale was adopted in this study. However, the scale was modified slightly to suit the present context. Some factors focusing on the image consciousness and carefree orientations in making a decision towards online buying were added in the scale that was missing in the earlier studies.

### Data Analysis and Methods

Data and information gathered from different sources after filtration generates relevant data, which is edited and coded subsequently. Data gathered through the survey was analyzed and tested by statistical tools like: factor analysis; t-test; and two independent samples t-test (Levene's test of equality of variance) ANOVA and Duncan's mean test. **The reliability of questionnaire in the form of Cronbach alpha is 0.732.**

### Objectives of Study

The present study serves to explore the following research objectives:

1. To identify the various decision-making styles adopted by consumers in online buying.
2. To compare the decision-making styles adopted by consumers in online buying across gender.
3. To compare the decision-making styles adopted by consumers in online buying across shopping expertise categories.
4. To compare the decision-making styles adopted by consumers in online buying across shopping frequency.

### Research Hypothesis framed

1. H1-There is no significant difference in the decision-making styles adopted in online buying between males and females?
2. H2-There is no significant difference in the decision-making styles adopted in online buying between across different shopping expertise categories?
3. H3-There is no significant difference in the decision-making styles adopted in online buying between across different shopping frequency?

### Limitations of the Study

1. As the study was conducted in Haryana, hence findings cannot be generalized for other territories.
2. Due to the language barrier, some respondents were hesitant to furnish required information, although they were made comfortable by translating the questions in the language they understand but this may have resulted in to semantic barrier affecting the quality of response.



3. Respondents becomes extra cautious when they are asked to provide personal information in relation to their occupation, income etc. and they may provide the misleading information, affecting the quality of research.
4. Besides all respondents was internet savvy and sufficiently educated. Future research might examine the diverse internet users such as older, less internet savvy and less educated.

### Analysis and interpretation

**Objective-1:** To identify the various decision-making styles adopted by consumers in online buying

**Table-1 Perception Statements about Online Buying**

S No.	Perception Statements
1	I purchase online because I want to be seen as part of happening crowd
2	I feel comfortable when I buy online
3	I want to be seen as conscious and ambitious person
4	I buy online because it makes me feel noticed
5	I buy online because it gives me social acceptability
6	Buying online requires least care, in a way it is very simple
7	I feel confident when I buy online
8	The price of products purchased online should be reasonable
9	Buying online enhances my overall personality
10	I would always prefer to buy from known sites
11	In online buying, I look carefully to find the products with best value for money
12	I usually purchase more expensive brand when shop online
13	The most well known and advertised brands are usually good choice while buying online
14	I carefully calculate how much I spend in online shopping
15	When buying online, Higher the price, higher the quality
16	I repeatedly purchase from the same site again and again
17	I enjoy shopping online
18	Online shopping is fun
19	I consider online buying with much thought and care
20	My standards and expectations on the quality of online buying are very high
21	The more product information I learn, the harder it seems to choose the best
22	When I want to buy online, I try to get the best or perfect choice
23	While buying online, there are so many brands to choose from that often I feel confused

**Table-2: Rotated Component Matrix**

	Factors							
	1	2	3	4	5	6	7	8
QM1	.880	.110	-.057	-.054	.291	-.029	.270	.004
QM2	-.198	.066	-.853	.413	-.352	.044	.074	.414
QM3	.832	.104	-.181	.081	-.134	.229	.144	-.142
QM4	-.789	-.084	.126	.331	.362	-.052	-.184	.101
QM5	-.737	.015	.313	-.074	.131	.517	.030	-.188
QM6	-.108	.477	.765	.238	-.015	.000	.316	-.375
QM7	.753	.283	-.023	.337	.094	-.130	-.016	-.079
QM8	-.283	-.117	.432	.847	-.292	.021	.098	-.262
QM9	.766	.037	.047	.273	.211	.205	.010	.132
QM10	.081	.751	-.184	.138	-.079	-.046	.306	.036
QM11	.107	.131	.155	.824	.062	.173	.320	-.147
QM12	.397	.762	-.052	.124	.175	.198	-.006	-.309



QM13	-.046	.767	.379	.362	.106	.102	-.065	.098
QM14	-.163	-.192	.055	-.067	.021	-.214	.339	.351
QM15	-.044	.752	.126	.108	-.121	.097	-.045	-.097
QM16	-.036	.829	.268	.316	-.167	-.106	-.066	.033
QM17	.344	.144	.112	-.006	-.156	-.020	-.056	.789
QM18	.288	-.253	.057	.295	-.187	.217	-.034	.730
QM19	.039	.045	.519	-.097	-.782	-.040	.057	.246
QM20	-.033	.492	.083	-.118	.825	.203	-.272	.334
QM21	.112	.110	.301	.117	.086	.152	.791	-.065
QM22	.173	.092	.076	.036	.799	-.028	.042	.357
QM23	.329	-.011	.502	.023	.151	-.025	.770	-.141

**Extraction Method: Principal Component Analysis.**  
**Rotation Method: Varimax with Kaiser Normalization.**

**Table-3: Factor Loadings of the 7-Factor Structure Consumer Decision-Making Style Model**

S No	Factor Name	Items	Communality
1	Image Conscious	1,3,4,5,7,9	.870, .812, .790, .747, .723, .746
2	Brand Conscious	10,12,13,15,16	.731, .769, .761, .839, .735
3	Carefree	2,6	.753, .765
4	Value Conscious	8,11	.747, .804
5	Meticulous	14,19,20,22	.796, .782, .825, .799
6	Confused by over choice	21,23	.791, .790
7	Fun loving	17,18	.789, .780

**Objective 2:** To compare the decision-making styles adopted by consumers in online buying across gender

**Hypothesis-1:** There is no significant difference in the decision-making styles adopted in online buying between males and females.

**Table 4: Decision Making Behavior across Gender**

Type Of Decision Making	Male (N= 139)		Female (N= 111)		T Value
	Mean	Sd	Mean	Sd	
Image Conscious	4.64	0.68	3.38	1.62	1.007*
Brand Conscious	4.70	0.70	4.64	0.88	1.593*
Carefree	3.65	0.84	3.93	0.99	.881
Value Conscious	3.54	1.04	3.61	1.22	.985 *
Meticulous	3.69	1.15	3.29	1.32	.550
Confused By Over Choice	3.84	1.12	3.87	1.08	2.045
Fun Loving	3.92	0.97	4.32	0.94	1.798 *

\*Significant at .05 Level

Table-4 denotes the decision-making behavior of respondents for online buying between males and females. The decision-making behavior of males and females significantly varies for Image conscious, brand conscious, value conscious, Fashion Conscious and Fun-Loving decision makers. Hence, we reject the null hypothesis (H-1) and conclude that there is significant difference in the decision-making styles adopted in online buying between males and females.

**Objective 3:** To compare the decision-making styles adopted by consumers in online buying across shopping expertise categories.

**Hypothesis-2:** There is no significant difference in the decision-making styles adopted in online buying between across different shopping expertise categories.



**Table-5: Decision Making Behavior across Different Shopping Expertise Categories (Beginner, Intermediate, Expert) DUNCAN'S Mean Test**

Type of Decision Making	Beginner (E1) (N=90)		Intermediate (E2) (N=101)		Expert (E3) (N=59)		E1 Vs E2	E2 Vs E3	E1 Vs E3	F value
	Mean	Sd	Mean	Sd	Mean	Sd				
Image Conscious	4.64	0.91	3.69	0.85	3.36	0.85	*		*	0.58
Brand Conscious	4.34	1.31	4.85	1.33	3.84	1.23		*		2.13
Carefree	3.81	0.72	3.89	0.79	3.53	0.67				0.54
Value Conscious	4.04	1.37	3.25	1.47	3.53	1.45	*			1.70
Meticulous	3.78	0.97	3.62	1.01	3.86	0.88		*		1.88
Confused by over choice	4.12	1.21	3.57	1.29	3.83	1.06			*	1.48
Fun loving	3.98	1.18	4.14	0.91	3.50	1.08		*		2.26

\*Significant at .05 Level

Table-5 denotes the decision-making behavior of online buyers across different shopping expertise categories (E1-Beginner, E2-Intermediate and E3-Expert). The decision-making behavior between E1 and E2 varies significantly for Image conscious and Value conscious decision makers. The decision-making behavior between E2 and E3 varies significantly for brand conscious, meticulous, Fun loving decision makers. Similarly, the decision-making behavior between E1 and E3 varies significantly for image conscious and confused by over choice decision makers. Hence, we reject the null hypothesis (H-2) and conclude that is significant difference in the decision-making styles adopted in online buying between across different shopping expertise categories.

**Objective 4:** To compare the decision-making styles adopted by consumers in online buying across shopping frequency

**Hypothesis-3:** There is no significant difference in the decision-making styles adopted in online buying between across different shopping frequency.

**Table-6: Decision Making Style Adopted By Online Buyers across Shopping Frequency (High, Medium, Low) DUNCAN'S Mean Test**

Type of Decision Making	High (S1) (N=90)		Medium (S2) (N=101)		Low (S3) (N=45)		S1 Vs S2	S2 Vs S3	S1 Vs S3	F value
	Mean	Sd	Mean	Sd	Mean	Sd				
Image Conscious	4.44	0.91	3.29	0.85	3.66	10.5			*	0.88
Brand Conscious	3.94	1.31	3.55	1.33	3.54	0.93			*	1.95
Carefree	3.61	0.72	3.49	0.79	3.93	0.87		*		0.84
Value Conscious	3.84	1.37	2.99	1.47	3.61	1.15	*			1.50
Meticulous	3.58	0.97	3.62	0.71	3.29	0.68	*			1.78
Confused by over choice	3.52	1.21	3.67	1.29	3.63	1.06		*		1.38
Fun loving	3.89	0.79	4.11	0.78	3.92	0.98			*	1.03

\*Significant at .05 Level

Table-6 denotes the decision-making style of online buyers across online shopping frequency. The decision-making behavior between S1 Vs S2 varies significantly for value conscious and decision makers. Decision making behavior between S2 and S3 varies significantly for carefree and fashion-conscious decision makers. Similarly, the decision making behavior between S1 and S3 varies significantly for brand conscious and image conscious and fun loving decision makers. Hence, we reject the null hypothesis (H-3) and conclude that there is significant difference in the decision-making styles adopted in online buying across different shopping frequency.

### Conclusion

Present study throws light on the decision-making style of online buyers through the use of a modified version of the Consumer Style Inventory. In addition, some factors focusing on the image consciousness and carefree orientations in



making online buying decisions were added in the scale that was missing in the earlier studies. It is observed in the study that there is a significant difference in the decision-making style for online buying, the online decision-making behavior of males and females significantly varies for Image conscious, brand conscious, value conscious, Fashion Conscious and Fun-Loving decision makers. There is also a significant difference in the online decision-making behavior of respondents across different shopping expertise category and across online shopping frequency. Across shopping expertise category, the decision-making behavior between beginner and intermediate buyers varies significantly for Image conscious and Value conscious decision makers. The decision-making behavior between intermediate and expert category varies significantly for brand conscious, meticulous, Fun loving decision makers. Similarly, the decision-making behavior between beginner and expert varies significantly for image conscious and confused by over choice decision makers. Across shopping frequency, the decision-making behavior between high frequency and medium frequency shoppers varies significantly for value conscious and decision makers. Decision making behavior between medium frequency and low frequency shoppers varies significantly for carefree and confused by over choice decision makers. Similarly, the decision-making behavior between high frequency shoppers and low frequency shoppers varies significantly for brand conscious and image conscious and fun-loving decision makers. These findings enable the e-commerce companies to gain a meaningful insight of understanding the typical decision-making style adopted by online buyers. The study also provides a powerful tool for e-commerce marketers for strategy formulation in the areas of marketing, brand positioning, pricing policy, and distribution etc.

**Scope for future Work:** In future, the comparative study may be conducted to study the decision-making style of online as well as in-store buyers; the study may also be conducted in other geographic locations.

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