IDENTIFYING MOST FAVORITE DIGITAL CHANNELS OF COMMUNICATION

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ABSTRACT
There are many different digital channels available today, including internet site, social networking sites (SNS), YouTube, mobile devices, online societies, digital outdoor media, digital television, and emails. Before making a purchase, a customer uses each of these channels. The purpose of this paper is to examine the most popular digital route for communicating while making a purchase. The paper also discusses the probable justifications for choosing a specific communication medium for a prospective buyer.

Keywords: Television, Electronic Mail, Simple Notification service, Wilk's Lambda, Chi-square

1. IDENTIFYINGTHEMOSTPREFERREDDIGITALCHANNELS

Responses were gathered from 801 Yamuna Nagar respondents. The survey revealed that, out of the 868 respondents, 701utilized at least one digital channel as a source of information before making a purchase. 167 respondents solely utilised conventional channels,such as TV, radio, newspapers, and visiting dealers' showrooms, instead of any digital ones. The utilization information for both conventional and digital communication channels is shown in Table 1.

Table1: Conventional /Old-stylevs.ElectronicNetworksofAdvertisement

No	Networks	Users	Ratio(%)
I	ElectronicNetworks	701	80.76
ii	Conventional / Old-styleNetworks	167	19.23

A significant modern communication route is emerging: digital channels. The same was confirmed by the findings, which showed that three-fourths (80%) of usersutilised at minimum one electronicnetwork in addition to conventional/ traditional means of communication when making a purchase. However, 20% of the respondents solely had faith in conventional forms of communication. To further understand the reasons, why respondents who solely utilised conventional communication channels did not use digital channels of communication while making a purchase, these respondents' responses were examined independently. Rogers (1983), Fishbein & Ajzen (1975), Ajzen (1991), Taylor and Todd (1995), and other noteworthy research on technology adoption have established that the use of a specific technology only occurs when the user prefers the salient beliefs of technology. According to Roger (1983), people are more likely to accept a technology if they believe it offers a relative benefit over the alternatives that are already available, is compatible, and is simple to use. In his research, Davis (1989) found that a technical medium's perceived utility and usability guarantee its actual use. According to Ajzen (1991), users' preferences for behavioral, normative, and control beliefs influence how they actually utilize technology.Important technological acceptance models, such as the ExpertiseReceptionPrototypical, Philosophy of LogicalAccomplishment, Philosophy of StrategicConduct, and DecayedPhilosophy of StrategicConduct, also demonstrate that consumer attitudes toward salient technological beliefs have a significant positive influence on whether or not a technology is used. Therefore, it makes sense that if a technology is used by the respondents, it is probably also liked. To put it another way, behavior in a technologically mediated environment can serve as a stand-in for choice. Following a similar rationale, the most popular channel was deemed to be the most favored. For the purpose of determining the most preferred communication method, 603 replies were taken into account.

Details on the practice of electronicnetworks of messagethough making a purchase are provided in Table 2 and Figure 1. According to the report, websites were utilised by a large majority of respondents (87%) as their preferred digital medium of contact when making a purchase. Additionally, the chart shows that respondents utilised both conventional/traditional and digital means of communication, with roughly two thirds (67%) of respondents using both. The chart also indicates that 23% of respondents solely used digital channels of contact rather than any conventional channels of communication while making a purchase.

Table2: MostFavoriteChannelsofCommunication

Channels	People	Percentage (%)
Websites	527	87
SNS	273	45
YouTube	246	41
Phone	110	18
Smartphone	256	42
Online Communities	148	25
Digital Outdoors	178	31
Digital TV	185	32
E-mails	64	11
Others	23	4
Traditional Channels	404	67

Website was the most popular digital medium, followed by cell phones (42%), social networking sites (45%), and websites for online communities. Emails were the least used method of contact when making a purchase, being used by only 4% of respondents.

It's interesting to note that respondents used recently introduced electronic networks like digital TV (32%) and digital outside (31%) to research products. A social networking site for sharing videos called YouTube was cited as a source of information by 41% of the respondents. Only 18% of respondents claimed to have used a feature phone, which makes sense considering that smart phones are steadily displacing feature phones in India.Only 4% of survey participants said they had learned about products through sources besides those listed above, such as the item itself, referrals from friends and family, and search engines like Google, Yahoo, and Rediff. However, all the data bases mentioned by the users in the next cluster might be included in the large category of communication channels, which also includes traditional media and the internet.
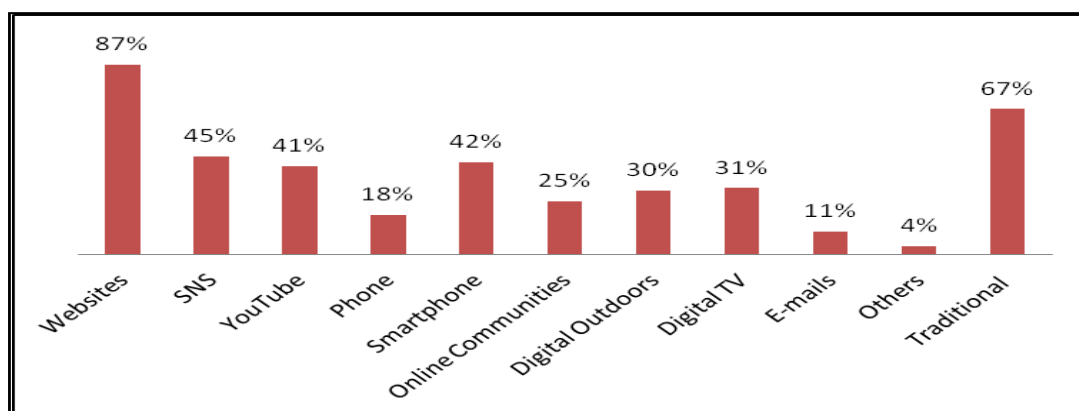
Figure1: MostFavoriteChannelofCommunication

2. HYPOTHESESSETFORTHETEST

Since the population percentage technique used to collect the data yielded two possible outcomes, usage and no use, a dichotomous distribution was assumed. The idea was assessed using a one example binomial test at a 5% level of significance to see if there was a preferred channel of message that consumers used when buying a product. No distributional presumptions were made because the one sample binomial test is a non-parametric test. The following were the test's hypotheses:

H_0: Customers do not have a preferred method of communication while making purchases.

H_a: Customers have a preferred method of communication while making a purchase.

Table3: TestMeasurementforChannelsofCommunication

Channels	Test	Importance	Conclusion
Internet site		.000	DiscardtheInsignificantProposition
Social Networks		.023	Discard the Insignificant Proposition
YouTube		.000	Discard the Insignificant Proposition
Mobiles	OneexampleBinomialAssessment	.000	Discard the Insignificant Proposition
Smartphone		.000	Discard the Insignificant Proposition
OnlineSocieties		.000	Discard the Insignificant Proposition
DigitalOutdoors		.000	Discard the Insignificant Proposition
Televisions		.000	Discard the Insignificant Proposition
Mails		.000	Discard the Insignificant Proposition
Miscellaneous		.000	Discard the Insignificant Proposition
TraditionalChannels		.000	Discard the Insignificant Proposition

Internet siteappeared as the maximumfavored channel of message when purchasing a product, followed by traditional channels (along with at least one digital channel), social networking sites, and smart phones. Table 3's significance values of less than.05 for all the channels of communication suggest that there was a preferred digital channel of communication.

3. MOTIVESFOR USING SPECIFIC CHANNEL OF COMMUNICATION

There isn't enough research showing the precise motive(s) for consuming a given electronicnetwork of message, even though the available literature has shown that they are revealing, cooperative, applicable, well-suited, easy to use, and enable calm comparison. The purpose of the current study is to comprehend the reason(s) for choosing a specific channel of communication while making a purchase. To get a conclusion, discriminant investigation was cast-off as a trial of worth.The use of each electronic channel was employed as the dependent variable, while key elements of digital marketing communication identified from the literature research were cast-off as interpreters, refined or self-governing variables. The test's goal was to identify the specific aspect of digital marketing communication that would make it easier for people to use a given digital channel of communication.

Websites: Well-suited, Useful and Calm to Usage

To determine the characteristics that would guarantee its use as an electronic network of message during a product purchase, one of the most prominent electronic networks of message, websites, was analysed. The average values provided by website owners and non-operators with relation to the components of the digital presentation statement varied, as shown by the collection data (Table 4).

According to Table 4, respondents who made purchases through websites gave electronic advertising messages a higher ranking (i.e., sophisticated) than respondents who did not use websites.

It was also proposed to identify the characteristics that significantly differentiated website users from non-users. A one-way ANOVA was performed to analyses each component of digital marketing communication. The equality of set means was assessed using Wilk's Lambda. Table 5 displays the results of the tests for

group mean equality for websites.Wilk's Lambda was found to be significant for each attribute when it's worth value was less than.05. Table 5, which also demonstrates this, makes this clear. The statistically significant results showed that, for all facets of digital marketing communication, the average of the two sets was very different.

However, the shared variance or correlation are not taken into consideration in the test of group mean equality. Table 5 demonstrated that the average of the two collections are substantially dissimilar from one another. In order to find any potential multicollinearity issues, the Pooled Within-Groups Matrix was examined. When two or more predictor variables in the study have a strong correlation with one another, multicollinearity exists.The correlation matrix between each predictor variable is shown in Table 6. Table 6 shows that the correlation between any two variables did not surpass the cutoff value of.75, demonstrating that multicollinearity was not an issue and that the discriminant model could be trusted (Poulsen 2008; Chawla 2011). The assumption that underlies discriminant analysis is that all groups are homogenous, or equal in terms of covariance.

Table4: GroupDataforInternet site

ElectronicAdvertising CommunicationFeatures (EACF)		Average	Std. Aberration	ValidN (list wise)	
				Unweighted	Weighted
Website User	Useful.	2.93	.971	77	77.000
	Fast	3.21	1.061	77	77.000
	Cooperative	3.31	1.017	77	77.000
	Appropriate	3.14	1.064	77	77.000
	CalmtoUse	2.25	1.211	77	77.000
	AccessibilityofProfessionalAssistance	3.15	1.115	77	77.000
	EasyEvaluation	3.25	1.045	77	77.000
	ObtainabilityofPurchaserAnalyses	3.67	1.027	77	77.000
	Compatibility	2.73	1.126	77	77.000
Website Non-user	Useful.	3.78	.973	526	526.000
	Fast	3.79	.967	526	526.000
	Cooperative	3.65	.906	526	526.000
	Appropriate	3.65	.905	526	526.000
	CalmtoUse	3.41	1.079	526	526.000
	AccessibilityofProfessionalAssistance	3.67	.920	526	526.000
	EasyEvaluation	4.17	.922	526	526.000
	ObtainabilityofPurchaserAnalyses	3.88	.913	526	526.000
	Compatibility	3.91	.889	526	526.000

Table5: AssessmentsofEquivalenceofSetMeansforInternet site

ElectronicAdvertising CommunicationFeatures(EACF)	Wilks 'Lambda	F	df1	df2	Sig.
Useful (U)	.983	5.127	1	600	.018
Fast (F)	.992	4.301	1	599	.050
Cooperative ©	.989	4.328	1	599	.038
Appropriate (A)	.990	4.338	1	599	.041
CalmtoUse (CU)	.908	7.013	1	599	.006
AccessibilityofProfessionalAssistance (APA)	.987	4.855	1	599	.028
EasyEvaluation (EE)	.986	5.471	1	599	.025
ObtainabilityofPurchaserAnalyses (OPA)	.988	4.662	1	599	.030
Compatibility (CB)	.980	7.346	1	599	.010

Table6: UnitedWithin-GroupsMatrix

EACF	U	F	C	A	CU	APA	EE	OPA	CB
Useful.	1.000								
Fast	.363	1.000							
Cooperative	.389	.310	1.000						
Appropriate	.321	.361	.434	1.000					
CalmtoUse	.264	.265	.150	.241	1.000				
AccessibilityofProfessionalAssistance	.412	.305	.269	.335	.163	1.000			
EasyEvaluation	.432	.401	.333	.349	.164	.390	1.000		
ObtainabilityofPurchaserAnalyses	.313	.251	.185	.258	.171	.381	.296	1.000	
Compatibility	.222	.219	.184	.200	.087	.195	.251	.134	1.000

The equality of covariance is tested using the Box's M statistic, and an irrelevantoutcome (related with a p value of higher than.001) demonstrates the equivalence of covariance (Grande, 2016). The outcomes of the Box M test for equality of covariance are shown in Table 7.

Table7: BoxMAssessmentofEquivalenceofCovariance

TestResults		
Box'sM		42.655
F	Approx	.931
	df1	45
	df2	57909.966
	Sig.	.059
Assessmentsnull propositionofequalpopulationcovariance conditions.		

As indicated in Table 7, Box's M statistic, which was related to 42.655 and had a worth value of.059, revealed the similarity of covariance among the sets. The essential principle of a discriminant function is to maximize variance among sets relative to variance in sets, and the Eigen cost reflects this ratio. A higher Eigen value is always preferred. Table 8 displays the Eigen values for webpages.

Table8: EigenValuesforWebsites

Function		Eigenvalue	%OfVariance	Cumulative%	CanonicalCorrelation
dimension0	1	.725[a]	100.0	100.0	.799

According to Table 8, the discriminant function of the website's Eigen value was.725. The function's Eigen value showed the likelihood that website operators and non-operatorscontrasted considerably for many aspects of electronicmessage. Additionally, the table displays the worth of "canonical relationship," which was a straightforward relationshipamong discriminant scores and the appropriate cluster memberships (operators and non-operators). Canonical association had a value of.799 and the square of this value was.638; this indicated that features of electronicadvertisingmessagereported for around 64% of the variance in the model used to distinguish between users and non-users.

The evaluated unstandardized discriminating role is shown in Table 9. Because the scores are not standardized, it is best to use the findings from the creative part of dimension.

Table9:CanonicalDiscriminantPurposeConstants(Unstandardized)

Electronic Advertising CommunicationFeatures (EACF)	DiscriminantRole(Unstandardized)
	1
Useful (U)	.583
Fast (F)	.051
Cooperative ©	.129
Appropriate (A)	.196
CalmtoUse (CU)	.537
AccessibilityofProfessionalAssistance (APA)	.282
EasyEvaluation (EE)	.452
ObtainabilityofPurchaserAnalyses (OPA)	.175
Compatibility (CB)	.592
Constant	-3.882

Based on the information in Table 9, the following discriminatory function for internet site usage can be carved out:

$$Y = -3.882 + .583 * I + .051 * Q + .129 * Int + .196 * R + .537 * ETU + .282 * EA + .452 * EC + .175 * ACR + .592 * C$$

Group centroid is the average score for the user and non-user groups, which was found independently. Table 10 contains the group centroids' value.

Table10:RolesatSetCentroids

Internet site	Role (1)
Non-Operators	-.414
Operators	.060

According to Table 10, the cluster centroid value for website operators was.060, whereas it was -.414 for non-operators. To ascertain if a respondent is an operator or not, these variables might be utilised as selection norms. If the count of responders in both groups is the same, the average of the two can be used as the cutoff score. The cutoff notch will be established using the Eq. However, in the current study, 603 respondents were split into 526 operators and 77 non-operators.

$$C = \frac{n_1 Y_1 + n_2 Y_2}{n_1 + n_2}$$

Where

n1: group-1 size

n2 group-2 size

Y1:groups-1discriminant scores (non-operator)

Y2:groups-2discriminant scores (operator)

The discriminant function's cutoff score was determined by inserting the numbers in the formula, and it was equal to 0. Therefore, a respondent with a score more than 0 would be considered a user, but a respondent with a score lower than 0 would be considered a non-user. Examining the value of the discriminating function is necessary to confirm the authenticity of the discrimination that has been detected. This is accomplished using the statistic known as Wilk's Lambda. Table 11 designates the Wilk's Lambda Measurement.

Table11: Wilk'sLambdaStatisticforWebsites

AssessmentofFunction(s)		Wilks'Lambda	Chi-square	Df	Sig.
dimension0	1	.211	24.617	9	.012

In the calculation of Wilk's Lambda, the discriminant score of each respondent acts as the dependent variable, while the category to which the respondent belongs acts as the independent variable. This variable can have a value among 0 and 1, where 0 represents seamless discrimination and 1 represents nope discrimination. The presence of a low Lambda value indicates that discrimination is actual, which is always desirable. A considerablemeasurement is always found (as irrelevant value specifies the alteration among the clustersoccursas of samplefault). The relevance of Wilk's Lambda is investigated using Chi-square. Wilk's Lambda for the discriminant function was found to be.211 and linked with a Chi-square measurement of 24.617. (Table 11).The Chi-square test measurement and a worth value of.012, which was less than.05. were used to govern the worth of Wilk's Lambda measurement. This led to the decision that discriminant function sufficiently accounted for group relationship. Representative Canonical Function,The unit of measurement has no bearing on coefficients, which mimic the beta coefficients in regression. These consistentconstants are used to abundant the interpreters and the predictor with the greatest value is taken to contribute the most to discrimination.

CONCLUSION

The findings demonstrated that while making a purchase, respondents used digital means of communication more frequently than traditional channels of contact. 80.76% of users must use a minimum of one electronic network to make a purchase. Only 20% of the respondents claimed they only used conventional media for communication. According to the survey, 23% of the respondents ignored traditional channels of communication and exclusively used digital ones. With 87% of respondents, websites were the most common digital communication medium. 42% of consumers utilised cellphones, while 45% used SNS. 67% of the respondents also used traditional media in addition to digital communication methods.Emails and other methods of interaction were the least frequently used when buying things. The study also emphasized the particular elements that affected a consumer's choice of an electronic messaging network while making a purchase. The website was made to work with YouTube. Information was disseminated using emails, social networking sites, digital outdoors, and smartphones. Reviews from individuals and business experts were posted in online forums. Because it was easy to use, digital TV gained popularity.

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