



DIGITAL BRANDING: AN EMPIRICAL STUDY WITH SPECIAL REFERENCE TO E-COMMERCE STARTUPS

Brijesh Sivathanu

Symbiosis Center for Information Technology, Symbiosis International University, Hinjewadi, Phase-I, Pune, India

E-Mail: brij.jesh2002@gmail.com

ABSTRACT

Advent of new technology, media and tools are rapidly reshaping the traditional ways of branding. Branding is the challenge for any of the e-commerce start-ups. This paper aims to highlight the digital branding practices of e-commerce start-ups and study its impact on the consumer buying behavior. A primary survey was conducted in Pune city using a structured questionnaire among 380 consumers who have purchased online. The exploratory factor analysis technique was deployed to identify the antecedents contributing to the digital branding of the e-commerce start-ups. Multiple Linear regression technique was used to understand the impact of the digital branding practices of the e-commerce start-ups on the consumer buying behavior. The results and findings clearly show that there exists a significant impact of the digital branding practices on the consumer buying behavior. This study attempts to interweave the disciplines of digital branding and consumer buying behavior, a crucial activity for the survival of e-commerce start-ups, given their lack of resources, financial cost constraints and the fundamental need to find and maintain clients. The significant contribution of this paper is that it provides a basis for conceptualizing a model of digital branding practices for the e-commerce startup firms performing under dynamic and competitive global environments.

Keywords: digital branding practices, e-commerce start-ups, impact, consumer buying behavior.

1. INTRODUCTION

Digital branding is a big challenge for start-ups and it is a critical activity for the successful establishment of any start-up company. It provides vital support in customer acquisition, maintenance and retention and to build a good reputation in the market. For any e-commerce start-up, digital branding is of utmost importance and a cost effective marketing initiative too. The crucial and alarming point is that if start-ups or new venture firms are not able to establish their corporate brand in the market within a relatively short time frame, they disappear from the market [1]. In this information age, information is already overloaded and it is critical to save the customer time and reduce the search cost. Digital brand building has become important for every e-commerce start-up to create an image in the customer's mind. Digital Branding is a vast and rapidly growing field. Digital branding is potentially a very powerful tool for businesses with low budget.

Startups should make innovative, creative and unconventional branding activities like create positive word-of-mouth and develop populist digital branding campaigns. New ventures should instead focus to develop more creative, innovate and unconventional branding activities [2, 3] as for instance organize events, actively create positive word-of-mouth, and develop online branding campaigns using social media.

With reference to the importance of digital branding to start-ups, this study highlights the consumer buying behavior and digital branding practices opted by the e-commerce start-ups.

2. LITERATURE REVIEW

The study mentions that Branding is the process of creating value through the provision of a compelling

and consistent offer and customer experience that will satisfy customers and keep them coming back [4, 5].

Contemporary definitions of branding transcend the simple transaction between the brand, organization and consumers, by including aspects of brand and relationship intangibles such as customer loyalty and preference [6].

Internet has redefined the marketing and branding strategies used by the companies because of some unique characteristics of the internet and its capacity to change traditional methods of advertising [7, 8].

The research mentions that there are different approaches to online branding [9]. Many companies expended significant effort in designing and maintaining their web site. Search Engine optimization (SEO) is useful for digital branding and online marketers are aware of it too. Some companies are engaged in other forms of online marketing like advertising through Google Ad Words, Yahoo search marketing and affiliate marketing programs. Some companies use online advertising as they consider it to be valuable. Many companies sported professionally designed logos and some companies create them in-house. The Internet offers a wide range of branding opportunities. SEOs, social media advertising using Facebook, LinkedIn, twitter and online advertising are among the several cost effective ways of reaching a larger audience geographically and creating a visible brand in a relatively short time frame. There are various free tools like blogs, database marketing and Web 2.0 which are also available.

The study mentions that the Internet offers a vast number of innovative branding opportunities especially suitable for start-ups, due to their relatively low cost and wide reach [10]. However, most start-ups are still at the beginning of the on-line branding learning curve. Search Engine Optimization is a particularly important tool because it is free and it is argued to be the best online tool



to connect with new clients, which is a crucial activity for start-ups. Internet advertising (Google Ad Words, Yahoo! Search Marketing and affiliate programs) can offer a great return on investment because it is a highly targeted form of advertising, but they can be expensive if they are not continuously monitored by competent staff. Entrepreneurs need to be encouraged to exploit the opportunity of using free or highly lucrative tools, although they require skilled specialists to run them and a considerable investment of time, including corporate Blogs, database marketing and Web 2.0.

The research states that personalization is also viewed as an integral element of internet marketing communications. From a branding perspective, online communication combines mass media's reach with the personalization inherent in two-way dialogue - previously possible only using personal promotion which triggers consumers to purchase online [11].

It was found that web site quality features were positively correlated to customer satisfaction, which in turn was significantly correlated to brand equity [12]. In the research - web site quality, content and ease of use attributes have emerged as critical elements [13, 14, 15]. Earlier consumers would systematically narrow down their brand choices to arrive at a final selection and complete the engagement by making a purchase. Now-a-days, consumers strongly rely on digital interactions and evaluate a shifting array of options. They remain engaged with the brand through social media even after a purchase. The study discusses that the web site content is very important for the customers. Effective web site content grouping occurs when related or similar web site content - wherever possible - is laced closely together in the navigational structure of a site which takes minimum efforts of navigation [16]. It also helps to create the online brand and help consumers to purchase easily.

Interactivity in the content, an interesting area in the research context resides within the interactivity construct. While current thinking is focusing more upon the personal context of interactivity - especially exhibited in online social networks - machine-based interactivity [17] is an area that represents considerable online branding relevance.

Really Simple Syndication (RSS) feed, is a free internet service that allows consumers to choose what they want to read, listen to and watch and have it sent to them electronically. RSS differs from e-mail newsletters, as the consumer has the power to be almost infinitely selective. Consumers can visit the web sites of interest, customize the content they want to receive and be secure that they will not receive any additional or irrelevant information. This is a very simple and cost effective practice used by start-up e-commerce companies.

The literature mentions that digital branding encompassing a broad range of offline and online tools, including mass media advertisements, banner advertisements, e-mail marketing, registration with main portals, affiliation programs, co-branding, sponsorship arrangements and exclusive tenancy on a site which is used by start-up e-commerce companies.

The research proposed the CARES (Contact, Affinity, Rewards, Extra value and Services) framework, as a route used for digital branding to achieve enhanced customer relationships in the internet environment, which lead to customer buying behavior [18].

Researchers have suggested that web experience, brand market share, and product category may affect the significance of brands online [19, 20].

The study on the analysis of online branding starts with creating and registering logos, brand marks, brand strap lines, creating brand awareness and presence, but in the long term, branding is the process of creating value through the provision of a compelling and consistent offer, (the brand promise) backed by a positive customer experience (the brand experience) that will satisfy customers and encourage them to return [21].

The study suggests that on the World Wide Web, the brand is the experience and the experience is the brand [22].

The selection of the best Uniform resource locator (URL) is important [23]. There is widespread recognition that consistency between domain name and brand name can increase the likelihood of locating the brand web site, as well as reinforce familiarity with the brand [24, 25].

The literature mentions that till the time e-commerce start-up companies don't opt for digital branding, consumers are reluctant to buy from these start-ups. There is a general recognition that the academic literature on online branding is limited and is in a formative stage with little integration [26, 27, 28, 29].

3. OBJECTIVES OF THE STUDY

The context for this study is the e-commerce start-up firms based in Pune city in India; it has two main objectives, namely:

- To identify the antecedents of digital branding followed by these e-commerce start-ups.
- To study the impact of the digital branding antecedents on the consumer buying behavior.

4. HYPOTHESES OF THE STUDY

The aim of this study is to understand the factors of digital branding affecting the consumer buying behavior, with reference to e-commerce start-up firms in Pune city.

- H₀₁: There is no significant relationship between website content and consumer buying behavior.
- H₀₂: There is no significant relationship between online advertising and consumer buying behavior.
- H₀₃: There is no significant relationship between online grievance handling and consumer buying behavior.
- H₀₄: There is no significant relationship between Personalization and consumer buying behavior.
- H₀₅: There is no significant relationship between Familiarity of website and consumer buying behavior.



- H₀₆: There is no significant relationship between online rewards and incentives and consumer buying behavior.
- H₀₇: There is no significant relationship between Social media presence and consumer buying behavior.
- H₀₈: There is no significant relationship between online sponsoring of the events and consumer buying behaviour.

5. RESEARCH METHODOLOGY

This study focuses on identifying the various antecedents contributing to the digital branding of the e-commerce start-ups. A primary survey was conducted using a structured questionnaire among the 380 online consumers in Pune city who have purchased online from the e-commerce start-ups. The sample respondents were selected based on the convenience sampling method. The exploratory factor analysis technique was deployed to identify the factors contributing to the digital branding of the e-commerce start-ups.

This is a descriptive research study to understand the digital branding practices used by e-commerce start-up companies. For conducting this research, both primary and secondary data was collected. The primary survey was done using a structured questionnaire with closed ended questions using a five point Likert scale ranging from “Strongly Agree” to “Strongly Disagree”. Also the marketers of the 35 e-commerce start-up companies were interviewed to understand the digital branding practices adopted by them.

The collected data was coded and entered for statistical analysis using SPSS software. The data obtained for the study were analyzed using Exploratory Factor analysis for identification of the antecedents contributing to the digital branding of the e-commerce start-ups in Pune city. Factor analysis was conducted as a data reduction technique to minimize the number of variables whilst simultaneously maximizing the amount of information in the analysis. In this study, the conceptual framework was developed by the researcher to understand the impact of the digital branding antecedents on the consumer buying behavior, which is as shown below in Figure-1.

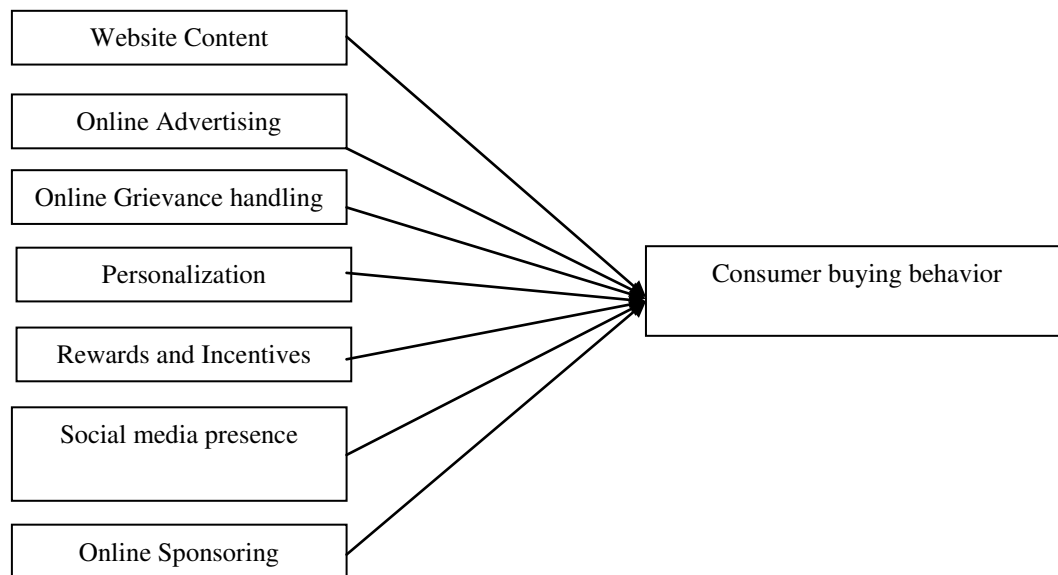


Figure-1. Conceptual framework.

6. ANALYSIS AND INTERPRETATION

The demographic characteristics of the survey confirm that there were 58% of male and 42 % of female members. 8% of the members have less than 6 months of membership with e-commerce start ups, 48 % of the members are 6 months to 1 years of membership with e-

commerce start-ups, 23% members have 1 to 2 years of membership, 21% of members have 2 years and above membership.

The descriptive statistics is as discussed in Table-1 below:

**Table-1.** Demographic statistics (N=380).

Measure	Item	Count percentage
Gender	Male	58
	Female	42
Age	18 to 25	69
	26 to 35	22
	36 to 50	9
Education	Higher secondary	5
	Graduation	46
	Post Graduate	46
	Ph.D.	3
Household Income (Monthly)	Rs. 10000 to 20000	11
	Rs. 20000 to 50000	69
	Rs. 50000 to 1,00,000	18
	Above Rs. 1,00,000	2
Length of Member History	Less than 6 months	8
	6 months to 1 year	48
	1 year to 2 years	23
	2 years and above	21

In accordance with the Churchill procedure, the researcher conducted the Principal Component Analysis with varimax rotation to identify the antecedents of digital branding of e-commerce start-ups. To determine the number of factors, the researcher considered the most usual rule of Kaiser criterion (selected the factors corresponding to the Eigen values above 1.0). Only items with communality greater than 0.5 and the absolute value of their co-relation to an axis greater than 0.6 were retained. Then the Cronbach alpha was used to assess the reliability of the antecedents. The estimated coefficients can be described as acceptable as they are all above 0.70 (Peterson 1994).

Table-2 below shows the Kaiser-Meyer-Olkin (KMO) value of 0.564, which is greater than 0.5 indicates the measure of sample adequacy which proves that the given primary data is fit for data analysis using factor analysis. The Bartlett's test of sphericity indicates that the

correlation matrix is not an identity matrix which indicates that the factor model is appropriate. Since the p-value is 0.001 i.e. the p-value is less than 0.05 which indicates that the correlation is significant.

The factor analysis shows that seven factors F1, F2, F3, F4, F5, F6 and F7 were extracted which cumulatively explains 79.846 per cent of the total variance. The rotated component matrix shows the factor loading of the items on the factors. The factors extracted are Web content, Online Advertising, Online Grievance Handling, Personalization, Reward and Incentives, Social media presence and Sponsoring,

The Scree plot mentions that seven factors F1, F2, F3, F4, F5, F6 and F7 emerged as important because their Eigen values were 5.311, 4.772, 3.851, 3.214, 2.628, 1.862 and 1.264 respectively. The remaining components with Eigen values under 1.0 were dropped as per the Kaiser rule.

**Table-2.** Factor analysis.

Factor name	Statements	h^2 (Communality)	Reliability (α)	Factors loading	Eigen value	% Variance explained	Cumulative %
F1 (Website Content)		-	.864	-	5.311	22.678	22.678
	S1 - Website colour	.894		.922			
	S2 – Website Presentation	.897		.952			
	S3 – Useful information to know good	.985		.956			
	S4 – Easy navigation	.978		.974			
	S5 – Easy payment gateway	.899		.876			
	S6- Contact Details	.913		.972			
F2 (Online Advertising)		-	.822	-	4.772	16.210	38.888
	S1 - Advertising on social media	.856		.976			
	S2 – Mobile Apps.	.899		.986			
	S3- E-mails	.906		.988			
	S4 - POP-ups.	.889		.987			
	S5 – SMS	.807		.997			
F3 (Online Grievance Handling)		-	.812	-	3.851	12.878	51.766
	S1 – Online customer care	.886		.978			
	S2 – Immediate online customer resolution	.883		.902			
	S3 - Quick online customer care	.891		.903			
F 4 (Personalization)		-	.848	-	3.214	10.672	62.438
	S1 –Personal Account						
	S2 – Personal benefits	.897		.869			
	S3 – Personalized daily offers	.826		.928			
	S4 – Personalized discounts	.865		.912			
	S5 – Personalized Messages	.889		.902			
	S6 – Personalized special offers for birthdays, anniversaries.	.892		.898			
		.872		.886			
F 5 (Reward and Incentives)		-	.828	-	2.628	7.864	70.302
	S1 – Online offers	.805		.901			
	S2 – online rewards	.807		.894			
	S3 – Login rewards	.825		.896			
	S4 – Online recommendation rewards	.834		.808			
			.806		1.862	5.586	75.888
F6 (Social Media Presence)	S1 – Company page on social media	.803		.911			
	S2 – Links from C2C portals	.891		.892			
	S3 – Likes on social media	.880		.889			
			.822		1.264	3.958	79.846
F7 (Online Sponsoring)	S1 – Sponsoring online events	.892		.885			
	S2 – Sponsoring sports and games	.897		.889			
	S3- Sponsoring online campaigns	.890		.883			
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy= 0.564							
Overall Cronbach Alpha (α) = 0.828							
Bartlett's Test of Sphericity = Approx. Chi-Square – 3430.135 {(p=0.001)}							
Source : Primary Data							

7. REGRESSION ANALYSIS

Multiple linear regression (MLR) test using the step enter regression method were subsequently conducted to assess the impact and influence of these factors on the

consumer buying behavior. This test will provide the details of the impact of changes in the independent variables on the dependent variable.



The Table-3 provides the multiple regression model summary and overall fit statistics. The adjusted R² of the model .649 with R² value of .674 that means the linear regression explained is 67.4% of the variance in the

data. The Durbin Watson is not between the critical values $1.5 < d < 2.5$ and therefore it can be assumed that there first order linear auto-correlation in the multiple linear regression data.

Table-3. Model summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.821 ^a	.674	.649	.506	1.283

a. **Predictors:** (Constant), web content, Online Advertising, Online Grievance Handling, Personalization, Reward and Incentives, Social media presence and Online Sponsoring.

b. **Dependent variable:** Consumer buying behavior

As per Table-4 the F-test is highly significant, thus it proves that there is a linear relationship between the variables in the model.

Table-4. ANOVA.

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.683	6	10.114	39.479	.000 ^a
	Residual	36.378	142	.256		
	Total	97.060	148			

a. **Predictors:** (Constant), web content, Online Advertising, Online Grievance Handling, Personalization, Reward and Incentives, Social media presence and Online Sponsoring.

b. **Dependent variable:** Consumer buying behavior

The Table-5 shows the multiple linear regression estimates including the intercept and the significance levels. The independent variables are 1) web content 2) Online Advertising 3) Online Grievance Handling 4) Personalization 5) Reward and Incentives 6) Social media presence and 7) Sponsoring.

The t values for web content, Online Advertising, Online Grievance Handling, Personalization, Reward and

Incentives, Social media presence and Sponsoring is significant at 5%, hence we reject the null hypothesis that there is no significant impact of these independent variables on the dependent variable - consumer buying behavior. Hence we accept the alternate hypothesis there is a significant impact of these independent variables on the consumer buying behavior.

Table-5. Coefficients.

	Model	Un-standardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.644	.225		2.862	.005
	Web content	.314	.069	.370	4.550	.000
	Online Advertising	.260	.079	.244	3.291	.001
	Online Grievance Handling	.242	.074	.268	3.270	.001
	Personalization	.226	.059	.057	3.830	.003
	Reward and Incentives	.186	.049	.068	3.795	.002
	Social media presence	.146	.059	.047	2.474	.002
	Online Sponsoring	.122	.077	.072	1.584	.003

a. Dependent Variable: Consumer Buying Behavior



8. RESULTS AND FINDINGS

The results illustrate that the antecedents of digital branding of e-commerce start-up companies are web content, Online Advertising, Online Grievance Handling, Personalization, Reward and Incentives, Social media presence and Online Sponsoring. Consumers are reluctant to purchase from new e-commerce start-ups till the time they are not familiar with the brand. Digital branding of e-commerce start-up companies significantly contribute to the online consumer buying behavior.

9. CONCLUSION AND MANAGERIAL IMPLICATIONS

This paper provides empirical evidence to understand the consumer buying behavior due to digital branding of e-commerce start-up companies. The present study makes both practical and academic contributions. Academically, it contributes to the existing literature in the area of digital branding and identifying its critical antecedents. It also helps to conceptualize a model for the consumer buying behavior due to digital branding of the e-commerce start-ups. The take away for the managers from this study is that the above determinants shall form the basis for the formulation of digital branding strategies in the e-commerce start-ups.

10. SCOPE FOR FURTHER RESEARCH

This research was conducted in the city of Pune in the state of Maharashtra. As with most studies, it is important to test these measures in different sectors, other cities and parts of India and subsequently other countries to improve the reliability and validity of this study.

This paper identifies the antecedents of digital branding by e-commerce start-ups. Future researchers may empirically examine the relationships among the antecedents of digital branding and consumer buying behavior for start-ups in the various other sectors.

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