



International Journal of Economic Research

ISSN : 0972-9380

available at <http://www.serialsjournal.com>

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Volume 14 • Number 9 • 2017

Impact of Customer Analytics on Brand Value – An Empirical Study with Special Reference to E-retailers

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Abstract: Purpose: Customer analytics tools are applied by the e-tailers (electronic-retailers/e-commerce retailers) to analyze customer data. The purpose of this paper is to explore customer analytics factors that facilitate enhancement of brand value of e-retailers. We used the Aaker (1996) brand value framework as the reference model for the design and analysis of our work.

Design / Methodology / Approach: Survey method enabled gathering of primary data for the empirical analysis. Two sets of questionnaire were administered: one for subject matter experts and the other to customers. A total of 217 subject matter experts comprising of academicians, digital marketing experts and marketing consultants responded to provide insights about customer analytics used by e-retailers. Questionnaire from 207 customers were used to measure on-line brand value for e-retailers. Exploratory factor analysis technique was deployed to identify the Customer Analytics factors contributing to the Brand Value of online E-tailers.

Results & Findings: Customer Behavioral Data, customer Interaction Data, Perceptual Data and Descriptive Data were significantly driving customer analytics. Moreover, these factors had significant impact on brand value comprising of brand-specific associations, general brand impressions and brand commitment.

Research Limitations: The scope of the study is limited to e-tail market only with a sample which may not be generalized to the universe at large. However, the research can be extended to customer analytics measures from both a geographic and industry centric perspective.

Practical / Managerial Implications: This research can be used to fine tune brand positioning and measure improvements results from e-retailing strategies. Future direction of the this study can lead to the application of customer analytics in the promotion of brand value across different market sectors

Originality/Value: This study discovered the effects of customer analytics on three brand value components: brand-specific associations, general brand impressions, and brand commitment.

Keywords: Brand Value, Customer analytics, E-retailers, Customer Behavior Data

INTRODUCTION

“If you can’t measure it, you can’t manage it”- Peter Drucker

The era of Big data has brought data-driven decision making in every business process. One of the most significant changes is the role that customer’s data play in controlling the E-tailers brand value.

Globalization, technology advancements, competition and changing consumers behavior have forced retailers to be customer driven, delivering a smarter shopping experience. Retailers have to leverage customer data to make sense of information and gain actionable insights with a constant focus on building customer loyalty as well as provide insights about the dissatisfied customers.

E-tailers have to regularly analyze huge customer data so as to provide modern customers with customized experiences at every phase of purchase, from awareness to engagement to the actual sale, and even after sales. Regularly analyzing mountains of customer data to understand their expectations and continuing the customer dialog help retailers retain their customers.

Customer Analytics can uncover patterns and trends in customer behavior and sentiments and use those insights to predict future outcomes and make smarter and quicker decisions.

Customers were observed to be loyal to the supplier if they trust that brand. Thus organizations are becoming market leaders through their focus on customer centric value. (Christopher, 1996) explained brand value needs to be included as part of customer value concept. Customer value recognized that being successful in the competitive market, required investments in the brand as well as investment in customers (Ul-Haq, 1994).

E-tailers have to leverage the customer data to make it useful for customer segmentation, targeting, positioning and devise a marketing mix. E-tailers can be clued-up by customer metrics captured, about customer experience, decision process, analyze the problems and devise improvements.

According to (Sauro, 2015) Customer analytics is a process by which customer data can be turned into predictive and prescriptive insights to ensure customers acquisition, retention, growth and enhance customer delight and advocacy. With recent advances in technology, user-friendly analytic tools are available for both small and big organizations.

The search industry is evolving with Google’s universal search. SEO techniques used earlier focused only on html based text contents, optimized keywords and relevancy. However the universal search focuses on media rich properties like videos, images, maps and news feeds. Thus if e-tailer optimizes all these medium their brand value can be enhanced.

In this paper, the author delineates the customer analytics factors that enhance brand value of E-tailers. The paper is divided in following sections: in section 1 author recognizes how customer analytics factors are important for E-tailers to enhance their brand value ; section 2 explores the opinions of marketers, consultants and academicians about important customer analytics factors that can have impact on the brand value of e-tailers; in section 3 researcher seeks to understand how the independent customer analytics variables i.e. Customer behavioral data, Customer Interaction Data, Perceptual Data and Descriptive Data impacts Brand value of E-tailers; in section 4 researcher has suggested the various methods of customer analytics implementation by e-tailers thereby enhancing their brand value.

Brand Building by E-tailers to influence Customer Behaviour

(Kelly, 2001) indicated the strategic reasons for all the marketing activities having focus on building strong brands. Powerful brands increases market shares, increased customer loyalty, amplifies distribution power, provides higher profit margins, and sustain the competition in business landscape.

(Aaker, 1996) proposed that a brand should be considered as an asset, developing the concept of brand equity. Author presented managers with a structure for measuring the power of a brand. The measures were classified into five categories like brand loyalty, brand awareness, perceived quality, brand associations and market behavior by the author.

(Simmons, 2008) incorporated marketing communication, understanding the customers, content and interactivity in his conceptual framework named “the four pillars of i-branding”.

(Zantedeschi, Feit, & Bradlow, 2016) in his research proposed extended traditional model of brand equity which conceive that strong brands are more preferred when marketing mix is controlled. The proposed model allowed (1) brand equity to evolve; (2) perceived product characteristics to evolve with brand strength; and (3) perceived coefficients for product attributes to be a function of equity.

(Steenkamp, 2014) proposed a “4V model” in his research consisting of valued brands, value sources, value delivery and value outcomes through which global brands were able to create firm value. The author observed that brands sustained only if they were efficient in delivering customer value.

(Lee, Knight, & Kim, 2008) described a brand analysis model consisting of three components: brand associations, brand impressions, and brand commitment. (Dillon, Madden, Kirmani & Mukherjee, 2001) introduced brand impressions as having holistic view about the brand. Author further added that general brand impression is reflected by brand awareness and brand image. Brand associations projected the properties and benefits that consumers associated to a brand which differentiated the brand.

(Lee, Knight, & Kim, 2008) in this study proposed that brand commitment constitute of brand loyalty and the purchase intention. To ensure continuous success, brand needs innovation, research and development investment, a unique communication strategy, and a brand image (Keller, Apeiria and Georgson, 2012). Entire company’s stability would be at stake if there is some brand contingency (Suder, 2006).

Brand awareness and brand image influences the formation of brand associations thus playing important roles in consumer decision. Brand awareness and brand image positively impacts marketing communication as consumers who are favorably predisposed toward a brand may respond to advertisements positively and thus require fewer ad exposures to meet communication objectives (Keller, 1993; Radakovic, 2014).

(Keller, 1993) proposed that brand recognition and brand recall sum up as brand awareness which provide ability to the consumer to rightly discriminate the brands. Consumers could retrieve the brand from their memory because of brand recall.

Interaction of Customer with brand:

Marketing is the science constituting of consumer behavior as an integral component. Knowledge about customer is the foundation for making sales and marketing strategies.

Customer analytics can be explained as data driven decision making. (Fisher, DeLine, Czerwinski, & Drucker, 2012). Analytics is the process of deriving insights by applying statistical analysis to the existing data and come with solutions to problems. (Murphy, 2010).

Customer analytics involves lot of statistical analysis to segment the customers and execute what-if analysis. Customer Analytics consists of:

- Algorithms for data mining to discover concealed patterns and associations within customer data.
- Generate individual customer score depending on their response to particular action.
- Measure the impact of the marketing campaigns.
- Use OLAP and OLTP in the enterprise.

Managers come across many departmental problems on day to day basis. They have to strive hard to increase conversion rates, return on investment, key performance indicators for customer satisfaction and retention and revenue.

As per (2016) IBM report customer analytics facilitates marketers to take decisions and engage with customers individually across all the mediums and channels. This enables better decisions, booming campaigns and lucrative customer relationships. Due to customer analytics marketers are able to collect, analyze customer data and information to improve overall marketing effectiveness and increase revenue.

As per IBM (2016) report customer segmentation is essential for the marketers to keep contact with their large customer database using cost-effective emails, provide benefits of a individual customer relationship. Appropriate customer and product segmentation allows sending the right information to the right people through right channel at the right time and right cost.

(2016) Angoss Customer analytics facilitates understanding customer lifetime value effectively and thus discover next best product/service and Up/cross sell.

(E M Steenkamp, Batra, & Alden, 2002) and (Strizhakova, Coulter, & Price, 2008) in their research work took a consumer viewpoint and defined worldwide brands emphasized that consumer's perception about the brand was very significant .Brands allow E-tailers and their products and services to adopt qualities like a person and share ethics and principles, make and keep commitments and create emotional connect with their customers. This directs customers to be loyal to and promote their brands.

Business models and marketing culture has been significantly impacted by the advent of Internet to be more successful (Harridge-March, 2004; Pitta & Fowler, 2005).Internet adoption for marketing includes websites, e-mail marketing, digital advertising, web analytics, viral marketing and brand communities (Marcolin, Coviello, & Milley, 2005; Ha, 2008; Bach Jensen, 2008). Internet characteristics and its capacity have forced many businesses to redefine their marketing and branding strategies (Harridge-March, 2004; Ibeh, Luo, & Dinnie, 2005). Internet enables easy and rapid interaction between customers and businesses. (Coyle & Thorson, 2001)).Online interactions were significant to achieve customer personalization thereby influencing online brand equity (Marcolin, Coviello, & Milley, 2005; Ibeh, Luo, & Dinnie, 2005).

(Simmons, 2007) discussed that the viral communications taking place on social network marketing web sites could be utilized in creating positive brand equity.

Transaction between organization and consumers are important for branding, which includes customer loyalty and preference (Haigh, 2003).

(Vinhas Da Silva & Faridah Syed Alwi, 2006) suggested that online consumers used more cognitive evaluations than affective.

Customer Perceptions

To assess the up to date position of E-retailers brand among consumers, brand perception, brand evaluation and brand loyalty should be analyzed among online consumers. Internet is interactive medium which provides product-related information, found impacting consumer trust and satisfaction (Ballantine, 2005; Wu & Chang, 2005).

Individual consumer's evaluation of products and services decides the perceived quality of the product, providing reason to buy and differentiate brands (Zeithaml, 1988). There are emotional values connected to many brands (Havlena & Holbrook, 1986).

(Andrews & Boyle, 2008) also found that risk perceptions among the consumers can be overcome by e-tailers by effectively using online communications. Author indicated that consumers are apprehensive about online security technologies. Therefore branding awareness using online communications was essential for e-tailers. As per (Ul-Haq, 1994) philosophy of relationship marketing recognized that sustainable competitive advantage could be gained by creating good customer perceptions.

Business Outcome/Impact

Brand Value allows growth in market share, profitability, charge premium price and better market valuation. Brand Value provides the opportunity product and service extension and enters new markets. Brand provides prospects to support the organization focus on concrete mission, vision, objectives and set of values.

Internet transactions provide valuable consumer data used for customer segmentation and provide customized products and services (Phippen, 2004; Evans & Mathur, 2005).

(Fournier & Yao, 1997) indicated that brand loyalty was the intention to buy the brand as a primary choice. Strong brands enjoy customer loyalty thus create higher revenues (Keller, 2003), can have premium pricing (Court et al., 2002) and increase their market value (Kay, 2006).

(Rafiq & Fulford, 2005) stated that customer loyalty leads to more positive interactions to develop brand equity. (Harridge-March, 2006) contended that the key component in building trust was good understanding of current and potential customers.

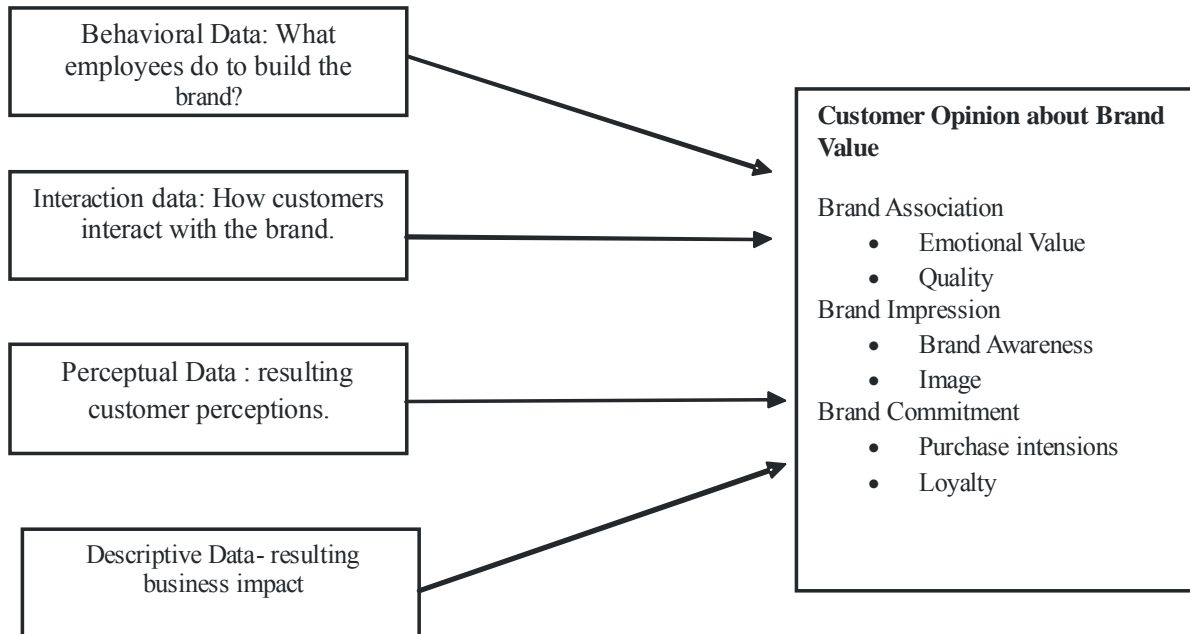
Operational Definition

Brand is the summation of positive and negative feelings, trust, credibility, thoughts and recognition that target consumers have about products, services and the company.

Brand Value is awareness, trust, reputation and perception for product, services or a company by doing things well.

Customer analytics is quantitatively measuring the metrics associated with customers to get deep insights to predict customer behavior and understand the perception in his/her mind for a E-tailer's brand.

Conceptual Model



Research objectives

1. To identify the factors that drive customer analytics for e-retailers.
2. To study whether the drivers of customer analytics also impact the brand value of the E-tailers.

Hypothesis of the Study

- H1: There is a significant impact of Customer Behavioral Data on the brand value of E-retailers.
H2: There is a significant impact of Customer Interaction Data on the brand value of E-retailers.
H3: There is a significant impact of Customer Perception Data on the brand value of E-retailers
H4: There is a significant impact of Customer Descriptive data on the brand value of E-retailers.

RESEARCH METHODOLOGY

Research Design

Author has followed descriptive research design to explore the significant factors of customer analytics for E-tailers.

Customer analytics can be used to pay attention to online customers through qualitative and quantitative research, social media metrics and customer support feedback mechanisms.

For this research paper, researcher has collected quantitative data on Customer analytics that impact the brand value of E-retailers from the subject matter experts.

Quantitative data on brand value of E-retailers was collected from the online customers.

Data Collection

Survey method enabled gathering of primary data for the empirical analysis. Two sets of questionnaire were administered: one for subject matter experts and the other for online customers. A total of 217 subject matter experts comprising of academicians, digital marketing experts and marketing consultants responded to provide insights about customer analytics used by e-retailers. Respondents for the research were selected based on the snowball sampling method. Questionnaire from 207 online customers were used to measure brand value for e-retailers. The sample respondents were selected based on the convenience sampling method. Exploratory factor analysis technique was done to identify the Customer Analytics factors contributing to the Brand Value of online E-tailers.

Research Instrument:

Researcher developed two questionnaires which were determined through literature review. The first set of questionnaire was administered for subject matter experts to explore the customer analytics factors used by E-retailers. Respondents responded to 65 declarative statements. The second set of questionnaire was administered for online customers to measure brand value of E-tailers. Interval scale was used to measure all variables using i.e. 5 point likert scale.

Sample Design

Customers who do online shopping and customer analytics experts like marketing consultants, digital marketers and academicians in the Pune city was the population of the study.

Sample size

A sample of 220 online buyers in Pune city was selected based on the non-probabilistic convenience sampling method. In the descriptive research convenience sampling is used to study respondents engaged with E-tailers. After examination of filled questionnaire, 207 responses were fit for the analysis. 300 Questionnaires were sent to customer analytics experts consisting of digital marketers, academicians and marketing consultants selected through non-probabilistic snow-ball sampling method. 207 subject matter experts responded completely and correctly.

Data Analysis and Results

Primary data was analyzed using K-S test, Cronbach alpha reliability test, data reduction technique i.e. exploratory factor analysis and multiple linear Regression Analysis Techniques.

1. K-S test to check the Normal distribution of measured variables

Table 1
K-S test for Normality

<i>K-S test for Normality</i>	<i>Significance level</i>
Brand Value of E-retailers	0.069
Customer Analytics Data	0.081

(a) The Significance value for brand value of E-retailers and Customer Analytics Data is > 0.05 thus all the values measured are normally distributed.

2. Cronbach Alpha reliability measure

The reliability test was conducted on the questionnaire designed to elucidate good reliable responses from the respondents.

Table 2
Cronbach Alpha test for reliability

<i>Variables</i>	<i>Cronbach's Alpha</i>	<i>No. of Items</i>
Brand Value of E-retailers	0.768	15
Customer Analytics Data	0.701	65

The questionnaire developed is reliable as Cronbach's Alpha reliability for Brand Value of E-retailers and Customer Analytics Data greater than 0.7 was calculated.

Customer analytics factors promoting brand value of E-retailers were explored using exploratory factor analysis which is multivariate method for data reduction.

To check whether original variables are correlated KMO Bartlett's test was used.

Exploratory factor analysis

To Explore Subject Matter expert's opinion about Customer analytics used by E-tailers, Exploratory Factor Analysis was implemented. Respondents were given 65 declarative statements which were measured on 5 point likert scale (5-strongly Agree and 1-Strongly disagree). Exploratory factor analysis was used to reduce 65 statements to manageable size.

KMO AND BARTLETT'S TEST

KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.658
Bartlett's Test of Sphericity	Approx. Chi-Square	7648
	Sig.	.000

Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.658 which was greater than 0.5.

Principal Component Analysis was the extraction method used. Factors were extracted using eigenvalues technique. Factors having eigenvalues more than 1.0 were included in the study as these variables involve factors with variance more than one.

Factor loadings were calculated, presenting the significance of each variable within the factor category.

Table 3
Result overview

<i>Factor loading significance Number of variables</i>		
	<i>No. of factors extracted</i>	<i>Variance</i>
Customer Analytics Data	4	79.9

Four factors were extracted from 65 items with variance of 79.9 from Customer Analytics Data as responded by subject matter experts. Strong connection between factor variables was established by high values of the loading.

Table 4
Factor loading results for Customer Analytics used E-tailers.

<i>Customer Analytics factor loading results</i>		
Factor 1 – Behavioral Data:	Create customer profile for ideal customers.	0.642
E-tailers brand building process.	Marketing strategy for each individual.	0.664
	Effectively tracking top-line revenue on a customer-by-customer basis.	0.680
	Identify Customer segments that are more profitable.	0.702
	Identify Discrete Segments according to recency, frequency and Monetary.	0.726
	Have right data, trained employees and automated program serving up right offers	0.684
	Leverage interactional data to determine where the prospects are in buying cycle.	0.648
	Separate the many insignificant tasks from the significant ones that matter to your customers.	0.708
	Determine conversion ratio.	0.742
	Tracking Coupon Codes and Promotional Codes.	0.782
	Tracking Payment Method and Shipment Method	0.726
	Tracking purchase history	0.646
	Customer Satisfaction measured.	0.866
	Customer Engagement with E-tailer is measured.	0.886
	Time duration a customer spends using your products or services.	0.936
	Percentage of customers that abandon at particular time intervals.	0.856
	Identify small problems through anomaly detection and be proactive in increasing customer retention.	0.854
	Use brand recall to measure brand awareness.	0.822

contd. table 4

Factor 2 – Interaction Data: How customers work together with the brand.	New Visitors, returning visitors and Total visitors	0.694
	Visitors before and after branding campaign on websites	0.628
	Measure frequency of visits in campaign / offer period compared to general.	0.744
	Social index- Traffic from Discussion forums / communities/ domains/links	0.782
	Track if brand is being talked about in the general forums or Social media and Track Product reviews	0.742
	Track Navigation path and Measure Visit lengths	0.824
	Free Demo trials / Downloads / Trial memberships/ PDFs / Brochures / Application forms/ free Coupons.	0.864
	Tasks completion rates indicating Customer satisfaction.	0.884
	Visitor Recency , Repeat visits by frequency.	0.686
	Social Media presence to encourage satisfied customers makes your recommendations.	0.744
	Customer reviews are posted online, tweets and blogs to give recommendations.	0.782
	Track how much are you talked about compared to your competitor.	0.846
	Track who is talking (demographics), what are they talking, which websites they talk.	0.874
	Examine customer behavior and messages at the touch points such as billing, customer service etc.	0.824
	Factor 3 – Perceptual Data : resulting customer perceptions.	How many people prefer your brand compared to your competitors.
Advocacy intent i.e. Net promoter scores		0.846
Change in traffic owing to Press Releases, campaigns or any product launches.		0.682
Effective at “embossing” brands into your psyche.		0.742
Tracks customers positive or negative reactions and their experience.		0.788
Identify the items to be purchased together.		0.824
Track customer’s Purchase intent.		0.844
Offer ways for the customers to buy more i.e. cross sell and up sell by making offers to customers at the most opportune time.		0.868
Track Positive associations of satisfied Customer.		0.640
Track self-declared customer information.		0.891
Factor 4 – Descriptive Data- resulting business outcomes.	Track customer Purchases and Re-purchases	0.874
	Measure customer Wallet Share on Products and Services.	0.842
	Track customer demographics	0.832
	Calculate customer wise profit Margins	0.746
	Calculate customer Revenue uplift opportunity.	0.793
	Track customer Lifetime value	0.648
	Track Likelihood of Target Action	0.826
	Use unique phone numbers with different campaigns	0.844
	Noticed on Website of e-tailers “was this info useful” check boxes (for content value measurement) Refer to friend form Quick on exit survey forms	0.788
	Provide offline recommendation and offline action.	0.748
	Track customer Conversion rate and Purchases online	0.724

Four factors extracted from Subject matter experts opinions on Customer analytics are Behavioral Data, customer Interaction Data, Perceptual Data and Descriptive Data.

Multiple Regression Analysis

Multiple Linear Regression technique was used to predict the value of dependant variable Brand value of E-retailers based on the value of four independent variables i.e. Customer Behavioral Data, customer Interaction Data, Perceptual Data and Descriptive Data.

Table 5
Model Summary

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	.798a	.636	.618	.496

This table provides the R, R², adjusted R², and the standard error of the estimate, which can be used to determine how well a regression model fits the data.

The “R” multiple correlation coefficients is measure of the quality of the prediction of the dependent variable; in this case, Brand value of E-retailers due to customer analytics. A value of 0.795, in this example, indicates a good level of prediction.

The “R Square” called the coefficient of determination, which is the proportion of variance in the dependent variable that can be explained by the independent variables. The value of 0.636 that our independent variables explain 63.6% of the variability of the dependent variable i.e. Brand value of E-retailers due to online customer Behavioral Data, customer Interaction Data, Perceptual Data and Descriptive Data.

(a) Statistical Significance

The *F*-ratio in the ANOVA table

Table 6
ANOVA Table

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	Regression	2.558	19	.853	37.46	.018a
	Residual	4.431	132	.246		
	Total	6.989	151			

The table 6 shows that the regression i.e. the predictability of this model is 0.853 while the residual i.e. the error is 0.246. The *F* value is significant at 0.018 i.e. $p < .05$ (i.e., the regression model proposed by the researcher is a good).

Estimated model coefficients

Table 7

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.470	.926		2.591	.016
Behavioral Data: What employees do to build the brand?	.679	.427	.770	1.489	.012
Interaction Data: How customers interact with the brand.	.312	.548	.270	0.569	.026
Perceptual Data : resulting customer perceptions.	.287	.162	.125	1.773	.032
Descriptive Data- resulting business impact	.129	.142	.107	.908	.044

- i) The t value of Behavioral Data of online Customers is significant at 5% hence we reject the null hypothesis that there is no significant impact of Customer Behavioral Data on the brand value of E-retailers.
- ii) The t value of Interaction Data of online Customers is significant at 5% hence we reject the null hypothesis that there is no significant impact of Customer Interaction Data on the brand value of E-retailers.
- iii) The t value of Perception Data of online Customers is significant at 5% hence we reject the null hypothesis that there is no significant impact of Customer Perception Data on the brand value of E-retailers.
- iv) The t value of Descriptive data of online Customers is significant at 5% hence we reject the null hypothesis that there is no significant impact of Customer Descriptive data on the brand value of E-retailers.

FINDINGS AND DISCUSSION

1. As per the table 5, the “R Square” the coefficient of determination, is the proportion of variance in the dependent variable that can be explained by the independent variables. In this study independent variables explains 63.6% of the variability of our dependent variable, Brand value of E-retailers.
2. The F value in the table 6 is significant at 0.018 the regression model proposed by the researcher is a good fit of the data.
3. Behavioral Data of online Customers, Interaction Data of online Customers, Perception Data of online Customers and Descriptive data of online Customers were found to be positively impacting the Brand value of E-retailers.
4. Table 7 shows Coefficient values with the information on each independent or the predictor variable. The coefficient for Behavioral Data of online Customers, Interaction Data of online Customers, Perception Data of online Customers and Descriptive data of online Customers are significant at 0.05; hence we reject the null hypothesis and accept the alternate hypothesis.
5. Table 4 shows high scores on the customer analytics factors examined through exploratory factor analysis that supports and promotes brand value of E-tailers.

6. Four factors extracted for Customer Analytics Data are Behavioral Data of online Customers, Interaction Data of online Customers, Perception Data of online Customers and Descriptive data of online Customers.
7. Behavioral Data emphasizes what marketers have to do to build the brand. This factor comprises of customer attributes, characteristics, self-declared information, demographics which can be used for customer segmentation, customer life time value and churn ratio detection.
8. Interaction Data consists of E-mail and chat transcripts, web click streams, and in-person dialogues.
9. Perceptual Data indicated the resulting customer perceptions, provides information about customer's opinions, preferences, needs, and desires which are found in survey responses or social media data.
10. Descriptive Data measured resulting business impact, determined customer orders, transactions, payment history, call logs, and usage history.

PRACTICAL / MANAGERIAL IMPLICATIONS

The present study makes both educational and practical contributions. This research contributes to the existing literature in the area of Brand Value and Customer analytics. It is evident that E-tailers have million visitors every day. Their business challenge is to analyze drop or increase in the traffic, know the customer behavior, understand how to trigger interest and engage visitors for a longer period of time on the portal.

The Analytics team can facilitate managers with solutions, real time updates and statistics. Thus the E-tailer can be in a position to forecast the future traffic, segment and understand the visitor's behavior.

These customer metrics are essential as indicative, predictive, and prescriptive tools to help E-tail marketers gauge if the brand is on pathway to its positioning, and its impact on the company and industry. Understanding how the brand is perceived allows marketers to take remedial actions so that the brand is associated with overall business objectives.

CONCLUSIONS

1. Companies are utilizing the customer data for competitive advantage. There is a tremendous pressure to shift from intuition-based to data-driven decision making. Thus the linkage of analytics to performance is evident.
2. If E-tailers build strong brand then people will specifically search for them when they have to purchase. Strong brand will ensure new products or services to be launched with trust and credibility.
3. Brand building is a process that has synergies with customer data/metrics.
4. Customer analytics can help a marketer keep an eye on and build up its brand.
5. We use analytics to increase brand awareness, preference, purchase intention and enduring customer loyalty.
6. Customer analytics is used to pay attention to the customers.
7. Important business decisions can be based on customer data and information.

8. Customer segmentation, targeting, brand positioning, pricing, distribution and marketing strategies can all be learned through customer metrics.
9. Customer Analytics facilitates a complete customer lifecycle value analysis, enhanced customer relationship management and customer intelligence.

FUTURE RESEARCH:

Further research could be conducted in other cities. One limitation of this paper is that the survey population is restricted within Pune city therefore the findings cannot be representative of all companies and customers. Though the structured data is the primary source for business intelligence further research shall be applied to unstructured data as large amount of business information originates with no identified structure. Sentiment analysis and Text analytics can be done on internal unstructured data like customer feedback survey, call centre notes, Emails, claim records and customer forms/letters. Also Text analytics could be applied to external unstructured data like blogs, social media, tweets and online forums.

REFERENCES

Books

- Keller, K., Apeiria, T. and Georgson, M. (2012), Strategic brand management. 1st ed. Harlow, England: New York.- book.
- Sauro, J. (2015), Customer Analytics for dummies. Hoboken, NJ, United States: John Wiley & Sons.
- Suder, G. (2006), Corporate strategies under international terrorism and adversity. 1st ed. Cheltenham, UK: Edward Elgar Pub.

Journal articles

- Aaker, D. (1996), Measuring Brand Equity Across Products and Markets. *California Management Review*, 38(3), pp. 102-120.
- Andrews, L. and Boyle, M. (2008). Consumers' accounts of perceived risk online and the influence of communication sources. *Qualitative Market Research: An International Journal*, 11(1), pp. 59-75.
- Bach Jensen, M. (2008), Online marketing communication potential. *European Journal of Marketing*, 42(3/4), pp. 502-525.
- Ballantine, P. (2005), Effects of interactivity and product information on consumer satisfaction in an online retail setting. *International Journal of Retail & Distribution Management*, 33(6), pp. 461-471.
- Christopher, M. (1996), From brand values to customer value. *Journal of Marketing Practice: Applied Marketing Science*, 2(1), pp. 55-66.
- Coyle, J. and Thorson, E. (2001), The Effects of Progressive Levels of Interactivity and Vividness in Web Marketing Sites. *Journal of Advertising*, 30(3), pp. 65-77.
- De Vos, A., De Hauw, S. and Van der Heijden, B. (2011), Competency development and career success: The mediating role of employability. *Journal of Vocational Behavior*, 79(2), pp. 438-447.
- Dillon, W., Madden, T., Kirmani, A. and Mukherjee, S. (2001), Understanding What's in a Brand Rating: A Model for Assessing Brand and Attribute Effects and Their Relationship to Brand Equity. *Journal of Marketing Research*, 38(4), pp. 415-429.
- E M Steenkamp, J., Batra, R. and Alden, D. (2002), How perceived brand globalness creates brand value. *Journal of International Business Studies*, 34(1), pp. 53-65.
- Evans, J. and Mathur, A. (2005), The value of online surveys. *Internet Research*, 15(2), pp. 195-219.
- Fisher, D., DeLine, R., Czerwinski, M. and Drucker, S. (2012), Interactions with big data analytics. *interactions*, 19(3), p. 50.

- Fournier, S. and Yao, J. (1997), Reviving brand loyalty: A reconceptualization within the framework of consumer-brand relationships. *International Journal of Research in Marketing*, 14(5), pp. 451-472.
- Gąsior, M. and Skowron, Ł. (2014). Gap in Trade Companies' Perception of Consumers' Purchasing Processes. *Contemporary Management Research*, 10(4).
- Ha, L. (2008), Online Advertising Research in Advertising Journals: A Review. *Journal of Current Issues & Research in Advertising*, 30(1), pp. 31-48.
- Haigh, D. (2003), An introduction to brand equity — How to understand and appreciate brand value and the economic impact of brand investment. *Interactive Marketing*, 5(1), pp. 21-32.
- Harridge March, S. (2004), Electronic marketing, the new kid on the block. *Marketing Intelligence & Planning*, 22(3), pp. 297-309.
- Harridge March, S. (2006), Can the building of trust overcome consumer perceived risk online?. *Marketing Intelligence & Planning*, 24(7), pp. 746-761.
- Havlena, W. and Holbrook, M. (1986), The Varieties of Consumption Experience: Comparing Two Typologies of Emotion in Consumer Behavior. *Journal of Consumer Research*, 13(3), p. 394.
- Ibeh, K., Luo, Y. and Dinnie, K. (2005), E-branding strategies of internet companies: Some preliminary insights from the UK. *Journal of Brand Management*, 12(5), pp. 355-373.
- Keller, K. (1993), Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, 57(1), p. 1.
- Kelley, C. (2001), Brand Leadership: Building Assets in the Information Society 2001 David A. Aaker, Erich Joachimsthaler. Brand Leadership: Building Assets in the Information Society. New York, NY: The Free Press 2000. 335 pages, ISBN: 0 684 83924 5 \$30 (hardback). *Journal of Consumer Marketing*, 18(1), pp. 75-83.
- Lee, M., Knight, D. and Kim, Y. (2008), Brand analysis of a US global brand in comparison with domestic brands in Mexico, Korea, and Japan. *Journal of Product & Brand Management*, 17(3), pp. 163-174.
- Marcolin, B., Coviello, N. and Milley, R. (2005), Assessing Web-Enabled Interactivity. *Journal of Organizational and End User Computing*, 17(4), pp. 23-48.
- Murphy, H. (2010), Cult of analytics, driving online marketing strategies using web analytics — Steve Jackson. *International Journal of Market Research*, 52(6), p. 842.
- Phippen, A. (2004), An evaluative methodology for virtual communities using web analytics. *Campus-Wide Information Systems*, 21(5), pp. 179-184.
- Pitta, D. and Fowler, D. (2005), Internet community forums: an untapped resource for consumer marketers. *Journal of Consumer Marketing*, 22(5), pp. 265-274.
- Radakovic, K. (2014), 10.5937/ekonhor1403265r = Belch E.G., Belch M.A.: Advertising and promotion: An integrated marketing communications perspective, McGraw Hill, New York, NY, 2012. *Ekonomski horizonti*, 16(3), pp.265-267.
- Rafiq, M. and Fulford, H. (2005), Loyalty transfer from offline to online stores in the UK grocery industry. *International Journal of Retail & Distribution Management*, 33(6), pp. 444-460.
- Simmons, G. (2008), Marketing to postmodern consumers: introducing the internet chameleon. *European Journal of Marketing*, 42(3/4), pp. 299-310.
- Steenkamp, J. (2014), How global brands create firm value: the 4V model. *International Marketing Review*, 31(1), pp. 5-29.
- Strizhakova, Y., Coulter, R. and Price, L. (2008), Branded Products as a Passport to Global Citizenship: Perspectives from Developed and Developing Countries. *Journal of International Marketing*, 16(4), pp. 57-85.
- Ul-Haq, R. (1994), Relationship Marketing—Bringing Quality, Customer Service and Marketing Together. M. Christopher, A. Payne and D. Ballantyne, Butterworth-Heinemann, Oxford, 1991, 204 pp, ISBN 0 750602589, price £25.00. *Strategic Change*, 3(2), pp.119-120.

- Vinhas Da Silva, R. and Faridah Syed Alwi, S. (2006), Cognitive, affective attributes and conative, behavioural responses in retail corporate branding. *Journal of Product & Brand Management*, 15(5), pp. 293-305.
- Wu, J. and Chang, Y. (2005), Towards understanding members' interactivity, trust, and flow in online travel community. *Industrial Management & Data Systems*, 105(7), pp. 937-954.
- Zantedeschi, D., Feit, E. and Bradlow, E. (2016), Measuring Multichannel Advertising Response. *Management Science*.
- Zeithaml, V. (1988), Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), p. 2.

Website

- www.angoss.com. (2013), Bigger Data for Marketing and Customer Intelligence- Customer Analytics Roadmap | Angoss. [online] Available at: <http://www.angoss.com> [Accessed 15 July 2016].
- software.ibm.com (2016), Driving to greater customer insight : IBM Software Business Analytics [online] Available at: <http://ftp://ftp.software.ibm.com/> [Accessed 15 Jul 2016].
- Google.co.in. (2017), Google. [online] Available at: https://www.google.co.in/?gfe_rd=cr&ei=UEz0WJLjDvPx8Ajj9LGgBQ#q=Institute+of+Business+Value,+Stepping+up+to+the+Challenge:+CMO+Insights+from+the+Global+C-Suite+Study [Accessed 17 Jul 2016].