

Evaluating Niche E-commerce Indian Retail Websites: User Perspective

Kumari Anshu, Loveleen Gaur, Vernika Agarwal

Abstract: Big retailers with deep pockets offer an extensive array of merchandise to persuade customers. Offering wide variety of products to capture diverse buyers may look like an eye-catching opportunity. Nevertheless, this may not always be the paramount tactic especially for small and mid-size businesses, as it often requires big investments. The research aims at evaluating the attributes of some prominent niche websites like Big Small, Chumbak, etc. This evaluation is based on the user's perspective of what and how they feel and experience about these niche e-retailer's website. The objective of the research is to identify the factors influencing efficiency of niche Indian retail websites and rank them on the basis of the factors identified in influencing efficiency. A two-phase methodology is adopted for the assessment of niche websites strategies. The two phase methodology adopted includes, identification of the factors for measuring website efficiency. Analytical network process (ANP) is utilized for evaluating these prominent niche websites. The study is based on the information gathered from users of online unique gifting websites. This study suggests a ranking of a set of assessment criteria that can be applied to measure efficiency of niche e-commerce websites. Based on the identified evaluation criteria the niche retailers are also ranked by applying ANP. The outcome will enable e-retails to identify the crucial attributes and align the website with the customer's preference to provide them with enriched customer experience It will also help the e-retail companies in developing a responsive and performance driven e-commerce website.

Index Terms: Niche e-commerce, website evaluation, e-retail, user experience, ANP

I. INTRODUCTION

A persistent increase in the number of online stores has been observed, intensifying competition between the businesses [8]. In 2013 Indian e-business was projected about \$16 billion and is predicted to touch \$56 Billion by 2023 [10]. In today's scenario there are big retailers with deep pockets offering extensive array of merchandise to persuade customers. Offering a wide variety of products to capture diverse buyers may look like an eye-catching opportunity. Nevertheless, this may not always be the paramount tactic especially for small and mid-size businesses, as it often requires big investments. At the same time, concentrating on a prevalent niche and taking benefits of multichannel retailing has numerous proven benefits. Owing to the growing market of horizontal e-commerce platforms, the market for niche e-commerce players has increased manifolds.

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A niche market is an explicit market that a business producing a specific merchandise focusses on. A niche market can further be fragmented into smaller market segments that will be determined by attributes like demographics (age and location) and buying power etc. For instance, the niche of a funky trendy fashion brand could fall under youth and fashion freak generation, depending on the merchandise, the basics it fulfils and the targeted customers [7]

According to [16] the business should try to strike the right balance between competition and opportunity while trying to establish their niche within a larger market. For a business to flourish in a niche there should be less competition in the segment and the businesses should need minimal resources to establish but must be sufficiently big to sustain a nascent business.

Most of these niche e-commerce players offer bare minimum catalogue of selected range of exclusive goods to consumers who want to ideally spend three to four minutes on e-commerce platforms to buy products [59]. Since most of these niche e-commerce sites are startups, therefore the online portals are a crucial link that can connect these online vendors to the end customers. Thus, it is essential to identify the best performing website on a smaller set of candidate criteria.

In case of online retail the websites are considered to be the interface of the business and helps in casting the first hand impression on the customers [40]. It is deliberated that a website may refract the prospects or attract them and convert them into customers. A retailer's website that is easy to use, navigate, well connected to different multimedia, having decent aesthetics, etc. are preferred by the users. With the enormous growth in the number of websites, researchers have pursued evaluating the attributes of e-commerce websites in order to make best use of technology, to fascinate Internet handlers, transform them into online customers, inspire buyers' loyalty, advance services and eventually reap the profits. Business strategies are built on the fundamentals like building trust [43], improving the quality of the systems [41], levels of security and privacy [2], their accessibility [28], implementing innovative features targeting buyer contentment and web utility [13]. Thus keeping in mind the market growth more emphasis should be laid on identification of features influencing the performance of e-commerce system and customer loyalty [54].

In this regard, the present study aims to bring forth a framework to evaluate the niche web portals based on users experience of using the websites of niche retailers. This paper tries to create a website feature assessment framework of the niche online retail websites. An

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attempt is made to diligently identify website attributes for evaluating the quality of websites from the review of literature. MCDM technique is applied on these identified attributes to obtain the framework for niche websites. It is observed that solicitation of the MCDM technique enables to carry out a widespread analysis and verification attribute ranking and users' preferences [25]

II. LITERATURE REVIEW

A fresh niche symbolizes development of fresh demand or a novel market segment that has not been served before, unlocking the door of opportunities for a first hand business to thrive [44]. Primarily there are dualistic modifications in the e-commerce environment, which may give rise to the establishment of a fresh niche. These are technical alterations and alterations in shoppers' socio-cultural settings [3].

According to research [21], a fresh niche is normally formed around novel expertise and technologies. The advancements in technologies like network communication, computer facilitated tools, and information technology has been the chief force behind the advent and spread of online business. This can expose avenues for new-fangled niche or novel markets/shopper segments [63].

In this regard [56] has explained the term creative destruction as the procedure by which already existing or new businesses try to access and enter into well-established markets through new creations, improvements and innovations that have greater impact on the buyers, and thus innovatively bringing an end to the prevailing market structure. Thus substituting the existing businesses by catering to the fresh demand or novel market sections evolving through entrepreneurs' novelties helps creating a niche for the retailers.

One of the most important technological component that may help businesses to create a niche and differentiate themselves from their competitors is their website. In the virtual domain of e-commerce this is the first crossover point through which the customer comes in contact with the businesses. Thus evaluation of these niche e-retailers websites is very crucial. Website assessment approaches mentioned in the work done by researchers engages various quality models, thus varying in the attributes utilized [46] in evaluation. From the review of literature various website quality evaluation models like eQual, Web Portal Site Quality, Ahn method, SiteQual, Website Evaluation Questionnaire, Website Quality Model, E-SQUAL and E-RecSQual, WAES have been studied. The eQual technique was effectively applied to appraise e-commerce [53], e-government [52], and university [51] websites. Technology Acceptance Model led to creation of Web Portal Site Quality. The model emphasizes the users' influence of perceiving, information system features on his recognition of the given system. Perceived usefulness and Perceived ease of use are its dual quality dimension [58]. DeLone and McLean proposed Information Systems Success model that comprises of information quality and system quality [64] [57]. The Web Portal Site Quality technique is utilized in appraising portals conveying largely demarcated information and services [65]. Another similar method known as Ahn method, uses the Technology Acceptance Model [62]. In this TAM model was elaborated with consequent elements significant regarding viewpoint of the Internet: information

quality, system quality and service quality. Quality features regarding business like quality and delivery of product were added [61].

The SiteQual model [20] originated as an amalgamation of the SERVQUAL, emphasizing the service quality [18] and Data Quality model emphasizing on information quality [48]. WUS scanned e-government websites and also used to evaluate other kind of websites that provide the users with knowledge and information [50]. The E-S-QUAL and E-RecS-Qual model given by Parsuraman et al. came into existence from the SERVQUAL model widely applied for reviewing and appraising service quality [1]. The WAES (Website Attribute Evaluation System) model aimed at evaluating organization and administration websites. It comprises of dual sets of features related to transparency and interactivity of a website.

Distinguished study focused on the quality of information and on usability. International Organization for Standardization (ISO) has explained this as the effectiveness, efficiency and satisfaction with which users can attain a definite set of tasks in a specific atmosphere [47]. This has been shown in Table I.

TABLE I . Illustration of research using quality of information and usability approach of website.

Information Quality	Usability
Katerrattanakul and Siau (1999) (Katterattanakul P., 1999) - Intrinsic Quality: precision of the matter, relevant and functional hyperlinks - Contextual Quality: providing biographer's facts - Representational Quality: optical settings or typographical attribute es, reliability, vibrancy in addition to appealing - Accessibility: ability of navigation tools in tracing the correct information	Palmer (2002) (J, 2002) - Download Interruptions - Navigation - Interactivity - Responsiveness - Information/ Content
Zhang et al. (2000) (Zhang X., 2000) - Presentation: visuals, colours, layout plan - Navigation: magnitude and applicability of the links - Quality: precision of information, capability to appeal to visitors	Agarwal and Venkatesh (2002) (Agarwal R., 2002) - Content: applicability, media usage, depth/breadth, up-to-date information - Ease of Use: objectives, construction, response - Promotion - Made-for-the medium: customization, fine-tuning - Emotion
Chae et al.(2002) (Chae M, 2002) - Connection Quality: responsiveness, steadiness,	Kim et al. (2002) (Kim J., 2002) - Firmness: internal and external consistency - Convenience:

- Content Quality: impartiality, credibility, quantity	information collecting, order handling
- Interaction quality: construction, navigation, appearance	- Delight: system interface, communication interface
- Contextual quality: timeliness	

TABLE II List of Niche Retailers

R1	BigSmall	BigSmall was launched by duo Yatin Hans and Aman Hans in April 2016. It aims at providing small, exclusive gifts that convey immense contentment to the customers. It started with an initial venture of Rs 30,000 each, with a bare minimum catalogue' of unique gifting. 80 percent of their profits is concluded from online platform, 15 percent is through business orders, and 5 percent through offline channels. Its present-day buyer consists of youth with surplus earnings. It largely has innovation gifting merchandises and also niche necessary goods that the community is unaware of [14]
R2	Chumbak	Chumbak was started in 2010 by Shubhra Chadda and Vivek Prabhakar in Bengaluru. It started by retailing small gift items [12]. It is a 'design-led lifestyle' brand for merchandises across apparel, home and accessories. They retail over 100 categories through 22 stores, pan India and also through online store, which has grown into a extremely collaborating and fast-growing online business with an emphasis on creating an influential brand and providing unforgettable purchasing experiences through engaging content. Their target group are the Millennial [32]
R3	Indian Circus	Indian Circus was established in 2012 by Krsnaa Mehta. The brand can be best described as pulsating, flamboyant, and Indian. It is an online brand that deals in unusual accessories, wall arts, home décor, fashion merchandises, and utilities. Their clientele are from 20 to 65 years of age. Eighty percent of their sales come in through the online channel [29]
R4	Alicia Souza	Alicia Souza was established in 2015, in Bangalore by the founder Alicia Souza. It began with around 200 products in five categories, and since it's re-launching on Shopify, it has 700 products in 25 categories. In one year time, sales have grown by

		400% [22]
R5	The Souled Store	The Souled Store was started by three co-founders - Vedang Patel, Rohin Samtaney and Aditya Sharma in 2013. The Souled Store is an e-commerce website that retails the utmost insane products along themes like pop culture, TV shows, superheroes, music, sports etc. It aims at catering customers in the age group of 16-30 years, mainly the middle class segment. Their online advertisement is directed specifically towards fans aged 18-24 years in love with Harry Potter and Wonder Woman. The business is mounting at over 3 times annually without any outside funding [45]

III. PURPOSE OF RESEARCH

The research aims at evaluating [the attributes of some prominent niche websites](#) like Big Small, Chumbak, Indian Circus, Alicia Souza and The Souled Store. [This evaluation is based on the user's perspective of what and how they feel and experience about these niche e-retailer's website. The outcome will enable e-retails to identify the crucial attributes and align the website with the customer's preference to provide them with enriched customer experience.](#)

IV. OBJECTIVE

1. To identify the factors influencing efficiency of niche Indian retail websites.
2. To rank the niche vendors websites on the basis of the factors identified in influencing efficiency.

V. METHODOLOGY

Analytical network process (ANP) is utilized for evaluating few prominent niche websites. The study is based on the figures gathered from users of online unique gifting websites. The results help the e-retail companies to identify the crucial indicators for developing a responsive and performance driven e-commerce website. A two-phase methodology is adopted for the assessment of niche websites strategies. The two phase methodology adopted includes:
Phase 1) Identification of the factors for measuring website efficiency.
Phase 2) ANP approach is utilized to evaluate the niche websites



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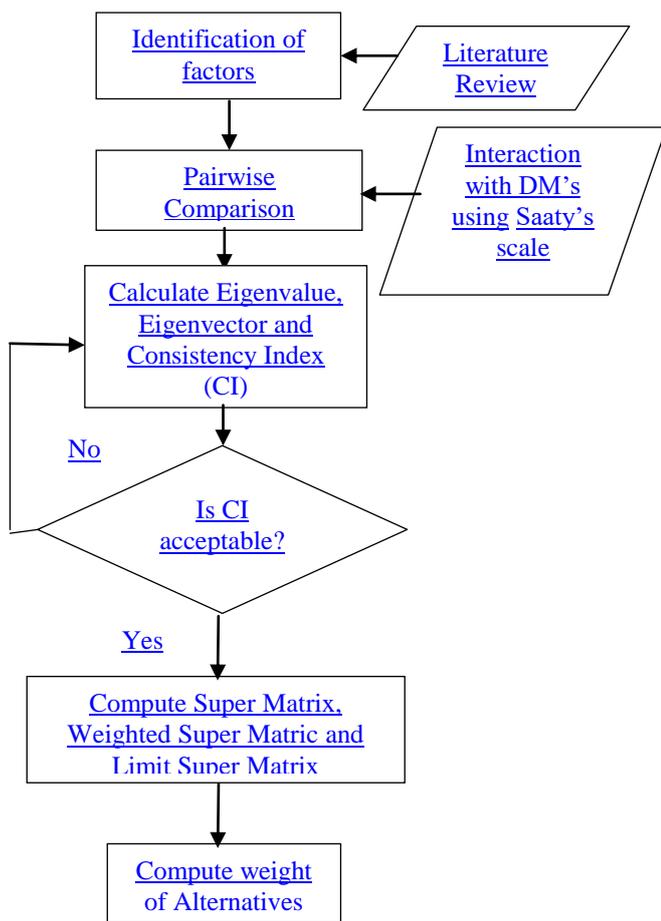


Fig 1. Flow chat of methodology

In the first phase, the factors for measuring website efficiency are shortlisted by literature survey as are given in Table III.

TABLE III Factors for measuring Website Efficiency

Notation	Factors	Description
F1	Aesthetics	Aesthetics connects to attention, sentiment, and contemplation. An appealing interface draws consumer's attention and engross them in to action. It also allows a perfect, exclusive look of the interface. Conventional aesthetics signifies consistency in design, and concepts like 'cleanliness', enjoyable, 'symmetrical' and 'aesthetic'. Expressive aesthetics indicates the design traits like creativity, special effects, originality. [26] [55] [34]

F2	Navigation	Navigation systems are essential component that supports customers to know where and what to find among accessible resources on website. One of the chief aspects that guides the success of a website is a well-crafted navigation system. [17] [19] [23] [42]
F3	Content	Website content refers to the features, utilities, information and merchandises presented on a website, not including features of web look or design. Website content elements is significant in assisting consumer in making judgment when buying on internet. [27] [5] [39] [49]
F4	Integratation with Social Media	The internet generated product, brand and business information is created by consumer and spread through personal social networks, blogs, online communities, customer forums etc. These networks are away from the control of vendors and many of the facts refers to shopper experiences from consuming products or services and their interpretations in the form of product reviews, recommendations to other customers, remarks about improvements and often even advices for use. [11]

F5	Accessibility	This is a significant element in the designing of websites. The World Wide Web Consortium (W3C) has defined the term as “individuals with incapacities can recognize, pick up, traverse, and work together with the web”. So, there is a grave requirement of web accessibility in B2C e-commerce websites for operator of all ages and especially with disabilities. An accessible web site can make use of all of assistive expertise such as screen readers, voice recognition, alternative pointing devices, alternate keyboards, and the website displays. [35] [36] [60]
F6	Ease of Use	The magnitude of shopper perception of using a website to be uncomplicated. Online buying has been willingly recognized as it has led to simplification of the process. It translates into degree of non-complexity. [15] [37]
F7	Multimedia	It corresponds to any component on website, dissimilar from transcribed, written content. It comprises of features such as: Pictures, Illustrations & Info graphics, Videotapes, Interactive Content. It helps to breakdown script that permits customers to consume it at a manageable stride. It also offers customer to engross with that isn't documented content. Multimedia makes for a great user experience. It enables declining bounce rate because it tempts users to stay on the page for an extended time. [6]

In the second phase, ANP methodology is applied to evaluate prominent niche websites. In this step, the circular association between features is evaluated also the association between features and the alternatives to generate super matrix. The super matrix is normalized and congregated to generate the final weights of the alternatives.

Steps of ANP

Step 1. Identify the level of hierarchy.

ANP involves relationships between the various levels of hierarchy (goal, criteria, sub-criteria, alternatives) and between the criteria/sub-criteria. In this step, we identify these level and the relationships between criteria/sub-criteria.

Step 2. Derive the local priorities.

Derive the local priorities for each hierarchy level and between the criteria/sub-criteria which are the principal Eigen vectors of the pairwise comparison matrices as done in AHP. The steps of AHP are as follows:

Steps of AHP

1. Pair wise assessment matrices representing the view of the decision makers are constructed in this step. The fundamental scale used in the pair-wise comparison is as follows: equal importance=1, moderate importance=3, strong importance=5, very strong importance=7 extremely strong importance=9. The numbers 2, 4, 6 and 8 signify compromise between the importances listed above.

2. The nxn judgement matrix A is obtained as follows:

$$A = \begin{bmatrix} 1 & a_{12} & \dots & \dots & a_{1n} \\ a_{21} & 1 & \dots & \dots & a_{2n} \\ \dots & \dots & \dots & \dots & \dots \\ \dots & \dots & \dots & \dots & \dots \\ a_{n1} & a_{n2} & \dots & \dots & 1 \end{bmatrix} \quad (1)$$

Where

$a_{ij} = 1$ if $i = j$, and a_{ij} is a value from 1 to 9 if $i \neq j$ and $a_{ji} = (a_{ij})^{-1}$

3. The matrix A is normalized by dividing every component (a_{ij}) by the jth column sum a_j to derive the matrix A^* as shown below:

$$A^* = \begin{bmatrix} 1/a_1 & a_{12}/a_2 & \dots & \dots & a_{1n}/a_n \\ a_{21}/a_1 & 1/a_2 & \dots & \dots & a_{2n}/a_n \\ \dots & \dots & \dots & \dots & \dots \\ \dots & \dots & \dots & \dots & \dots \\ a_{n1}/a_1 & a_{n2}/a_2 & \dots & \dots & 1/a_n \end{bmatrix} \quad (2)$$

4. The average of rows of the matrix A^* is used to generate the nx1 priority vector which is the principal eigenvector of A. Eigen value of each pair wise matrix, is calculated using the following equation:

$$Aw = \lambda_{\max} w \quad (3)$$

Where λ_{\max} is the principal eigenvalue of A^* and w is a non-zero nx1 vector.

5. Calculate Consistency Ratio (CR) and Consistency Index (CI) for each pair wise matrix. The measurement of consistency is called the consistency index. It is calculated as:



$$CI = \frac{\lambda_{\max} - n}{n - 1} \quad (4)$$

where n is the matrix size.

$$CR = \frac{CI}{RI} \quad (5)$$

where RI is the Random Consistency Index, and CR should be less than 0.10 for the assessments to be taken into consideration

6. The priorities of the criteria so obtained are used to calculate the weight of priorities of sub-criteria in the next level. This continues till the priority weights of alternatives are calculated. The rating of the alternatives is obtained by aggregating the relative priorities using the hierarchical additive weighting method.

Construct the unweighted super matrix

The super matrix consists of all sub-matrices of the form which includes all the priority vectors representing the priority of various levels of hierarchy (goal, criteria, sub-criteria, alternatives) and the influence of criteria/sub-criteria on other criteria (zero vector represents no influence).

Obtain the weighted super-matrix.

Normalize the matrix by dividing every criterion in the column by the number of clusters so that each cluster acquires equal weight.

Obtain the global priority vector the weights

To obtain, steady state global priorities, the super-matrix is congregated by levitation it to a sufficiently large power of $2k+1$ (k is an arbitrary large number) for attaining the limit super matrix.

VI. NUMERICAL INTERPRETATION

The website of niche e-commerce players is a crucial link to attract customers. Thus, it is very essential that their websites are easy to use, navigate, well connected to different multimedia, having decent aesthetics, etc. In this regard, the process of evaluation of niche websites from customer perspective is crucial. For the assessment of five niche websites, we have identified a core group of decision makers from website development team having at least 5-10 years of experience with the firm for the identification of criteria of evaluation from the literature. Following this step, the circular association between features is evaluated, also the association between criteria and the alternatives is identifies for further evaluation. Following the chronological order of the ANP method discussed above, we get five matrices signifying the pair-wise assessment among the criteria for each alternative. Another seven matrices signifying the pair-wise assessment among alternative for each criterion are obtained. Finally, pair-wise assessment of criteria with respect to the criteria is constructed based on circular relationships between them. Consistencies of all the matrices are checked and priorities are derived. Table VI shows the relative importance of alternatives with respect to criteria ease of use.

TABLE IV Relative priorities of alternatives with respect to criteria ease of use.

Ease of Use	R1	R2	R3	R4	R5	gm	priority	aw	ratio	ri	ci	cr
R1	1.00	2.00	0.50	2.00	4.00	1.52	0.26	1.44	5.61	1.12	0.09	0.08
R2	0.50	1.00	2.00	3.00	5.00	1.72	0.29	1.61	5.55			
R3	2.00	0.50	1.00	3.00	4.00	1.64	0.28	1.52	5.46			
R4	0.50	0.33	0.33	1.00	3.00	0.70	0.12	0.61	5.12			
R5	0.25	0.20	0.25	0.33	1.00	0.33	0.06	0.29	5.09			
$\lambda_{\max} = 5.37, RI = 1.12, CI = 0.09, CR = 0.08$												

In similar manner, the remaining pairwise matrices are constructed. The priorities of these pairwise matrices are filled as columns of the sub-matrices of the unweighted super matrix as given in Table V.

TABLE V Unweighted Super matrix

	F1	F2	F3	F4	F5	F6	F7	R1	R2	R3	R4	R5
F1	0.00	0.34	0.00	0.00	0.42	0.00	0.52	0.23	0.24	0.25	0.23	0.25
F2	0.62	0.00	0.55	0.00	0.24	0.00	0.20	0.12	0.14	0.16	0.25	0.16
F3	0.00	0.08	0.00	0.00	0.12	0.00	0.07	0.13	0.11	0.11	0.18	0.11
F4	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.09	0.11	0.08	0.11	0.08
F5	0.23	0.17	0.24	0.00	0.00	0.00	0.20	0.27	0.25	0.26	0.11	0.26
F6	0.13	0.22	0.00	0.00	0.06	0.00	0.00	0.09	0.07	0.06	0.06	0.06
F7	0.00	0.18	0.21	0.00	0.06	0.00	0.00	0.04	0.05	0.04	0.03	0.04
R1	0.25	0.27	0.15	0.26	0.29	0.33	0.22	1.00	0.00	0.00	0.00	0.00
R2	0.29	0.05	0.46	0.12	0.08	0.0	0.15	0.00	1.00	0.00	0.00	0.00
R3	0.27	0.24	0.23	0.11	0.41	0.28	0.37	0.00	0.00	1.00	0.00	0.00
R4	0.11	0.23	0.09	0.28	0.10	0.21	0.14	0.00	0.00	0.00	1.00	0.00
R5	0.057	0.19	0.05	0.21	0.10	0.10	0.10	0.00	0.00	0.00	0.00	1.00

TABLE VI Weighted Super matrix

	F1	F2	F3	F4	F5	F6	F7	R1	R2	R3	R4	R5
F1	0.00	0.17	0.00	0.00	0.21	0.00	0.26	0.11	0.12	0.12	0.11	0.12
F2	0.31	0.00	0.27	0.00	0.12	0.00	0.10	0.06	0.07	0.08	0.12	0.08
F3	0.00	0.04	0.00	0.00	0.06	0.00	0.03	0.06	0.05	0.05	0.09	0.05
F4	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.04	0.05	0.04	0.05	0.04
F5	0.11	0.08	0.12	0.00	0.00	0.00	0.10	0.13	0.12	0.13	0.05	0.13
F6	0.06	0.11	0.00	0.00	0.03	0.00	0.00	0.04	0.04	0.03	0.03	0.03
F7	0.00	0.09	0.10	0.00	0.03	0.00	0.00	0.02	0.02	0.02	0.01	0.02
R1	0.12	0.13	0.07	0.26	0.14	0.33	0.11	0.50	0.00	0.00	0.00	0.00
R2	0.14	0.02	0.23	0.12	0.04	0.05	0.07	0.00	0.50	0.00	0.00	0.00
R3	0.13	0.12	0.11	0.11	0.20	0.28	0.18	0.00	0.00	0.50	0.00	0.00
R4	0.05	0.11	0.04	0.2	0.05	0.21	0.07	0.00	0.00	0.00	0.50	0.00
R5	0.02	0.09	0.02	0.21	0.05	0.10	0.05	0.00	0.00	0.00	0.00	0.50

TABLE VII Limit Super matrix

	F1	F2	F3	F4	F5	F6	F7	R1	R2	R3	R4	R5
F1	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
F2	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
F3	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
F4	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
F5	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
F6	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
F7	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
R1	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
R2	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08

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R3	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
R4	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
R5	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06

The weighted matrix and the limit super matrix are further obtained as demonstrated by Tables VI and VII. The highlighted column shows the stable global priority vector. Normalizing the vector, we get the importance of weights of the alternatives as: {0.14, 0.08, 0.15, 0.09, 0.06}.

VII. RESULTS

The present study aims at identifying an efficient niche website aiming at enhancing the user experience. In order to identify the best performing website, ANP methodology is used, which generates importance ratings of the website by considering the dependence among the criteria. The analysis shows that among all the niche websites undertaken for the study purpose Indian Circus has a major impact on the customers followed by BigSmall. This is followed by Alicia Souza and Chumbak respectively. The Souled Store brand website shows minimum impact being drawn upon the customers among all the brands studied. The analysis also helps in providing the ranking to the various attributes considered for the study. Aesthetics of the niche websites is the most criteria followed by Navigation. Accessibility and Content are the next important attributes considered by the customer. Ease of Use, Integration with social media and Multimedia are the next most important attributes.

VIII. CONCLUSION

~~The exponential growth in the e-tailing website in India is pressuring the companies to give enhanced user experience. The website creates the most important interface or the impression that the shoppers obtains of the vendors on the internet [40]. It can transform prospects into actual buyers with its highly creative and informative content. Online shopping is basically interface between the customer and the machine. It is thus crucial that the website of niche retailers directly appeals and attract the buyers and hence the website should be aesthetic and visually appealing. Aesthetics of the websites should also be backed by a good and easy to navigate system. The aim of these niche retailers website should be to create an experience that's incomparable and that will strengthen the customers' intent to revisit the site more repeatedly. This should hold true not only for the regular customers but also for especially abled customers. Online websites are an easy mode for them to shop hassle free and thus it is very crucial for the websites to be accessible. Customer satisfaction improves when they get accurate quality and quantity of information of the merchandise they are looking for online [33], thus emphasising on the content as well as ease of use of the website. Many a times the customers are apprehensive and unsure of the actions to be taken if anything goes wrong. So, the niche retailer websites where buyers are able to get connected to different social media sites are able to attract customers. This finally emboldens trust and loyalty among the buyers thus enhancing their customer experience. Attributes such as aesthetics, navigation and ease of use are very important for the customer [38]. These factors if not properly taken care of by the niche e-retailers may lead to customer's switching to other retailers. If a customer finds the website compatible, convenient and hassle free he will get engrossed in the buying process. This will ultimately get reflected in the~~

increased sale of the e-retailers. Also the customer tries to evaluate the buying experience from the different niche e-retailers and if he feels satisfied with the e-retailer's performance he will act as a source of promotion, spreading positive word of mouth. Hence considering all the attributes into consideration the niche website which appealed most to the customers is Indian Circus followed by Big Small. This is followed by Alicia Souza and Chumbak respectively. The Souled Store brand website shows minimum impact being drawn upon the customers among all the brands studied. This is shown in Table VIII and IX.

TABLE VIII Website attribute Ranking

Notation	Factors	Rank
F1	Aesthetics	1
F2	Navigation	2
F3	Content	4
F4	Integration with Social Media	6
F5	Accessibility	3
F6	Ease of Use	5
F7	Multimedia	7

TABLE IX Niche E-retailers ranking

Notation	E-Retailer	Rank
R1	Big Small	2
R2	Chumbak	4
R3	Indian Circus	1
R4	Alicia Souza	3
R5	The Souled Store	5

REFERENCES

1. A. Parasuraman, "SERVQUAL: A Multiple-item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, vol. 64, no. 1, 1988, pp.12-40.
2. A.K. Ghosh, *E-commerce Security and Privacy*. New York: Springer, 2012
3. W. Abernathy, "Innovation: mapping the winds of creative destruction," *Research Policy*, 14, 1985, pp. 3-22.
4. R. Agarwal, "Assessing a firm's web presence: a heuristic evaluation procedure for the measurement of usability," *Information Systems Research*, 13(2), 2002, pp. 168-186.
5. M. A. Aladwani, "Developing and validating an instrument for measuring user-perceived web quality", *Information & Management*, 2002, pp. 467-476.
6. Bilgihan's. (2016). 4 Reasons Multimedia is a Crucial Element for Websites. Available: <https://www.webpagefx.com/multimedia.htm>
7. N. Blanckenberg. (2017). How to Find a Profitable Niche for Your Online Store. Available: <https://www.business2community.com/ecommerce/find-profitable-niche-online-store-01784930>.
8. C. Zorman, "Competition between local and electronic markets: How the benefit of buying online depends on where you live", *Management Science*, vol. 55, no. 1, 2009, pp. 47-57.

9. M. Chae, "Information quality for mobile internet services: a theoretical model with empirical validation", *Electronic Markets*, 12(1) 2002, pp. 38-46.
10. F. Chef, Stats, Figures & Facts: Learn about Glorious Indian eCommerce Growth. Available: <https://www.fatbit.com/fab/stats-figures-facts-learn-glorious-indian-ecommerce-growth/>.
11. E. Constantinides, "Effects of Cultural Background on Internet Buying Behaviour: Towards a Virtual Global Village?" In W. R. Psaila G., E-Commerce and Web Technologies. EC-Web, 2008.
12. I. Crossley. (2018). Chumbak embraces omni-channel, aims for 50 stores by FY19 end. Available: <https://in.fashionnetwork.com/news/Chumbak-embraces-omni-channel-aims-for-50-stores-by-FY19-end.971000.html#.XBaYnVFLfIU>
13. D. Belanche, "Website usability, consumer satisfaction and the intention to use a website: The moderating effect of perceived risk." *Journal of retailing and consumer services*, vol. 19, no. 1, 2012, pp. 124-132.
14. Dailyhunt. (2018). With 125k orders in six months, BigSmall aims to make it big in the niche ecommerce gifting space. Available: <https://m.dailyhunt.in/news/india/english/yourstory-epaper-yourstory/w/ith+125k+orders+in+six+months+bigsmall+aims+to+make+it+big+in+the+niche+ecommerce+gifting+space-newsid-81057456>.
15. F. Davis, "Perceived usefulness, perceived ease of use and User Acceptance of Information Technology". *MIS Quarterly* 13, 1989, pp. 319-340.
16. B. Ellis. (2018, April 17). How Do You Choose Just the Right Niche for Your Ecommerce Business? Available: A Checklist. <https://www.entrepreneur.com/article/31149>.
17. C. Farnum, "Information architecture: five things information managers need to know" *Information Management Journal*, 36(5), 2002, pp. 33-39.
18. G.J. Udo, "Using SERVQUAL to assess the quality of e-learning experience." *Computers in Human Behavior*, vol. 27, no. 3, 2011, pp. 1272-1283.
19. C. George, "Usability testing and design of a library website: an iterative approach." *Academic Research Library*, 21(3), 2005, pp. 167-180.
20. H.W. Webb, "Business to consumer electronic commerce Website quality: integrating information and service dimensions", In *Proc. 7th Americas Conference on Information Systems*, 2001.
21. D. H. Hine, "An analysis of changing management roles in small Australian services exporters in response to the stages in industry development", *International Journal of Entrepreneurial Behavior & Research*, 9(2), 2003, 74-88.
22. (n.d.). How Alicia Souza replatformed to Shopify from Magento to scale her brand. Available: <https://www.shopify.in/gold/customers/alicia-souza>.
23. J. M. Hughes, "What really makes students like a website? What are the implications for designing web-based language learning sites?", *ReCALL*, 16(1), 2004, pp. 85-102.
24. J. P., "Web site usability, design and performance metrics", *Information Systems Research*, 13(2), 2002, pp. 151-167.
25. Jarosław Wątróbski, "PEQUAL - E-commerce websites quality evaluation methodology", Proceedings of the Federated Conference on Computer Science, 2016, pp. 1317-1327.
26. M. Jennings, "Theory and models for creating engaging and immersive commerce Websites", In *Proc. Of SIGCPR 2000*, ACM Press, 2000, pp. 77-85.
27. K.R.E, H. E., "The content and design of web sites: an empirical study", *Information & Management* 2000; 37, 2000, pp. 123-134.
28. O.S. Kang, "The Importance of Web Accessibility in Business to-Consumer (B2C) Websites". 22nd Australasian Software Engineering Conference, 2002.
29. S. Kashyap, (2017). How India Circus started a small online store and went on to catch Godrej's eye. Available: <https://yourstory.com/2017/11/india-circus-online-store-godrej/>.
30. P. Katterattanakul, "Measuring information quality of Web sites: development of an instrument", Proceedings of the 20th I.C.I.S, Charlotte, 1999, pp. 279-285.
31. J. Kim, "Business as buildings: metrics for architectural quality of internet business", *Information Systems Research*, 13(3), 2002, pp. 239-254.
32. S. Kumar, (2018). Design-Led lifestyle brand Chumbak targets 50 stores by FY19. Available: <https://www.indiaretailing.com/2018/04/22/retail/design-led-lifestyle-brand-chumbak-targets-50-stores-by-fy19/>.
33. Anshu.K, Gaur.L, "Evaluating Satisfaction Level of Grocery E-Retailers Using Intuitionistic Fuzzy TOPSIS and ECCSI Model", 2017 International Conference on Infocom Technologies and Unmanned Systems (Trends and Future Directions) (ICTUS) ,2017, pp. 276 - 284. Dubai: IEEE.
34. T, T. Lavie, "Assessing Dimensions of Perceived Visual Aesthetics of Web Sites", *International journal of human-computer studies* 60, 3, 2004, pp. 269-298.
35. J.A.Lazar, "Improving web accessibility: a study of webmaster perceptions", *Comput. Hum. Behav.* 20, 2004, pp. 269-288.
36. J.S. Lazar, "Design of e-business web site". In *Handbook of Human Factors and Ergonomics*, John Wiley & Sons, Inc.2006, pp. 1344-1363.
37. K. M. Limayem, "What makes consumers buy from Internet? A longitudinal study of online shopping", *IEEE Transactions on Systems, Man and Cybernetics*, 30, 2000, pp. 421-432.
38. C. A. Liu, "Exploring the factors associated with web site success in the context of electronic commerce", *Information and Management*, 38, 2000, pp. 23-33.
39. Lohse Gerard, "Internet retail store design: how the user interface influences traffic and sales", *Journal of Computer Mediated Communication*, 1999 Available: <http://jcmc.indiana.edu/vol5/issue2/lohse.htm>.
40. L. Gaur, K. Anshu, "Consumer Preference Analysis for Websites Using e-TailQ and AHP", *International Journal of Engineering & Technology*, 2018, pp. 14-20.
41. M. Cao, "B2C e-commerce web site quality: an empirical examination", *Industrial Management & Data Systems*, vol. 105, no. 5, 2005, pp. 645-661.
42. K. B. Maloney, "Beyond information architecture: a systems integration approach to web-site design", *Information Technology and Libraries*, 23(4), 2004, pp. 145-152.
43. D. Manchala, "E-commerce trust metrics and models", *IEEE Internet Computing*, vol. 4, no. 2, 2000, pp. 36-44.
44. B. McKelvey, "Toward a complexity science of entrepreneurship, *Journal of Business Venturing*, 19(3), 2004, pp. 313-341.
45. A. A. Nair, (2017). With zero cash burn and profit from day one, The Souled Store writes a new e-commerce story. Available: <https://yourstory.com/2017/10/zero-cash-burn-profit-day-one-souled-store-writes-new-e-commerce-story/>.
46. P. Ziemba, "Method of Criteria Selection and Weights Calculation in the Process of Web", *Lecture Notes in Artificial Intelligence*, vol.8733, 2014, pp. 684-693.
47. R, R, "Evaluation des sites Web: nouvelles pratiques, anciennes théories, 8ème colloque de", 8ème colloque de l'AIM Grenoble 23 et 24 mai, 2003, pp. 1-12.
48. R. Y. Wang, "Beyond Accuracy: What Data Quality Means to Data Consumers", *Journal of Management Information Systems*, vol. 12, no. 4, 1996, pp. 5-33.
49. Ranganathan Chandrasekaran, "Key dimensions of business-to-consumer web sites", *Information & Management*, 2002, pp. 457-465.
50. S. Elling, "Measuring the quality of governmental websites in a controlled versus an online setting with the Website Evaluation Questionnaire", *Government Information Quarterly*, vol. 29, no. 3, 2012, pp. 383-393.
51. S.J. Barnes, "WebQual: An Exploration of Web-site Quality". *Proc. 8th European Conference on Information Systems*, vol. 1, 2000, pp. 298-305.
52. S. J. Barnes, "Measuring Web site quality improvements: a case study of the forum on strategic management knowledge exchange", *Industrial Management & Data Systems*, vol.103, no. 5, 2003, pp. 297-309.
53. S.J. Barnes, "The eQual Approach to the Assessment of E-Commerce Quality: A Longitudinal Study of Internet Bookstores", In W. Suh, *Web Engineering: Principles and Techniques* 2005, pp. 161-181, London: Idea Group Publishing.
54. S.S. Srinivasan, "Customer loyalty in e-commerce: an exploration of its antecedents and consequences", *Journal of Retailing*, vol. 78, no. 1, 2002, pp. 41-50.
55. P. H. Sautter, "E-Tail Atmospheric: A Critique of the Literature and Model Extension", *Journal of Electronic Commerce Research* 5, 1, 2004, pp. 14-24.
56. J. A. Schumpeter, "Capitalism, socialism, and democracy", New York: Harper Torchbooks, 1975
57. P. Seddon, "A Respecification and Extension of the DeLone and McLean Model of IS Success", *Information Systems Research*, vol. 8, no. 3, 1997, pp. 240-353.

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58. H. Shih, "Extended technology acceptance model of Internet utilization behavior", *Information & Management*, vol. 41, no. 6, 2004, pp. 719-729.
59. A. Sinha, (2018, July 30). Here for the long run: Why niche e-commerce verticals are here to stay. Available: <https://economictimes.indiatimes.com/small-biz/startups/features/here-for-the-long-run-why-niche-e-commerce-verticals-are-here-to-stay/articleshow/65193488.cms>
60. O. K. Sohaib, "The importance of web acesibility in business to-consumer (B2C) Websites", *22nd Australasian Software Engineering Conference (ASWEC 2013)*, 2013, pp. 1-11.
61. T. Ahn, "The impact of the online and offline features on the user acceptance of Internet shopping malls", *Electronic Commerce Research and Applications*, vol. 3, no. 4, 2004, pp. 405-420.
62. T. Ahn, "The impact of Web quality and playfulness on user acceptance of online retailing", *Information & Management*, vol. 44, no. 3, 2007, pp. 263-275.
63. C. I. Tangpong, "The Emergence of Business-to-Consumer E-Commerce", *Journal of Leadership & Organizational Studies*, 16(2), 2009, pp. 131-140.
64. W.H. DeLone, "Information Systems Success: The Quest for the Dependent Variable", *Information Systems Research*, vol. 3, no. 1, 1992, pp. 60-95.
65. Z. Yang, "Development and validation of an instrument to measure user perceived service quality of information presenting Web Portals", *Information & Management* vol. 42, no. 4, 2005, pp. 575-589.
66. X. Zhang, "Information Quality of commercial Web site home pages: an explorative analysis", *Proceedings of the 21th ICIS, Brisbane, 2000*, pp. 164-1

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