

## AD BLOCKING PERSPECTIVES – DRIVERS OF PLEASANT AND UNPLEASANT ONLINE USER EXPERIENCES

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### ABSTRACT

online advertising, which includes models like emails, display advertising, pop ups etc emerged as a handsome source of income to all the stake holders in the last decade. Also referred to as internet advertising or online marketing, this form of advertising is being observed by the market experts from both the marketer and the consumer perspectives across the globe. The social media ad is considered a very cost-effective way of promoting a brand to the digi-savvy consumers. Despite the heavy rise in the digital advertising, the digital advertising environment is not as robust as it ought to have been because of multiple reasons out of which ad blocking practice is a major hassle. This practice of blocking the commercials from the view slows down the rate of return on investment of advertisers. Researchers across the world observed that the major cause of ad blocking is a substantial shrinkage in the user experience. The studies conducted in the direction revealed that privacy concern also led to the ad blocking by online customers. This study covers the major rationales behind the ad blocking practice of the online consumers of Navi Mumbai. In the process, the paper throws enough light on what is considered as absolute wonderful online user experience according to the Navi Mumbai consumers. The study has utilized tools like Crosstab and One-way ANOVA in bringing to light the significant aspects considered by the online consumer of Navi Mumbai in defining what hassle-free user experience and deterrent factors of the same were. The study was conducted between October 2019 and April 2020 through online questionnaires along with interesting telephonic interactions.

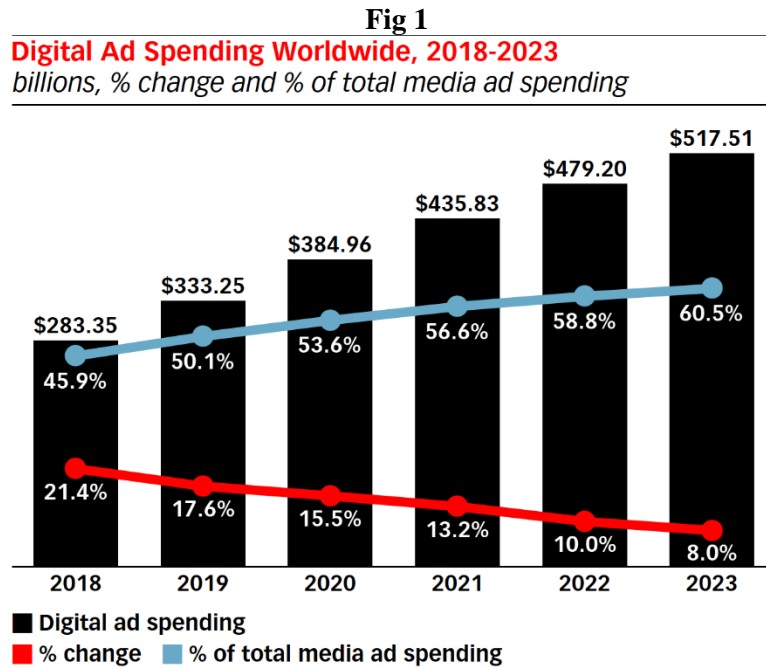
**Keywords:** Ad blocking, user experience, malvertising, digital advertising.

### INTRODUCTION:

Ad blocking has been looked at by the online consumers as an intrusion to their privacy while the digital publishers consider that an attractive model of revenue. The two concepts observed in this context are ad blocking practice and the consumer online experience. One is very much related to the other in more than one way. According to Dr.Ritika and Annapurna (2017)<sup>(1)</sup> the basic reasons why a consumer would ever think of blocking an ad were because they found the ads to be intrusive, observed that the ads were irrelevant, considered ads to be threats to their privacy and thought the ads delayed the page loading process. According to the authors' survey, the respondents felt by avoiding unnecessary ads, they were able to create a better user experience through quick surfing, effective malware protection, less clutter and no distractions.

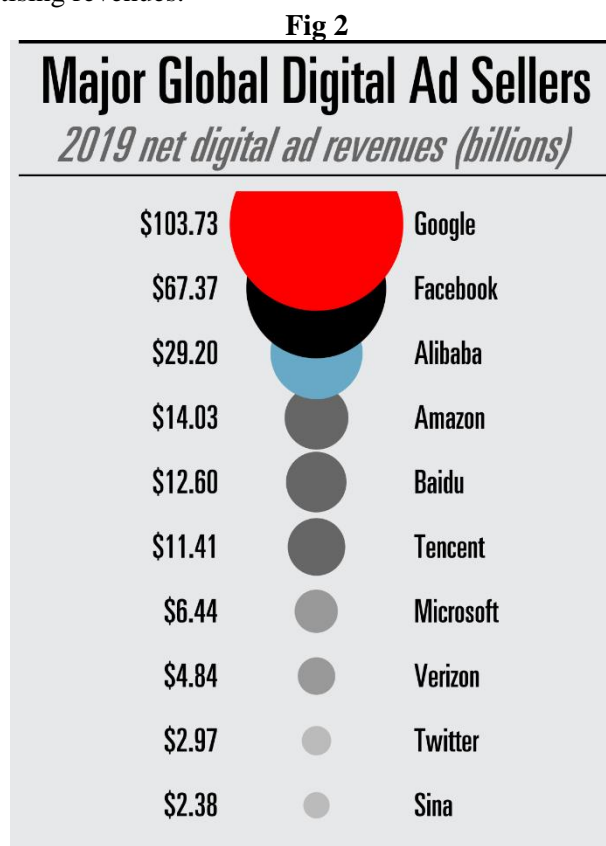
The online advertising is a multi-million business model. It is the conventional advertising strategy customized according to the requirements of the new-age media to reach the potential audiences. The model delivers marketing communication to online consumers via email, banner ads, social media ads, online classified ads and so on.

According to a report by Jasmine Enberg on eMarketer.com, 'global digital ad spending 2019'<sup>(2)</sup>, by 2023, the digital ad spend would reach \$517.51 billion with Google and Facebook leading the list global ad sellers. The brands across the world and across industries have started to break the traditional advertising mode and place customer experience as the primary factor of brand loyalty. This includes conventional, digital, paid and owned modes of promotion. The holistic viewing of brand from all perspectives like as a source of continuous income, customer loyalty, effective competitive strategy etc is now the order of the day.



Source: <https://www.emarketer.com/content/global-digital-ad-spending-2019>

Google includes YouTube ad revenues; Facebook includes Instagram ad revenues and Microsoft includes LinkedIn advertising revenues.



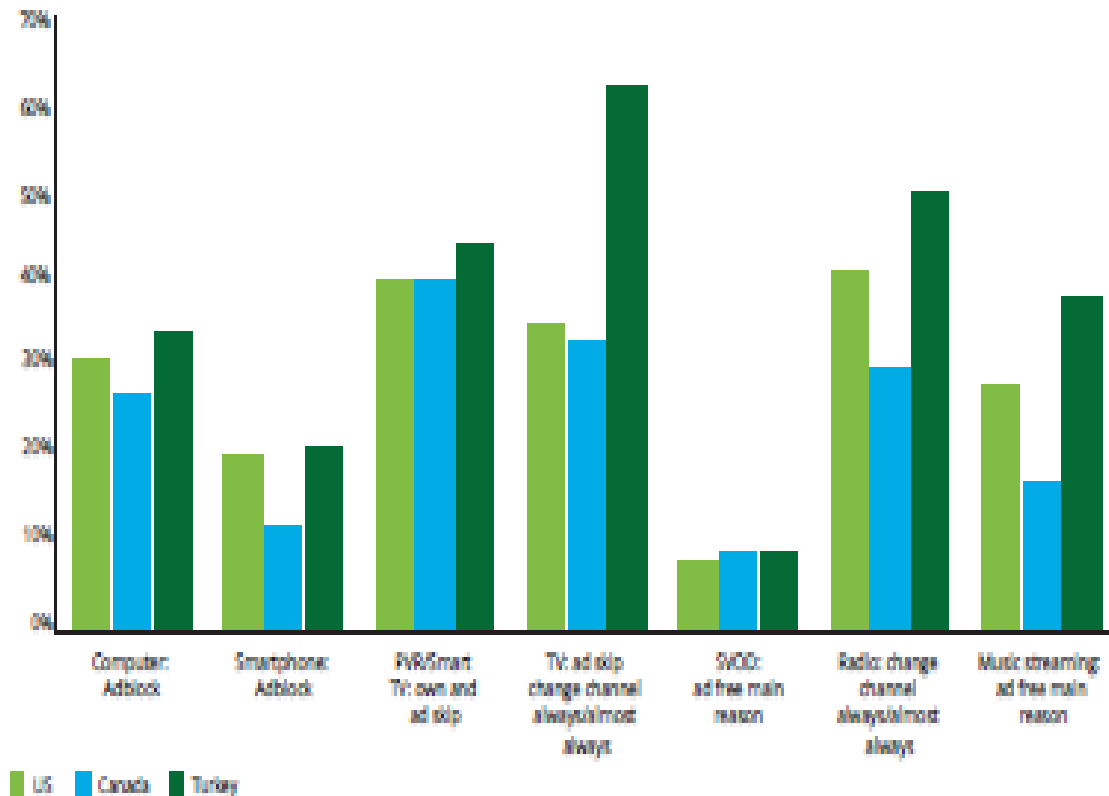
Source: <https://www.emarketer.com/content/global-digital-ad-spending-2019>

The paper deals with ad blocking and malvertising which are very much related to enhanced online user experience.

**Managerial implications:** The paper basically deals with the next area of absolute competition, after the core product or service, 'customer experience'. Be it online or offline, the brands take extraordinary care in handling the various possible dimensions of customer experience to ensure

profitability. The focus on the outcome and online functional benefits are of major significance to the managerial community in the wake of customer experience management strategy. The paper gives reasonable clarity to the managers responsible for creating amazing customer experience as to what exactly the customers of Navi Mumbai consider as a satisfying feel with the brands while they are online. The different dimensions that provide them with an enjoyable brand experience and those which hamper the user experience online are discussed in the paper. The ad blocking practice of the customers and the possible causes for the same are deliberated where the various factors range from annoying online ads to interruptions during the browsing sessions with video ads. The study may not be exhaustive as only Navi Mumbai was chosen as the field of study but the location has cross cultural ambience with customers of different demographic features closely interacting with one another over many things, of which brands are one common subject of discussion. Deloitte in its global study of adults ‘*Is there an adlergic epidemic? Ad blocking across media*’<sup>(3)</sup> conducted in 2017, 1096 Americans and 1090 Canadians aged between 18 and 75 were surveyed for their ad blocking behaviours across many media and devices. One of the major findings was that 3/4<sup>th</sup> of the North Americans blocked ads following some way or the other.

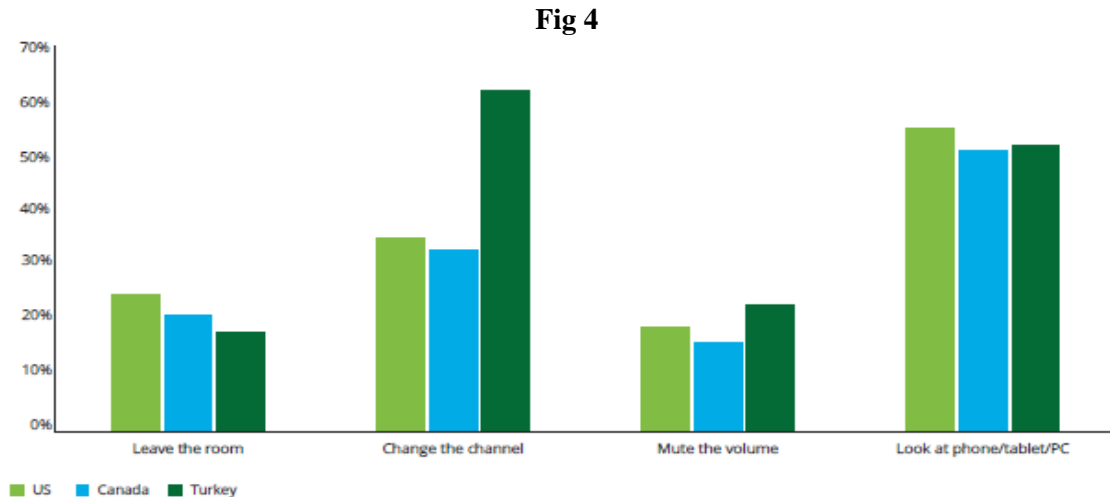
**Fig 3**



(Computer adblock, Smart phone adblock, TV adskip, radio change channel, music streaming)

(Source: *Is there an adlergic epidemic? Ad blocking across media*’<sup>(3)</sup>)

The above image from the report depicts the ad blocking practice in the US, Canada and Turkey over various devices. The survey also reported that PC ad blocking was to the tune of 31% in America and 27% among the Canadians. In both the chosen nations, men blocked ads 10% more than women and the age group 18 to 34 was ranked the highest in ad blocks.



(Source: *Is there an adlergic epidemic? Ad blocking across media*' <sup>(3)</sup>)

To another query as to what do the viewers do to avoids ad while they are displayed, the four major things they did were to **leave the room, change the channel, mute the volume or start looking into mobile or PC** to divert for some time. The managers do have a wonderful takeaway from this report which is very exhaustive and comprehensive as to how significant it to create ads that attract the customer's attention online

## LITERATURE REVIEW

### Customer Experience

In a world where products or services are being sold as commodities, the scope of showcasing an edge comes with the unique customer experience the brands provide. The differentiation in the satisfaction levels of the ultimate users greatly depends on their experience during their usage of the brand [Badgett et al., 2007 <sup>(4)</sup>; Bolton et al., 2014 <sup>(5)</sup>; Meyer & Schwager, 2007 <sup>(6)</sup>; Reinartz & Ulaga, 2008 <sup>(7)</sup>]. Some experts even observed that enriched customer experience paved the way for increased brand loyalty, better financial performance of the company, enhanced customer trust on the brand and strengthened the bonding between the customers and the brand [(Ballester & Aleman, 2001 <sup>(8)</sup>]. Verhoef et al., 2009 <sup>(9)</sup> created a conceptual model of user experience model where he talked of 2 important dimensions of customer experience which every brand had to take care of. The first dimension was customer-to-customer interactions where the users share their personal experiences with their own family, friends and others. The second dimension was the customer interaction with the employees of the company or brand. In either case, the interactions were given enough weightage as they lead to acceptance or rejection of the brand in the course of time. As the modern business arena considered multi-channels as the order of the day, the experience on one channel took no time in reaching the others

### Ad Blocking

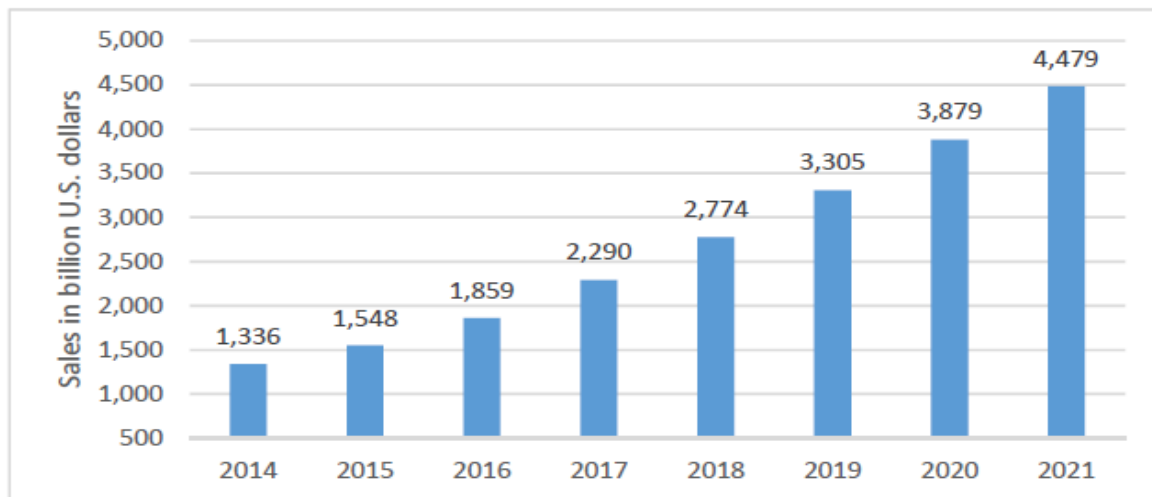
Kontaxis and Chew (2015) observed that the alarming increase in the online advertising spend has paved the way to the rise of ad blocking and the other privacy-assuring software <sup>(10)</sup>. As per the finding of Turow et. al <sup>(11)</sup>, the fundamental reason for the websites, advertising networks and the physical retailers to make deliberate efforts to track their visitors was to personalize or tailor the advertising messages they delivered. They further clarified that by learning about the customers' present and past browsing patterns, one could recommend the products that would appeal to them. The targets became easy to access. In their detailed study on tailored ad messages targeted at customers, they had expressed concerns as this practice of behavioural targeting was not ethical as it helped the advertiser to collect loads of personal data about the users, created profiles about them and utilize the data to target them with their brands.

Arvind Jain, a Google engineer felt that the online consumers did not want to wait. According to him, every millisecond also mattered to such customers who searched less if their search was delayed because of the deliberate actions by the brands to thrust digital ads <sup>(12)</sup>. He further deliberated in his

article on the New York times that the growing impatience among the online users was the major cause for the increased usage of ad blocking software.

Ad blocking is, understandably, very unpopular among ad publishers, with the Interactive Advertising Bureau labelling the practice a “potential existential threat” to the online advertising ecosystem. Digital advertising publishers took efforts to fight the attempt of the online users to block ads by restricting access to the site for the ad blockers but it resulted in the users’ abandoning such sites ultimately according to Miroglio et.al <sup>(13)</sup>. The authors asserted that the ad blocking system had enhanced the user experience on the internet, the avoidance of unnecessary ads being the basic reason.

**Fig 5 Global digital ad spend**

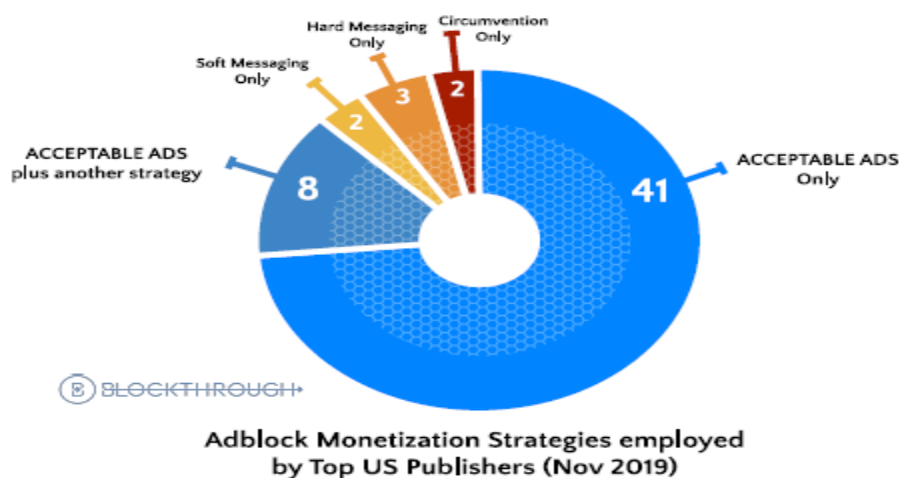


Source: <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/><sup>(14)</sup>

The above image displays the rise of global digital ad expenditure from 2014 to the projected figure in 2021. The global digital advertising expenditure which was at US\$90 Bn in 2017 is expected to touch US\$ 350 by the end of 2026 with an anticipated CAGR of 18.5% <sup>(15)</sup>.

According to 2020 PageFair Blockthrough Adblock report 2019 <sup>(16)</sup> by the end of 2019, 527 million people in the US used mobile browsers which blocked ads by default and 236 million people blocked ads on desktop. The report was published with a finding that 56% out of the top 100 US ad publishers (companies or individuals that generate content for consumption by consumers) monetized through the ad blocks.

**Fig 6**



Source: <https://blockthrough.com/2020/02/03/2020-adblock-report-2/><sup>(16)</sup>

## MALVERTISING

Malvertising typically connotes the practice of planting malware through online advertising on the web pages according to Mimiso <sup>(17)</sup>, who further clarified that certain trusted websites too lost their

credibility because of malvertising. The rising digital advertising expenditure and the flourishing online advertising ecosystem gave a large scope for malicious ad contents to deceive the viewers as real advertisers as per the observation of Zarras et al. <sup>(18)</sup>. With AdWords, which was introduced by Google in 2000, as a practice of bidding for ads associated with specific search terms <sup>(19)</sup> the advertisers started to compete with one another to promote their brands through ads to the online users, based on their searches in the past. According to Lee <sup>(20)</sup> Edward Snowden, an American whistle-blower, who became popular after he brought to light certain classified information from the National Security Agency in 2013, supported the system of ad blocking as a method to prevent malvertising. Snowden asserted that when the online viewers were given ads with active contents that necessitated Javascript to be run or had Flash embedded in it, the vector could attack the web browser of the user and so he should be trying to block those ads.

## RESEARCH METHODOLOGY

- a. Research design: Descriptive
- b. Sampling: Simple random sampling
- c. No. of samples: 57
- d. Data collection: Primary data collection through questionnaires, telephonic conversation  
Secondary data collection through published literature (print and internet)
- e. Questionnaire: Structured, close ended questions
- f. Data handling through Descriptive statistics, One Way ANOVA, Correlation

**Objectives of the study:** To identify the underlying factors leading to

- i) distraction when online
- ii) superior online user experience

## Data Analysis

**Table 1 - Frequency table to identify the age wise distractors while online**

The following frequency table depicts the age wise break up of the factors that were considered as distractions while browsing internet. The study did not consider the purposes of browsing. But during the brief conversations during the study, the student samples were understood to have surfed for academic purposes while the professionals, housewives, entrepreneurs and the retired samples were identified to have browsed for various reasons like watching YouTube videos, online shopping and browsing through blogs.

Frequency table to identify the major distractors while online according to Age groups					
	Age group	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-19	2	3.5	3.5	3.5
	20-24	7	12.3	12.3	15.8
	25-29	12	21.1	21.1	36.8
	30-34	15	26.3	26.3	63.2
	35 & above	21	36.8	36.8	100.0
	Total	57	100.0	100.0	

As it displayed in the below table, the consumers of age 30 and above had considered all the factors very distracting while browsing. It was also found during the initial conversation with the samples before they were requested for data, that the younger population (as per the study 15 to 29) had no specific aversion towards online advertising but what they considered significant when a brand advertised itself ranged between the price and performance factors which should be wisely and creatively highlighted in the ads.

**Table 2 - Cross tabulation to identify the association**

Age group	Frequent ads while browsing	Cookies / product recommendation	In-between video ads	Call to action
15 – 19	0	1	0	1
20 – 24	2	0	1	0
25 – 29	0	0	2	1
30 – 34	30	31	26	28
35 and above	25	25	29	27

**Occupation and the attention towards online ads**

		attention towards online ads					Total
		very often	often	cannot say	not much	no attention at all	
Occupation	Student	1	0	0	3	2	6
	Professional	0	3	0	25	4	32
	Housewife	0	1	2	7	0	10
	entrepreneur	0	1	0	4	0	5
	Retired	0	1	0	1	0	2
Total		1	6	2	40	6	55

Symmetric Measures					
		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Interval by Interval	Pearson's R	-.211	.173	-1.574	.121 <sup>c</sup>
Ordinal by Ordinal	Spearman Correlation	-.289	.140	-2.199	.032 <sup>c</sup>
N of Valid Cases		55			

**H0:** There is no significant association between the occupation and the level of attention towards the online ads while browsing

**H1:** There is no significant association between the occupation and the level of attention towards the online ads while browsing

Table 2 depicts that the level of attention given to the advertisements while online and the occupation of the respondents did not have much of relationship. Irrespective of who they were, the respondents were neutral towards online ads

One-Way ANOVA - table displays the relationship between the age groups of the respondents and the factors contributing towards satisfactory online user experience

**H0:** There is no significant difference among the different factors attributed towards a satisfying online user experience

**Table 3 -One-Way ANOVA**

Factors leading to pleasing online customer experience	Age groups	N	Mean	Std. Deviation	Std. Error	f	sig
seamless internet connectivity	15-19	2	4.50	.707	.500	.181	.947
	20-24	7	4.43	.535	.202		
	25-29	12	4.42	.515	.149		
	30-34	15	4.47	.516	.133		
	35 & above	21	4.33	.483	.105		
	Total	57	4.40	.495	.066		
safety to privacy	15-19	2	5.00	.000	.000	2.100	.094
	20-24	7	4.57	.535	.202		
	25-29	12	4.58	.515	.149		
	30-34	15	4.53	.516	.133		
	35 & above	21	4.24	.436	.095		
	Total	57	4.46	.503	.067		
quick page loading	15-19	2	4.00	.000	.000	.969	.432
	20-24	7	4.57	.535	.202		
	25-29	12	4.67	.492	.142		
	30-34	15	4.53	.516	.133		
	35 & above	21	4.43	.507	.111		
	Total	57	4.51	.504	.067		
less clutter in pages	15-19	2	4.50	.707	.500	.497	.738
	20-24	7	4.71	.488	.184		
	25-29	12	4.58	.515	.149		
	30-34	15	4.47	.516	.133		
	35 & above	21	4.43	.507	.111		
	Total	57	4.51	.504	.067		
low/nil distractions	15-19	2	4.50	.707	.500	.671	.615
	20-24	7	4.71	.488	.184		
	25-29	12	3.92	1.240	.358		
	30-34	15	4.27	1.100	.284		
	35 & above	21	4.24	1.044	.228		
	Total	57	4.25	1.040	.138		

**H1:** There is significant difference among the different factors attributed towards a satisfying online user experience

In table 3, we could find 5 major factors chosen as aspects contributing towards a satisfying / happy online consumer experience; hassle-free internet connectivity, assurance of safety to online privacy of the user, quick loading of pages, low clutter of the loaded page and low / nil distractions while a customer is online. Interestingly the age group 15 to 19 features on top of the list under two major factors; seamless internet and privacy assurance. The age group 20 to 24 which mainly comprises of students and professionals felt that quick loading of pages during the browsing sessions was the key to a happy online customer experience. The same set of respondents also realized that low distractions during serious browsing sessions and less cluttered online pages also contributed to a satisfactory

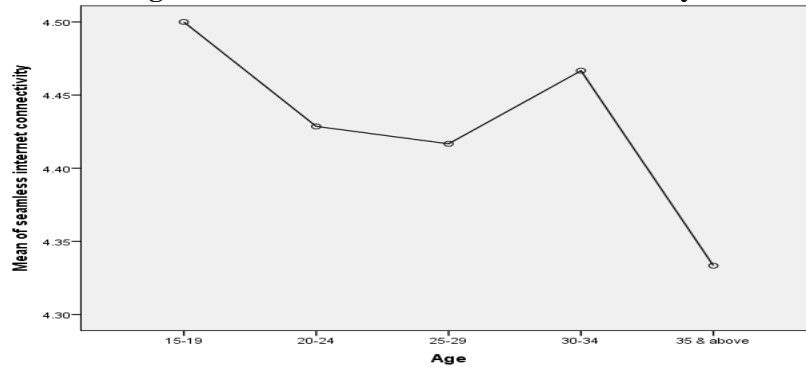


online experience. According to the data collected, this age group comprised of students and working professionals whose surfing sessions would be either academic or career oriented

As the ANOVA table proves that all the factors are equally important to an online user, *Post Hoc* test was conducted where age is taken as the independent factor and the factors affecting the online consumer experience are dependent factors. The resultant mean plot graphs of the Post Hoc test are given below

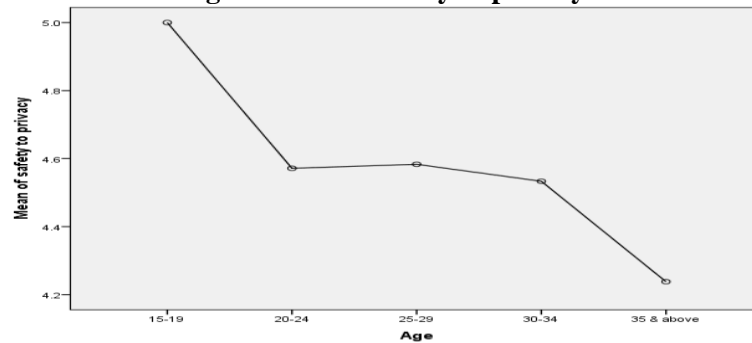
### Mean plot graphs of the factors attributing towards satisfactory online experience

**Fig 7 – mean of seamless internet connectivity**



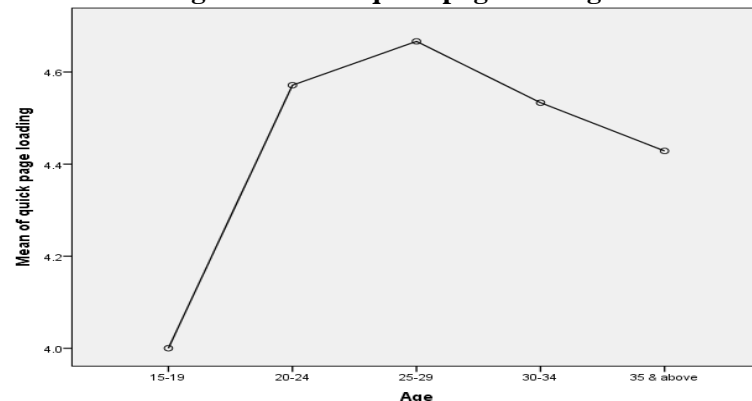
The above graph shows, for the age group 15-19, seamless internet connectivity is the most important factor and for the age group 35 and above, it is the least important factor.

**Fig 8 – mean of safety to privacy**



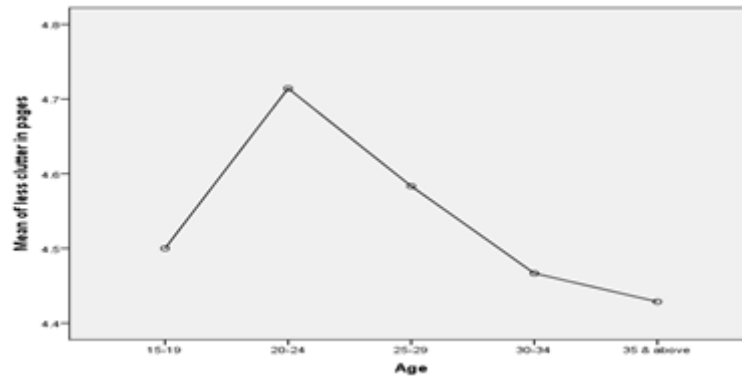
The above graph shows, the age group 15-19, considers safety to privacy the most important factor and for the age group 35 and above, it is the least important factor.

**Fig 9 – mean of quick page loading**



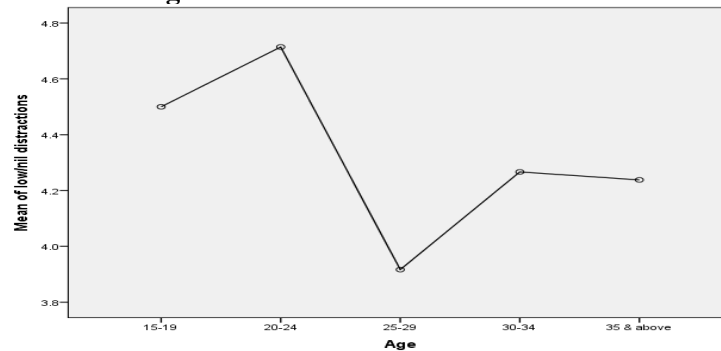
The above graph shows, the age group 25-29 considers quick page loading the most important factor and for the age group 15 - 19, it is the least important factor.

**Fig 10 – mean of less cluttered pages**



The above graph shows, the age group 20-24 considers less cluttered pages the most important factor and for the age group 35 and above, it is the least important factor.

**Fig 11 – mean of low / nil distraction**



The above graph shows, the age group 20-24 considers low or nil distraction, the most important factor and for the age group 25 - 29, it is the least important factor

**Table 4 Cross tabulation and Chi Square -**

**Association between gender and the opinion about cookies / product recommendation**

**H0:** There is no significant association between gender and the opinion about cookies/product recommendation when online

**H1:** There is significant association between gender and the opinion about cookies/product recommendation when online

		cookies / product recommendation			Total
		Strongly disagree	agree	strongly agree	
Gender	Male	1	15	9	25
	Female	0	16	16	32
Total		1	31	25	57

Correlations			
		cookies / product recommendation	Gender
cookies / product recommendation	Pearson Correlation	1	.193
	Sig. (2-tailed)		.151
	N	57	57
Gender	Pearson Correlation	.193	1
	Sig. (2-tailed)	.151	
	N	57	57

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.165 <sup>a</sup>	2	.339
Likelihood Ratio	2.543	2	.280
Linear-by-Linear Association	2.083	1	.149
N of Valid Cases	57		

Table 4 shows that the p value is greater than the standard alpha value and so H0 is accepted. Irrespective of gender, the respondents find cookies or product recommendations to be a distraction while browsing.

**Table 5 Crosstabulation**

Age and the opinion that less clutter in pages leads to an enjoyable online user experience					
Age			less clutter in pages		Total
			disagree	strongly disagree	
	15-19	Count	1	1	2
		% within Age	50.0%	50.0%	100.0%
		% within less clutter in pages	3.6%	3.4%	3.5%
	20-24	Count	2	5	7
		% within Age	28.6%	71.4%	100.0%
		% within less clutter in pages	7.1%	17.2%	12.3%
	25-29	Count	5	7	12
		% within Age	41.7%	58.3%	100.0%
		% within less clutter in pages	17.9%	24.1%	21.1%
	30-34	Count	8	7	15
		% within Age	53.3%	46.7%	100.0%
		% within less clutter in pages	28.6%	24.1%	26.3%
	35 & above	Count	12	9	21
		% within Age	57.1%	42.9%	100.0%
		% within less clutter in pages	42.9%	31.0%	36.8%
Total		Count	28	29	57
		% within Age	49.1%	50.9%	100.0%
		% within less clutter in pages	100.0%	100.0%	100.0%

**H0:** There is no significant association between age and the opinion about less cluttered page

**H1:** There is significant association between age and the opinion about less cluttered page

Table 5 clarifies that the age group 35+ felt that less clutter on the web page would enhance the user experience followed by 30-34 who felt that a clutter page would lead to delays in what they wanted to do online.

## FINDINGS

### A. Factors leading to distraction while browsing:

1. Online user wants a clean, well-organized user interface where it would be possible for them to browse and find what they wanted without wastage of time and resources. The ultimate fact is a cluttered or disorderly website is not a visual problem, but a business problem which involves several billion-dollar worth advertising expenditures. Clutter, according to the respondents belonging to 25+ age group in the study, meant something which made them struggle through web pages to understand which was significant and which was not for them.
2. According to the respondents, clutter also meant too much of data or information on the screen which were not structured in a logical way. The nuisance was also because of the noise generated by the video ads that started to play once the page was loaded. According to the same sample groups, it took a while for them to track where the visual noise was coming from to stop those ads.

### B. Factors driving online user satisfaction

3. Seamless internet connectivity and online privacy were two major drivers of online user experience according to 15-19 age group while 25-29 age group opted for quick page loading as the key to customer happiness and loyalty. According to Google, the average time it takes for a page to load on mobile devices is 15 seconds <sup>(21)</sup>. But the samples said that if they had to wait for more than 3 seconds for a page to load, they left the page. So it is time for the marketers to cleverly make their webpages to load with those matter which would not delay the loading of page.
4. The Vice President of Product Marketing at Unbounce, Ryan Engley once mentioned that the business houses needed to take caution as to why and when videos needed to be used to market their products online as they slow down the page loading pace <sup>(22)</sup>. The respondents of the study too expressed similar views. They viewed animated ads or video ads on the browsing page as a reason for slow pages which also lead them to faster pages.

## CONCLUSION AND THE ROAD AHEAD

In a digital ecosystem, the businesses find their revenues basically by showcasing their brands and the value those brands would give the users. As such the digital world is equipped with efficient and free ad blockers like AdLock, AdBlock Plus, uBlock Plus Adblocker, Trustnav Adblocker, NoScript etc. The ad blocking practice across the globe has risen alarmingly in the past 5 years <sup>(23)</sup>. Due to the absence of a system to set the minimum required standard regarding online advertising formats, the digital ad world consisting of the advertisers, the publishers and the social platforms have started working in unison to avert the economic repercussions of the ad blocking occurrence across the globe. Given the fact that 25% of the internet users in the world block ads. It is an issue looming large as robust publishers like Google and FaceBook largely depend on ads for revenues. Even if a miniscule percentage of the ad blocking consumers is countered with efficient means to prevent the blocking, it would result in solid profits. The Acceptable Ads Program, of which Google and Microsoft are enrolled members, whitelists the ads to be displayed. A few giant publishers like FaceBook are manipulating the ads on display to avoid adblockers while many other publishers have executed anti adblockers-Javascript code that would identify and notify the existence of an adblocker. Overall it looks like a war between the publishers on the one side and the ad blocking users on the other to establish their purposes online. The study has thrown light that majority of the online consumers considered online ads as a matter of distraction and were of the view that they could not convey valuable information to a customer. The ad maker has a good news here that those consumers who would welcome a value adding information through a video ad or a floating ad are real assets since they would appreciate the efforts of the ad makers if the ads really make sense and equip them in market space effectively.

It is time for the publishers and the marketers to strike an ideal balance between the valuable contents of the ads and the relevance to the targeted population.

The study could further be extended into the following directions

- a. As a study on the urban and semi-urban online consumers who are equally digitally literate but look for different value propositions from a brand
- b. As a study on millennials alone of both the genders, as they have expressed interest in the current research, towards receiving relevant and useful brand information through online ads

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