

THE INFLUENCE OF USER-GENERATED CONTENT ON CONSUMER PURCHASE BEHAVIOR IN THE ERA OF SOCIAL MEDIA AND DATA ANALYTICS

Farheen Taj

Research Scholar

DR. Rajinder Singh

Guide name

School of Commerce, Sunrise University, Alwar

DECLARATION: I AS AN AUTHOR OF THIS PAPER /ARTICLE, HERE BY DECLARE THAT THE PAPER SUBMITTED BY ME FOR PUBLICATION IN THE JOURNAL IS COMPLETELY MY OWN GENUINE PAPER. IF ANY ISSUE REGARDING COPYRIGHT/PATENT/OTHER REAL AUTHOR ARISES, THE PUBLISHER WILL NOT BE LEGALLY RESPONSIBLE. IF ANY OF SUCH MATTERS OCCUR PUBLISHER MAY REMOVE MY CONTENT FROM THE JOURNAL WEBSITE. FOR THE REASON OF CONTENT AMENDMENT /OR ANY TECHNICAL ISSUE WITH NO VISIBILITY ON WEBSITE /UPDATES, I HAVE RESUBMITTED THIS PAPER FOR THE PUBLICATION.FOR ANY PUBLICATION MATTERS OR ANY INFORMATION INTENTIONALLY HIDDEN BY ME OR OTHERWISE, I SHALL BE LEGALLY RESPONSIBLE. (COMPLETE DECLARATION OF THE AUTHOR AT THE LAST PAGE OF THIS PAPER/ARTICLE

Abstract

In the era of social media and data analytics, user-generated content (UGC) has grown in importance as a factor affecting customer buying behavior. Goal: The term "big data" describes the massive volume of information that is currently being collected by computers, mobile devices, the internet, and society as a whole. It becomes challenging to actually gather, manage, analyze, transform, model, and organize this unstructured data in order to achieve the company's goal of learning more and gaining insights into the purchasing behavior of consumers because these data sets are so huge and diverse in nature, kind, and format. The goal of the article is to provide insights into customer needs by analyzing large amounts of social media data. Techniques/Statistical Evaluation: The research makes the connection between the evolution of consumer purchasing behavior and social media and big data. Consumer purchase intention is significantly shaped by the unstructured data that is generated, sometimes referred to as User Generated Data (UGC). Results: This study revealed that social media and big data are driving a new paradigm shift in consumers' purchase intentions. Using structural equation modeling, the researcher has discovered the ideal model fit and demonstrated through hypothesis testing that social media and big data together are the sources of user-generated content (UGCs), which influence customers' intentions to make purchases. This study emphasizes how user-generated content (UGC) is transforming contemporary consumer behavior and provides useful takeaways for marketers looking to take use of social media dynamics to gain a competitive edge.

Keywords: *Influence, User-Generated Content (UGC), Consumer Purchase, Behavior, Social Media*

1.INTRODUCTION

User-generated content, or UGC, has become an important role in influencing consumer behavior in the digital world due to the widespread use of social media and advanced data analytics. User-generated content (UGC) has a significant impact on how customers search for, evaluate, and select products and services. It can be found in a variety of formats, such as testimonials, social media posts, product evaluations, and ratings. In the past, marketing campaigns have mostly concentrated on companies and used well written messaging and advertising to attract consumers. However, the emergence of social media has made it possible for people to freely share their thoughts and experiences, democratizing the content creation process. Prospective buyers now work in a more trustworthy, cooperative environment where peer reviews are highly valued, rather than depending just on brand advertising.

These days, social media platforms such as Facebook, Instagram, Twitter, and specialized review sites are where user-generated content (UGC) may be found. User experiences and recommendations can spread quickly thanks to these platforms, and this has the potential to greatly impact potential customers. Consumers view peer-generated material as more genuine and trustworthy than traditional advertising, which adds to UGC's legitimacy and effect due to its accessibility and immediate nature. Negative material, on the other hand, might discourage potential customers and harm a brand's reputation. For example, a favorable review or a viral social media post can inspire significant consumer attention and influence purchase decisions.

UGC has a greater influence on customer behavior thanks to the function of data analytics. Businesses may obtain profound insights into customer preferences, trends, and sentiment by tracking and analyzing massive volumes of data produced by social media interactions and online reviews. Employing data analytics technologies helps businesses find trends and connections between user-generated content (UGC) and customer buying habits, resulting in more focused and successful marketing campaigns. Using sentiment analysis, for instance, companies can determine how the public feels about their products and modify their marketing strategies appropriately. Furthermore, by utilizing historical user-generated content (UGC) to predict future purchase

tendencies, predictive analytics enables businesses to anticipate market changes and anticipate customer wants before they arise.

This study explores the intricate interaction between user-generated content (UGC) and consumer purchasing behavior. It also looks at the ways in which social media and data analytics interact to shape modern consumer decisions. The research will examine the effects of user-generated content (UGC) on trust, engagement, and purchase behaviors in order to provide businesses with a better knowledge of how to leverage these insights to improve their marketing efforts and establish stronger relationships with their audience. The results are directly applicable to brands that want to employ data analytics and user-generated content (UGC) to optimize their marketing tactics and increase consumer satisfaction levels.

2. REVIEW OF LITREATURE

Agarwal (2020) examines the significant impact user-generated content (UGC) has on brand identification and purchase intents in social media marketing. The study highlights the importance of user-generated content (UGC) in fostering consumer engagement, emphasizing how social media interactions, user evaluations, and ratings significantly raise the exposure and authority of brands. User-generated content (UGC) influences customers' perceptions and decision-making, per Agarwal's research. UGC provides relatable and genuine content, which helps organizations and customers bridge the trust and reliability divide. The study's findings show that businesses can enhance their marketing strategies and gain customers' trust by effectively utilizing user-generated content (UGC), which will ultimately result in increased buy intentions.

Al-Abdallah and Jumaa (2022) Analyze how user-generated content and company-generated content interact during the purchasing process. According to their findings, user-generated content (UGC) has a greater influence on consumer decision-making than firm-generated material, even if the latter is important in forming brand messages. According to the study, user-generated content (UGC) frequently influences customer opinions more successfully than standard firm-generated material because of its relatability and authenticity. Peer reviews and social media interactions are increasingly being relied upon by consumers when making judgments about what to buy,

according to Al-Abdallah and Jumaa. This is because consumers regard these sources as more reliable and objective. By providing insights into how user-generated content (UGC) influences consumer behavior in addition to or instead of firm-generated content, this research advances our understanding of how to optimize content strategies for increased engagement and conversion.

Ana and Istudor (2019) focus on the travel preferences of millennials and examine the ways in which social media and user-generated content affect these preferences. According to their survey, user-generated content (UGC) has a significant influence on the decisions made by millennial travelers, who rely heavily on social media platforms as inspiration and information sources. According to the research, user-generated reviews, travel blogs, and social media posts have a substantial influence on opinions about travel locations and services. Ana and Istudor highlight the participatory nature of social media, where users are informed and engaged by user-generated content (UGC), which in turn encourages users to make decisions based on the experiences of their peers. The present study underscores the increasing importance of user-generated content (UGC) in the travel industry, as authentic user experiences have the potential to shape consumer preferences and enhance travel-oriented marketing strategies.

3. RESEARCH METHODS

The sources of user-generated material that impacted the changes in consumer behavior were found through the application of qualitative analysis. The article's goal is to look into how consumer intentions are influenced by user-generated content. It was discovered that websites that gather huge data from user interaction and social media platforms are the main suppliers of user-generated content (UGC). The content analysis method is said to be particularly beneficial for identifying the important influencers¹⁰. A distinct study has revealed that when qualitative analysis is obtained from open sources, it can be subjected to a more thorough examination to verify its validity¹¹. To enhance the validity and improve the outcomes, a research technique for the survey has also been applied¹³. Primary data was collected, statistical tests were performed, and quantitative research was conducted in order to validate the constructs.

3.1 Theoretical Framework

The Structure Equation Modeling diagram, which incorporates social media and big data to construct consumers' buying intentions, is explained in Figure 1.

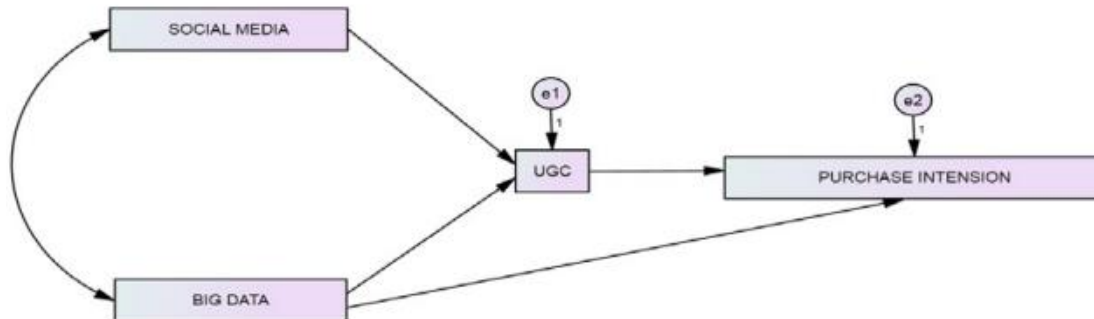


Figure 1: The proposed model.

3.1.1 Social Media

Social media refers to a variety of internet platforms that let users communicate, work together, and exchange information on goods and services. Social media has made it possible for customers to actively engage in a variety of online communities and obtain knowledge and understanding about the product; as a result, they are no longer passive recipients of information about the product. Users can access similar interest groups and find the right information at the right moment with its assistance. Through voice, text, and video messages, they have been elevated from being simply consumers to content producers and distributors. Thus, it is demonstrated that individuals have the extremely high ability to affect the intentions and purchase behavior of other users, something that was not before observed.

3.1.2 Big Data

The way information is accessed has changed as a result of technological improvements, which has also raised the significance of big data. The amount of data being generated and collected is predicted to skyrocket in the upcoming years. Despite the vastness of the big data context, there is

still a great deal of non-uniformity and the majority of the generated data is unstructured. In light of this situation, more sophisticated technology is required in order to gather, analyze, and draw conclusions from this unstructured data electronic word of mouth. refers to communications sent by current, former, or prospective customers via electronic means discussing a brand, good, or services.

The primary obstacle in big data analysis is still getting useful conclusions from massive amounts of publicly accessible data on the internet. Scientists are working on a number of tools and web services that will facilitate easy user-website interaction and simplify and organize data collection. Tools like Garaizer, Reips, and Witten were created specifically for Twitter, while Milne and Witten were made for wikis. In-depth data analysis requires additional organizing of the diverse types of user-provided material that make up the created data.

3.1.3 User Generated Content- UGC

Content made by users interacting with a medium that includes information meant to be created, influenced, shared, and consumed by others is referred to as user-generated content. Details about the product, brand, or specification that pique the customer's interest and persuade them to make a purchase are usually included in the material. Recent research indicates that even when utilized simultaneously, user-generated content and electronic word-of-mouth are very different. The only goods that UGC and e-WOM can be used interchangeably are those that are specific to a certain brand. Thus, the study investigates the impact of these user-generated content (UGCs) on customers' purchase intentions. The study is important because user-generated content (UGC) has a big impact on customer behavior, especially when the marketplace is taken into consideration. Controlling this UGC is extremely tough for retailers as well.

3.1.4 Purchase Intention

Users of social media are exposed to a plethora of information, whether on purpose or accidentally. Prior studies have demonstrated that the information that consumers can obtain online has an impact on their intentions to make purchases.²⁶, depending on the kind of goods or service being sought after as well as consumer to customer, the degree of effect alone may vary.

3.2 Hypothesis

H1: Positive correlation exists between social media and UGC Accepted

H2: Big Data and UGC Accepted are favorably correlated.

H3: UGC and Purchase Intention are positively correlated.

H4: Big Data is favorably correlated with intention to purchase—accepted

4. DATA COLLECTION

Data was gathered using a structured questionnaire that was distributed to social media users and customers who want to conduct online research before making a purchase in order to test the suggested framework. For a total of two months (February 2023–March 2023), 250 questionnaires were randomly distributed, and we were able to gather 100 valid answers. The survey had demographic inquiries and Likert scale questions with five possible answers (1 being strongly disagree, 2 being disagree, 3 being neutral, 4 being agree, and 5 being strongly agree). The respondents' demographics are explained in Table 1.

Table 1: Demographic summary

Category	Frequency	Percent
Gender		
Female	50	50%
Male	50	50%
Age		
26-33	30	30%
34-41	20	20%
Above 41	50	50%
Income		
Below 40000	25	25%

40000-60000	25	25%
60001-80000	30	30
Above 80000	20	20%
Education		
UG	30	30%
PG	30	30%
Professional Courses	40	40%

The information shows that respondents' genders are distributed fairly, with equal numbers of men and women making up 50% of the sample. In terms of age, the 26–33 and over 41 age groups have a significant concentration of responders (50% each), whilst the 34–41 age group is underrepresented (20%). 25% of respondents fell into the below 40000- and 40000-60000-income brackets, 30% into the 60001-80000 bracket, and 20% into the over 80000 category. This represents a fairly equally distributed income distribution. In terms of educational background, the sample is evenly distributed among participants, with 30% having undergraduate degrees and 30% having postgraduate degrees. Additionally, 40% of the sample has professional courses.

5. DATA ANALYSIS AND RESULTS

Table 2: The hypothesis and the goodness of fit index findings

Hypothesis	Std RW	C.R.	P
H1 UGC ← social media	0.41	6.255	***
H2 UGC ← Big Data	0.29	2.685	***
H3 Purchase Intention ← UGC	0.89	14.411	***
H4 Purchase Intention ← Big Data	0.42	4.252	***

Goodness-of-Fit Index	Value
$\chi^2/d.f.$	1.714
Goodness-of-Fit Index (GFI)	0.925
Adjusted GFI (AGFI)	0.902
Comparative Fit Index (CFI)	0.951
RMSEA	0.051

The table displays the findings of hypothesis testing as well as the goodness-of-fit indices for the structural model that examines the relationship between purchase intention and user-generated content (UGC) and Big Data. User-generated content is influenced by social media. Standardized regression weight (Std RW) of 0.41 indicates a relatively positive correlation between social media and user-generated content, according to Hypothesis H1. This relationship's statistical significance is confirmed by the critical ratio (C.R.) of 6.255 and the significance level (P) of *** ($p < 0.001$). This implies that UGC is fostered and enhanced by social media, underscoring the significance of UGC in the digital environment where users actively create and interact with material.

When compared to social media, Hypothesis H2's Std RW of 0.29, which measures the impact of Big Data on user-generated content, suggests a weaker but still positive relationship. The statistical significance of the association is supported by the C.R. of 2.685 and a significance level of *** ($p < 0.001$), indicating that although Big Data influences UGC, its impact is not as great as that of social media. With a Std RW of 0.89, Hypothesis H3's investigation of the relationship between UGC and purchase intention reveals a very substantial positive influence. This association is highly significant, as evidenced by the C.R. of 14.411 and significance level of *** ($p < 0.001$). This emphasizes how important user-generated content (UGC) is in influencing consumers' purchase intents and suggests that UGC is a major factor in influencing consumer purchasing decisions.

With a Std RW of 0.42, Hypothesis H4 evaluates the impact of big data on purchase intention and finds a moderately favorable effect. The statistical importance of this link is shown by the C.R. of 4.252 and the significance level of *** ($p < 0.001$). While data analytics is crucial, UGC is a more potent motivator of purchase decisions. Big Data does impact purchase intention, but its effect is less evident than UGC's. The goodness-of-fit indexes offer additional support for the suitability of

the model. A decent fit is shown by the $\chi^2/d.f.$ value of 1.714, since values less than 2 are often regarded as appropriate. The Goodness-of-Fit Index (GFI) of 0.925 and the Adjusted GFI (AGFI) of 0.902, both of which are greater than the conventional cutoff of 0.90, suggest a good model fit. The Comparative Fit Index (CFI) of 0.951, which indicates that a well-fitting model has values above 0.95, further supports this. Lastly, the Root Mean Square Error of Approximation (RMSEA) of 0.051, which is less than the recommended cutoff of 0.06, suggests a reasonable match between the model and the actual data. When everything is said and done, these findings demonstrate the significance of social media and user-generated content in influencing consumer behavior and purchase intentions. The data fits the model well, highlighting the need of incorporating social media and user-generated content (UGC) into marketing campaigns to successfully engage and sway customers.

Table 3: Values for factor loading, CR, and AVE

Variable	Item	Factor Loading	CR*	AVE
Social media	SM1	0.72		
	SM2	0.81		
	SM3	0.70	0.862	1.92
Big Data	BD1	0.69		
	BD2	0.85		
	BD3	0.71		
	BD4	0.82	0.82	1.61
UGC	U1	0.81		
	U2	0.79		
	U3	0.83	0.822	1.10
Purchase Intention	PI1	0.71		
	PI2	0.72		
	PI3	0.83	0.814	0.62

Table 3 presents an analysis of the factor loadings, composite reliability (CR), and average variance extracted (AVE) for the four primary components in the study: big data, social media,

user-generated content (UGC), and purchase intention. These metrics help assess the reliability and validity of the measuring model used in the research.

The factor loadings for items SM1, SM2, and SM3 within the Social Media construct are 0.72, 0.81, and 0.70, correspondingly. There is strong internal consistency among the items, as seen by the composite reliability (CR) of 0.862, which is above the acceptable level of 0.70. The average variance extracted (AVE) is 1.92, indicating convergent validity and indicating that a significant portion of variance is captured by the concept in comparison to the variance resulting from measurement error. Factor loadings for items BD1, BD2, BD3, and BD4 in the Big Data construct are 0.69, 0.85, 0.71, and 0.82, respectively. With a CR of 0.82, which is within the permissible range, the internal consistency is trustworthy. Though it is marginally below the optimal AVE value of 2, which indicates potential for improvement in capturing variance, the AVE of 1.61 indicates that the concept captures variance well.

The factor loadings for items U1, U2, and U3 in User-Generated Content (UGC) are 0.81, 0.79, and 0.83, correspondingly. With a CR of 0.822, the products exhibit strong internal consistency and dependability. The measuring items need to be further refined since, despite their reliability, they may not capture as much variance from the construct as would be ideal, as indicated by the relatively low AVE of 1.10. Factor loadings for the Purchase Intention construct are 0.71, 0.72, and 0.83 for items PI1, PI2, and PI3, in that order. Although the AVE of 0.62 is low and suggests that the construct does not capture as much variance as it should, the CR of 0.814 shows good reliability. This could suggest that in order to more accurately reflect the construct in subsequent research, more or different items would be required. Overall, the table shows that although the composite reliability scores indicate that the constructs have good reliability, the AVE values imply that there is room for improvement in the measurement items to increase the variance that the constructs capture. This research emphasizes how crucial it is to make sure measurement models are valid and dependable in order to appropriately capture the constructs they are meant to reflect.

6. DISCUSSION

The Research highlights the need for businesses to investigate the body of information and learn about the preferences of their customers. These can assist businesses in understanding the needs of their customers and tailoring their tactics accordingly. An extensive analysis may show that there are more location-based demands and that the conventional notion of seasonal demand is no longer valid. Personalized service and involving the customer in the branding process are other factors. Through the examination of customer digital footprints, businesses can offer packaged services that prioritize customer preference and obtain a competitive advantage in the marketplace³¹. One of the most effective ways for businesses to understand their customers' preferences is to look at the searches they conduct. Businesses can raise awareness to boost the product's initial interest, which will ultimately result in higher search volume searches. Big data has created opportunities across numerous businesses. By just observing the digital footprints of their customers, businesses may optimize their marketing initiatives and boost overall performance. Big social data gives you the flexibility to collect and monitor information as well as customer reactions to your offering. User interactions inside social network communities can have a significant influence on users' inclinations to make purchases. Big social data research continues to center on the patterns that consumers use to find and connect with other individuals who share their interests. It can help companies find out what customers need by allowing them to enter their minds. Both the author of the content and its impact on other readers can be determined.

7. CONCLUSION

Big data still has a lot of room for understanding and application to the advantage of companies, as it is not yet fully grasped by all. Even though very few businesses have recognized the underlying potential; in order to extract insights from the data, an expert must thoroughly examine the available data. Many businesses have embraced social media, which is still in its infancy, to promote their goods. Many businesses are making use of the platforms and channels already in place to collect consumer-related data in order to create the ideal plan for implementing ideal technologies and achieving precise outcomes. Big social data is therefore highly helpful, and since

social media has become such an integral part of our lives, we cannot discount the influence it can have on purchasing decisions. Studies on the influence these platforms have on consumers' purchasing intentions have become more comprehensive and extensive as a result of these shifts in the social environment. The difficulties continue since it might be difficult to determine who is truly creating material and has the ability to influence others.

REFERENCES

1. Agarwal, M. (2020). Importance of User Generated Content as a part of Social Media Marketing that drives Customer's Brand Awareness and Purchase Intentions. *The International journal of analytical and experimental modal analysis*, 12(2), 3071.
2. Al-Abdallah, G., & Jumaa, S. (2022). User-generated content and firm generated content: a comparative empirical study of the consumer buying process. *UKH Journal of Social Sciences*, 6(1), 10-31.
3. Ana, M. I., & Istudor, L. G. (2019). The role of social media and user-generated-content in millennials' travel behavior. *Management dynamics in the knowledge economy*, 7(1), 87-104.
4. Karunanayake, T., & Madubashini, C. (2019). The influence of user generated content on purchase intention of automobiles in Sri Lanka. *Asian Social Science*, 15(6), 44.
5. Kumar, H., Singh, M. K., & Gupta, M. P. (2018). Socio-influences of user generated content in emerging markets. *Marketing Intelligence & Planning*, 36(7), 737-749.
6. Nusairat, N. M., Alroale, M. A., Al Qeed, M., Al-Gasawneh, J. A., Hammouri, Q., Ahmad, A., & Abdellatif, H. (2021). User-generated content-consumer buying intentions nexus: the mediating role of brand image. *Academy of Strategic Management Journal*, 20(4), 1-12.
7. Roma, P., & Aloini, D. (2019). How does brand-related user-generated content differ across social media? Evidence reloaded. *Journal of Business Research*, 96, 322-339.
8. Scholz, M., Schnurbus, J., Haupt, H., Dorner, V., Landherr, A., & Probst, F. (2018). Dynamic effects of user-and marketer-generated content on consumer purchase behavior: Modeling the hierarchical structure of social media websites. *Decision Support Systems*, 113, 43-55.

9. Thomas, T. G. (2020, June). How user generated content impacts consumer engagement. In 2020 8th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions)(ICRITO) (pp. 562-568). IEEE.
10. Tsiakali, K. (2018). User-generated-content versus marketing-generated-content: Personality and content influence on traveler's behavior. *Journal of Hospitality Marketing & Management*, 27(8), 946-972.
11. Tyrväinen, O., Karjaluoto, H., & Ukpabi, D. (2023). Understanding the role of social media content in brand loyalty: A meta-analysis of user-generated content versus firm-generated content. *Journal of Interactive Marketing*, 58(4), 400-413.
12. Vazquez, D., Cheung, J., Nguyen, B., Dennis, C., & Kent, A. (2021). Examining the influence of user-generated content on the fashion consumer online experience. *Journal of Fashion Marketing and Management: An International Journal*, 25(3), 528-547.

Author's Declaration

I as an author of the above research paper/article, here by, declare that the content of this paper is prepared by me and if any person having copyright issue or patent or anything otherwise related to the content, I shall always be legally responsible for any issue. For the reason of invisibility of my research paper on the website /amendments /updates, I have resubmitted my paper for publication on the same date. If any data or information given by me is not correct, I shall always be legally responsible. With my whole responsibility legally and formally have intimated the publisher (Publisher) that my paper has been checked by my guide (if any) or expert to make it sure that paper is technically right and there is no unaccepted plagiarism and hentriacontane is genuinely mine. If any issue arises related to Plagiarism/ Guide Name/ Educational Qualification /Designation/Address of my university/college/institution/ Structure or Formatting/ Resubmission/Submission /Copyright /Patent /Submission for any higher degree or Job/Primary Data/Secondary Data Issues. I will be solely/entirely responsible for any legal issues. I have been informed that the most of the data from the website is invisible or shuffled or vanished from the database due to some technical fault or hacking and therefore the process of resubmission is there for the scholars/students who finds trouble in getting their paper on the website. At the time of resubmission of my paper I take all the legal and formal responsibilities, If I hide or do not submit the copy of my original documents (Andhra/Driving License/Any Identity Proof and Photo) in spite of demand from the publisher then my paper maybe rejected or removed from the website anytime and may not be consider for verification. I accept the fact that as the content of this paper and the resubmission legal responsibilities and reasons are only mine then the Publisher (Airo International Journal/Airo National Research Journal) is never responsible. I also declare that if publisher finds Any complication or error or anything hidden or implemented otherwise, my paper may be removed from the website or the watermark of remark/actuality maybe mentioned on my paper. Even if anything is found illegal publisher may also take legal action against me.

Farheen Taj
DR. Rajinder Singh