

IMPACT OF E-PUBLICATION QUALITY ON READERS SATISFACTION: A STUDY OF POST GRADUATION STUDENTS OF JODHPUR CITY

Mr. Kamal Kant*

Abstract

The present era of technological advances introduced many electronic products in the field of publications. But there arise many new quality issues influencing the reader's satisfaction. However, there isn't a superior measurement to find these issues. Thus, the study emphasizes on investigating an approach to evaluate and improvise the information quality (IQ) in the e-publication from the viewpoint of PG student's from Jodhpur district. Many studies disclosed the variations in print and electronic publications, but there is still a gap in identifying the impact of content quality on the level of readers' satisfaction. This study adopted a quantitative approach of gathering and analyzing the data using the descriptive survey method. A well-structured questionnaire was framed to collect information from the readers (PG students) perspective. The questionnaire was administered to a randomly selected sample of 100 PG

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* **Research Scholar, Department of Management Studies, Jai Narain Vyas University, Jodhpur, Rajasthan-India**

students of Jodhpur colleges. Data processing is done through a statistical method for reaching the results of the study. The study at the end concludes that readers are logically satisfied with e-publication contents. Further, the study reveals that readers find it more easy and interesting to explore and read the data available online as compared with print information. Therefore, online data publishers should plan and make strategies so as to completely welcome their technological fortune and focus on enhancing the quality of information and improve their contents to increase the satisfaction level of readers.

Introduction:

Information systems (IS) field has been mushrooming in terms of capacity as well as multiplicity. A lot of this can be ascribed to the various problematic innovation advancements that have complicated the IS's growth chart contradictory to any other recognized sector.

Electronic publishing (e-publishing) addresses the gathering, revision, and dissemination of data, art and programming in any frame, for example, on physical media or by means of PC systems. E-publishing might be extensively partitioned into two classifications: online and offline publishing. Online publishing utilizes PC and correspondence systems including the Internet, intranet and extranet for content dissemination.

Offline publication utilizes capacity media, for example, CD ROM, CD-I, DVD, memory card and diskette for content dissemination.

Electronic publication (e-publication) can be defined as the publication of any sort of electronic media. A vast variety of e-publications are available in the online market these days, including data resources, informative guides, games and fun products. This investigation is chiefly centred

around different sorts of data resources, for example, digital books, e-diaries, e-magazines, e-papers, e-reference works, databases and different kinds of official e-distributions.

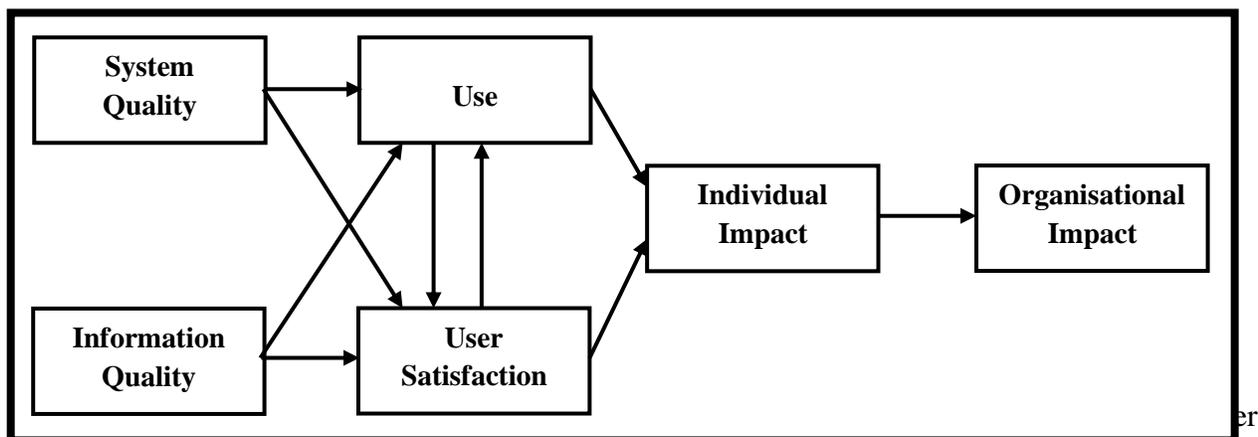
The main objective of this research paper is to study “the impact of e-publishing quality on the reader’s satisfaction”. In order to achieve this, the researcher collected data from postgraduate students of Jodhpur City of Rajasthan.

Background:

Since many years, India is leading the book publishing countries of the world as it has been one of the chief publishing countries in the world of book publishing. Not only in English, has India additionally published in 24 regional languages to cater the domestic demand of the countrymen. There are very nearly 15,000 publishers enrolled in India, among them publishing 70,000 titles every year in 24 languages, 18 of which are progressively conspicuous and profoundly developed and utilized by a large number of individuals.

“DeLone AND Mclean (1992) IS Success Model”

According to “DeLone and McLean in 1992, writersought to scientifically mix individual processes from the IS success categories to make a wide-ranging measurement tool. They proposed a six dimension model; the model proposed by them is displayed in below diagram. The writer argues about the ‘system quality’ and ‘IQ’ uniquely and cooperativelyimpact both ‘use’ and ‘user satisfaction’. Thus, all of them are regarded as direct experiences of ‘individual impact’ which eventually has some organizational impact (DeLone and McLean, 1992)”.



system, response time, accessibility, and accuracy of system.

IQ: This discusses about ‘meaning level’ of IS O/P concerning precision, applicability, suitability, flexibility, and convenience.

Use: “Which is generally evaluated as described from the view point of the users or real use according to the system concerning inquiries by time, connect time or number of computer tasks employed”.

“User satisfaction”: This means the estimates of the impact of available information on the user.

Individual impact: This term addresses how the user’s experiences with the system are being absorbed by the IS.

Organizational impact: This tells about the way the delivery of data and system influences or affects the organization as a whole.

This model proposed by **DeLong and McLean (1992)**, has witnessed the maximum approval and recognition by the researchers along with few obvious criticisms. In their literature, **Wang and Strong (1996)** quoted about the exploration to explain how ‘IQ’ and ‘user satisfaction’ are being utilized as the basis of investigation done by them. This study derives comprehensively from both these studies of IS and IQ to apprehend IQ on the internet.

Literature Review:

An electronic document containing information can be easily published by anyone online merely by obtaining desired space on a website (**Herrera-Viedma et al., 2006**). No code of conducts or instruction manual is being provided to regulate the kind and information quality that can be published by an author about the internet (“**Diligenti et al., 2004**”). Readers/users/consumers are supposed to decide themselves regarding the information quality former to putting them into use for their own needs. This without any standard publishing has immensely and adversely affected the collective information quality.

In the contribution given by **Wang and Strong (1996)**, towards literature, they tried “to address the issues concerning information quality (IQ). They implemented common literature concepts on quality and explained IQ in terms of data that is ‘fit-for-use’ by the users. Apart from IQ, they presented one more dimension viz. ‘data quality (DQ) dimension as an array of DQ features that signify a single feature of the DQ theory’. ‘Data’ generally denotes information at its initial processing phases and ‘information’ is regarded as the product at a later phase (**Strong et al.,**

1997b).According to this study, the word ‘information’ can be referred to as both ‘data and information’ which will be conveniently utilized reciprocally”.

“Multi-dimensional is another concept in which Information Quality can be commonly described in the literature (**Ballou et al., 1998; Klein, 2001; Aladwani and Palvia, 2002; Gendron and D’Onofrio, 2004**). DQ is an additional word which is frequently utilized correspondently in place of IQ and is commonly termed as information that is ‘fit-for-use’ (**Wang and Strong, 1996**). **Tayi and Ballou (1998)** articulated IQ as a relative term, data regarded as valuable for one individual might not be a good option for another individual’s use”.

Eppler (2002) “arranged his quality standards majorly into four wide dimensions: relevant information, sound information, optimized process, and reliable infrastructure. This sequential arrangement is grounded on the media theory given by Schmid and Stanoevska-Slabeva (**Schmid & Stanoevska-Slabeva 1999**)”.

There are few other IQ analysts who have executed almost similar practices. Evidently, for instance, where they successfully arrange quality criteria from 7 different investigations into 4 dimensions: “Intrinsic IQ, Contextual IQ, Representational IQ, and Accessibility IQ”.

Dimensions are described in an accompanying way:

Intrinsic: It suggests that “data has quality in its very own right”;
Contextual features “the necessity that IQ must be considered inside the setting of the job needs to be done”.
“Representational and accessibility stress the significance of PC frameworks that store and give access to data (Lee et. al. 2002)”.

“They arrange criteria from different investigations along these four dimensions. One of the investigations that they describe is (Delone and McLean 1992), which was introduced previously. They additionally describe an early investigation by Robert (Zmud 1978), which originates before a significant part of the computerization development”.

Major Objective of the Study

To enquire and reveal the quality of e-publication, along with various dimensions of TQM.

Research Methodology:

The research paper is an effort of exploratory research, taking into account the primary and secondary data. And secondary data sourced from diaries, magazines, articles and media reports.

Procedure for Data Collection:

To achieve the objective of this study viz. impact of e-publication quality on readers' satisfaction, required information was collected using both primary and secondary sources.

Primary Data:

Primary information includes data gathered through a questionnaire filled by the Postgraduate students from the selected college of Jodhpur and by observing and analyzing respondents' perception by a definite set of the enquiries in the form of questions in a questionnaire.

Secondary Data:

The data gathered by means of officially distributed sources like books, journals, reports, sites, research papers and so on is referred to as secondary data. Principle sources of secondary data were databanks of the institute, libraries, journals, online data group's etc. This type of information usually generates a calculated system aimed at the examination.

Data Analysis:

There are various factors which affect the satisfaction of readers for quality in e-publication. For this purpose, 10 different factors are listed which generally affect the quality of the respondent's perception for them.

“One sample T-Test: It was implemented to investigate the significance of selected factors. This test was applied on the scores generated for individual result for the factors for the assessment that their mean significantly varied from a Test score values 4 or not. The test scores 4 signifies that respondent's scores for the factors are very good and positive which finally represents that the impact of e-publication enhances readers satisfaction and significantly affects them”.

Table 1: Test of Normality:

Tests of Normality		
	Kolmogorov-Smirnov ^a	Shapiro-Wilk

	Statistic	df	Sig.	Statistic	df	Sig.
Relevance	0.158	100	0.096	0.713	100	0.625
Accuracy	0.143	100	0.096	0.756	100	0.412
Timeliness	0.142	100	0.096	0.742	100	0.231
Completeness	0.131	100	0.096	0.741	100	0.421
Coherence	0.124	100	0.096	0.749	100	0.171
Format	0.123	100	0.096	0.736	100	0.182
Accessibility	0.188	100	0.096	0.724	100	0.564
Compatibility	0.189	100	0.086	0.715	100	0.722
Security	0.131	100	0.096	0.739	100	0.384
Validity	0.121	100	0.096	0.741	100	0.663

“Kolmogorov-Smirnov and Shapiro-Wilk tests are used to evaluate the normality of the distributed population and the final significance values approve that one sample T-Test can be applied on the data or not. If the p values are greater than 0.05 which imply that it is acceptable to assume that the distribution is normal and one sample T-Test could be performed to the data. The p values for all the 10 statement presenting the quality factor which increases the users/readers satisfaction from-publications are greater than 0.05 which imply that it is acceptable to assume that the distribution for all quality factors or statements is normal.”

Table 2: “One-Sample Statistics”

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Relevance	100	4.0133	.83535	.06821
Accuracy	100	3.0933	.92211	.07529
Timeliness	100	3.2267	1.07533	.08780
Completeness	100	4.1000	.77503	.06328
Coherence	100	4.0467	.84613	.06909
Format	100	4.0867	.75916	.06199

Accessibility	100	4.0333	.82264	.06717
Compatibility	100	2.4933	1.36960	.11183
Security	100	3.9933	.76410	.06239
Validity	100	3.7267	1.16950	.09549

Table 3 it could be interpreted that the observed mean score of the Relevance (4.0133 ± 0.83535), Accuracy (3.0933 ± 0.9221), Timeliness (3.2267 ± 1.07533), Completeness (4.1 ± 0.77503), Coherence (4.0467 ± 0.84613), Format (4.0867 ± 0.75916), and Accessibility (4.0333 ± 0.82264) was greater than the “population normal score” of ‘4.0’.

For the rest of the factors like Compatibility (2.4933 ± 1.3696), Security (3.9933 ± 0.7641) and Validity (3.7267 ± 1.1695) the observed mean score was lesser as compared with the population normal score of ‘4.0’.

Table 3: “One Sample T-Test”

One-Sample Test						
	Test Value = 4					
	T	df	Sig. (2-tailed)	(2-Mean Difference)	95% Confidence Interval of the Difference	
					Lower	Upper
Relevance	.195	99	.845	.01333	-.1214	.1481
Accuracy	-12.042	99	.000	-.90667	-1.0554	-.7579
Timeliness	-8.808	99	.000	-.77333	-.9468	-.5998
Completeness	1.580	99	.116	.10000	-.0250	.2250
Coherence	.675	99	.500	.04667	-.0898	.1832
Format	1.398	99	.164	.08667	-.0358	.2092
Accessibility	.496	99	.620	.03333	-.0994	.1661
Compatibility	-13.473	99	.000	-1.50667	-1.7276	-1.2857
Security	-.107	99	.915	-.00667	-.1299	.1166
Validity	-2.862	99	.005	-.27333	-.4620	-.0846

“In one-sample t-test of the $p < .05$ then it can be concluded that the population means are statistically significantly different and If $p > .05$, the difference between the sample-estimated population mean and the comparison population mean would not be statistically significantly different. If SPSS state that the ‘**Sig. (2-tailed)**’ value is ‘0.000’, this actually means that $p < .0005$. It does not mean that the significance level is actually zero.”

From above Table 4 following “observation could be derived for the factors”, that motivate a firm for CSR activity.

1. For Relevance, “quality factor T value is .195 and Sig. (2-tailed) value is .845 for 99 degrees of freedom shows that the difference between the sample estimated” the population mean and the comparison population mean is not statistically significantly different, which shows that Relevance quality factor significantly positively affects the reader's satisfaction.
2. For Accuracy, “factor T value is -12.042 and Sig. (2-tailed) value is .000 for 99 degrees of freedom” shows that the difference between the sample estimated the population mean and the comparison population mean is statistically significantly different, which shows that Accuracy factor does not significantly affect readers satisfaction.
3. For Timeliness, “factor T value is -8.808 and Sig. (2-tailed) value is .000 for 99 degrees of freedom” shows that the difference between the sample estimated population mean and the comparison population means is statistically significantly different, which shows that the Timeliness factor does not significantly affect readers satisfaction.
4. For Completeness, “factor T value is 1.580 and Sig. (2-tailed) value is .116 for 99 degrees of freedom” shows that the difference between the sample estimated the population mean and the comparison population mean is not statistically significantly different, which shows that completeness quality factor significantly positively affects the reader's satisfaction.
5. For Coherence, “factor T value is .675 and Sig. (2-tailed) value is .500 for 99 degrees of freedom” shows that the difference between the sample estimated the population mean and the comparison population mean is not statistically significantly different, which shows that coherence quality factor significantly positively affects the reader's satisfaction.
6. For Format, “factor T value is 1.398 and Sig. (2-tailed) value is .164 for 99 degree of freedom” shows that the difference between the sample estimated population mean and the comparison population means is not statistically significantly different, which shows that format quality factor significantly positively affects the reader's satisfaction.

7. For Accessibility, “factor T value is .496 and Sig. (2-tailed) value is .620 for 99 degree of freedom” shows that the difference between the sample estimated population mean and the comparison population mean is not statistically significantly different, which shows that accessibility quality factor significantly positively affects the reader's satisfaction.

8. For Compatibility, “factor T value is -13.473 and Sig. (2-tailed) value is .000 for 949 degree of freedom shows that the difference between the sample estimated the population mean and the comparison population mean is statistically significantly different, which shows that the compatibility factor does not significantly affect readers satisfaction”.

9. For Security, “factor T value is -.107 and Sig. (2-tailed) value is .915 for 99 degree of freedom shows that the difference between the sample estimated the population mean and the comparison population mean is not statistically significantly different, which shows that security quality factor significantly positively affects the readers satisfaction”.

10. For Validity, “factor T value is -2.862 and Sig. (2-tailed) value is .005 for 99 degrees of freedom shows that the difference between the sample estimated population mean and the comparison population mean is statistically significantly different, which shows that the validity factor does not significantly affect readers satisfaction”.

Limitation of The Study:

Like every other empirical research, this study also has some limitations which are as follows, which needs to be improvised in further research.

1. The study is restricted to the Jodhpur region of Rajasthan (**Geographical limitation**).
2. The study is restricted to one sector only and hence generalization can be difficult.
3. For the purpose of secondary data collection there is a large dependency on the reports that creates Doubtfulness of data.
4. Time and money for research

Conclusion:

Thus from the study, we can now say that during the last few years, the Indian e-publication sector has witnessed remarkable growth. It is evident from the study that positive changes have occurred in the reader's satisfaction level that can be gained via quality enhancement of e-publications. E-publications field holds a wider scope of opportunities for new authors. This

revolutionary movement from print media to e-publication has enhanced the ease and reliability of data to the readers and hence made the data and information accessible to all the users and thus increases readers satisfaction. Various statistical tools were applied to check and analyze the data gathered from PG students of Jodhpur college and the results display that there are certain quality dimensions that positively affects the reader's satisfaction level. Also from results, we have that out of 10 quality factors of e-publication under consideration, Relevance, Completeness, Coherence, Format, Accessibility, and Security are the quality factors that significantly positively affect the readers satisfaction. However, there are some factors like Accuracy, Timeliness, Compatibility and Validity factor for quality of e-publication does not significantly affects readers satisfaction. Thus the study successfully achieved its aim of identifying the impact of e-publication quality on readers satisfaction. Hence we can now conclude that e-publishers should leverage over the technological advancement and enhances the quality of information and improvise their contents quality to increase the satisfaction level of readers and consequently their trust and loyalty.

Suggestions:

1. Better analysis of the secondary data collected from reports and journals can be achieved by adopting more refined analytical models.
2. Reliability of system can be enhanced significantly by addressing a major factor viz. human error factor as human reliability directly or indirectly influences the overall reliability of the system.
3. More in depth data to the researcher about the critical factors which disturbs the researcher in developing the e-publication and reader's satisfaction related data may definitely improve their responses quality also.

REFERENCES:-

- ☞ Aladwani, A. M., & Palvia, P. C. (2002). Developing and validating an instrument for measuring user-perceived web quality. *Information & Management*, 39(6), 467-476.
- ☞ Ballou, D., Wang, R., Pazer, H., & Tayi, G. K. (1998). Modeling information manufacturing systems to determine information product quality. *Management Science*, 44(4), 462-484.

- ☞ Ballou, D., Wang, R., Pazer, H., &Tayi, G. K. (1998). Modeling information manufacturing systems to determine information product quality. *Management Science*, 44(4), 462-484.
- ☞ DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information systems research*, 3(1), 60-95.
- ☞ Delone, William H. & Ephraim R. McLean (1992) "Information Systems Success: The Quest for the Dependent Variable," *Information Systems Research*, 3(1) 60-95.
- ☞ Diligenti, M., Gori, M., &Maggini, M. (2004). A unified probabilistic framework for web page scoring systems. *IEEE Transactions on knowledge and data engineering*, 16(1), 4-16.
- ☞ Eppler, M. J., &Muenzenmayer, P. (2002, November). Measuring Information Quality in the Web Context: A Survey of State-of-the-Art Instruments and an Application Methodology. In *IQ* (pp. 187-196).
- ☞ Gendron, M., Shanks, G., &Alampi, J. (2004, July). Next steps in understanding information quality and its effect on decision making and organizational effectiveness. In *Proc. of DSS 2004 Conference* (pp. 283-294).
- ☞ Herrera-Viedma, E., Pasi, G., Lopez-Herrera, A. G., &Porcel, C. (2006). Evaluating the information quality of websites: A methodology based on fuzzy computing with words. *Journal of the American Society for Information Science and Technology*, 57(4), 538-549.
- ☞ Klein, B. D. (2001). User perceptions of data quality: Internet and traditional text sources. *Journal of Computer Information Systems*, 41(4), 9-15.
- ☞ Lee, Yang W., Diane M. Strong, Beverly K. Kahn, & Richard Y. Wang (2002) "AIMQ: A Methodology for Information Quality Assessment," *Information & Management*, 40(2) 133-146.
- ☞ Schmid, Beat F. & Katarina Stanoevska-Slabeva "Knowledge Media: An Innovative Concept and Technology for Knowledge Management in the Information Age," in *Proceedings of the 32nd Annual Hawaii International Conference on Systems Sciences (HICSS)*. Hawaii: University of Hawaii.
- ☞ Strong, D. M., Lee, Y. W., & Wang, R. Y. (1997). Data quality in context. *Communications of the ACM*, 40(5), 103-110.
- ☞ Wang, R. Y., & Strong, D. M. (1996). Beyond accuracy: What data quality means to data consumers. *Journal of management information systems*, 12(4), 5-33.

☞ Zmud, Robert W. (1978) "Concepts, Theories and Techniques: An Empirical Investigation of the Dimensionality of the Concept of Information," *Decision Sciences*, 9(2) 187-195.