





A study of Prospects and Problems of Online Education in Bihar

- Kamlesh Kumar*

Research Scholar, HPKVPBS, Central University of Himachal Pradesh, Dharamshala 🔼 kamlesh483@gmail.com p https://orcid.org/0000-0002-1600-7886

Research Scholar, Dept. of Business Administration (DBA), School of Management Sciences (SMS), Central University of Jharkhand (CUJ) ajitdas672@gmail.com https://orcid.org/0000-0003-4264-6128

- Bhagwan Singh

Professor, Dean & Head, Dept. of Business Administration (DBA), School of Management Sciences (SMS), Central University of Jharkhand (CUJ) 🔼 bhagwansingh.bs@gmail.com 🏻 ip https://orcid.org/0000-0002-6377-0948

- Sarvesh Kumar

Assistant Professor, HPKV Business School of Commerce and Management Studies, Central University of Himachal Pradesh, Kangra sarveshkumar@hpcu.ac.in https://orcid.org/0000-0003-3047-914X

Puia Kumari

Research Scholar, Faculty of Commerce, University Department of Commerce, B R Ambedekar Bihar University, Muzaffarpur, Bihar puja.kumari9430@gmail.com | https://orcid.org/0009-0001-4782-9727



ARTICLE HISTORY

Paper Nomenclature: Empirical Research Paper (ERP)

Paper Code: GJEISV15I1JM2023ERP3 Submission at Portal (www.gjeis.com): 20-Jan-2023

Manuscript Acknowledged: 25-Jan-2023

Originality Check: 31-Jan-2023

Originality Test (Plag) Ratio (Turnitin): 05%

Author Revert with Rectified Copy: 10-Feb-2023

Peer Reviewers Comment (Open): 18-Feb-2023

Single Blind Reviewers Explanation: 25Feb- 2023

Double Blind Reviewers Interpretation: 09-Mar-2023 Triple Blind Reviewers Annotations: 12-Mar-2023

Author Update (w.r.t. correction, suggestion

& observation): 24-Mar-2023

Camera-Ready-Copy: 28- Mar-2023

Editorial Board Excerpt & Citation: 30-Mar-2023

Published Online First: 31-Mar-2023

ABSTRACT

Purpose: Online education is now most popular and useful way of learning after the transformation of internet. In COVID - 19 pandemics, the online teaching and education were at its peak. This developed the importance of the online education. Various states of India are providing online education and thus to evaluate the Marketing strategies and prospects & problems in online education in Bihar was done. Online Education allows user to get fruitful knowledge and quality-based education at the minimum cost. The innovation in technology and many government initiatives toward quality education to all, at minimum cost, is changing learning attitude of students and they are moving toward online education. The purpose of this study is to access the marketing strategy for online education in Bihar along with problem and prospects comes with online education.

Design and Methodology: For this research data is collected through the standard structured questionnaire. The quantitative method is used to investigate the respondent's behaviour toward online education system. In this research 950 respondent's sample data have been collected through non-probability sampling method and data was analyzed through the statistical methods like Factor Analysis, Linear Regression.

Findings: The study analyzes the 950 respondent's data as per their demographical characteristics that is "age group", "Educational qualification", "Gender wise" participation and also "profession wise". After that factor analysis and regression analysis is perform to Evaluate the prospects and problem of online education with key factor of online education in Bihar. The present study confine that internet connectivity is a biggest issue along with insufficient digital infrastructure to provide online education, the degree given through online education mode is also biggest credibility issue among the students because they are not sure about the degree earn through online mode are acceptable or not. This study also shows and express that in context of Bihar it needs significant affords to break the psychological barrier between people and technology and online education can be powerful method in education sector of Bihar.

Paper Type: Empirical Research Paper.

KEYWORDS: Online education | Key factor | Problem | Marketing Strategies

*Corresponding Author (Kamlesh Et. Al)

- Present Volume & Issue (Cycle): Volume 15 | Issue-1 | Jan-Mar 2023
- International Standard Serial Number:
- Online ISSN: 0975-1432 | Print ISSN: 0975-153X
- DOI (Crossref, USA) https://doi.org/10.18311/gjeis/2023
- Bibliographic database: OCLC Number (WorldCat): 988732114
- Impact Factor: 3.57 (2019-2020) & 1.0 (2020-2021) [CiteFactor]
- Editor-in-Chief: Dr. Subodh Kesharwani
- Frequency: Quarterly

- Published Since: 2009
- Research database: EBSCO https://www.ebsco.com
- Review Pedagogy: Single Blind Review/ Double Blind Review/ Triple Blind Review/ Open Review
- · Copyright: ©2023 GJEIS and it's heirs
- · Publishers: Scholastic Seed Inc. and KARAM Society
- · Place: New Delhi, India.
- Repository (figshare): 704442/13





Introduction

Online education also known as online learning, e-learning and web-based learning by the use of internet transmit material and information among the learners and also allow learner to learn anytime from anywhere.

Education is very important in our lives. If there is education in a person's life, it means that it is not difficult for him to overcome the difficult phase of life. Education is like a key that can open the doors of our dark lives and let us see the world of energy.

"Education is the most direct path that may be used to find answers to all of our issues."

- Ravindra Nath Tagore.

The extensive range of different technological advancement used by universities that can enhance the online programs through the broad interaction between learners and facilitators (Bell & Federman, 2013)

Today Online education has become increasingly popular with the advancement of civilization and technology and it covers many segments in terms of educational facilities through the Internet.

Evolution of Online Education

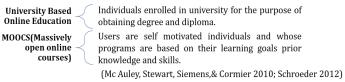
Online learning does not develop overnight. According to a study by the National Center for Education Statistics (NCES), the primary determinants that influenced higher education institutions to provides online courses in 2009 contained student demand for versatile programs, granted connect to college for students who did not additionally have connect, provided many-more courses, and wanted to enhance student registration(Lewis & Parsad, 2009).

The development of online education began with the origins of distance learning in the USAin the year 1800s, when instructors and learners in the city Chicago, who'd been in different locations, were trying to connect via using correspondence Programmes (Vrasidas & McIsaac, 1999).

Subsequently, the discovery of radio as a way of connect media during the First World War it paved the way for the implementation of distant learning programmes using that technology in educational institutions such as the Air School, which was established in Wisconsin in the 1920s (McIsaac & Gunawardena, 1996).

The first online courses were introduced in 1981, and the first totally virtual programme was invented by the Western Behavioral Science Institutions in the following year (Linda Harasim, 2000).

Online Education Categorized by its user:



Popular Online Education Platform:



Figure 1(a): Private Online Education Platform

Government Online Learning Platform: There are some government platform which provide free online portals for students in many areas. The GOI offer free online platform and providing multiple courses that can be access by students, teachers and professionals. The information is uploaded on portal in form of documents, presentation, audio and video form and test format are also were given.



Figure 2: Government Online Learning Platforms

SWAYAM is a platform where student can get quality-based learning material from the class nine to post graduation level. It offers video lectures, learning material in the form of text that can be downloadable, online doubt clearing discussion forum and also offer assessment test their learner can give the test. As per level of education SWAYAM had partnership with different type of institutions like for School partner with NIOS, NCERT, After School with IGNOU, NITTTER, for under graduate partner with AICTE, NPTEL,

DOI: 10.18311/gjeis/2023 Vol 15 | Issue 1 | Jan-Mar 2023 31

IIM-B, CEC and for post-graduation it partners with AICTE, UGC, IIMB, NPTEL.

NEROE is an initiative of MHRD that have approx. 16 thousand registered users and approx. 14 thousand resources. This platform is very popular among the students they are visited this portal for access e-libraries, e-courses and e-books. Apart from that NEROE have some other features also that are website of NEORE is in both English and Hindi, students need to enroll so that can start learning which are taught in classroom. In NEORE students can access repository of hues number of documents and interactive session including audio and video in different languages and also test their learning outcome via pre-set assignment.

DIKSHA is a learning platform that is available for both students and teachers from class 1 to 12. It offers more than 80,000 e-books for the only class 12 as per the CBSE, NCERT and State and Union territories norms which are available in many languages and that can be access by both teachers and students. Focus of DIKSHA is to ensure that the student can not their final and important year of school due to the absence of offline classroom environment.

e-Pathshala is also a learning platform where student can continue their education from class 1 to 12. The content which is available on portal that has been made by NCERT with all important and basic concept which is taught in the class so that student is updated with it.

Swayam Prabha is a form of DTH channel for providing online education. This has 32 free DTH channels which paly educational content for student through out the day or night. Here channel is provided study material for both school education and higher education in different streams like science, commerce, performing arts, arts, engineering, medical, agriculture and etc. However, the learning content for competitive exam are also provided through this platform.

Initiative taken by Bihar Government for Online Education

Unnayan Bihar – It is an all-encompassing educational project that aims to provide a high-quality education in schools by means of online interactive lectures. In doing so, it will support the work that is done by school teachers, enhance the educational outcomes for students, and drive up enrollment and attendance rates. In the academic year 2019-20, the "Unnayan Bihar" programme was launched at a total of 5646 secondary and upper secondary schools across the

Kushal Yuva Program – It is Skilling program started by Govt. of Bihar in December 2016 under the 7 Nischay. Under this program learners are facilitated via the use of animated concept movies that have been designed on the base of three

Skill development courses that comprises Language skill, Soft Skill and Computer Application. When the student has been instructed in the idea, they will next be given a quick multiple-choice exam based on the topic that they have just been instructed in.

Other Initiative – eLots, MeraDurdarshanmera Vidyalaya, Cathup Course materials, Mobile Learning Centers, Tele education system for CWSN and etc. are online education platforms used in Bihar.

Literature Review

(Anene et al., 2014) Using survey data of Nigeria, revealed that most of the school faces the too many problems in terms of lack of computer lab, power supply is not appropriate, internet connectivity, unskilled teachers and etc. through the hypothesis testing the study show that students especially teenager group suffering lots because they are friendly with physical classroom classes so they were not focused on as like face to face study. Study also find out that if the problem of power supply may get resolved and get internet services free then the online education can acceptable among the teenager student because due to irregular power supply retention problem is arise.

(Das & Pathak, 2021) based on the result of survey study find that the online learning is new concept for India as compared to advanced and developed country so it requires proper planning to provide online education facility. Data is used in this study is undergraduate level students of different colleges. The study observed that learning process is better in offline mode as compared to online mode as per the analysis of data. Different types of features can affect the online education like costing, learning environment, technical and etc. and also some positive attitude is shown among the students in context of acceptance of online education. However, online education needs proper planning and systematic effort to provide the demand of current education system.

(Bhuasiri et al., 2012) identify the critical factors which that can influence in the acceptance of online learning among the developing country. The study finds many factors that can be obstacle in elearning system. Uses Delphi method to collect the responses, Delphi is an opinion survey method in which information is gathered from expert. study find that the for making e-learning successful some prerequisites are needed like awareness of technology among the learners, motivation and changing behaviour of learners. Researcher also found six dimensions for successful implementation of online education including instructor characteristics, students' characteristics, ICT and etc., where system quality and infrastructure is most important for instructor characteristics. Study also identify there can be minimum 20 significant factor for successful implementation of elearning in developing countries

Online ISSN: 0975-1432 | Print ISSN: 0975-153X

(Palvia et al., 2018) discuss the consequences of online education for national and international level of organization. The study summaries the implications among the government and business of countries and world bodies first implication faced by developing countries is telecommunication infrastructure and their band width, secondly is quality must be improved as like face to face learning and also recognition of online education equal to online education. A prominent message that has emerged from virtually all countries is that the one-size-fits-all approach has plainly failed. In the setting of limited resources and infrastructure in certain regions of the world, we require the correct balance of localization, cultural diversity adaptation, and technology, which includes a Learning Management System. Moreover, technology training for last mile trainers and end users appears to be a reoccurring issue in virtually all such research.

(Bates,2000) investigate in their study entitled "Managing Technological Change: Strategies for College and University Leaders" internet provides powerful tool for course delivery and likely to transform teaching practices in future.

(Herrington, J. & Deden, A., 2002) examine in their research entitled "University strategies in online learning marketplace" the impact of strategic planning on costs, risks, quality and potential outcomes that universities invest in elearning. It also describes a continuity of appropriate planning that universities can accept based on the examiner of these influencing elements.

(Farrell, 2000) discussed in their research entitled "The impact of research on deve -lopments in inclusive education" related to requirement of expensive technical infrastructure for online courses.

(Brown et al., 1988) concludes in their study entitled "Situated cognition and the culture of learning" researcher investigate inherently reduce the effectiveness of many teaching practices. They examine how this knowledge-based perspective influences our perception of learning and point out that traditional schooling frequently downplays the influence of school culture on what is taught in the classroom. They provide cognitive learning as an alternative to conventional methods that recognize the fundamental nature of knowledge. They look at two instances of math instruction that highlight some of the salient aspects of this method of instruction.

(Herrington & Oliver, 2000) identify in their research "An instructional design framework for authentic learning environments" keyfactor of a situated educational environment from the large literature and also identify operationalize the essential elements of a situated educational environment by developing an interactive media and also investigate students' perceptions of their experiences using a multimedia package built on a situated educational framework.

(McAlpine & Clements, 2001) investigates in the study entitled "Problem based learning in the design of a multimedia project" the use of PBL as a foundation for interactive multimedia framework. Online learning needs to be interesting and demanding for it to be effective, as well as giving students enables to resources and tools for accessing & editing data in a learning environment where they may do research.

As a foundation for the creation of multimedia content in this subject area, PBL seems to have a lot of potential. Using a PBL approach, instructional design for multimedia and web - based technologies must focus on utilizing the technologies to facilitate and support all of the crucial activities necessary for this method of teaching and learning.

Objective of the Research Paper:

- Major objective of this paper is to evaluate the prospects and problems of online education in Bihar for this study 950 students and different stakeholders of education that is parents, educators, professionals from different institutions and organizations of six districts namely Patna, East Champaran, Muzaffarpur, Madhubani, Gaya, Samastipur were selected.
- To analyze success or failure of any new system is depend on the acceptance of people and the acceptance is formed by their perceptions and experience toward new system.
- To get the understanding of effectiveness of online education in Bihar we need to find out the students' attitude toward online education and difficulties they encountered while studying.

Research Methodology:

Research Gap

After gone through the huge number of Literature there are maximum researches which have been conducted related to future prospects and challenges associated with online education. Many Research explain the technical aspects of online education and how it facilitates to target audience. In maximum studies it explains limited aspects of online education and described the model for established advantages over traditional learning system.

The quality education which is absent in Bihar must be developed. It will only happen when the transparency will be in its education system. As the districts of Bihar are economically backward, hence the idea for online education will be most preferable as it is the cheapest mode of education system currently going on.

Research Design

The framework of the research method and approach that a researcher will use to carry out an investigation is referred

33

DOI: 10.18311/gjeis/2023 Vol 15 | Issue 1 | Jan-Mar 2023

to as the research design. The study adopted proper strategy for data collection and analyzing of the data so that it helped researcher to handle the challenges of research and also fulfill the objective of the study. The research is descriptive in nature and statistical.

Study Design

The present study mainly consisting descriptive and analytical aspects.

• Sample Size

The study consists 950 respondent's data.

• Sampling Technique

For this study convenience sampling approach is used to collect responses from students, teachers, working professionals and other of Bihar by distributing of 1200 questionnaires.

Data Collection

A self- administrator questionnaire has been used in collecting primary data from the intended population to test the objective of the proposed study.

Data Collection Procedures

This study is mainly based on the primary data, Questionnaire method is used to collect the data from the respondents. The scoring for the questionnaire was done using the Likert scale five points, which were determined with the assistance of utilizing the Likert scale statement whereHigher end is 5 and lower End is 1 as "Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree= 2, and Strongly Disagree = 1".

• Data Analysis Procedures

In order to analyze the collected data from respondents, the SPSS along with Microsoft Excel has been used to perform the statistical operation for this study.

SPSS: By the use of SPSS users may extract every information from through the use of descriptive, frequency, inferential and many statistical methods. It also predicating numeral outcomes such as linear regression, and for predicting for identifying groups cluster analysis and factor analysis is great methodologies.

Nature of Research

This research is based on descriptive type of research.

Data Analysis

Data analysis is a very crucial task of research process, it is a process of producing, analyzing, and conceptualizing data meaning. In this study analyzing the quantitative and the qualitative data we used descriptive analysis for demographical variables. Furthermore, the factor analysis was used to find out the Y(Dependent Variable) by applying the PCA and after that linear regression method is used for

establishing the significance relation between Dependent Variable and Independent Variable. Where, Dependent variable (Y) is a set of statement of key factor of online education which are found by applying of factor analysis method and Independent Variable(X) is set of statement related to prospects and problem.

The demographical data gathered from the responded of were tabulated and analyzed using simple percentage. To illustrate the clear view of the result bar graph has been used

Here the demographic profile of the respondents covers their Name(optional), Email id(optional), Age, Educational Qualification, Gender, Profession, Area of belongingness, annual income of the family, Name of the institution/organization(Optional) and proficiency in using internet.

Table 1: Number of "Valid" and "Missing" Cases

	Statistics							
		Age	Qualifi -cation	Gender	Profes -sion	Area of belongi -ngness	Annual Income	Proficiency of Using Internet
N	"Valid"	950	950	950	950	950	950	950
	"Missing"	0	0	0	0	0	0	0

Table 2: Age Group of the respondents

Age	Age Group of the Respondents						
Age	Frequency	Percentage (%)					
Below 18	234	25%					
18-25	390	41%					
26-30	179	19%					
above 30	147	15%					
Total	950	100%					

Table 1 show that constituting a sample population of 950 respondents as discussed in this study. This table show that number of valid and missing responses statistics of respondent's characteristics.

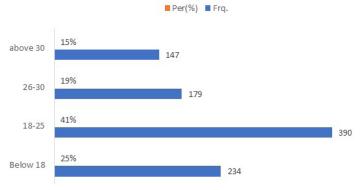


Figure 3: Age Group of the Respondents



Figure 3 specifies that the majority i.e. 41% of the respondents (390 respondents/950 respondents) were from the "age group of 18-25 years", followed by 25% respondents belong to age group below 18. The data show that young generation enthusiastic role in the survey.

EDUCATIONAL QUALIFICATION



Figure 4: Educational Qualification of the Respondents

The Figure 4 represents the educational qualification background of the respondents, who have taken part in the survey. Out of 950 respondents, the highest number of respondents were Graduate i.e., 37.05% of the total population followed by 34.84% undergraduate, 13.68% Postgraduate, 8.63% $10^{\rm th}$ standard and only 5.79% of respondents from other educational qualification.

Gender of the Respondents

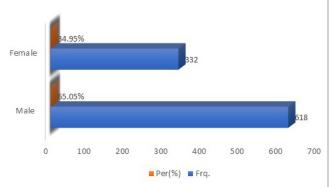


Figure 5: Gender of the Respondents

It is clearly seen from table Figure 5 that the male respondents took part enthusiastically in the survey, comparing 65 % respondents (618/950 respondents) among total population. The female respondents were also behind in taking part in the survey, comprising 34.95% (332/950 respondents) of the total population from Bihar.

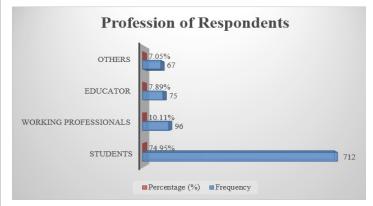


Figure 6: Profession of the Respondents

Figure 6 illustrates the profession wise distribution of respondents. The sample population included 712 students, constituting 74.95% of the sample population. The remaining 25.05% of respondents comprised of 10.11% working professionals 7.89% educator and 7.05% other (like parents and self-employed).

Factor Analysis:

After analyzing the demographical data of the respondents here, we are listing the statements related to key factor of online education which is obtained after factor analysis.

Table 3: Factor Analysis (KMO and Bartlett's Test)

KMO and Bartlett's Test							
Kaiser-N	.953						
Saı	.933						
Bartlett's	Bartlett's Approx. Chi-Square						
Test of	Df	1035					
Sphericity	Sig.	0.000					

Table 3 show the result of factor analysis, KMO test is used to examine how well the data is suitable for Factor Analysis. The Value of KMO is .953 that means it is Marvelous. If the value of KMO is less than 0.5 then we cannot apply the factor analysis and it will be unacceptable.

So, after applying factor analysis on the collected data for 46 statements we got the four factors, in this study factor. One of which contain 17 statements is taken as Key factor of online education as a dependent variable also known as Y. The list of Dependent variables is as in Table 4:

35

DOI: 10.18311/gjeis/2023 Vol 15 | Issue 1 | Jan-Mar 2023

Table 4: Rotated component matrix of Key factor of online education (Dependent Variable)

Variable Code	Statements (Key factor of Online Education)	Rotated Component Matrix Value
Var27	Online education willingness is very well	.943
Var30	It is cost effective and provide quality education	.935
Var34	I will prefer online education because it provides quality education	.922
Var31	It is based on the scientific method of learning system	.921
Var14	I am well aware about online education	.911
Var35	I will prefer online education because it is cost effective	.908
Var32	It is more interactive	.898
Var22	I can get suitable online courses anywhere	.896
Var33	It promotes critical thinking ability	.895
Var23	For me online education is a better option	.894
Var38	I will prefer online education because of its course content	.881
Var25	I understand the concept in a better manner through online education	.877
Var26	My knowledge increases through online education	.865
Var46	The future of online education is bright	.863
Var24	I feel comfortable during online session	.850
Var21	I can easily access the online education portal	.794
Var43	The online education enhances the skills of learners	.764

Here, PCA is used as a Factor technique or extraction method, it is most commonly used method for factor analysis. Objective of the factor analysis is to describe the information into fewer factors from the large set of variables. The obtained factor is also called as principle component. Rotation method taken is varimax with Kaiser Normalization, it reduces the number of variables having extreme loadings on a factor. Each component explains non-redundant information, and components are always orthogonal.

Regression Analysis:

36

The Linear regression is used to forecast the value of one variable i.e., dependent variable(Y) based on the value of another variable that is called independent variable(X).

The mathematical equation y = mx + c is used in the linear regression analysis. This equation is used to represent the line of best fit for the connection between the dependent variable Y and the independent variable X. The degree of variability in y that may be attributed to x can be inferred from the regression coefficient, often known as R^2 .

Table 5: Output of Regression Analysis

	Regression Analysis								
				Std.	Change Statistics				
Model	R		Adjusted R Square		R Square Change	F Change	df1	df2	Sig. F Change
1	.968ª	.938	.937	5.13191	.938	2031.512	7	942	0.000

Table 6: Evaluate prospects and problems of online education in Bihar

	ANOVA								
Model		Sum of Squares	df	Mean Square	F	Sig.			
	Regression	374519.740	7	53502.820	2031.512	.000b			
1	Residual	24808.943	942	26.336					
	Total	399328.683	949						

Table 5 is output of linear regression which is perform to find the prospects and problems of online education in Bihar by taking Key factors of online education as dependent

Vol 15 | Issue 1 | Jan-Mar 2023 Online ISSN : 0975-1432 | Print ISSN : 0975-153X

variable (Y). The output show that there is significant linear relationship between Dependent and Independent variable i.e., Key factor of online education and prospects and problems of online education in Bihar respectively . The value of R^2 = .938 and Adjusted R^2 = .937 that show the model is best fitted for performing the linear regression analysis and also explain the Y variable properly.

scientific approach and in employability and enhances the skills of learners.

After the applying of regression analysis on dependent and independent variable, study finds that many problems are comes with the online education in Bihar. One of the problem is lack of internet access. In Bihar internet connectivity is a

Table 7: Coefficients table of Independent Variable (Prospects and Problem of Online Education in Bihar)

	Coefficients ^a								
	Regression Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
		В	Std. Error	Beta					
	(Constant)	-1.133	1.113		-1.018	.309			
	There is a lack of Internet penetration in Bihar	1.844	.252	.069	7.321	.000			
	There is a lack of sufficient digital infrastructure in Bihar	2.297	.501	.071	4.585	.000			
	Online education limits social interaction	751	.396	031	-1.898	.058			
1	Degree earned through online learning courses have a credibility issue	-2.332	.413	132	-5.645	.000			
	Issue of motivation towards online education	3.051	.382	.190	7.995	.000			
	Language of online available course is an issue	.852	.429	.035	1.986	.047			
	I can get suitable online courses anywhere	12.254	.185	.880	66.350	0.000			

This table 7 is the resultant of linear regression coefficient and it show that all the statement that's is "Lack of internet penetration in Bihar" significant level is .000, "Lack of sufficient digital Infrastructure in Bihar" significant level is .000, "Degree earned through online learning courses have credibility issue" significant level is .000, "Issue of motivation towards online education" significant level is .000, "Language of online available courses is an issue" significant level is .047 and last but not the least "I can get suitable online courses anywhere" value is also significant i.e., 0.000. So, all the statements are significant for the prospects and problems in online education except "Online education limits social interaction" because the significant value of this statement is .058 which is greater than the normal range of significant level i.e. <=0.05.

Conclusion

Since, the generation of development in technology, one cannot limit themselves to use only traditional way of methods. Students should possess fundamental digital literacy and abilities in order to competent in this era of technological advancement. Online education having lots of features which enables it a very popular form of education. Online education seems to be there are basic ingredients that can make it operation smooth and easily accessible by all.

In the era of rapid technological updates, learners are preferring online education over traditional education systembecause online education provides quality education, cost effective, easily accessibility, customize services and above all not having time constraint issue. It also helps in

biggest issue along with insufficient digital infrastructure to provide online education& degree and to get knowledge through online education mode is also biggest credibility issue among the students because they are not sure about the degree earn through online mode are acceptable or not. One more fact is that the result of the study depicts that motivation and language of courses also is an issue of online education.

In this study primary data were collected from different stakeholders of online education including students, teachers, working professional, parents and others. It has been observed that there are many problems associated with key factor of online education. Therefore, a positive prospectis also associated with the problem, that can be resolved by the internet and digital infrastructure related issue and clarity in acceptance of degree which is earn via online mode.

In context to Bihar it will need significant efforts to break the psychological barrier between people and technology. This study shows that online education can be powerful method in education sector and the marketing strategies applied by the government & private players of online education stakeholders has to be backed by the infrastructure and government controlled policy. The development of digital University announcement has to be rationalized. This method has potential both to support effective educational programmes and to expose student to adopt the newer technology through online education. It also provides opportunities to the budding entrepreneurs to have a look for growth in online education sector and adopting online marketing strategies to promote online education through web-based advertising.

37

DOI: 10.18311/gjeis/2023 Vol 15 | Issue 1 | Jan-Mar 2023



References

- Singh B., (2017), Web Based Advertising: A Tool of Digital and InternetBased Marketing, 1st Edition, Anamika Publisher.
- Bell, B. S., & Federman, J. E. (2013). E-learning in postsecondary education. Future of Children, 23(1), 165–185. https://doi. org/10.1353/foc.2013.0007
- Bates, Tony. (2000). Managing Technological Change: Strategies for College and University Leaders / T. Bates..
- Herrington, J. & Deden, A. (2002). University Strategies in the Online Learning Marketplace. In M. Driscoll & T. Reeves (Eds.), Proceedings of E-Learn 2002--World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education (pp. 1403-1406). Montreal, Canada: Association for the Advancement of Computing in Education (AACE). Retrieved March 13, 2023 from https://www.learntechlib.org/ primary/p/9391/.
- Farrell, P. (2000). The Impact of Research on Developments in Inclusive Education. International Journal of Inclusive Education, 4, 153-162. http://dx.doi. org/10.1080/136031100284867
- Anene, J. N., Imam, H., & Odumuh, T. (2014). Problem and Prospect E-learning in Nigerian Universities. International Journal of Technology and Inclusive Education, 3(2), 320–327. https://doi.org/10.20533/ijtie.2047.0533.2014.0041
- Bhuasiri, W., Xaymoungkhoun, O., Zo, H., Rho, J. J., & Ciganek, A. P. (2012). Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty. Computers and Education, 58(2), 843–855. https://doi.org/10.1016/j.compedu.2011.10.010
- Das, S., & Pathak, T. (2021). Online Learning- The Problems and the Prospects. 58, 2498–2504.
- Palvia, S., Aeron, P., Gupta, P., Mahapatra, D., Parida, R., Rosner, R., & Sindhi, S. (2018). Online Education: Worldwide Status, Challenges, Trends, and Implications. Journal of Global Information Technology Management, 21(4), 233–241. https://doi.org/10.1080/1097198X.2018.1542262
- Lewis, L., & Parsad, B. (2009). Distance Education at Degree-Granting Postsecondary Distance Education at Degree-Granting Postsecondary Institutions: 2006 07. World Wide Web Internet And Web Information Systems, 2000–2001. http://nces.ed.gov/pubs2009/2009044.pdf

- Abdalla, E., & Ibrahim, A. (2016). Critical Evaluation of Doyle 's (2000) Definition of Marketing. 2000, 1–14.
- Al-Rahmi, W. M., Othman, M. S., & Yusuf, L. M. (2015). Exploring the factors that affect student satisfaction through using E-learning in Malaysian higher education institutions. Mediterranean Journal of Social Sciences, 6(4S1), 299–310. https://doi.org/10.5901/mjss.2015.v6n4s1p299
- Blezu, C., & Popa, E. M. (2008). E-Learning and its Prospects in Education. Proceedings of the 12th Wseas International Conference on Computers, Pts 1-3, July, 297–302. https:// ijcrt.org/papers/IJCRT2005135.pdf
- Concannon, F., Flynn, A., & Campbell, M. (2005). benefits of e-learning. 36(3).
- Misa, T. J. (2011). David F. Noble, 22 july 1945 to 27 december 2010. Technology and Culture, 52(2), 360–372. https://doi. org/10.1353/tech.2011.0061
- N, O., Salleh, M., & A., N. (2012). E-Learning Methodologies and Tools. International Journal of Advanced Computer Science and Applications, 3(2), 48–52. https://doi.org/10.14569/ ijacsa.2012.030208
- Nawar Al-Saadi. (2017). E-learning and its impact on future generations. Journal of Information Technology Education
 Http://Www.Informingscience.Com/Publications/3524, Research,(January), 160–187.
- McIsaac, M. S., & Gunawardena, C. N. (1996). Handbook of research for
- educational communications and technology: A project of the association
- · for educational communications and technology.
- Vrasidas, C., & McIsaac, M. S. (1999). Factors influencing interaction in an online course. International Journal of Phytoremediation, 21(1), 22–36. https://doi. org/10.1080/08923649909527033
- Linda Harasim. (2000). Shift happens: Online education as a new paradigm in learning. Internet and Higher Education, 3, 41–6 https://www.buddy4study.com/article/government-onlinelearning-platforms

GJEIS Prevent Plagiarism in Publication

The Editorial Board had used the Turnitin – a Swedish anti-plagiarism software tool which is a fully-automatic machine learning text-recognition system made for detecting, preventing and handling plagiarism and trusted by thousands of institutions across worldwide. Ouriginal by Turnitin is an award-winning software that helps detect and prevent plagiarism regardless of language. Combining text-matching with writing-style analysis to promote academic integrity and prevent plagiarism, Ouriginal is simple, reliable and easy to use. Ouriginal was acquired by Turnitin in 2021. As part of a larger global organization GJEIS and Turnitin better equipped to anticipate the foster an environment of academic integrity for educators and students around the globe. Ouriginal is GDPR compliant with privacy by design and an uptime of 99.9% and have trust to be the partner in academic integrity (https://www.ouriginal.com/) tool to check the originality and further affixed the similarity index which is {05%} in this case (See below Annexure-I). Thus, the reviewers and editors are of view to find it suitable to publish in this Volume-15, Issue-1, Jan-Mar 2023.

Annexure 15.3

38

Submission Date	Submission Date Submission Id		Character Count	
31-Jan-2023	2037601392 (Turnitin)	5005	28517	

Analyzed Document	Submitter email	Submitted by	Similarity
1.3 ERP1_Kamlesh _GJEIS Jan to Mar 2023.docx (2037601392)	kamlesh483@gmail.com	Kamlesh Kumar	05%

Vol 15 | Issue 1 | Jan-Mar 2023 Online ISSN : 0975-1432 | Print ISSN : 0975-153X

<1%

<1%

<1%

<1%

<1%

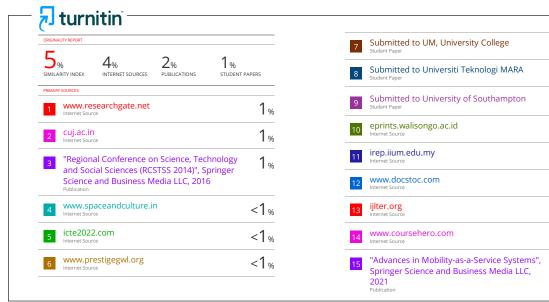
<1%

<1%

<1%

<1%





Reviewers Memorandum

Reviewer's Comment 1: The study is planned in a structured manner. The topic is chosen very appropriate when digital/online education is on the verge of expansion. The study has used both primary data and secondary data to reach to a conclusion. Appropriate statistical tools are applied to analyze the collected data and the inclusion of figures and tables improves the understandability of the research.

Reviewer's Comment 2: The study provides valuable insights into the challenges and opportunities associated with online education in Bihar. The findings of the study can be used by the various policymakers, educators, and students in the concerned area.

Reviewer's Comment 3: The significance of the study can be seen from the fact that, though the theme of the study is very significant in the present scenario, it still lacks robust research undertaken in the area, especially in the context of Bihar. The study breaks preconceived barriers in the mind of people to adopt technology in educational programmes.





Kamlesh Kumar, Ajit Das, Bhagwan Singh, Sarvesh Kumar and Puja Kumari "A study of Prospects and Problems of Online Education in Bihar" Volume-15, Issue-1, Jan-Mar 2023. (www.gjeis.com)

https://doi.org/10.18311/gjeis/2022

Volume-15, Issue-1, Jan-Mar 2023 Online iSSN: 0975-1432, Print iSSN: 0975-153X Frequency: Quarterly, Published Since: 2009

Google Citations: Since 2009 H-Index = 96

i10-Index: 964

Source: https://scholar.google.co.in/citations? user=S47TtNkAAAAJ&hl=en

Conflict of Interest: Author of a Paper had no conflict neither financially nor academically.

The article has 05% of plagiarism which is the accepted percentage as per the norms and standards of the journal for publication. As per the editorial board's observations and blind reviewers' remarks the paper had some minor revisions which were communicated on a timely basis to the authors (Kamlesh, Ajit, Bhagwan, Sarvesh and Puja) and accordingly, all the corrections had been incorporated as and when directed and required to do so. The comments related to this manuscript are noticeably related to the theme "Prospects and Problems of online education in Bihar" both subject-wise and research-wise. The study aims to assess the marketing strategy for online education in Bihar, India, and to identify the problems and prospects. The study was conducted using a standard structured questionnaire and data analysis techniques such as factor analysis and linear regression. The findings indicate that the biggest issues with online education in Bihar are internet connectivity and insufficient digital infrastructure. After comprehensive reviews and the editorial board's remarks, the manuscript has been categorized and decided to publish under the "Empirical Research Paper" category.

Acknowledgement



The acknowledgment section is an essential part of all academic research papers. It provides appropriate recognition to all contributors for their hard work and effort taken while writing a paper. The data presented and analyzed in this paper by authors (Kamlesh, Ajit, Bhagwan, Sarvesh and Puja) were collected first handily and wherever it has been taken the proper acknowledgment and endorsement depicts. The authors are highly indebted to others who facilitated accomplishing the research. Last but not least, endorse all reviewers and editors of GJEIS in publishing in the present issue.

Disclaimer 1



All views expressed in this paper are my/our own. Some of the content is taken from open-source websites & some are copyright free for the purpose of disseminating knowledge. Those some we/I had mentioned above in the references section and acknowledged/cited as when and where required. The author/s have cited their joint own work mostly, and tables/data from other referenced sources in this particular paper with the narrative & endorsement have been presented within quotes and reference at the bottom of the article accordingly & appropriately. Finally, some of the contents are taken or overlapped from open-source websites for knowledge purposes. Those some of i/we had mentioned above in the references section. On the other hand, opinions expressed in this paper are those of the author and do not reflect the views of the GJEIS. The authors have made every effort to ensure that the information in this paper is correct, any remaining errors and deficiencies are solely their responsibility.

(c) GJEIS 2023

Scholastic Seed Inc.