**Academic Social Networking Trends of Universities in Kerala**

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**Abstract**

*This study analyses the Academic Social Networking (ASN) characteristics of Universities in Kerala. As a case study, we recorded and analysed the profiles of eighteenuniversities in Kerala inResearchGate (RG), a leading ASN. The study found that only fifteen universities have profiles in RG. Among the fifteen universities,Cochin University of Science and Technology (CUSAT) is the top university with regards to membership status, number of publications, reads, and RG scores. The majority of reads obtained by universities in Kerala are from India, followed by the USA. Institution wise reads show Indian institutions are more interested in research outputs in Kerala than foreign institutions. The study also shows the majority of the RG users are from the science subjects.*

*Keywords:*

*Academic Social Networking, ResearchGate, Scholarly Publishing, Universities and Kerala*

1. **Introduction**

Social networking sites are web-based services that allow individuals to construct a public or semi-public profile within a handed system, articulate a list of other users with whom they share a connection and view and share a connection and view and traverse their list of connections and those made by others within the system (Boyd and Ellison, 2008). Social networking sites, such as Facebook, Twitter, andMySpace, are used regularly by many millions of people. In India, 82 percent of users activated to social networking sites daily; among them, there were 100 million Facebook users, amidst the male population constituted 76 million and female 25 million (Prasad, 2015). These social networking sites enable users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending emails and instant messages between each other (Kaplan and Heinlein, 2010).

Instead of these traditional forms of social networking, a variety of Academic Social Networking (ASN) platforms have also achieved attraction around the world. Academia.edu, Mendeley, Zotero, CiteULike, BibSonomy, LinkedIn, Google Scholar, and ResearchGate are the major ASNsites. These ASNs are an interesting online space that merits their discussion (Ovadia, 2013).These sitesallow researchers to provide their publications either automatically (Google Scholar) or by self-entry (Mendeley, Academia.edu, and ResearchGate). Among this,ResearchGate and Academia.edu are the more popular ASNs. Mendeley, Zotero, CiteULike, BibSonomy are reference sharing sites,and LinkedIn is a professional communication and career networking site. Ovadia (2014) observed that ASN sites are a new intersection between social media and scholarly publishing. It acts as anonline repository to which users can upload and share research papers. Thelwall and Kousha (2013) pointed out that these are a significant addition to scholarly communication and academic information seeking eco-structure. This study examines the involvement of researchers in Kerala in academic social networking sites. The study has taken the most popular academic social networking site- ResearchGate (RG).

**2.ResearchGate**

RG was founded in 2008 by physicians Dr. IjadMadisch and Dr.SörenHofmayer, and computer scientist Horst Fickenscher. It gives the researchers the option to upload the journal articles, conference papers, posters,and data. It also provides analytics of publications, including the number of times researcher’s papers have been read, downloaded, and cited by other users on ResearchGate. It also provides community interaction features like options to follow other researchers and receive notifications when they upload new articles, ask questions within the research community, request a full-text version of papers, contact other researchers through the direct messaging system, etc. The site also sends automatic email alerts to people about activities related to their profiles and publications. Currently, RG has over 15 million users all over the world use RG to share, discover, and discuss research (ResearchGate, 2019). Yu (2016) indicated that the success of RG enabled researchers is that they can disseminate their ideas and share their publications free of charge to facilitate collaboration among researchers from all over the world.

**3. Related Studies**

Elsayed (2015) surveyed the use of ASNs among Arab researchers and found that three-quarters of the respondents use academic social networking sites to share publications, and most researchers subscribed to more than one academic social network, but RG was the most frequently used one. The study also revealed that academic discipline appears to play a role in defining Arab researchers within RG, as the majority of them were from the pure and applied sciences.Al-Daihani, Al-QallafandAlSaheeb (2018) conducted a study on social science academics’ use of social media for scholarly communication at Kuwait University. The study found Twitter and Facebook received the highest mean score for use, followed by WhatsApp, Instagram,and YouTube. Moderate to low use was recorded for academic social media. Among them,RG recorded the highest use followed by academia.edu.Asmi and Margam (2018) study on the usage of academic social networking sites among the research scholars in Central Universities of Delhi found that that potential uses of academic social networking sites in Indian libraries are slow compared to the libraries of developed countries and some of the developing countries.Stvilia, Wu, & Lee (2018) study on researchers' uses of and disincentives for sharing their research identity information in research information management systems revealed that Humanities researchers were the least frequent users of research information management systems. Yan and Zhang (2018) examined user behaviors and network characteristics of US research universities on ResearchGate.  Their study indicated that US higher education institutions play different roles based on their academic influence in the network and demonstrate distinct behaviors in overall participation, information seeking, and information sharing.Lee et al. (2019) investigated researchers' motivations for self‐archiving work on RG to understand their perceptions and willingness to use RG as a personal repository for their research and found that motivations were correlated with one another, demonstrating that RG motivations for self‐archiving could increase or decrease based on several factors in combination with motivations from the personal, social, professional, and external contexts.

**4. Objectives**

The study aims to analyse the involvement of universities in Kerala on the use of academic social networking sites, especially on ResearchGate. The study proposed the following objectives:

* To examine the ResearchGate profiles of Universities in Kerala.
* To compare the RG score of Universities in Kerala.
* To find out an active user group of ResearchGate among the Universities in Kerala.
* To compare the publication status of Universities in Kerala in ResearchGate.
* To analyse top reads received by eachUniversityinKerala.
* To find out the institutions that read the research output of Universities of Kerala.

**5. Methodology**

The study used the Web content analysis method. The study examined the profiles of the Universities of Kerala in the ResearchGate website (https://www.researchgate.net/) during February 2020. Total publications, number of users in ResearchGate, RG Score, number of reads, top reads by country, top reads by the institution, were recorded and analysed.The data obtained were analysed using Microsoft Excel.

**6. Analysis & Results**

The data gathered from 18 Universities in Kerala, among which scholars from 3 Universities have no membership in ResearchGate. Hence the study was limited to 15 Universities in Kerala.

**6.1 Universities in Kerala**

There are a total of 18 Universities in Kerala. Among these 2 are Central Universities, 13 State Universities 3 Deemed Universities. The list of all 18 Universities has been shown in Table 1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No.** | **University** | **Location** | **Type** | **Year of****Establishment** |
| 1. | A P J Abdul Kalam Technological University(KTU) | Thiruvananthapuram | State  | 2014 |
| 2. | Central University of Kerala(CUK) | [Kasaragod](https://en.wikipedia.org/wiki/Kasaragod) | Central  | 2009 |
| 3. | Cochin University of Science and Technology(CUSAT) | Kochi | State | 1971 |
| 4. | Indian Maritime University(IMU) | Kochi | Central | 2008 |
| 5. | Kannur University(KU) | Kannur | State | 1997 |
| 6. | Kerala Agricultural University(KAU) | Thrissur | State | 1972 |
| 7. | Kerala University of Fisheries and Ocean Studies(KUFOS) | Kochi | State | 2010 |
| 8. | Kerala University of Health Sciences(KUHS) | Thrissur | State | 2010 |
| 9. | Kerala Veterinary and Animal Sciences University(KVASU) | Wayanad | State | 2010 |
| 10. | Mahatma Gandhi University(MGU) | Kottayam | State | 1983 |
| 11 | National University of Advanced Legal Studies(NUALS) | Kochi | State | 2005 |
| 12. | SreeSankaracharya University of Sanskrit(SSUS) | Kalady | State | 1994 |
| 13 | ThunchathEzhuthachan Malayalam University(MU) | Malappuram | State | 2012 |
| 14 | University of Kerala(UOK) | Thiruvananthapuram | State | 1937 |
| 15 | University of Calicut(UOC) | Malappuram | State | 1968 |
| 16. | Amrita University(AU) | Kochi | Deemed | 1998 |
| 17. | Indian Institute of Space Science and Technology(IISST) | Thiruvananthapuram | Deemed | 2007 |
| 18 | Kerala Kalamandalam(KK) | Cheruthuruthy | Deemed | 1999 |

**Table 1 Universities in Kerala**

**6.2 Membership Status in ResearchGate**

Among the 18 Universities in Kerala, only 15 (83%) have membership in ResearchGate. Name of these Universities and their number of members registered in ResearchGate is presented in Figure 1. Among the 15 Universities, CUSAT is top in list with 1864 members followed by the IISST (1024) and the University of Kerala with 739 members.

**Figure 1. Membership Status in ResearchGate**

**6.2.1 Membership Status by Knowledge domain**

The study shows that Science and Engineering academic community is more interested in using RG than Social science people. Only SSUS and NUALS are exceptions. In these universities,the main academic domain is Social science.

**6.3 Publication Status**

ResearchGate provides the easy provision to upload publications of a researcher. Figure 2 shows the number of publications uploaded by each university in Kerala. Among 15 Universities under study, 3 Universities haven't listed any publications in RG. Figure 2 shows the publication status of universities in Kerala.

**Figure 2. Status of Publications Uploaded by Researchers in Kerala**

The Universities are having more publications listed are CUSAT with 6225 publications, followed by the University of Kerala with 4766 publications and MGU with 3043 publications.

**6.4 RG Score**

The RG Score measures scientific reputation based on how their peers receive a researcher’s work. The RG Score of all 15 Universities was collected and presented in Figure 3. Among the 13 Universities, CUSAT has the highest RG Score (6289.22), followed by the University of Kerala (3210.21) and MGU (2598.85).

**Figure 3. RG Score Received by Universities in Kerala**

**6.5 Reads**

Reads is a simple metric designed to show exactly how often research is being accessed on ResearchGate in real-time. CUSAT researchers received the highest number of reads (12916) followed by KAU (10174) and the University of Calicut (6855).

‘Top reads by Institution’ in RG mean the top institutions who read the research output produced by a particular institution. The study found that nine university’s top readers consist oftheir scholars, followed by scholars of other Indian institutions (CUSAT, UOK, MGU, UOC& KAU). Two universities (KVASU & KUHS) received top reads from Institutions outside Kerala, and fouruniversities(IMU, KUFOS, NUALS & SSUS) received top reads from foreign institutions.

 The country-wise reads show the majority reads are from India. There is no university wise variation found in this data. The second-largest readers of research outputs of Kerala researchers are from America, followed by cHINA. Researchers from the Philippines, Pakistan. Hongkong, Nigeria, Thailand, Russia, Egypt, Netherland,and UK are also keen to read the research output of Kerala.

**7. Discussion**

 The analysis revealed that the membership status and publications added by researchers to their profiles were relatively low compared to leading universities in India- Indian Institute of Science (IISc), Jawaharlal Nehru University (JNU) and Banaras Hindu University (BHU). IIsc has 6802 members in RG, JNU had 3202, and BHU had 3733. IISc and BHU uploaded more than forty-six thousand publications in RG.Compared to them, theRG score of universities in Kerala is also low. Shrivastava and Mahajan’s (2017) studyfoundthat all the ResearchGate metrics correlated positively withRGScore. The highest correlation of RGScore was found with publications added byresearchers to their profiles. This specifies that researchers, who added their publicationsto their profiles in ResearchGate and made their research more visible, and obtained higher RGScores.If the researchers in Kerala upload more publications in their profile, automatically, the reads will increase and get higher RG scores. Reads aredependent upon the number of publications added by a researcher to his profile.

 ASNs enhance scholarly communication. Meishar-Tal and Pieterse (2017) study established that scholars use the sites mainly for the consumption of information, slightly less for sharing of information, and very scantily for interaction with others. This finding indicated that academic networks do not function as other social networks do. Consumption of information, sharing of information and ideas, definitely influence teaching, learning, and writing abilities. Since the ranking of universities mainly depends on teaching, learning, and scholarly outputs of a university, library professionals must provide awareness of these new types of scholarly communication networks to their users.

**8. Conclusion**

This paper examined the academic Social Networking trends of Universities in Kerala. The study found that participation in RG is low among the university communities in Kerala. Only fifteen universities have profiles in RG. Among these universities,science academic community is more active in RG. Among the fifteen universities, CUSAT is the top university in membership status and publications status. CUSAT has received the highest number of reads, followed by KAU and UOC. CUSAT has also received the highest RG score, followed by UOK and MGU. The majority of reads obtained by universities in Kerala are from India, followed by the US and China. Institution wise reads show Indian institutions are more interested in research outputs in Kerala than foreign institutions.

 Academic social networking is a form of research dissemination. The features offered by these sites help scholars keeping up-to-date and networking with similar research interests. Since it enhances scholarly communication via open-access platforms, libraries must provide awareness of these types of networking sites. Many foreign universities are currently offering library guides, links, and tutorials to academic networking sites.

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