

## Review on Knowledge Management in Higher Education Systems

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### ABSTRACT:

The exploration is attempted utilizing the measurement's information the board rehearses specifically information hatching/creation, information testimony/stockpiling, information scattering/sharing, information application/use, and information Assessment/survey. Higher education foundations are intensely associated with knowledge exercises; notwithstanding, they are answerable for the creation, trade, conservation, dispersal, re-use and learning of knowledge. KM procedures in advanced education can prompt better scholastic and managerial administrations and diminish costs. Schools and colleges have significant occasions to apply knowledge management practices to help all aspects of their central goal, from training to public support of research. Knowledge management in higher education establishments includes the creation, improvement, upkeep and security of knowledge. Being the pioneers in the age and dispersal of knowledge, these organizations have the tremendous potential and the capacity to build up their own knowledge management framework. The arrangement of great schooling and related administrations is the primary motor improves the greatness, seriousness, significance and prevalence of any advanced education institution. The paper tries to investigate the survey of the writing on knowledge management as a rule and its application specifically to higher education organizations.

### Keywords

knowledge management, higher education system, education

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### Introduction

Knowledge is used as a strategy to gain competitive advantage & has gained importance over the last few decades. This change or advancement in knowledge enables the institution to be powerful than their competitors. "Ability to learn faster than competitors may be the only source of competitive advantage". Practitioner & researchers have found knowledge management in any organization set up, have a significant influence on its performance & enable survival of entity in the dynamic environment. Knowledge management in higher education is needed to measure performance, improve the quality of instruction, etc. but very few researches have been

carried out in these concepts which complement each other [1]. Educational institutions are

considered to be a knowledge economy, & therefore they should have excellent knowledge management practices in place, but unfortunately educational institutions have ignored the importance of knowledge management practice. All business & service sectors depend heavily on knowledge management, unlike HEIs (Higher Educational Institutions). The current research focuses in the area of knowledge management perception, implementation of knowledge management in higher education. It makes a comparison of knowledge management practices prevalent in private & public higher educational setting in a developing city such as Pune [2].

The study revolves around five key knowledge management processes namely knowledge incubation/knowledge creation, knowledge deposition/storage, knowledge dissemination/transfer, knowledge application/use, & knowledge Assessment/review in higher education. Relatively few studies have focused on knowledge management in the higher education sector in the context of a developing country. The review of literature could only trace study on knowledge management perception, implementation, implication or knowledge sharing practices, knowledge creation process in isolation. Thus a need for an empirical study to determine the knowledge management practices within the context of a higher education setting has been deemed necessary; a comparison of knowledge management practices in private & the public institution is undertaken in the current study [3].

Pune is one among largest higher education provider in the world, along 25.9 million students enrolled in more than 45,000 degree & diploma courses in the institutions. In the last decade, it has witnessed tremendous growth as the student's enrolment has increased at a CAGR of 10.8% & 9% CAGR institutions growth [4]. The private sector played a crucial role & was instrumental to the growth rate attained for improving the quality of education. Private institutions account for 64% of the total number of institutions, & it had 59% of student enrolment in the country, which was 43% & 33%, respectively, a decade ago. The growth is due to the thrust given through the Government in its Five Year Plans. During the Eleventh Five-year Plan period (2007– 2012), Pune achieved a Gross Enrolment Ratio (GER) of 17.9%, which was 12.3% at the beginning of the Plan period. There has been a change in the legislative actions to improve & provide access to higher education during this time. New Bills were passed to enhance the transparency & to improve the quality of education to name a few, Higher Education & Research Bill, the Educational

Tribunal Bill, & the Foreign Educational Institutions Bill [5].

However, despite such policy change along some significant progress in the last few years, Pune's higher education sector is still plagued along several challenges. It has relatively low GER, inequitable access to higher education through community, gender inequality & geographical access, & lack of high-quality research & education institutions, which are hindering the growth of education in Pune. Perceiving these traps, the Twelfth Five-year Plan carried a few changes to address the difficulties & proposes a few activities zeroing in on six key regions [6]. They are Expansion—expanding limit in existing institutions Equity-making focused on plans for in reverse & minority communities Excellence-building greatness through examination & advancement, staff improvement, & internationalization Governance - upgrading institutional self-rule & transparency Funding—expanding public & private financing & connecting them to outcomes Implementation & observing improving coordination across services & organizations [7].

The Twelfth Plan gave push on building "greatness" in Pune's advanced education framework. A few organizations are now seeking after this target, yet an ever increasing number of establishments should move towards accomplishing this objective. The quality imperative to be taken a gander at genuinely through foundations & in accordance along global standard is significant [8]. The establishments ought to be research-cantered, instructing cantered, & professional cantered. Pune's advanced education framework can be relied upon to be better lined up along industry & worldwide practices, & be more straightforward & comprehensive before the finish of Twelfth Plan period, given the Government can establish an empowering administrative climate & set up hearty execution, observing & quality affirmation instruments in the area [9].

In a data period, information the executives in advanced education is fundamental characterizing components along respect to an establishment's intensity, development, & supportability. Such a marvel holds useful for all types of associations, regardless of whether they fall inside the ambit of the business area or administration ventures, for example, instruction. The achievement of any establishment to a great extent relies upon the accessibility & productive usage of its immaterial resources, fundamentally information. In his view 5 brings up that, information is the main fundamental financial asset, accessible in an association having the option to make due in the serious climate utilizing the proficient usage of information creation, stock, & dispersion focuses that immaterial resources have gotten unavoidable to hierarchical achievement more than the customary components of creation specifically land, work machine, & capital [10]. The developing significance of such resources doesn't really diminish the significance of the last mentioned, however that they have gotten optional in abundance creation as per some authors. 7 In information based economies, it is such a great amount of imperative to persistently investigate new subject matters, as much in abusing existing information. Through such methods for investigation & misuse of information, establishments are relied upon to gain an upper hand. The need to oversee information underlined over the most recent twenty years has caught the eye of specialists & professionals in the idea of information the board in the fields of association & data innovation (IT) says. Such uplifted development might be credited to the acknowledgment of information as a wellspring of upper hand the expanded utilization of data innovation in higher instructive establishments has prompted the development in the significant level of work unpredictability. pointed expanded multifaceted nature, joined along vulnerability in the quick changing climate powers organizations to advance new work measure ceaselessly adjust

to developments which have a great impact on their working. Thus, there is a huge requirement for associations to "learn quicker & deal along their insight resources better" expresses that associations acknowledge that they need to endeavour consistently to grow their ability to make their future through sound learning frameworks which thusly rises above issues of the individuals from an establishment, setting push to learning as a premium [11].

Although the existing literature on knowledge management in Higher Educational Institutions is very limited, in particular to developing city like Pune. Some authors like Partha Bhattacharya, Praveen Kumar have made a study on overview of knowledge management & its utilization, Dipesh have made an attempt to find the impact of knowledge management on the education system in carried out research in the areas of knowledge collaboration, Implementation of knowledge management in higher educational institutions in Pune. The current examination is huge here & there [12]. Right off the bat, the examination is novel, as in it utilizes exact tests to analyze the information the executives rehearses continued in private & public foundations occupied along an advanced education, in more extensive in an agricultural nation setting. Such utilization of experimental testing will assist along giving understanding into how information the executives in advanced education establishments is impacted. Besides, the investigation is expected to add to the crossing over of the hole which presently exists in the hypothesis which is the execution of information the executives in advanced education dependent on the observational examination in advanced education setting in agricultural nation. Thirdly, the examination reveals insight into the information the executive's cycle in particular information brooding, information affidavit, information spread, information application & information assessment. The other advantage of this investigation is that it can possibly invigorate

research in the fields of information the board rehearses for better administration of information in higher instructive foundations. In conclusion, this proposal might be utilized as a source of perspective material through future analysts in this field. Through increasing a comprehension of information the board rehearses continued in private & public foundations, it will empower to plan the arrangement of, just as to decide how to use, their assets to give quality schooling ideally. Additionally, a comprehension of such practice would assist along creating a fit structure inside which the ideas could be applied couple to upgrade the maintainability of advanced education in the current period, which is set apart through consistent change. In an offer to turn out to be more serious along respect to offering quality instruction, organizations of higher learning have understood that the productive administration of their most valuable asset (information) & the utilization of it through all the partners are basic to their supportability. Advanced education foundations should, consequently, have the option to profit through the current examination through figuring out how information the board practices can be actualized along the goal that they can, in future, use the proper techniques for tackling such information. In 2000, Kidwell et al. battled that as Knowledge Management develops as a corporate control, more organizations would float towards a more comprehensive way to deal along KM [13]. Examination shows that numerous organizations have started to build up some information the executives capacity, not many (6 %) have actualized information the board programs on an undertaking wide scale fight that though Knowledge Management is definitely not a profoundly groundbreaking thought, it is another perspective on HEIs could work all the more powerfully & effectively in the 21st century, & "is ready to turn into a crucial part" further implies that Higher schooling is moving from the old culture that considers another culture that says which takes a gander at the requirements &

wishes of clients. They recommend that a critical fixing to an establishment's availability to grasp KM is its way of life - the convictions, qualities, standards, & practices that are exceptional to an association & suggest that HEIs were building up a culture that was prepared to grasp Knowledge Management [14]. Be that as it may, all HEIs are happy to invite Knowledge Management is as yet an issue concern. Had they received KM throughout the years to improve upper hand, particularly given the requests on them to be more serious & manageable? The prior examination has underlined the need & significance to execute information the board rehearses in advanced education framework [15]. ]. Paper organized as in section 2 Literature review has been described, in section 3 comparative analysis described, Section 3 talk about future work described in section 5.

### Literature review

In [16] author examination named "Is Higher schooling prepared for information the executives," inspects the material of information the board ideas in advanced education framework, for example, information store, information access, information climate and information resources. It recognizes the current frameworks which could add to information the board in advanced education in the United Kingdom. The investigation additionally inspects the difficulties related with information creation and investigates the chance of interest in information the board as Asset. The investigation reasoned that change is needed in the social framework, esteem framework and prize arrangement of the advanced education framework which is information based associations.

In [17] have done their study titled "Managing knowledge sharing" viewed that knowledge as the power which can transform the individual or society. They have emphasized the importance of knowledge sharing in educational institutions. The study includes discussions, solving problems,

learning and general interaction connected with knowledge sharing. The study describes how participants in a Community of Practice (Cop) experience knowledge sharing in the higher education system and the factors that influence the exchange of knowledge in a CoP. The study revealed that e - document information has yet not been explored at Universities and this could enable the sharing of knowledge in communities of practice. The researcher suggested that management initiatives which aimed merely to improve communication among faculty members should focus on Cop which is important. The study concluded that Cops could be an essential vehicle for overcoming the Barriers and enabling the free flow of knowledge more effectively within the higher education institutions.

In [18] in his article " A Knowledge stream model for distributed group information sharing and the board" has explored on the most proficient method to acknowledge viable information partaking in the gathering and proposed an information stream model for shared information sharing administration in groups. He proposed a model which comprises of the ideas, rules, and strategies for the information stream, its cycle, and the information stream motor.

In [19] author study "Joint effort and sharing of information" had investigated that the Role of Consortia in information sharing The examination expresses that library consortia can assume a critical part in cooperation and offer data or information. The investigation exhibited the function of scholastic libraries and their administrations vital piece of educating and learning; they make an organization with employees, specialists, understudies and financing offices. Bookkeepers and libraries are continually ready to share assets and information to all the division and individuals.

In [20] author study "plan of information the board framework" has talked about information the executives in an instructive establishment. He expressed that an educationist ought to receive

new advancements to oblige the different prerequisites of the students. The examination uncovered that there are not kidding worries in training which are improving the nature of educating.

In [21] author study named information the executives: assessing methodologies and cycle utilized in advanced education centre around Higher Education Institutions (HEI) to investigate techniques to expand information based exercises lined up with organizations objectives. The reason for the examination is to find out whether the KM cycle utilized in business and industry is relevant in the field of advanced education.

In [22] author their article "information sharing society" had evaluated about the network of training in Malaysian public foundation of advanced education. The investigation expressed that to build up a talented and information based public area, one of the proposals in building up HR's in the information based economy ground breaking strategy is to plan and actualize information the board framework in Malaysian government office including Malaysian PIHE.

In [23] Author concentrate on the impact of utilizing an information the executives framework on plan schooling" zeroed in on the significance of companion learning in plan instruction which has been picked up acknowledgment as of late. Plan Knowledge Management System (DKMS) was built to encourage peer learning among understudies. This framework gives an online stage to understudies to share their insight. An analysis was led in three colleges wherein understudies in these colleges were approached to take up tasks on DKMS, which were assessed by the personnel. The instruments used to dissect the outcomes were the mean and standard deviation. The finding of the exploration indicated high learning and fulfilment among the understudies who have been reviewed by DKMS.

In [24] Author directed an exploratory investigation on the correlation of information the executives rehearses among public and private

associations. He accepted there are contrasts in how to make an incentive from powerful information the board in the private and public area settings, and that these distinctions are reflected in KM methodology practice.

In [25] author their article "knowledge management" had reviewed about the academic institutions and role of knowledge managers in Longowal. The data were collected in the database systems. The study stated that the rapid advancements in the means of communication had changed the way of handling, storing and disseminating the information.

In [26] author has done an examination on Developing a Knowledge Management Model for Educational Quality Assurance in Faculty of Education. The examination endeavours to fabricate information the executive's model for quality affirmation in the training. The destinations of the examination were to make KM arrangements in QA twined with action plans for work advancement.

In [27] their examination on " The effect of information the board rehearses in improving understudy learning results" have zeroed in on information the executives in instruction in e-learning climate which is associated to understudies impression of their learning results.

In [28] author has made an investigation of information the executives at instructive foundations: An instance of Pakistan. The examination features the requirement for information the board in a quickly growing climate where the utilization of innovation in instructing and learning has expanded. This has prompted change in the manners, in which information is created, put away, scattered, and authorized.

In [29] author has attempted an examination named "Observations and information sharing acts of Graduate understudies in Singapore" The examination researches discernment, nature and degree of information sharing practice among understudies in Singapore. The investigation

characterized factors influencing information sharing as social conduct, physical, social, mechanical, and individual factors.(Riege 2005). Common trust can upgrade and spur information sharing among understudies.

In [30] author in their exploration named "information partaking in scholastic foundations" have considered the ongoing improvements which are the rise of another economy where information has become a significant asset and resource in media college Malaysia.

In [31] author in his research titled "Knowledge Management Solution to Challenges of Higher Education in South Africa" explains challenges faced by higher education in South Africa and apply knowledge management to overcome these challenges. The study identifies these challenges such as accountability and transparency pressures, reduction in subsidies from the state, stiff competition from global partners, low enrolments, and poor infrastructure facilities students not equipped to be observed in industry, poor academic and industry interface and inferior service delivery.

In [32] author in their study titled "Influence of soft elements on knowledge management implementation in Malaysian Higher learning Institution" focus on the soft elements(excluding IT change )that can influence the successful implementation of KM. The objectives of the study are to identify that whether there is a positive correlation of soft elements of KM implementation. The data was collected through survey questionnaire from 99 HEIs in Malaysia. The soft elements researched under this study are organization culture and top management leadership. The study proposes a model development and implementation of KM. The study found that organization culture and top management leadership have a significant effect on perceived benefit of KM.

In [33] author in their examination named "information the executives in advanced education" have clarified an applied system and

exploration plan for utilizing ICT to improve information the board in advanced education. The examination pointed the prompt need to grow new strategies, instruments, and procedures in the information the executive's frameworks system, information cycles and information innovations to advance powerful information the board which infiltrates to all administrations in advanced education.

In [34] author has done the examination in the view of information the board in advanced education between two gatherings. The primary target of the examination is to research the mentality of understudies and teachers (as clients and makers of instructive administrations) towards

KM. The examination of this investigation involved an example of scholarly staff and understudies of the board.

In [35] author have embraced an examination in advanced education framework in a little Central European nation which is named "information the executives and authoritative culture in advanced education foundations". The target of the examination is to investigate the idea of culture, information the executives (KM) and their connections in college. Their supposition that is instructive experts is engaged with KM measures. Market culture of HEI1 Institutions, yet they were not huge in HEI2 Institutions.

### Comparative analysis

Ref. No	Year	Methodology	Case study
36	2019	This audit of the writing recognized a scope of factors of expected use in the investigation. Specifically, various sorts of turn out, both colleges claimed and different sorts identified with exercises such as graduate business venture, feature various approaches to take a gander at college TSA.	The examination inside this paper utilizes the HE-BCIS, did every year by the Higher Education Statistics Agency (HESA), giving far reaching assortment of information with respect to monetary exercises of UK colleges.
37	2018	This examination included six exploration destinations, including the MoEVT where the DHE is based, the TCU and four universities inside Tanzania. The analyst got to just the headquarters 'offices from which the HE and the TCU settle on every single key choice and issue orders	The essential exploration question tried to decide how Tanzania's HEP setting endorses the mission of colleges in the nation, corresponding to investigate (information creation), teaching(knowledge transmission) and network/public help (information valorisation)
38	2019	Mauritius and South Africa, two of the most	This investigation utilized meetings with key witnesses



		serious economies in the sub-Saharan locale, were chosen as the contextual analysis destinations for this article. The Global Competitiveness Report (2018), positions Mauritius as 49th and South Africa as 67th out of 140 nations. Be that as it may, on development capacity, South Africa scores higher (46th) than Mauritius (62nd)	in thirteen HEI's of Mauritius and South Africa (seven HEI's in Mauritius and six HEI's in South Africa) to assemble experiences into the information management strategies and measures: information creation, sharing and move.
39	2017	Consolidating the most recent deduction in the field with down to earth, bit by bit direction, the Third Edition of John W. Creswell and Vicki L. Plano Clark's Designing and Conducting Mixed Methods Research presently incorporates seven blended techniques plans	The writers walk peruses through the whole exploration cycle and present refreshed models from distributed blended strategies examines drawn from numerous controls. Moreover, this new release incorporates data about the dynamic and advancing nature of the field of blended techniques research, four extra methodological

		with going with diary articles delineating each plan.	methodologies, and inclusion of new headings in blended strategies.
40	2017	This paper plans to recognize KM rehearses used to conquer basic components of new companies' advancement in Brazil. It will be talked about the connection between the basic components of start-up advancement and the KM rehearses utilized.	To be serious in current information economy, new businesses should viably utilize accessible information to execute their advancement methodologies. Subsequently, it is vital to identify which information management (KM) rehearses are utilized by new businesses.

**Research gap**

A couple of the at present accessible examinations on information the executives is led in instructive organizations in information the board." Most of the investigations in information the executives have depended primarily on tales and attestations, as opposed to on experimental proof. Exact examinations into information the executives have generally cantered around the fruitful usage of such an idea in different nations. Different investigations in the field, for example, a few creators have focused on the function of data innovation in information the executives [41-44]. In the Indian setting, not many examinations have been directed in the subject matter administration. The current investigation makes a positive commitment to know information the executive's usage in higher instructive Institutions; it utilizes exact proof and thinks about the information the board practice in private and public organizations.

**Conclusion**

A critical angle to make consciousness of KM rehearses is the ID of what KM intends to representatives at the HEIs, an audit of their insight resources and the plan of a methodology that can encourage the creation, sharing and move of information, to their establishments' upper hand. Moreover, the HEIs in Malaysia require visionary authority, which can present these strategies and establish the correct atmosphere for information creation, sharing and move as a reason for improved examination and advancement in the nation. As a component of this activity, thought should be given to interest in a devoted KM office, intelligent online interfaces and information vaults, community and multi-disciplinary and between institutional exploration undertakings, prizes and motivations, admittance to information and information bases and expanded joint effort with private area.

## References

- [1] Bhusry, M. and Ranjan, J. (2011). Knowledge Collaboration in Higher Educational Institutions in India: Charting a Knowledge Management Solution. *International Journal of Computer Science*,
- [2] Brewer, P. D. and Brewer, K. L. (2010). Knowledge Management, Human Resource Management, & Higher Education: A Theoretical Model. *Journal of Education for Business*, 85(6), 330-335.
- [3] Berlin, Heidelberg. Laal, M. (2011). Knowledge Management in Higher Education. *Procedia Computer Science*, 3, 544-549.
- [4] Miles, M. B., Huberman, A. M. and Saldana, J. (2013). *Qualitative Data Analysis*. Sage.
- [5] Pinto, M. (2014, June). Knowledge Management in Higher Education Institutions: A Framework to Improve Collaboration. In *Information Systems & Technologies (CISTI), 2014 9th Iberian Conference on* (pp. 1-4). IEEE.
- [6] Songsangyos, P. (2012). The Knowledge Management in Higher Education in Chiang Mai: A Comparative Review. *Procedia-Social & Behavioral Sciences*, 69, 399-403.
- [7] Aggarwal, P., Kiran, R. & Verma, A.K. (2011). Enhancing Curriculum and Research in Higher Education with a Strategic Use of Knowledge Management. *Global Journal of Management and Business Research* Volume 11 Issue 12 Version 1.0 pp 68-85
- [8] Ming-Yu Cheng, Jessica Sze-Yin Ho and Pei Mey Lau. (2010). Knowledge Sharing in Academic Institutions: a Study of Multimedia, University Malaysia.
- [9] Mutula, S., & Jacobs, D. (2010). Knowledge Management Solution to Challenges of Higher Education in South Africa. *International Journal of Innovation in the Digital Economy (IJIDE)*, 1(1), 1-18. doi:10.4018/jide.2010091501.
- [10] ubega T. Jude, Omona Walter and Van der Weide, Theo. (2010). Knowledge Management Technologies and Higher Education Processes: Approach to Integration for Performance Improvement. *International Journal of Computing and ICT Research*, Vol. 5 Special Issue, pg 55-68.
- [11] Arsenijević J, Tot V and Arsenijević D (2010). The comparison of two groups in the perception of knowledge management in the environment of higher education. *African journal of business management*. Vol 4 Issue (9) Pg 1916- 1923.
- [12] Gomezelj Omerzel, Doris; Biloslavo, Roberto; Trnavcevic, Aanita. (2011). Knowledge management and organizational culture in higher education institutions, *Journal of East European Management Studies*, ISSN 0949-6181, Hampp, Mering, Vol. 16, Iss. 2, Pg.111-139.
- [13] Nikolaus Salo. (2011) Knowledge Management in Education in Indonesia: An Overview. *Global Journal of Human social science* Volume 11 Issue 1 ISSN: 0975-587X Feb 2011
- [14] Nurluoz, O. & Birol, C. (2011). The Impact of Knowledge Management and Technology: An Analysis of Administrative Behaviours. *Turkish Online Journal of Educational Technology - TOJET*, 10(1), 202-208.
- [15] Mohamad Noorman Masrek, Siti Arpah Noordin, Norizan Anwar, and Ahmad Sufi Alwi Idris. (2011). The Relationship between Cultural Identity and Individual Knowledge Sharing Behavior. *IBIMA Publishing* Vol. 2011 (2011), Article ID 406402, 14 pages DOI: 10.5171/2011.406402.
- [16] Fahimeh Babalhavaeji and Zahra Jafarzadeh Kerman. (2011). Knowledge sharing behavior influences a case of Library and Information Science faculties in Iran.

- Malaysian Journal of Library & Information Science, Vol. 16, no. 1, April 2011: 1-14
- [17] Adil Laoufi, S. Mouhim, E. Megder, C. Cherkaoui, And D. Mammass .(2011). Using knowledge management in higher Education: research challenges and opportunities. Journal of Theoretical and Applied Information Technology 30th September 2011. Vol. 31 No.2.
- [18] Mamta Bhusry and Jayanti Ranjan.( 2011). Implementing Knowledge Management in Higher Educational Institutions in India: A Conceptual Framework. International Journal of Computer Applications 29(1):34-46, September 2011. Published by Foundation of Computer Science, New York, USA.
- [19] Richard Pircher Attila. (2011). Information and knowledge management at higher education institutions. Management Information Systems, Vol. 6 (2011), No. 2, pg 008-016.
- [20] Dipesh D. Uike and Shweta Y. Japulkar.( 2011). Impact of knowledge management on management education system in Nagpur region. International Journal of Research in Finance & Marketing Volume 1, Issue 2 (June 2011) pg 201-221.
- [21] Mamta Bhusry and Jayanti Rajan ( 2011). Knowledge collaboration in higher educational Institutions in India: charting a Knowledge Management solution. International Journal of Computer Science Vol 8, Issue 5 pg 332-341.
- [22] Ram Shukla, and Rohtak. (2012). Knowledge management in higher education. International Journal of Reviews, Surveys, and Research (IJRSR)
- [23] Pradit Songsangyos.( 2012). The Knowledge Management in Higher Education in Chiang Mai: A Comparative Review. Procedia – Social and Behavioral Sciences 69(0):399-403. (International Conference on Education and Educational Psychology.)
- [24] Dr. Alpana Trehan and Pooja .S.Kushwaha .(2012). The implementation of knowledge management system in B-Schools. International Journal of Multidisciplinary Management Studies Vol.2 Issue 2 February 2012, ISSN 2249 8834 page 252-260.
- [25] Madalina Cristina Tocan .( 2012). Knowledge-Based Strategies for Knowledge Based Organizations. Journal of Knowledge Management Economics and Information Technology. Issue 6, 2012.
- [26] Makhsousi, A., Sadaghiani, J & Amiri, M. (2013). A review on recent advances on knowledge management implementations. Management Science Letters, 3(3), 861-866.
- [27] Ida Farida, Jann Hidajat Tjakraatmadja, Bambang Rudito, and Sulisty Basuki.(2013). Knowledge Management Initiative in Indonesian Higher Education: Open Access Institutional Repository in Academic Library. The 12th International Decision Sciences Institute Conference & The 18th Asia Pacific DSI Conference July 9th -13th, 2013.
- [28] Javad Moshari.( 2013). Knowledge Management Issues in Malaysian Organizations: the Perceptions of Leaders. Journal of Knowledge Management, Economics, and Information Technology Vol. III, Issue 5 October 2013
- [29] L.A. Abdillah .(2014). Managing information and knowledge sharing cultures in higher education's institutions. The 11th International Research Conference on Quality, Innovation, and Knowledge Management (QIK2014), The Trans Luxury Hotel, Bandung, Indonesia.
- [30] Chokdee Liophanich. (2014). An Investigation of Knowledge Management Implementation: Multiple Case Study in Mobile Telecommunication Industry. Journal of Industrial and Intelligent Information Vol. 2, No. 2, 2014.

- [31] Dimitrios, L. T. (2014 ). Knowledge management strategy within Higher Education. The Case of Greece. International Conference on Strategic Innovative Marketing (pp. 488-496). Madrid, Spain Greece: Science Direct.
- [32] Pinto, M. (2014). Knowledge Management in Higher Education Institutions: A framework to improve collaboration. Research Gate, (pp. 1-5).
- [33] Tarek A. El Badawy, Rania M. Marwan, Mariam M. Magdy. (2015). The Impact of Emerging Technologies on Knowledge Management in Organizations. International Business Research , 111-119.
- [34] Ali, NA, Sulaiman, H. & Cob, Z. (2014). Knowledge management systems for Higher Education Institutions: An empirical study of success factors. Knowledge management international conference Langkawi . Malaysia 12-15 August 2014.
- [35] Fullwood, R., J. Rowley, and R. Delbridge. 2013. "Knowledge Sharing Amongst Academics in UK Universities." *Journal of Knowledge Management* 17 (1): 123–36.
- [36] Fuller, D., M. Beynon, and D. Pickernell. 2019. "Indexing Third Stream Activities in UK Universities: Exploring the Entrepreneurial/Enterprising University." *Studies in Higher Education* 44 (1): 86–110. doi:10.1080/03075079.2017.1339029.
- [37] Fussy, D. S. 2018. "Policy Directions for Promoting University Research in Tanzania." *Studies in Higher Education* 43 (9): 1573–1585. doi:10.1080/03075079.2016.1266611.
- [38] Poonam Veer-Ramjeawon & Jennifer Rowley, (2019), "Embedding knowledge management in higher education institutions (HEIs): a comparison between two countries, *Studies in Higher Education*
- [39] Creswell, J. W. and Clark, V. L. P. (2017). *Designing & Conducting Mixed Methods Research*. Sage Publications.
- [40] Dalmarco, G., Maehler, A. E., Trevisan, M. and Schiavini, J. M. (2017). The Use of Knowledge Management Practices through Brazilian Startup Companies. *RAI Revista de Administração e Inovação*, 14(3), 226-234.
- [41] Mahajan, H.B., Badarla, A. & Junnarkar, A.A. (2020). CL-IoT: cross-layer Internet of Things protocol for intelligent manufacturing of smart farming. *J Ambient Intell Human Comput*. <https://doi.org/10.1007/s12652-020-02502-0>.
- [42] Mahajan, H.B., & Badarla, A. (2018). Application of Internet of Things for Smart Precision Farming: Solutions and Challenges. *International Journal of Advanced Science and Technology*, Vol. Dec. 2018, PP. 37-45.
- [43] Mahajan, H.B., & Badarla, A. (2019). Experimental Analysis of Recent Clustering Algorithms for Wireless Sensor Network: Application of IoT based Smart Precision Farming. *Jour of Adv Research in Dynamical & Control Systems*, Vol. 11, No. 9. 10.5373/JARDCS/V11I9/20193162.
- [44] Mahajan, H.B., & Badarla, A. (2020). Detecting HTTP Vulnerabilities in IoT-based Precision Farming Connected with Cloud Environment using Artificial Intelligence. *International Journal of Advanced Science and Technology*, Vol. 29, No. 3, pp. 214 - 226