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Knowledge Management Practices at Indian Institutes of Management (IIMs) Library: A Survey

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Abstract

KM needs a systematic approach to develop the evolution of knowledge into a key organizational resource. Most importantly, effective KM is now acknowledged as the key driver of new knowledge and ideas. Therefore, KM has become a significant issue in all types of organizations across the world irrespective of profit-making or not-for-profit organizations. An institution's wide approach to KM can direct enormous improvements in creation and sharing of knowledge within the academic fraternity. In fact, academic institutions are the factory and laboratory of knowledge creation and the academicians are the best knowledge creators. Therefore, the application of KM tools and techniques in the academic sector is as important as it is in the corporate sector. The present study is an attempt to analyze the KM practices in six KM segments (i.e identification, acquisition, creation, sharing, storage and utilization) in four selected IIMs Library which seems to be the best management institutes of India and having the special status - "*Institute of National Importance*". A survey method of research was adopted in this study and structured questionnaires are distributed to 504 respondents to collect primary data and resolved that KM practices are still in initial stage and need to do a lot for improvement.

Keywords: *Knowledge Management; KM Practices; KM Tools; Knowledge Acquisition: Knowledge Creation; Knowledge Sharing; Knowledge Utilization; IIMs. IIM Library etc*.

1. Introduction

Due to information revolution and emerging the different ICT tools and techniques in last four decades, huge amount of information has generated, processed and resulted the present knowledge society where Knowledge is power and it goes to waste if it is not manage properly. Thus, knowledge management is one of the very important aspects in present time and it can be considered the most powerful resource for any organizational success because it improves products and services in the aspect of quality and quantity. It is a management attitude which unites and streamlines information management with the culture of organizational learning spirit. It helps in linking person with person, as well as person with information. In the words of Young (n.d.)[1] - "Knowledge management is a holistic discipline that asks everybody to take personal responsibility and accountability for his/her knowledge". In other words, knowledge management is for everyone and this is the only way for democratization of knowledge. He has also pointed out that the purpose of KM should not be to just become more knowledgeable, but

to be able to create, transfer and apply knowledge with the purpose of better achieving objectives.

Organizations are powered by knowledge, and most opportunities are derived from intellectual rather than physical assets. The ability to capture, organize, and disseminate knowledge is a critical component of overall performance of any organization. Everyday all the members of an organization need immediate access to information in order to be effective in their roles. While information management relies heavily upon a small group of experts to publish knowledge for the rest of the organization to consume, knowledge management democratizes knowledge. Here everyone becomes a collaborator, contributor, and consumer of knowledge.

Academic institutions create new knowledge, acquire it from diverse sources, and apply it in a range of different environments (Tranfield, Denyer and Marcos, 2004)[2]. Characteristics of knowledge relevant to academic institutions include theories, principles, models, experiences, values, skills, expertise, know-how, facts, opinions, ideas, contextual information, faculties and staff insights, faculties and staff publications, research reports, project reports, class notes, laboratory notes, hands-on-training, workshops, seminars, conferences etc. and through Knowledge Management, this accommodated knowledge can be democratized for more and forever use. Since academic institutions are knowledge based organizations and plays a significant role in our society by developing the human resource capital by learning, education and research process. The academic institutions expended very huge amount of money for discovery and creation of new knowledge through learning and research practices but many institutions still missing the proper KM practices for identification, acquisition, storage, sharing and utilization of this knowledge properly. Ratcliffe-Martin, Coakes and Sugden (2000)[3] argued that, "academic institutions do not generally manage information well. They tend to lose it, fail to exploit it, duplicate it, do not share it, do not always know what they know and do not recognize knowledge as an asset".

1.1. Tools for Knowledge Management

A tool is any item that can be used to reach a goal, especially one that is not consumed in the process. The set of tools required to achieve a goal is equipment. The knowledge of constructing, obtaining and using tools is technology. Knowledge management tools are designed to assist knowledge management, whether they are physical items or verbally share work practices. Knowledge management tool spotlights on assisting individual learning, use and contextualization of organizational knowledge rooted in people and documents. This leads to at least four key functional requirements for knowledge management tools: i) facilitate information contextualization; ii) intelligently transfer information; iii) facilitate social interactions and networking; iv) present a customized human-computer interface that meets user needs (Alavi & Leidner, 2001)[4].

Wormell (2004)[5] stated that IT plays a supportive role in most KM programs; people and processes are vital. Trying to implant a KM system of any scale without technology is extremely difficult, but the technology itself does not make the KM system work; it can facilitate and

enable connections and communications but it will not make them happen. Jain (2007)[6] stated that IT can support KM in two ways: by providing the means to organize, store, retrieve, disseminate and share explicit knowledge and information rapidly around the organization and around the world; and by connecting people with people through collaborative tools to capture and share tacit knowledge. Webster (2007)[7] argued that IT can improve knowledge flows, but cannot guarantee them. Even the most successful of technological solutions can be frustrated by a lack of time and motivation for knowledge sharing, and an inability to truly capture tacit knowledge and use this knowledge effectively. It is also worth noting that some organizations function well without formal KM systems by exploiting existing IT, such as intranets, portals, web2.0, institutional repository etc. Surveys done by Martin (2008)[8] have identified the most common IT applications for KM as including Groupware (messaging and email), document management, workflow, data warehouse, multi-media repositories, intranets and portals, information retrieval technologies and search engines, business modeling and intelligent agents. These and other technologies can be grouped by category such as content management, knowledge transfer/sharing and collaboration, or as distributive and collaborative technologies. He further stated that Lotus Notes, the software that packaged email with data repositories and basic collaborative tools, was the first technological catalyst for KM.

2. Objectives of the Study

The objectives of the present study are to -

1. Analyze the Library profile of selected management institutes
2. Know the IT infrastructures and knowledge management practices of selected IIMs libraries
3. Examine the status and practices of KM processes of selected IIMs library
4. Find out the existing KM tools used for explicit and tacit knowledge management

3. Methodology

The study is quantitative in its approach and survey method was found suitable for this study. A structured questionnaire was prepared and distributed among 504 respondents selected by convenience sampling technique whoever came to the library during the course of study. To determine the sample size, equal representation from each institution was taken into consideration and 504 respondents were approached by the researcher to fill the questionnaire consisting 400 students (100 from each institute), 100 teachers (25 from each institute) and remaining 4 are the librarians or library in-charge of the concerned institutes.

To find out the status of knowledge management processes available at the select institutes, 35 points scale were developed under six KM segment (i.e. identification, acquisition, creation, sharing, storage and utilization) as mention in table-1. A three point scale (1=Disagree, 2=Neutral and 3=Agree) was used to measure the respondents view about KM process.

Table-1: Measurement Items of KM Processes

KM Processes	Code	Measurement Item
Knowledge Identification (KI)	KI1	Our institution regularly does knowledge audit.
	KI2	Our institution maintains up to date employees' skill white page to identify the knowledge specializations.
Knowledge Acquisition (KA)	KA1	Members of this institution are active in external professional networks and associations to acquire knowledge.
	KA2	Our institution actively collects information about the needs and wishes of its members.
	KA3	If important knowledge is not available, my institution buys it, e.g. journals, research reports, books etc.
	KA4	If needed, our institution hires new staff members who possess missing knowledge.
	KA5	Staff members regularly follow courses, training programmes and seminars to remain up to date.
	KA6	We invite experts from outside the institution to deliver lectures, classes, trainings etc.
Knowledge Creation (KC)	KC1	We frequently make use of brainstorming sessions to find solutions for problems we face in our work.
	KC2	Members are assigned to new projects and programmes, depending on their know-how and availability.
	KC3	Our institution conducts research work to create new knowledge.
	KC4	Members are assessed and rewarded for developing new knowledge and for testing new ideas.
Knowledge Documentation (KD)	KD1	Our institution maintains up-to-date institutional repository to store the institutional scholarly outputs.
	KD2	Our institution maintains internal databases for storing internal knowledge.
	KD3	Our institution maintains its own Wiki for storage of knowledge.
	KD4	Our institution has documented specific knowledge and skills of individual employees.
	KD5	Experts in certain areas are urged to make explicit the methods they use in a step-by-step description.
	KD6	Exit interviews are conducted and are documented.
	KD7	Failures and successes are evaluated and lessons learnt are documented.
	KD8	Our institution has up-to-date handbooks and work guidelines, which are frequently used.
Knowledge Sharing (KS)	KS1	Much knowledge is shared in informal ways, e.g. in the discussion forums, social networks, chat rooms, blogs etc.
	KS2	Our institution maintains portals for sharing of organizational knowledge.
	KS3	Our institution provide intranet to connect each other.
	KS4	Our institution promotes communities of practices through social networking.
	KS5	Some members keep their own blog for sharing of knowledge.

	KS6	New members or staffs are assigned to mentors who help them to find their way in the organization.
	KS7	Regular meetings are organized, at which professional matters are discussed.
	KS8	Colleagues inform one another regularly about positive experiences and successful projects undertaken.
	KS9	Job rotation occurs, based on one's know-how, thereby ensuring knowledge distribution.
Knowledge Utilization (KU)	KU1	Members utilize research findings to promote new knowledge.
	KU2	Our institution uses experiences of students and other clients to improve our programmes and services.
	KU3	Our institutions apply existing know-how in a creative manner in new applications.
	KU4	Our institution combines our specializations in multi-disciplinary teams.
	KU5	Sophisticated search engines are provided in the portals and databases to search required knowledge.
	KU6	'Ask the Librarian' Service is provided for the better utilization of library resources.

4. Scope of the Study

The scope of the present study is limited to IIMs Library which are the primer institutes of management in India and having the status of "Institutes of National Importance". At present there are total 19 IIMs located in different part of the country. A list of all 19 IIMs was prepared and divided according to their location into four zones i.e. North, East, South and West zone of the country. Then the oldest IIM was identified and chosen from each zone. Thus the scope is further limited to top four listed IIMs of India as listed in Table-1.

Table-2: List of IIMs selected for study

Name of the Institute	Year of establishment	Zone
Indian Institute of Management, Calcutta (IIM C)	1961	East Zone
Indian Institute of Management, Ahmedabad (IIM A)	1961	West Zone
Indian Institute of Management, Bangalore (IIM B)	1973	South Zone
Indian Institute of Management, Lucknow (IIM L)	1984	North Zone

5. Data Analysis

Profile of the Institutions

Table-3 furnished below provides an overview of the select IIMs of this study. Here it is seen that out of the four selected IIMs, IIM Calcutta is the oldest and IIML is the youngest one and situated in state capitals. In area wise analysis it found the IIML have the biggest campus followed by IIMC while IIMA & IIMB have near about same area. IIMB have the highest number of academic staffs followed by IIMC and IIML while IIML have highest

student's enrollment. All the IIMS have websites with domain name ac. (IIMC & IIML) and .ernet (IIMA and IIMB). In the motto of two IIMs (IIMC & IIMA) knowledge word are included. It is also observed that all the institutions are having their internal newsletter which gave detail information/activities of institutes.

Table-3: Profile of the select IIMs

Name	IIM – C	IIM - A	IIM - B	IIM - L
Year of Est.	1961	1961	1973	1984
Location	Kolkata Bengal	Ahmedabad Gujarat	Bangalore Karnataka	Lucknow Uttar Pradesh,
Official Website	https://www.iimcal.ac.in/	http://www.iimahd.ernet.in/	www.iimb.ernet.in	www.iiml.ac.in
Motto	Knowledge for the benefit of all	Progress through knowledge	May our study be brilliant and effective	Better management towards better nation
Campus	135 acres	106 acres	100 acres	200 acres
Academic staff	92	-*	110	85
Students	1714+	1500+	1000+	2000+
Internal News Letter	IIMC Sandesh	Weekly News Digest	IIMB Newsletter	IIML Newsletter

* Unable to get exact no. of academic staffs

Profile of the Libraries

Table-4 shows the basic information about selected IIMs libraries and it observed that all the IIMs having separate library building with different sections like circulation section, reading room section, periodical section, text book section, reference book section, new arrival section, digital library section etc. Moreover, some of the libraries are having compact shelves, group study section etc. All libraries are fully automated with state of the art library management software. Moreover, the libraries of IIM Ahmedabad and IIM Lucknow are open for 24 hours. With regards to library collections, IIML have less collection in compare to other IIMs library and this may be because IIML is the youngest library among them. As far Knowledge Management is concerned, none of the library is having separate Knowledge Management Unit at present.

Table-4: Profile of the select IIM Libraries

Name	IIM – C	IIM – A	IIM - B	IIM – L
Name of the Library	B.C. Roy Memorial Library	Vikram Sarabhai Library	IIM Bangalore Library	Gyanodaya
Library Building	Four storied	Four storied	Four storied	Two storied
Library Hour	9:15 am to 1:00 am	24*7	9:00 am to 10:00 pm	24*7

Library Collection	1.6 lakhs volumes of books and bound journals, 500 journals, 40,000 online full text journals.	1,76,393 books, 42,004 bound volumes, journals (print-2268, online-945), 30 news papers, 265 thesis, 1745 project reports, 1,981 CDs and 132 videos.	Over 2,40,000 documents, 72 e-resources and 884 e-books, 2,330 print and e-journals, and 27 newspapers, 4,180 CDs, 420 video cassettes, 577 VCDs and DVDs and 235 audio cassettes.	43000 books, 6000 reference book, 200000 e-books, Journals (Print-533, online-2014**),** 274 videos, 40 e-databases, Bound Volumes 20000, News paper 19, Micro Films 11875
LMS	VTLS Virtua	Koha	VTLS Chameleon	LibSys
Repository Software	-	DSpace	DSpace	Greenstone
Compact Shelves	√	√	√	√
New Arrival Section	√	√	√	√
Separate Group Study Section	√	√	×	×
Separate KM Unit	×	×	×	×

ICT Infrastructure at the Libraries

Table-5 shows ICT infrastructure of selected IIMs library and found that all the libraries are having good infrastructural facilities like full AC, internet, wi-fi, remote access facilities, RFID, CCTV, library portal, institutional repository, digital library etc. Moreover, all the libraries are fully automated with integrated library management software. All the library are participated in library consortium to get e-resources but none of the library has started services through mobile phone and SMS alert service but IIMA is planning to provide mobile based library service very soon.

Table-5: ICT Infrastructure

IT Infrastructural Facilities	IIM – C	IIM - A	IIM - B	IIM – L
Full AC	√	√	√	√
Internet	√	√	√	√
Wi-Fi	√	√	√	√
Remote Access	√	√	√	√
RFID	√	×	×	√
CCTV	√	√	√	√
Fully Automated	√	√	√	√
Library Portal	√	√	√	√

Digital Library	√	√	√	√
Library Consortium	√	√	√	√
Services through Mobile Phone	×	×	×	×
SMS Alert Service	×	×	×	×

Knowledge Identification Process

In case of knowledge identification two factors are identified- one is knowledge audit and employees' skill white page. A knowledge audit is a process of determining the status of critical knowledge in an organization, a way of 'knowing what is known to others.' It is the most important first phase, stage of a KM initiative and the foundation for the development of a KM strategy. Similarly employees' skill white page is a tool to know what knowledge and expertise is possessed to whom within the organization to perform a particular job or mission. It is like a staff directory, in electronic form.

Table-6 shows the respondent response with respect of these two parameters and reveals that majority of the respondents from all the three categories are responding negatively towards the factors related to Knowledge Identification. It means majority of the select institutions are not performing well in Knowledge Identification.

Table-6: Knowledge Identification

KI	Variables	Category of respondents wise distribution		
		Librarians	**Teachers**	**Students**
KI 1	Disagree	75.0%	62%	66%
	Undecided	25%	20%	25%
	Agree	-	16%	9%
	Total	100%	100%	100%
KI 2	Disagree	50.0%	56%	58%
	Undecided	25%	29%	25%
	Agree	25%	14%	17%
	Total	100%	100%	100%

Knowledge Acquisition Process

In academic institutions, many established practices has been followed to acquires knowledge like buying journals, research reports, books, participating in external professional networks and associations, inviting or hiring experts from outside, participating training programmes, workshops, seminars etc.

Table-7 presents the responses on the factors related to Knowledge Acquisition in selected IIMs library and found that that majority of the respondents from all the three categories have responded positively towards the factors related to Knowledge Acquisition. It denotes that majority of the select institutions are performing well in Knowledge Acquisition process. This segment of KM practices is doing well in selected IIMs library.

Table-7: Knowledge Acquisition Process

KA	Variables	Category of respondents wise distribution		
		Librarians	**Teachers**	**Students**
KA 1	Disagree	-	15%	13%
	Undecided	-	5%	12%
	Agree	100%	80%	75%
	Total	100%	100%	100%
KA 2	Disagree	-	11%	13%
	Undecided	-	14%	12%
	Agree	100%	75%	75%
	Total	100%	100%	100%
KA3	Disagree	-	8%	9%
	Undecided	-	13%	13%
	Agree	100%	79%	78%
	Total	100%	100%	100%
KA4	Disagree	25%	16	15%
	Undecided	25%	26%	27%
	Agree	50.0%	58%	58%
	Total	100%	100%	100%
KA5	Disagree	-	14%	8%
	Undecided	25%	16%	13%
	Agree	75%	70%	79%
	Total	100%	100%	100%
KA6	Disagree	-	7%	8%
	Undecided	25%	5%	7%
	Agree	75%	88%	85%
	Total	100%	100%	100%

Knowledge Creation Process

Knowledge creation means formation of new ideas through interaction between tacit and explicit knowledge of human beings. Knowledge creation according to the Nonaka's SECI model[9] is about continuous transfer, combination, and conversions with different types of knowledge, as users practice, interact, and learn. Cook and Brown (1999)[10] distinguish between knowledge and knowing, and suggest that knowledge creation is a product of the interplay between them.

Academic environment, knowledge can be created in various ways like brainstorming sessions, undertaking projects, research output etc., reward and recognition for developing new knowledge and for testing new ideas etc. Table-8 has displayed the responses on the factors related to knowledge creation practices in selected IIMs library and after analysis found that majority of the respondents, of all the categories have responded positively towards the factors related to knowledge creation. It expresses that majority of the select institutions are performing well in knowledge creation parameters under KM practices.

Table-8: Knowledge Creation Process

KC	Variables	Category of respondents wise distribution		
		Librarians	**Teachers**	**Students**
KC 1	Disagree	-	15%	13.1%
	Undecided	25%	5%	11.6%
	Agree	75%	80%	75.3%
	Total	100%	100%	100%
KC 2	Disagree	-	8%	2%
	Undecided	-	7%	11%
	Agree	100%	85%	87%
	Total	100%	100%	100%
KC3	Disagree	-	7%	9%
	Undecided	-	3%	3%
	Agree	100%	89%	88%
	Total	100%	100%	100%
KC4	Disagree	25%	16	15%
	Undecided	25%	25%	27%
	Agree	50%	58%	58%
	Total	100%	100%	100%

Knowledge Documentation Process

In an academic institution knowledge can be documented through various ways like institutional repository, internal databases, Wiki, Exit interviews, handbooks and work guidelines, documentation of failures and successes etc.

Table-9 shows the responses on the factors related to knowledge documentation practices in selected IIMs library reveals a mixed response from respondents. Factors like KD3, KD4, KD5, KD6 and KD7 are found with negative responses in all three categories on the contrary while KD1 and KD2 factors are showing the opposite result. The analyses conclude that knowledge documentation process is not performing in well manner in the select institutes, but it is exist and there is hope for improvement in near future.

Table-9: Knowledge Documentation

KD	Variables	Category of respondents wise distribution		
		Librarians	**Teachers**	**Students**
KD 1	Disagree	25%	12%	14%
	Undecided	-	28%	31%
	Agree	75%	60%	55%
	Total	100%	100%	100%
KD 2	Disagree	-	11%	13%
	Undecided	-	14%	12%
	Agree	100%	75%	75%

	Total	100%	100%	100%
KD3	Disagree	75%	69%	78%
	Undecided	25%	13%	12%
	Agree	-	18%	9%
	Total	100%	100%	100%
KD4	Disagree	100%	58%	57%
	Undecided	-	17%	16%
	Agree	-	25%	27%
	Total	100%	100%	100%
KD5	Disagree	75%	70%	79%
	Undecided	25%	16%	13%
	Agree	-	14%	7%
	Total	100%	100%	100%
KD6	Disagree	87.5%	88%	85%
	Undecided	12.5%	6%	8%
	Agree	-	6%	7%
	Total	100%	100%	100%
KD7	Disagree	50.0%	73%	77%
	Undecided	25%	20%	14%
	Agree	25%	7%	9%
	Total	100%	100%	100%
KD8	Disagree	25%	16%	15%
	Undecided	-	15%	17%
	Agree	75%	69%	68%
	Total	100%	100%	100%

Knowledge Sharing Practices

In an academic environment knowledge can be shared through institutional portals, institutional repositories, discussion forums, social networks, chat rooms, blogs, professional meetings, collaborative research work, job rotation etc. Table-10 displayed the responses on the factors related to knowledge sharing in KM system. Here it is seen that majority of the respondents of all three categories responded positively towards the knowledge sharing factors like institutional portals, institutional repositories, discussion forums, social networks, chat rooms, blogs etc. It means majority of the select institutes are performing well in case of knowledge sharing. Some factors under knowledge sharing parameters like- knowledge sharing through professional meetings, collaborative research work, job rotation etc. reflected with mixed responses. It mean these sector are little week and need to improve in future.

Table-10: Knowledge Sharing

KS	**Variables**	**Category of respondents wise distribution**		
		Librarians	**Teachers**	**Students**
KS 1	Disagree	-	5.0%	1%
	Undecided	25%	20.0%	13%
	Agree	75%	75.0%	86%

	Total	100%	100%	100%
KS 2	Disagree	-	2%	3%
	Undecided	-	13%	10%
	Agree	100%	85%	87%
	Total	100%	100%	100%
KS3	Disagree	-	1%	-
	Undecided	-	2%	3%
	Agree	100%	97%	97%
	Total	100%	100%	100%
KS4	Disagree	-	16%	9%
	Undecided	25%	25%	27%
	Agree	75%	59%	64%
	Total	100%	100%	100%
KS5	Disagree	-	13%	7%
	Undecided	25%	16%	13%
	Agree	75%	70%	80%
	Total	100%	100%	100%
KS6	Disagree	-	12%	14%
	Undecided	25%	28%	31%
	Agree	75%	60%	55%
	Total	100%	100%	100%
KS7	Disagree	-	7%	7%
	Undecided	-	5%	8%
	Agree	100%	88%	85%
	Total	100%	100%	100%
KS8	Disagree	-	63%	48%
	Undecided	25%	20%	34%
	Agree	75%	17%	18%
	Total	100%	100%	100%
KS9	Disagree	50.0%	17%	25%
	Undecided	25%	45%	48%
	Agree	25%	38%	27%
	Total	100%	100%	100%

Knowledge Utilization Practices

Knowledge utilization is one of the most important practices of KM cycle because all the efforts under KM practices have been done for the proper and maximum utilization of knowledge only. Table-11 shows the responses on the factors related to knowledge utilization. Here it is seen that majority of the respondents of all three categories have responded positively towards the factors related to knowledge utilization. It shows that majority of the select institutes are utilizing their internal knowledge in very well manner.

Table-11: Knowledge Utilization

KU	Variables	Category of respondents wise distribution		
		Librarians	**Teachers**	**Students**
KU 1	Disagree	-	1%	2%
	Undecided	-	13%	7%
	Agree	100%	86%	91%
	Total	100%	100%	100%
KU 2	Disagree	25%	22%	14%
	Undecided	25%	33%	41%
	Agree	50%	45%	45%
	Total	100%	100%	100%
KU3	Disagree	1%	7%	9%
	Undecided	12%	14%	13%
	Agree	87%	79.%	78%
	Total	100%	100%	100%
KU4	Disagree	-	13%	7%
	Undecided	25%	16%	14%
	Agree	75%	71%	79%
	Total	100%	100%	100%
KU5	Disagree	-	13%	7
	Undecided	-	16%	13
	Agree	100%	71%	80%
	Total	100%	100%	100%
KU6	Disagree	-	6%	9%
	Undecided	-	16%	17%
	Agree	100%	78%	74%
	Total	100%	100%	100%

Existence of Knowledge Management (KM) Tools

Here it is tried to find out the knowledge management tools available at the select institutes, from the librarians / library in-charge of respective library and asked to state the status of availability of the Tacit and Explicit KM tools at their institutes in presented in table-12 A and 12B.

(a) Existence of Tacit KM Tools

Tacit knowledge is considered as the most valued knowledge of an organization. It is sometimes described as know-how, which is deeply rooted in action, commitment and involvement. Because of this, tacit knowledge is often context dependent and personal in nature. As such, it is very difficult to articulate record and communicate. Table-12A shows the existence of tacit KM tools and analysis reflects that tacit knowledge management is not getting priority in none of the selected institutes. Tacit knowledge management techniques like Knowledge audit, knowledge harvesting, exit interview, collaborative research workspace, recording of classroom lectures recording of laboratory works etc. are not practicing in an official way in any of the select institutions. Only few institutes are practicing in tacit KM tools like brain storming sessions,

employees' skill white pages, discussion forums, social networking, chat-rooms etc. but again it is not in an organized way.

Table-12A: Existence of Tacit KM Tools

Tacit KM Tools	IIMs			
	IIM–C	IIM-A	IIM-B	IIM-L
Recording of Classroom Lectures	×	×	×	×
Recording of Laboratory Works	×	×	×	×
Brain Storming Sessions	×	√	√	√
Employees' Skill White Pages	√	√	√	√
Discussion Forums	√	√	√	√
Social Networking	√	√	√	√
Chat-rooms	√	√	√	√
Collaborative research workspace	×	√	×	√
Knowledge Harvesting	×	√	×	√
Knowledge Audit	×	×	×	×
After Action Reviews	√	√	√	√
Exit Interviews	×	√	×	√

Table-12B: Existence of Explicit KM Tools

Explicit KM Tools	IIMs			
	IIM–C	IIM-A	IIM-B	IIM-L
Portal	√	√	√	√
Institutional Repository	×	√	√	√
Web2.0				
• Blogs	√	√	√	√
• Wikis	√	×	√	√
• Instant Messaging	×	×	×	×
• Social Networking	√	√	√	√
• RSS Feeds	√	√	√	√
• Podcasting	×	×	×	×
• Tagging	×	×	×	×

(b) Existence of Explicit of KM Tools

Explicit knowledge is formalized and codified. As a result it is sometimes referred to as 'know what'. As such, it is fairly easy to identify, store and retrieve. This type of knowledge can easily be handled by knowledge management systems, facilitating the storage, retrieval and utilization. Table-12B indicates that, more knowledge, managed in all the select institutes are explicit in

nature. Explicit knowledge management tools like portal and institutional repository are adopted in most of the select institutes; Moreover, web2.0 tools like blog, wikis, instant messaging, podcasting, tagging & social bookmarking etc. are yet to be practiced in most of the select institutes.

Discussion and Conclusion

A tool is used for any item to reach a particular goal, especially one that is not consumed in the process. The knowledge of constructing, obtaining and using tools is technology. Knowledge management tools are designed to assist knowledge management processes, whether they are physical items or verbally share work practices. This leads to at least four key functional requirements for basic knowledge management as discussed by Alavi & Leidner, 2001 and stated that "knowledge management tools should help the user to gather appropriate information when it is needed rather than require the user to hunt through data in an attempt to identify something salient". Based on two different types of knowledge, i.e. Tacit and Explicit, we can find two different types of KM tools - Tacit Knowledge Management Tools and Explicit Knowledge Management Tools. In the analysis it is clearly seen that tacit knowledge management is not getting priority in none of the selected institute at present. Tacit knowledge management techniques (like knowledge audit, knowledge harvesting, exit interview, collaborative research workspace, recording of classroom lectures, recording of laboratory works etc.) are not practicing in an official way in any of the select institutions but in explicit knowledge management tools, select institutes are explicit in nature. Explicit knowledge management tools like- portal and IR are used in most of the select institutes; Moreover, web2.0 tools like blog, wikis, instant messaging, podcasting, tagging etc. are yet to be practiced in most of the select institutes.

The study examined the status of KM practices used by selected apex management institutes library. In the current uncertain and ever-changing technological environment, knowledge has become the single certain source for sustainable development. Learning from past mistakes and avoiding duplication of work, compelling each organization to look for ways to make the best use of technology for managing its internal knowledge. The academic institutions should give more importance to all the knowledge management processes i.e. Knowledge Identification, Knowledge Acquisition, Knowledge Creation, Knowledge Documentation, Knowledge Sharing and Knowledge Utilization. Indeed, all these KM processes should be performed in an organized and formal way and a separate ' Knowledge Management Unit' in each institute is very much essential now to coop with the present challenges.

References

1. Young, Ron. (2005), "What is Knowledge Management?" Retrieved from http://www. knowledge-managementonline.com/what-is-Knowledge-Management.html (accessed on 20 April, 20017).

2. David, Tranfield , David Denyer , Javier Marcos & Mike Burr, (2004). Co-producing management knowledge. *Management Decision*, 42 (3/4), 375-386, available at: https://doi.org/10.1108/00251740410518895 (accessed on 15 April, 20017).
3. Ratcliffe Martin, V., Coakes, E. & Sugden, G. (2000). Enhancing knowledge acquisition and transfer in the university sector. Available at: http://users.wmin.ac.uk/~coakese/knowledge/bit2000.html (accessed 15 April, 20017).
4. Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1),107-136
5. Wormell, Irene. (2004). Social Science Libraries Section: aids in creation of new Knowledge Management Section. *IFLA Newsletter*. 2004:1
6. Jain, P. (2007). An empirical study of knowledge management in academic libraries in East and Southern Africa. *Library Review*, 56(5), 377-392.
7. Webster, M. (2007). The role of library in knowledge management. Knowledge management: social, cultural and theoretical perspectives. Ed. R. Rikowski. Oxford: Chandos publishing; 77-91.
8. Martin, J. (2008). Personal knowledge management: the basis for corporate and institutional knowledge. In Martin, J. and Wright, K. (Eds.), Managing Knowledge: Case Studies in Innovation, Edmonton: Spotted Cow Press.
9. Nonaka, I. & Takeuchi, H. (1995). The knowledge creating company: how Japanese companies create the dynasties of innovation. Oxford: Oxford University Press
10. Cook, S.D., & Brown, J.S. (1999), Bridging Epistemologies: the Generative Dance between Organizational Knowledge and Organizational Knowing. *Organization Science*, 10 (4).
11. Chakraborty, Nirmali & Laloo, Bikika. (2013). Knowledge Management through Academic Portal: A Case Study of Bodhidroom E-learning Portal. *World Digital Libraries*. 6 (2). 77-92.
12. Chakraborty, Nirmali (2016). Knowledge Management in IIM Bangalore: A Case Study. In Shukla, A. and Verma, M. K. Librarianship: A Journey from Clay Tablet to Fablet, New Delhi: Shree Publishers.