



# A STUDY ON KNOWLEDGE MANAGEMENT PRACTICES IN EDUCATIONAL INSTITUTIONS AT MADANAPALLE, ANDHRA PRADESH

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## Chapter 1

### INTRODUCTION

A system for managing knowledge in organizations that supports the generation, capture, storage, and dissemination of information is referred to as a knowledge management system (KM System). A knowledge management (KM) system's goal is to give staff members easy access to the organization's recorded base of knowledge, sources, and solutions. An engineer might be aware of the metallurgical makeup of an alloy that dampens noise in gear systems, for instance, according to a typical claim supporting the development of a KM system. By disseminating this knowledge throughout the company, we can improve engine design and provide concepts for brand-new or upgraded machinery. Universities and other organizations use knowledge to create and maintain competitive advantages. Universities are aware that their ignorance can be both a competitive advantage and their "Achilles' heel". This makes it necessary for all universities to manage knowledge as a resource for the organization. The popularity of managing organizational knowledge as a management technique in universities has increased along with the number of research projects being done on the subject (Koenig, 2012). It is evident that knowledge management (KM) is becoming seen as a priceless intangible asset unto itself. The effective utilisation of KM is crucial for decision-making and strategy formulation, and the success of companies depends on it.

As a result of this insight, they are currently working to handle knowledge in a more organized and productive manner. Organizations also use KM to promote knowledge creation and sharing, which is said to enhance productivity, innovation, competitiveness, and interpersonal relationships within those organizations as well as produce the best learning, problem-solving, and decision-making outcomes. Education today is subject to the

same conditions of the marketplace. Na Ubon and Kinble, 2015 assert that profound changes in competition have made universities think like business. The educational markets are becoming global as they have to adjust themselves and develop strategies to respond rapidly to the changes in technologies and increasing demands of stakeholders. A promising direction regarding the application of KM in universities is the development and implementation of communities of practice (CoPs). The main objective of CoPs is to establish a structure where knowledge is shared and exchanged among various members within a given domain. The CoPs play an important role in the management of the tacit and explicit knowledge that the universities' community members own (Wenger, 2012). They also support teaching, research, learning and administrative activities.

KMS systems deal with information (although Knowledge Management as a discipline may extend beyond the information centric aspect of any system) so they are a class of information system and may build on or utilize other information sources. Distinguishing features of a KMS can include:

**Purpose:** KMS will have an explicit Knowledge Management objective of some type such as collaboration, sharing good practice or the like.

**Context:** One perspective on KMS would see knowledge is information that is meaningfully organized, accumulated, and embedded in a context of creation and application.

**Processes:** KMS are developed to support and enhance knowledge-intensive processes, tasks, or projects of e.g., creation, construction, identification, capturing, acquisition, selection, valuation, organization, linking, structuring, formalization, visualization, transfer, distribution, retention, maintenance, refinement, revision, evolution, accessing, retrieval and last but not least the application of knowledge, also called the knowledge life cycle.

**Participants:** Users can play the roles of active, involved participants in knowledge networks and communities fostered by KMS, although this is not necessarily the case. KMS designs are held to reflect that knowledge is developed collectively and that the "distribution" of knowledge leads to its continuous change, reconstruction, and application in different contexts, by different participants with differing backgrounds and experiences.

**Instruments:** KMS support KM instruments, e.g., the capture, creation and sharing of the codifiable aspects of experience, the creation of corporate knowledge directories, taxonomies or ontologies, expertise locators, skill management systems, collaborative filtering and handling of interests used to connect people, the creation and fostering of communities or knowledge networks.

## 1.1 Emergence of Knowledge Management

Additionally, management consulting firms like McKinney's showed a lot of interest in the subject around the start of the twenty-first century. Last but not least, a search on Amazon for the term "Knowledge Management" illustrates the enormous volume of books and reports that have been created since 1995 on the subject. The number of scholarly publications and articles published on the subject of knowledge management increased exponentially in the late 1990s as well. Thus, surveys by Scarborough & Swan (2001) and Wilson (2002) found that interest in the subject was essentially nonexistent in the mid-1990s, but that starting around 1996, the number of publications on the subject increased dramatically. Both these articles, however, suggested that there was a risk that knowledge management was a passing fad (Wilson is particularly scathing and talks of knowledge management as a bandwagon 'without wheels'), and that there was likely to be an 'impending decline' of interest in the topic (Scarborough & Swan 2001, 56). However, contemporary analysis suggests such a decline has not occurred, and that the early years of the twenty-first century saw a sustained interest in the topic.

Between 2000 and 2006, at least 110 articles per year were published on knowledge management, with the average number of articles per year being 129. This compares to the peak of just under 160 articles published on the topic in 1998 as reported by Scarborough & Swan (2001). The ongoing academic interest in knowledge management is also visible in the number of other ways, such as in the emergence of a number of conferences on the topic which have become regular annual events, as well as the topic of learning and knowledge now becoming regular themes at many long-standing management and organization conferences.

Finally, in relation to academic journals, papers on learning and knowledge in organizations have consistently been published in top tier journals (such as Journal of Management Studies, Organization Studies, Organization Science) and there has also been the birth of a number of journals specifically concerned with issues of learning and knowledge management (such as the Journal of the Knowledge Management, Knowledge and Process Management and Knowledge Management: Research and Practice). It thus appears that the current level of sustained interest in the topic of knowledge management is likely to continue in the academic arena for the seeable future.

## Perspectives on Knowledge Management

Finding out the meaning managers give to the idea of knowledge management was one of the study's goals. An information-based perspective, a technology-based perspective, and a culture-based perspective all came into focus. According to managers, the information-based approach views knowledge management as being about informational traits including easily accessible information, real-time information, and actionable information. Some people claimed that the informational core of knowledge management was made up of free text and notions. Also, in terms of the information perspective, several managers mentioned their view that knowledge management was concerned with reducing the overload of information by “filtering the gems from the rocks”. There was an apparent concern with the extraordinary amount of information that can now easily be gathered and disseminated via information technologies. The managers expressed a desire to obtain competitive advantage from information itself (as opposed to associating competitive advantage with any particular information technology). Lastly, some managers thought very specifically of knowledge management as being a “corporate yellow pages” or a “people to people information archive”. In other words, they viewed knowledge management as a means of keeping track not so much of knowledge itself, but of who held the knowledge and how to locate them. Knowledge was not distinguished from information or data. Rather, the words were evidently used interchangeably. However, the managers were implicitly making distinctions among the terms. KM initiatives are expanding across institutions of higher learning. The competitive benefits of KM efforts have been demonstrated and documented in the industry, government and in the academic world. For instance, towards achieving the objective of its Vision 2020, Malaysian Public Institutions of Higher Education’s contribution to the Vision is the production of knowledgeable human power or knowledge workers to the country. As other non-profit organizations, Malaysian Public Institutions of Higher Education have taken the challenge of the implementation of KM in their respective organizations on board (Abu- Bakar & Alias, 2005). Many educational institutions want better ways of transforming knowledge into effective decision-making and action. Thus, institutions of higher learning focus on making individual knowledge re-usable for the achievement of their missions. To achieve their institutional missions, that is, education, research and service to society, institutions of higher learning need to manage the processes associated with the creation of knowledge and innovation through shared ideas (AL-Hakim et al, 2012). As Sulisworo

(2012) argues, IHLs seek to share information and knowledge among the academic communities within and outside the institutions and normally those institutions that succeed in knowledge management are likely to view knowledge as an asset and to develop organizational norms and values which support knowledge creation and sharing. Therefore, knowledge management can become part of an organization's capital asset and to achieve the institutional mission, that is, education, research and service to society, IHLs need to manage consciously and explicitly the processes associated with the creation of knowledge, its sharing and re-use.

### **Importance of KM**

Knowledge management is crucial because it improves an organization's capacity for effective decision-making. By ensuring that every employee has access to the collective knowledge held by the company, a more intelligent workforce is created that is better able to make timely, educated decisions, benefiting the entire business. Knowledge management lowers employee turnover increases consumer access to best practices, and fosters innovation inside the organization. Knowledge management is becoming more and more significant. Building your business in an intelligent, adaptable approach is one of the best ways to stay ahead of the curve as the market becomes more and more competitive. You must be able to recognize problems from a distance and react fast to new information and innovations. The respondents who reported that their organizations currently had or were developing KMS expressed the idea that the KMS were designed to achieve both process results and organizational outcomes. The process improvements involved shortening the proposal time for client engagements, saving time, improving project management, increasing staff participation, enhancing communication, making the opinions of plant staff more visible, reducing problem-solving time, better serving the clients, and providing better measurement and accountability. These process improvements can be thought of as either relating to communication improvements or efficiency gains. The process improvements then, in the minds of the managers, led to cost reduction of specific activities, increased sales, personnel reduction, higher profitability, lower inventory levels, ensuring consistent proposal terms for worldwide clients and marketing related outcomes (i.e., better targeted marketing, locking-in customers, and what one respondent termed "proactive marketing"--approaching clients "for solutions to problems they don't even face"). Thus, the perceived organizational benefits of KMS can be thought of primarily as being of a financial, marketing, and general nature.

## 1.2 Applying KM In Higher Education

Using knowledge management techniques and technologies in higher education is as vital as it is in the corporate sector. If done effectively, it can lead to better decision-making capabilities, reduced “product” development cycle time (for example, curriculum development and research), improved academic and administrative services, and reduced costs. Relying on the institutional knowledge of unique individuals can hamper the flexibility and responsiveness of any organization. As institutions launch knowledge management initiatives, they can learn lessons from their counterparts in the corporate sector. Some key points to remember are: Start with strategy. Before doing anything else, determine what you want to accomplish with knowledge management. Organizational infrastructure human resources, financial measurements of success, and information technology should support knowledge management. Think of technology as an enabler, and measure the impact of KM in financial terms, such as cost reductions, customer satisfaction, and speed to market. Seek a high-level champion for the initiative someone who believes in its benefits and who can advocate as needed. Select a pilot project for knowledge management ideally one with high impact on the organization but of low risk to build credibility for knowledge management. If possible, make the pilot one that participants will enjoy and find rewarding. Develop a detailed action plan for the pilot that defines the process, the IT infrastructure, and the roles and incentives of the pilot project team. After the pilot, assess the results and refine the action plan. Knowledge management systems are employed by organizations to meet the organizational objectives of improved performance, competitive advantage, experience transfer and the development of collaborative practices. Duffy(1999) defines knowledge management as the “identification, growth and effective application of an organization’s critical knowledge” defines Knowledge management is “the systematic, holistic approach to the sustainable improvement of the handling of knowledge on all levels of an organization” (Eppler,2002). According to Nakkiran and Sewry (2002, pp. 235-245), knowledge management is the process of identifying, growing and effectively applying an organization’s existing knowledge in order to achieve the organization’s goals, while creating an organizational culture that permits further knowledge creation. From these and other views about knowledge management, it is inferred that a good knowledge management system should be integrated into the daily routines of the people enabling a continuous knowledge flow in the organization. A knowledge management system is based on capturing, storing,

transforming and sharing the organizational knowledge. Information technology (IT) is a key enabler for KM systems and facilitates the capture, storage, transformation and dissemination of knowledge. The concept of knowledge is a large and extremely complex one and is not easily defined as one concise definition. As Ackoff noted; data are defined as symbols that represent properties of objects, events and their environment. They are products of observation but are of no use until they are in a usable, relevant form. The difference between data and information is a functional difference rather than a structural one. Information then is contained in descriptions, answers to questions that begin in such words as who, what, when and how many. Information systems generate, store, retrieve and process data and thus one can say that information is inferred from data. Knowledge on the other hand is “know- how” (rather know-what or know-who) and is what makes possible the transition from information into instructions. Knowledge can be obtained either by transmission from another who has it, by instructions or by extracting it from experience. This means that data are symbols (for instance numbers, letters or letters that form words) that represents something about reality, but unless put into a context through some kind of question they do not give any meaning. And when you do just that (put it into some kind of context), it becomes information. Knowledge on the other hand is your ability you use this information into executing specific task. There are two kinds of knowledge. One is explicit knowledge, which can be expressed in words and numbers and shared in the form of data, scientific formulae, product specifications, manuals, universal principles, and so forth. This kind of knowledge can be readily transmitted across individuals formally and systematically. Tacit knowledge is highly personal and hard to formalize, making it difficult to communicate or share with others. Subjective insights, intuitions and hunches fall into this category of knowledge. Furthermore, tacit knowledge is deeply rooted in an individual's action and experience, as well as in the ideals, values or emotions he or she embrace.

### 1.3 Need of Study

Knowledge is widespread but somewhere knowledge management is considered as a general process. To see the role of knowledge management in education sector. To see whether the knowledge is being acquired or it is by experience. To see which kind of knowledge, need to be managed by which knowledge management practice. To see how innovatively the education sector is managing knowledge.

Higher Educational institutions are said to be in the knowledge business since they are involved in knowledge creation, dissemination and learning. Higher Educational institutes aim to prepare new generations with the skills, cultural and scientific literacy, flexibility, and capacity for critical inquiry and moral choice necessary to make their own contribution to society. As institutions launch KM initiatives, they can learn lessons from their counterparts in the corporate sector. Some key points to remember are: Starting with strategy. Before doing anything else, determining what we want to accomplish with KM. Organizational infrastructure human resources, financial measurements of success, and information technology should support KM. Think of technology as an enabler. Seeking a high-level champion for the initiative, someone who believes in its benefits and who can advocate as needed. Selection a pilot project for KM ideally one with high impact on the organization but of low risk to build credibility for knowledge management. Developing a detailed action plan for the pilot that defines the process and the roles and incentives of the pilot project team. After the pilot, results assessment and refining the action plan.



## 1.4 Scope of Study

The study is limited to Madanapalle city and study is focused on 5 selected educational institutions i.e.,

1. Madanapalle Institute of Technology & Science
2. Viswam Engineering College
3. Golden Valley Integrated Campus
4. Aditya College of Engineering
5. Besant Theosophical College

## 1.5 Significance of the Study

Any organization that wants to make the most of its internal knowledge must implement knowledge management as a vital activity. Some of the most important advantages of knowledge management are listed below.

**Better decision-making:** Organizations can make better choices by gathering and organizing knowledge. This is because individuals have easier access to the knowledge they need to make the best decisions, as well as more accurate and current information.

**Innovation growth:** Knowledge management can promote innovation by enticing staff members to contribute their thoughts and perspectives. New goods, services, and procedures may result from this, aiding the business in maintaining its competitiveness. **Enhanced collaboration:** Knowledge management systems can facilitate collaboration between employees by making it easy to share information and ideas. This can lead to better teamwork and more effective problem-solving.

**Improved customer service:** By capturing and organizing knowledge about customers, organizations can provide better customer service. They can quickly access information about a customer's history with the organization and provide personalized service that meets their needs.

**Reduced risk:** Knowledge management can help organizations to reduce risk by ensuring that employees have access to accurate and up-to-date information. This can help to prevent mistakes and avoid potential legal or financial issues.

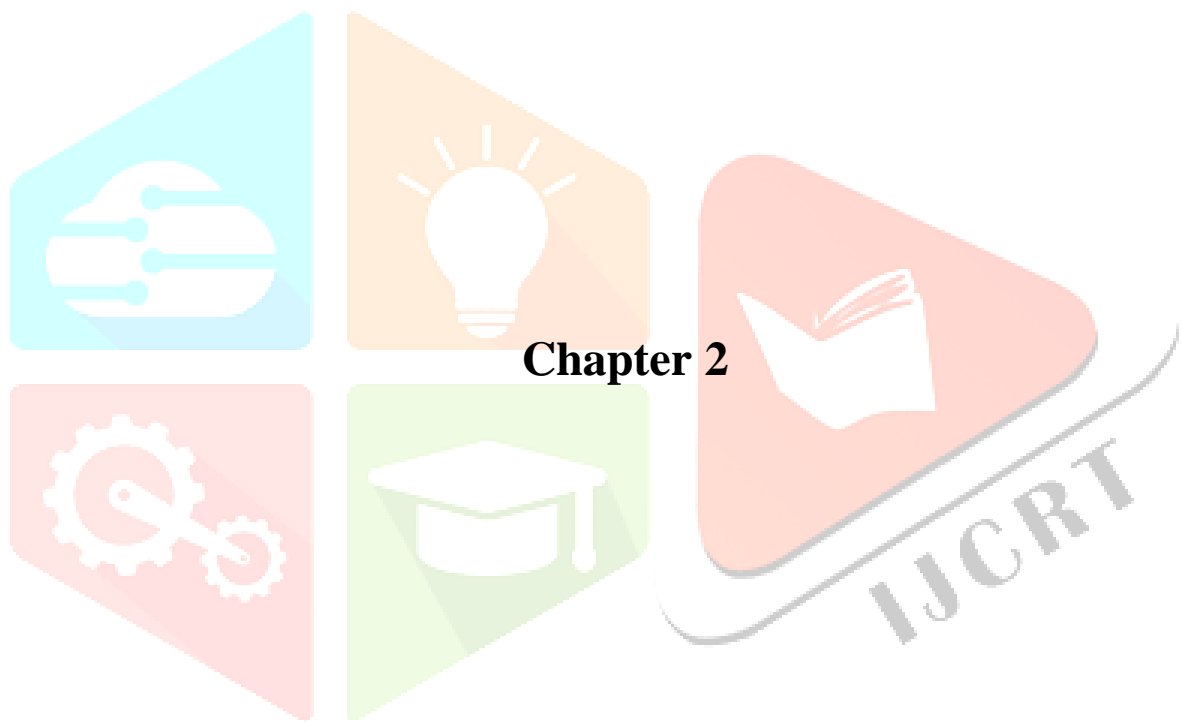
Better employee retention: Knowledge management can help organizations to retain their employees by creating a culture of learning and development. Employees are more likely to stay with an organization that values their knowledge and invests in their professional growth.

Increased efficiency: Knowledge management can help organizations to be more efficient by reducing the time and resources required to find information. By creating a centralized knowledge repository, employees can quickly access the information they need without wasting time searching for it.

Overall, knowledge management is critical for organizations that want to stay competitive and agile in a rapidly changing business environment. It helps organizations to effectively utilize the knowledge that exists within the organization and to continuously improve their processes, products, and services.

## 1.6 Problem Statement

All organizations, whether they are for profit or nonprofit, are built on knowledge. Therefore, to develop compatibility, efficiency, and effectiveness of an organization in a present and especially a future environment (which is increasingly dynamic and chaotic), excellent knowledge management is required. So it makes sense that management interests have recently been focused on knowledge management as a science and a practice. KM has been recognized as a notion as a result. Knowledge Management popularity will grow permanently. Not only because of the transformation of all organizations into knowledge and human civilization organizations in the Society of Knowledge, but also because of the fact that the existence and development of Knowledge organization and the Society of Knowledge will more and more depend on the level of development of Knowledge Management as a concept or theory. Finally, the popularity of KM will also grow if we intensify its development.



## LITERATURE REVIEW

Abubakar Mohammed Abubakar(2019) has examined that “Knowledge Management, decision-making style and organizational performance” A synthesis of existing Industry 4.0 literature depicts that knowledge management and decision making strategies are crucial factors for organizations. This article highlights the need and develops a framework for knowledge management and decision-making style by reviewing existing management literature. This research proposes a framework that supports the relationship between knowledge management enabling factors (i.e., organizational member's collaboration, T- shaped skills, learning and IT-support) and organizational performance, and the mediating effect of knowledge creation process. The article also proposes that decision-making style (i.e., intuitive and/or rational) will moderate the relationship between knowledge creation process and organizational performance. A set of propositions that represent an empirically- driven research agenda, and also describe the relationships between the focal variables are presented to enhance audience's understanding within a business context. Rodrigo Valio Dominguez and Gonzalez Manoel Fernando Martins(2017) has examined that “Knowledge Management Process: theoretical-conceptual research”, Knowledge Management (KM) is a subject that has aroused the interest of many researchers in the last decade, being great part of contributions driven by steps, named KM process. Because it is an embracing theme, publications about KM process have multidisciplinary contributions and, thus, this research aims to conceptualize this process, analyzing the main approach that guides the study of each stage, and also, to raise the main publications on the subject, classifying them as to their contribution area. To reach these goals, this article is oriented by theoretical-conceptual research, in which 71 articles were studied. The results indicate that the KM process consists of four stages: acquisition, storage, distribution, and use of knowledge. In the acquisition phase, the studied themes are organizational learning, knowledge inception, creative process and knowledge transformation. In the storage phase, the contributions deal with a person, an organization and information technology, while in the distribution phase the studies concentrate in social contact themes, practice community and sharing via information technology. And, finally, in the use phase, we address the form of use, dynamic capacity and retrieval and knowledge transformation. Adjei and Dei (2015) and Hey (2004) explain that the part of knowledge that is more easily definable involves the accumulation and assimilation of multiple pieces of information, once again providing structure to it in the form

of relationships between the information and internalizing or personalizing that knowledge by bringing it from the outside 'into' to the mind. Bolormaa Demchig (2014) examined that Knowledge management capability level assessment of the higher education institutions: Case study from Mongoli, Main purpose of this study is to conduct an assessment of knowledge management (KM) capability and to determine the current position of the knowledge management maturity of one of the higher education institutions of Mongolia. This study utilizes the Kulkarni and Freeze's (2004) organizational knowledge capability areas and Knowledge Management Capability Assessment (KMCA) model for the assessment. The findings and context of this study indicates that, as a whole, the university's current knowledge management capability maturity falls on the Level 1 of the KM Maturity. The study shows that both organizational knowledge capability areas and KMCA model suggested by Kulkarni and Freeze (2004) are applicable to the higher education context. Ramohlale (2014) define knowledge as a fluid mix of framed experience, values, contextual information and expert insight that provide a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. That is, knowledge comes with understanding. This understanding helps to distinguish between the various types of knowledge: tacit and explicit (Frost, 2012). Tacit knowledge, also referred to as know-how (Brown & Duguid, 2001), intuitive (Horvath, 2001), practical, or action- oriented knowledge is based on practice, acquired by personal experience, seldom expressed openly, often resembles intuitions and embodies beliefs and values (Smith, 2012). It can be shared through socialization and interaction between persons or groups in organizations. When tacit knowledge is articulated, it becomes explicit knowledge (Smith, 2012). Explicit knowledge sometimes called codified (Yeh, 2011), know-what (Brown & Duguid 2001), or academic knowledge (Smith, 2012) is the knowledge that has been processed by information systems, written down, codified or recorded, archived and protected by organizations (Yeh, 2011). Undu (2013) created another definition of KM: a discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving and sharing all of an organization's information assets. These assets may include people, systems, databases, documents, policies, procedures and previously uncaptured expertise and experience in individual workers. Ramohlale (2014) asserts that the ultimate aim of KM is to organize, share and put together knowledge to create substance and value in knowledge, retain key talent, improve customer service, boost innovation, achieve business objectives faster and better and promote the development of unique market offerings. This is achieved through an

integrated set of initiatives, systems and behavioral interventions to promote smooth flow and sharing of knowledge relevant to the business and to eliminate reinvention (Arun, 2005). Mamta Bhusry (2012) examined that Implementing Knowledge Management in Higher Educational Institutions in India: A Conceptual Framework , Abstract - Higher education institutions (HEIs) create and apply knowledge during their processes and activities. The growth in the number of HEIs in India in the last decade has increased competition and the pressures for performing better. This has forced the institutions to recognize the need for knowledge management (KM) initiatives which is a key asset. KM in HEIs involves the discovery capture of the knowledge created, its filtering and encapsulation and mapping it to the needs of the organization to derive value from its sharing throughout the organization. A competitive edge over others depends largely on the quality of KM that organizations are able to apply to their operations. The paper explores the functional domains of HEIs and the indicators that determine these domains. Further, the authors have evaluated the functional domains for information technology (IT) based knowledge management (KM) intervention and identified the benefits that are perceived. In order to reinforce the results, the authors have proposed a conceptual framework for the efficient capture, encapsulation, structuring, dissemination and employment of the organizational knowledge towards the organizational goals and objectives. If the framework is implemented, the authors feel it will result in enhanced transformation of organizational knowledge into decision making and actions. Dev Raj Adhikari(2010) has examined “Knowledge Management in academic institutions”. The purpose of this paper is to present a concept of knowledge among the campus chiefs and other university leaders to make them aware of how important knowledge management (KM) is to achieve quality education criteria. Marjan Laal (2010) examined that Knowledge management in higher education Marjan Laal ,This review article outlines the basic concepts of knowledge management (KM) in higher education (HE) institutes and gives a summing up of previous scientific works to ensure providing an effective and efficient understanding of it for an ever-changing environment. KM is a systematic process by which knowledge needed for an organization to succeed is created, captured, shared and leveraged. Nowadays, the pace of evolution has entered a rapid speed, and those who can't learn, adapt, and change from moment to moment simply won't survive. Current HE institutes recognize their valuable intelligences and have adopted their changing role in a society. Rudolf.W (2010) has examined that Conceptual Knowledge Processing is obliged to a pragmatic understanding of knowledge according to which human knowledge is obtained and supported in a process of

human thinking, reasoning, and communicating. It is based on a mathematical theory of concepts directed toward an interaction of formal and material thoughts. How this theoretical conception enables effects in the economic practice is explained in this paper, guided by the key processes of the organizational knowledge management. These key processes are knowledge identification, knowledge acquisition, knowledge development, knowledge distribution and sharing, knowledge usage, and knowledge preservation. Rene.P, (2010) has examined that though there is abundant literature on successful cases of organizations applying knowledge management (KM) measures, many KM initiatives have failed to achieve their knowledge and business goals. In order to foster decisions about the design of such initiatives, information is required on success factors and barriers when selecting KM measures. Multi agent-based simulation (MABS) is suggested as instrument to investigate potential effects of KM measures on dependent variables such as sharing of knowledge in organizations or business performance. For such a simulation, the concept of knowledge sharing, influencing factors and their impact on business and knowledge goals are modeled based on an extensive multi-disciplinary literature survey. Natalija Sedziuviene & Jolita Vveinhardt (2009) has examined The Paradigm of Knowledge Management in Higher Educational Institutions, The dynamics of the modern market, fast development of science and technology, changes in society require a new attitude to the management of organizations. New requirements are set to the employees as well. The understanding of the necessity to improve constantly, to raise the professional level becomes a very important trait of the employee along with the perfect professional knowledge. The professional must not only have new ideas, but also it is necessary to know and be able to use the experience of the organization, that is able to improve the work quality and productivity. The spreading of the telecommunication means such as internet allow creating a homogeneous global information storage system, that significantly raises the possibility of the information search and mastering. The penetration of informational and innovational technologies into all spheres of our lives, the usage of e-learning created preconditions to establish management systems. Luen.T(2009) has examined that while most would agree that effective knowledge management can improve the management of crises, it is surprising how little research has been done in this area. The study presents a framework designed to determine whether, and to what extent, knowledge management can positively impact crisis management (CM). A case study of two energy companies in Taiwan is conducted to investigate the relationships between knowledge strategies and critical CM factors. The research results indicate two main

findings. First, an organization needs to employ different knowledge strategies at different phases of a business crisis to fulfil its different knowledge needs and achieve the desired CM outcomes. Second, there are significant relationships among knowledge strategies, crisis phases, and crisis characteristics. Khan.M et.al (2008) examined that in the present emerging global economy, the focus has been shifted from manufacturing to service sector. Education sector, especially Technical Education System (TES), is characterized as highly process oriented intangibility and multi stakeholder situations. Difficulty arises in evaluating quality of education being imparted aggregating the inputs and outputs of the system. This paper proposes an alternative method viz. Data Envelopment Analysis (DEA) which can aggregate the input and output components in such situations for obtaining an overall performance measure. Kaur.R (2008) describe that Open Courseware is an innovative and bold idea. It aims to support learning and teaching programmed significantly. Learning material contained in an OCW provides learners an opportunity to gain knowledge beyond their routine classroom environments. These are in the digital form which can be accessed online, thus breaking the barriers of time and distance. Indian academics can play a significant role in creating OCW materials for the students to propagate the teaching and learning process diluting the limitations of traditional educational setup and begin a new culture of learning beyond Classroom. Zhaohao.S et.al (2007) has examined This paper examines, experience management and knowledge management, and their interrelationships. It also proposes process perspectives for both experience management and knowledge management, which integrate experience processing and corresponding management, knowledge processing and corresponding management respectively. The proposed approach will facilitate research and development of knowledge management and experience management as well as knowledge- based systems. Armada.L (2005) has examined the aim with knowledge management to increase the profit, through capturing, storing, sharing, and utilizing knowledge in an innovative way. Can knowledge management be of use in organizations as schools, where profit is of no interest? This article discusses the need for knowledge management from the perspectives of students, teachers and parents. These systems can be classified as support for (1) students' learning, (2) students and teachers regarding well-being, (3) teachers' decision making. The conclusion is that intelligent systems, such as knowledge-based systems, could be used in schools, facilitating knowledge management within the organization. Mavridis.D (2004) has examined that the performance of economic entities has been a research matter even in the ancient world. The human "genius" has been recognized as a vehicle for certain



valuable capabilities and as the critical enabler of transforming processes. But it has not been considered as an intellectual capitalizer or intellectual asset. This has happened recently in the promising field of intellectual capital and its related philosophy of knowledge management, although the related research status quo is still in its infancy. Applies the VAIC<sup>TM</sup> method in order to analyze the data of Japanese banks for the financial period 1 April 2000-31 March 2001. Analyzes the intellectual or human (HC) and physical capital (CA) of the Japanese banking sector and discusses their impact on the banks' value-based performance. Focuses on the actual status of HC and CA capital and its predictive, discriminative, and integrative impact on the "intellectual" added value-based performance situation. Confirms the existence of significant performance differences among the various groups of Japanese banks but also the differences between the Japanese and some European banks (Greece and Austria). Williams's et.al (2004) has examined that 'Blogging' - a contraction of the term 'web logging' - is perhaps best described as a form of micro-publishing. Easy to use, from any Internet connection point, blogging has become firmly established as a web based communications tool. The blogging phenomenon has evolved from its early origin as a medium for the publication of simple, online personal diaries. This paper explores the potential of blogs as learning spaces for students in the higher education sector. The paper concludes that blogging has the potential to be a transformational technology for teaching and learning. Ayer, M (2004) has examined that, This paper seeks to identify knowledge management concepts that relate to the implementation of Knowledge management Practices in education and also in collaborative arrangements. It also discusses about the challenges facing in higher education in India and the concept of Knowledge management in education and the new trends of education. It also explains about the Knowledge management and types of Knowledge management and their trends and new innovations of Knowledge management in current education scenario. Argote, L et.al (2003) has examined that the Management Science special issue on "Managing Knowledge in Organizations: Creating, Retaining, and Transferring Knowledge," we provide an integrative framework for organizing the literature on knowledge management. The framework has two dimensions. The knowledge management outcomes of knowledge creation, retention, and transfer are represented along one dimension. Brent Gallupe (2002) has examined that "knowledge management systems: surveying the landscape", Knowledge management systems (KMS) are the tools and techniques that support knowledge-management practices in organizations. The study of these systems consists of a small but growing body of literature.

In the last two years alone, at least four books, two special editions of journals and a number of academic and practitioner articles have been published related to this area. However, much of the work that has been published has been in the form of isolated survey studies, or anecdotal case studies into particular aspects of KMSs. This has made it difficult to build a cumulative body of knowledge into the development, use and management of these systems. The purpose of this paper is to ‘survey the current landscape’ of KMS and provide a framework for research into the development and use of these systems in organizations. Bhatt.G (2001) has examined that, Argues that the knowledge management process can be categorized into knowledge creation, knowledge validation, knowledge presentation, knowledge distribution, and knowledge application activities. To capitalize on knowledge, an organization must be swift in balancing its knowledge management activities. Such a balancing act requires changes in organizational culture, technologies, and techniques. A number of organizations believe that by focusing exclusively on people, technologies, or techniques, they can manage knowledge. By creating a nurturing and “learning-by-doing” kind of environment, an organization can sustain its competitive advantages. Leidner.D et.al (2001) has examined that in the past few years, there has been a growing interest in treating knowledge as a significant organizational resource. The objective of KMS is to support creation, transfer, and application of knowledge in organizations. Knowledge and knowledge management are complex and multi-faceted concepts. This paper provides a review and interpretation of knowledge management literatures in different fields with an eye toward identifying the important areas for research. Gray.P (2001) has examined that a wide variety of organizational practices have been proposed to support the creation, storage and transfer of knowledge, yet it is often unclear how these practices relate to one another in their contribution to organizational performance. This study develops a categorization system for knowledge management practices based on two dimensions: the practices' role in the problem-solving process, and the type of problem they address. By focusing attention on the importance of problem solving in transforming knowledge into business value, this research suggests a new way to understand the connection between knowledge management practices and organizational goals. Luen.T(2001) has examined that many organizations in the private or public sectors have started to realize the importance of knowledge management in streamlining their operations. This realization stems from the fact that Singapore, as a small country with no natural resources, has to rely on human capital and its people in positioning itself for the new economy. Many organizations in the public sector are knowledge-intensive

organizations and poor knowledge management practices might lead to high costs as a result of knowledge gaps and poor decisions. Rowley.J (2000) has examined that higher education institutions are in the knowledge business, since they are involved in knowledge creation and dissemination and learning. Identifies a number of existing facilities, systems or projects which contribute to knowledge management in higher education, such as libraries, and electronic collections of learning materials, networks for e-mail communication, and management information systems which provide data on the student profile. Concludes by noting that although knowledge based organizations might seem to have the most to gain through knowledge management, effective knowledge management may require significant change in culture and values, organizational structures, and reward systems. Aronson.J et.al (2000) has examined that Knowledge management (KM) is a process that deals with the development, storage, retrieval, and dissemination of information and expertise within an organization to support and improve its business performance. Organizations are realizing that knowledge is a crucial resource for organizations, and it should be managed judiciously. Organizations need to harness knowledge not only to stay competitive, but also to become innovative. KM requires a major shift in organizational culture and a commitment at all levels of a firm to make it work. Jungpil Hahn and Mani R. Subramani(2000) has examined “A Framework of Knowledge Management Systems: Issues and Challenges for Theory and Practice” As the basis of value creation increasingly depends on the leverage of the intangible assets of firms, knowledge management systems (KMS) are emerging as powerful sources of competitive advantage. However, the general recognition of the importance of such systems seems to be accompanied by a technology-induced drive to implement systems with inadequate consideration of the fundamental knowledge problems that the KMS are likely to solve. This paper contributes to the stream of research on knowledge management systems by proposing an inductively developed framework for this important class of information systems, classifying KMS based on the locus of the knowledge and the a priori structuring of contents. This framework provides a means to explore issues related to KMS and unifying dimensions underlying different types of KMS. Storey.J et.al (2000) has examined that, In this article author says that large numbers of organizations are taking great interest in the idea of knowledge management and many are launching knowledge management initiatives and programmes. A large proportion of such initiatives will fail. Yet, despite the injunctions to “learn from failure”, little detailed attention has been paid to why and how these apparently popular initiatives run into difficulties. The purpose of this article is to examine, in some

unusual detail, a significant example of a failed knowledge management initiative in order to analyze what went wrong and to identify the key learning points. Maryam Alavi and Dorothy E. Leidner(2001) has examined that “Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues, Knowledge is a broad and abstract notion that has defined epistemological debate in western philosophy since the classical Greek era. In the past few years, however, there has been a growing interest in treating knowledge as a significant organizational resource. Consistent with the interest in organizational knowledge and knowledge management (KM), IS researchers have begun promoting a class of information systems, referred to as knowledge management systems (KMS). The objective of KMS is to support creation, transfer, and application of knowledge in organizations. Knowledge and knowledge management are complex and multi-faceted concepts. Thus, effective development and implementation of KMS requires a foundation in several rich literatures. To be credible, KMS research and development should preserve and build upon the significant literature that exists in different but related fields. Sawan.J et.al (1999) has examined that, In this article author begins with a critical review of the literature on knowledge management, arguing that its focus on IT to create a network structure may limit its potential for encouraging knowledge sharing across social communities. Two cases of interactive innovation are contrasted. One focused almost entirely on using IT (intranet) for knowledge sharing, resulting in a plethora of independent intranets which reinforced existing organizational and social boundaries with electronic “fences”. While IT was used to provide a network to encourage sharing, there was also recognition of the importance of face-to-face interaction for sharing tacit knowledge. The emphasis was on encouraging active networking among dispersed communities, rather than relying on IT networks. Argues for a community-based model of knowledge management for interactive innovation and contrasts this with the cognitive-based view that underpins many IT-led knowledge management initiatives. Maryam Alav(1999) examined that Knowledge Management Systems: Issues, Challenges, And Benefits, The knowledge- based theory of the firm suggests that knowledge is the organizational asset that enables sustainable competitive advantage in hyper competitive environments. The emphasis on knowledge in today’s organizations is based on the assumption that barriers to the transfer and replication of knowledge endow it with strategic importance. Many organizations are developing information systems designed specifically to facilitate the sharing and integration of knowledge. Such systems are referred to as Knowledge Management System (KMS). Because KMS are just beginning to appear in organizations, little research and field data

exists to guide the development and implementation of such systems or to guide expectations of the potential benefits of such systems. This study provides an analysis of current practices and outcomes of KMS and the nature of KMS as they are evolving in fifty organizations. Shariq.S (1997) examined that Society is entering into an era where the future essentially will be determined by people's ability to wisely use knowledge, a precious global resource that is the embodiment of human intellectual capital and technology. As knowledge increasingly becomes the key strategic resource of the future the need to develop comprehensive understanding of knowledge processes for the creation, transfer and deployment of this unique asset are becoming critical. Educational institutions and training organizations and businesses and knowledge-based organizations in the public sector are in need of an integrative discipline for studying, researching and learning about the knowledge assets - human intellectual capital and technology.



## 2.1 KM Practices in Educational Institutions

During the administrative and academic procedures of higher education institutions, Knowledge is created. Individuals develop knowledge in the form of explicit knowledge in the form of papers, methods, outcomes, and tacit information in the procedure of experience, judgments, perspectives, and discernments. The problem is figuring out how to make this tacit and explicit information available to the institution as a centralized resource. The ability to capture and make available institutional memory will maintain continuity and expedite institutional learning. Instead, most HEIs are faced with the arduous issue of integrating their institutional memory in order to promote information exchange and judgment. Knowledge is developed in a variability of ways at various levels, and it is compulsory in a diversity of ways at each level. Teaching, assessment, evaluation, counseling, admissions, training, placement, and development and research are all administrative and academic activities that result in many important practices and studies that may be regarded as information in the framework of higher educational establishments (Savitri et al., 2013; Acevedo-Correa et al., 2020). Faculty, administration, academics, students, research, training and placement are only a few of the components or levels that make up an academic institution. All of these levels both develop and consume information, albeit the kind of knowledge differs depending on the level. It is critical to determine the information so each layer gives to the system and the information that each level needs to accomplish its duties and to discover effective ways to apply this knowledge at the locations of usage (Tejedor et al., 2019). The information demands at all stages must be met by a comprehensive KM system. In the academic world, knowledge management is a relatively recent discipline. Many future national and international events and seminars will focus on knowledge management (Prahawan et al., 2021). Many international universities are actively involved in knowledge management operations and research (Masete and Mafini, 2018). It is now gaining popularity in the sphere of education because of the necessity to reveal the intellectual potential accessible in institutions for the purpose of exchanging experiences. It has a lot of promise and should be just as important, if not more so, in the education sector. Information builds on previous knowledge, and historical events aid in the generation of new knowledge (Rahman Ahmad et al., 2020). Human efforts, which are produced *via* effective educational activities, scientific research, and producing novel concepts in the area of interest, are the primary source of knowledge development. All experience and understanding institutions, such as companies,

Research and Development (R&D) centers, and higher ed. academics from colleges to universities, are on the lookout for new ideas in their fields of study and contribute to the understanding in a variety of ways.

## **Selection of Educational Institutions for Study**

### **1. Madanapalle Institute of Technology & Science**

Madanapalle Institute of Technology & Science is established in 1998 in the picturesque and pleasant environs of Madanapalle and is ideally located on a sprawling 26.17 acre campus on Madanapalle - Anantapur Highway (NH-205) near Angallu, about 10km away from Madanapalle. MITS, originated under the auspices of Ratakonda Ranga Reddy Educational Academy under the proactive leadership of Late Sri. N. Krishna Kumar M.S. (U.S.A), the then President and Dr. N. Vijaya Bhaskar Choudary, Ph.D., Secretary & Correspondent of the Academy. MITS is governed by a progressive management that never rests on laurels and has been striving conscientiously to develop it as one of the best centers of Academic Excellence in India. The Institution's profile is firmly based on strategies and action plans that match changing demands of the nation and the students' fraternity. MITS enjoys constant support and patronage of NRI's with distinguished academic traditions and vast experience in Engineering & Technology. With best faculty and facilities, excellent ambience that stimulates learning and located in close proximity to happening IT destinations, the Madanapalle Institute of Technology & Science not only imparts the best education but also ensures all-round development of a student's personality along with excellent employability skills that will land them good positions in the industry. It may not be an exaggeration to state that the higher education scenario of Madanapalle town has witnessed a sea change with the advent of the Madanapalle Institute & Technology Science (MITS). The computer and Internet facilities, modern workshops and labs, seminar halls and well-equipped libraries and sports facilities are all meant to provide the desired inputs for the overall growth and development of the students.

### **2. Viswam Engineering College**

Viswam Engineering College(Formerly Sir Vishveshwaraiah Institute of Science and Technology) also known as VISM is an Indian state college. It is located in Madanapalle, Annamayya district, Andhra Pradesh, India.

It is 5 km (3.1 mi) from Madanapalle near Angallu on the national highway NH205. It is affiliated to Jawaharlal Nehru Technological University, Anantapur. It is also an ISO 9001:2015 certified institution. The society is involved in improving both the primary and secondary education of the rural poor in this area. Viswam Engineering College was established in 2006. It was promoted by the Viswam Educational Society and registered in the year 1991. Under its influence, the society evolved from LKG to PG since 1991. The required approvals from AICTE, New Delhi and affiliation from JNTU, Anantapur were obtained.

VISM is promoted by the Viswam Educational Society registered in the year 1991. The society is involved in improving both the primary and secondary education of the rural poor of this area. Under its influence, the society is running from LKG to PG since 1991. With the establishment of Technological Institute in the year 2006 the dream of the people located in and around this place is fulfilled. SVTM was established at Angallu with the noble idea of imparting technical education for the poor in and around Madanapalle, a draught prone area. The required approvals from AICTE, New Delhi and affiliation from JNTU, Anantapur were obtained. From its inception the management has been taking many progressive steps to improve standards in technical education. Both the parents and students appreciated the measures and getting benefitted. Many steps are taken up to impart training not only in academics but also in nurturing the creative and cultural talents, thereby developing the all-round personality of the students. The utmost care is taken to improve their communicative, analytical and logical skills by employing separate faculty for the purpose, providing a slot in the timetable, so that it is a continuous process till they reach final year. With a committed mission to develop academic environment in a poverty stricken area as the western block of the district, Sri.M.Prabhakar Reddy the Chairman of the group of Viswam Institutions has been making his maximum efforts to make the institution an Icon.

### **3. Golden Valley Integrated Campus (GVIC)**

Golden Valley Integrated Campus (GVIC) is one of the first Integrated Campus in the whole of India . GVIC is located in a pleasant and serene background on National Highway 205, 11 kms from Madanapalle and 20 kms from the Horsley Hills (Andhra Ooty). GVIC has been named with the sacred belief of turning young people's future into a Golden path. Madanapalle has been an Educational and Cultural centre from early 1915. Shri.



N.V.Ramana Reddy along with several other professionals and academicians has been striving hard to promote the best educational standards with international practices to improve the quality of professional education in rural areas. The beautiful, serene atmosphere of GVIC coupled with various facilities provides a powerful ambience for any students to learn, think and enjoy the life in the campus. The college can be easily reached by college buses or the public transport. The campus has own canteen, hostel and other amenities, making students life more comfortable. Accommodation is available in the hostels. These hostels provide a good environment for studies and extracurricular activities. The college provides sufficient facilities for indoor games and well maintained playgrounds. The College believes in the constitutional ideal of contributing towards a society of equality & liberty, It provides quality education to many students from socioeconomically marginalized sections of society, without compromising academic standards.

#### **4. Aditya College of Engineering**

Aditya College of Engineering, Madanapalle under the umbrella of Veda Educational Society was Established in the year 2009 on lofty and noble ideals to impart excellent technical and value based Education under the able and dynamic leadership of Sri R. Ramamohan Reddy, Secretary & Correspondent and Sri.M.Nagamalla Reddy, President who are young, dynamic and committed to provide the best education to the students. ACEM is beautifully nestled against an array of mountains and lush greenery about 10 km from the heart of Madanapalle.

Aditya College of Engineering, Madanapalle under the umbrella of Veda Educational Society was Established in the year 2009 on lofty and noble ideals to impart excellent technical and value based Education.

#### **5. Besant Theosophical College**

Besant Theosophical College started on 19 July 1915 in Madanapalle and it was affiliated to Madras University. In 1917, when Dr. Annie Besant led the agitation for "Home Rule", this institution, which became a centre of nationalist activities, was obliged to dissociate itself from the Madras University and became part of the newly organized Visva-Bharati University founded by Rabindranath Tagore.

In 1919, Tagore visited the college and during this time translated the lyrics of the Indian national anthem, "Jana Gana Mana", which he had previously written, from Bengali to English. Margaret Cousins (an expert in European music and wife of Irish poet James

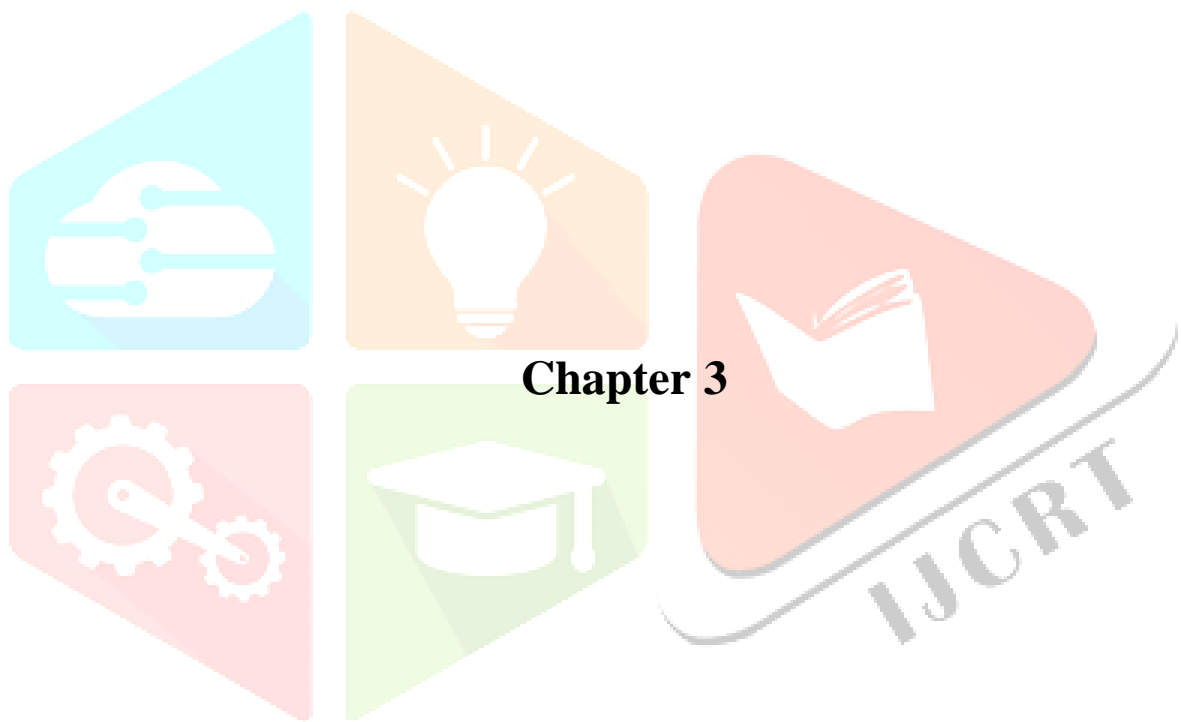
Cousins, then vice-principal of the college) set down the western notation to the national anthem in the college based on the notes provided by Tagore himself.<sup>[2]</sup> During Tagore's visit, the Scout Movement and "All India Women Association" were inaugurated at Madanapalle.

In 1923, the college was re-affiliated to Madras University and continued for almost 30 years. After the separation of Andhra State and Madras State, the college was affiliated to Andhra University (1954–1956) and then to Sri Venkateswara University, Tirupati.

## 2.2 Objectives of the Study

The goal of knowledge management is to provide reliable and secure information, as well as make it available throughout your organization's lifecycle. There are three main objectives of KM and they are:

1. To check the level of awareness about Knowledge Management Practices in private educational Institutions at Madanapalle city in Andhra Pradesh.
2. To identify the measurement tools being used by Educational Institutions towards Knowledge Management Practices.
3. To provide meaningful insights for the Educational Institutions with respect to Knowledge Management Practices.



## RESEARCH METHODOLOGY

**3.1 Research Design:** The study aims at observing the Knowledge Management Practices in Education sector in Madanapalle city. The design of the research is descriptive.

### **Sampling Plan:**

**Sampling Technique:** Respondent selected on the basis of Convenience Sampling.

**Data Analysis:** For the purpose of study, the teachers are rated on five point LIKERTSCALE.

**Sample Size:** A sample size would be 150 teachers from 5 educational Institutions.

### **Sources of Data:**

**Data source:** The present study is mainly based on primary data from educational institutes in Madanapalle, Andhra Pradesh.

**Research Instrument:** A structured questionnaire has been circulated among the faculties of the five selected institutions for the study.

### **Data Collection Source:**

**Primary data:** The primary data includes the information collected from the structured questionnaire of a sample of 150 teachers.

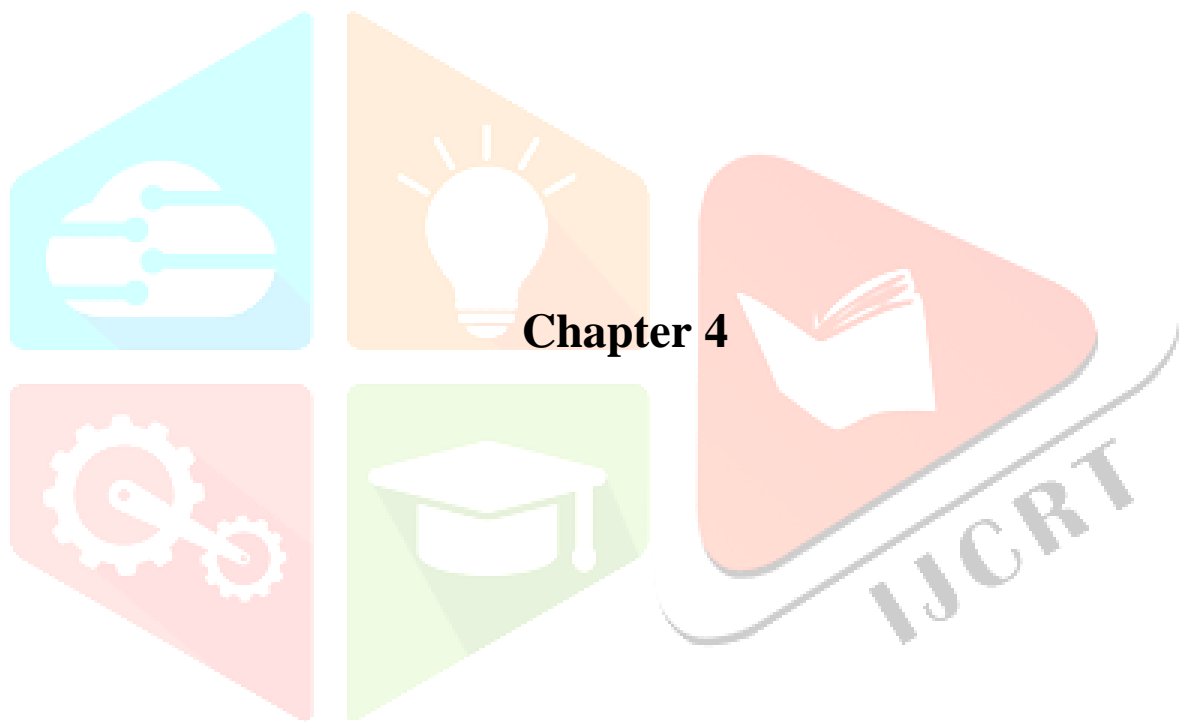
**Secondary data:** Referred Magazines, Journals and Publications for the study. Gone through the Websites related to the study.

For the collection of primary data, a self-administered survey has done in,

1. Madanapalle Institute of Technology & Science
2. Viswam Engineering College
3. Golden valley Integrated Campus
4. Aditya College of Engineering
5. Besant Theosophical College

### 3.2 Statistical Tools: Factor analysis Percentage analysis





## DATA ANALYSIS AND INTERPRETATION

### Mode of Knowledge and Faculty Development Program:

#### Gender:

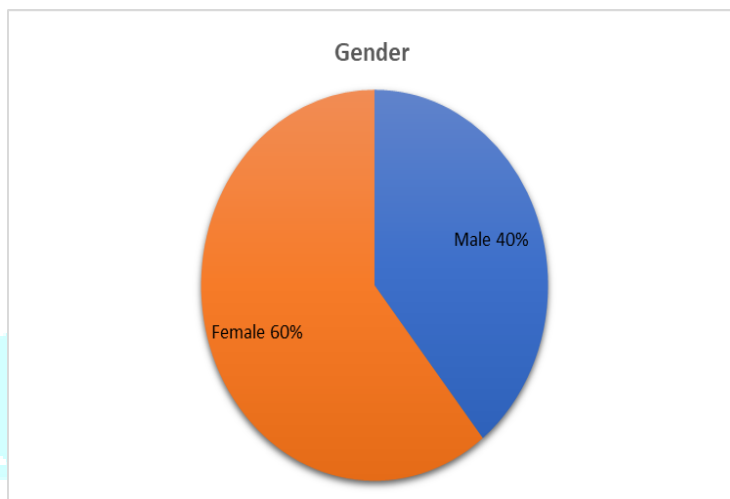


Fig 1.1: Gender

**Interpretation:** The respondent of the study includes male and female gender. Where female is 60% and male are 40% from five selected institutions for the study.

#### Age:

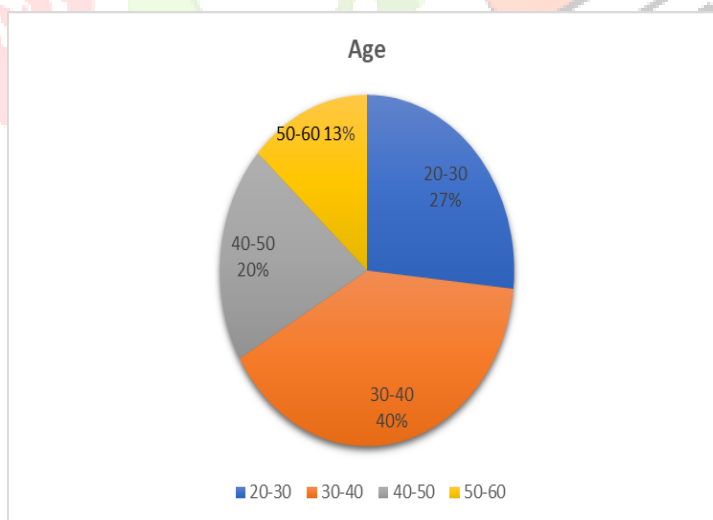


Fig 1.2: Age

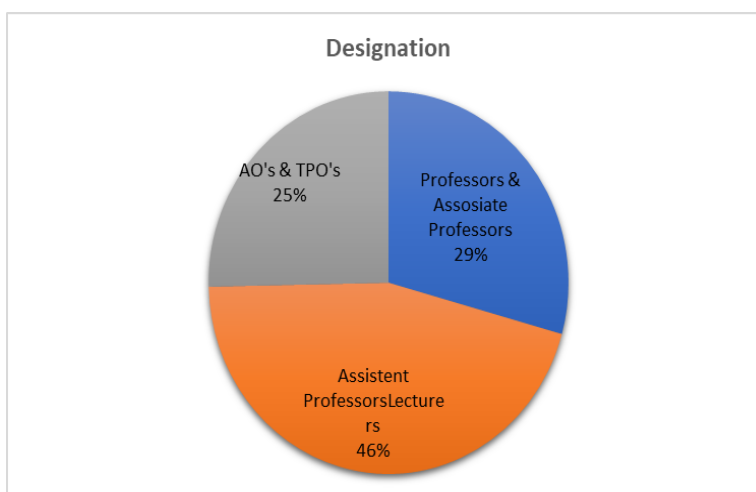
**Interpretation:** The study includes different age groups among which intermediate age group is

maximum.





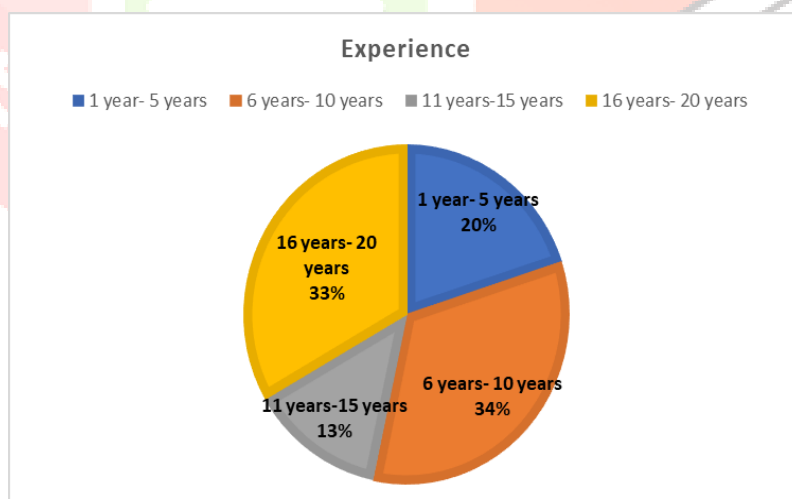
**Designation:**



**Fig 1.3: Designation**

**Interpretation:** The respondent of the study includes different designations where Professors, Associate Professor are merged into one group, Assistant Professors, Lecturers are merged into one group and AO's, TPO's are merged into one group.

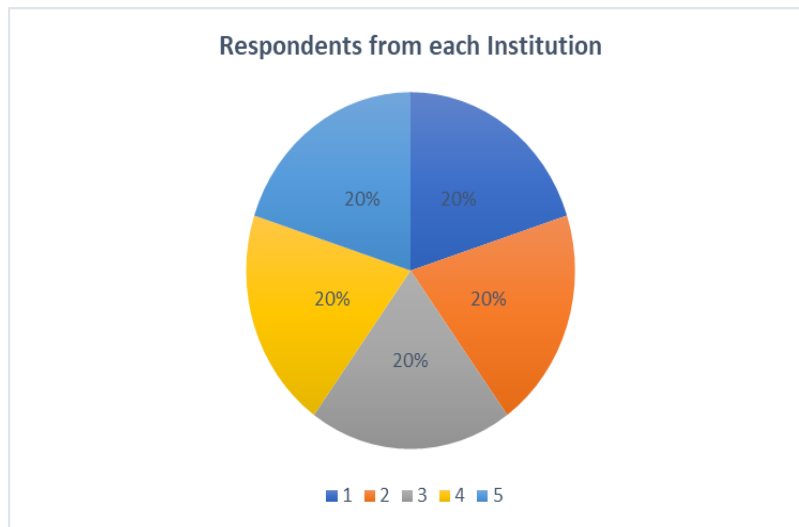
**Experience:**



**Fig 1.4: Experience**

**Interpretation:** The experiences of the faculty found in the study from different experience level.

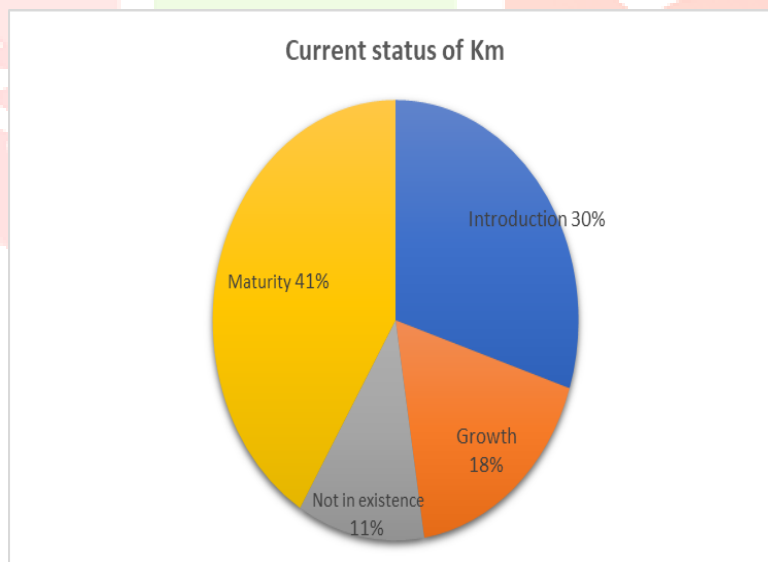
### Respondents from each Institution



**Fig 1.5: Respondents from each Institution**

**Interpretation:** The survey included five institutions where respondents are equally extracted for the study.

### Current status of KM



**Fig 1.6: Current status of KM**

**Interpretation:** The different stages in the study included from introduction to maturity. Maximum status of KM practices is in maturity stage.

### Mode of knowledge & faculty development program

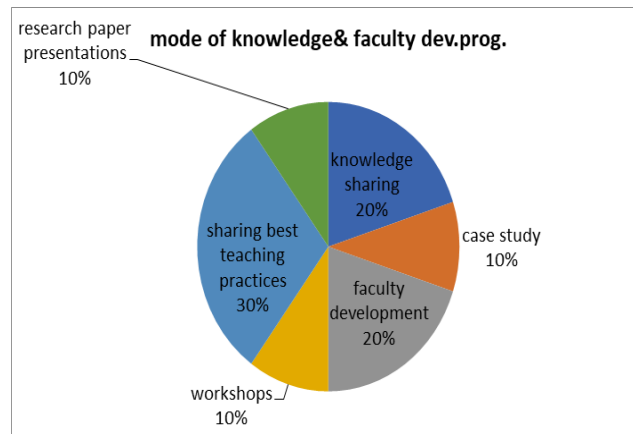


Fig 1.7: Mode of knowledge & faculty development program

**Interpretation:** During the survey it was found that the colleges are prominent towards the knowledge sharing process as GNA-IMT itself says that they have achieved excellencethrough knowledge sharing.

### Research & basket exercises:

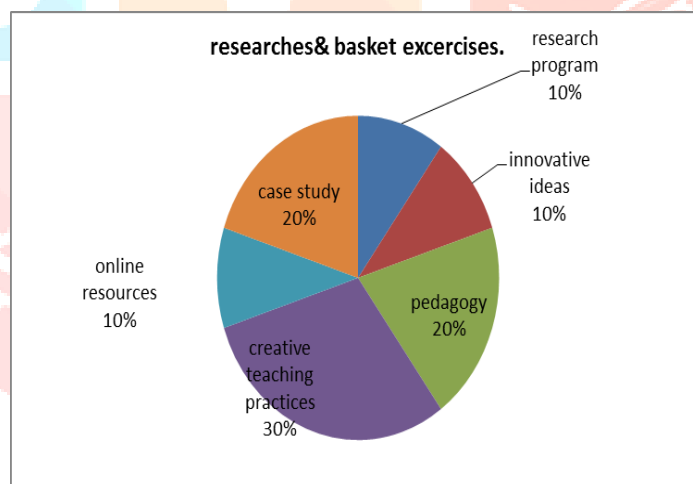


Fig 1.8: Research & basket exercises

**Interpretation:** During the research it was found that the basket exercises are being followed almost in every institution we surveyed but in case of researches we found except in MITS less number of teachers in other institutes gets the opportunities to go for the research papers and their presentations, so they suggested that the more emphasis should be given on their research projects, as it will increase their knowledge as well as they will have so much things to share with their other faculty as well as the students.

### Online management & effective learning:

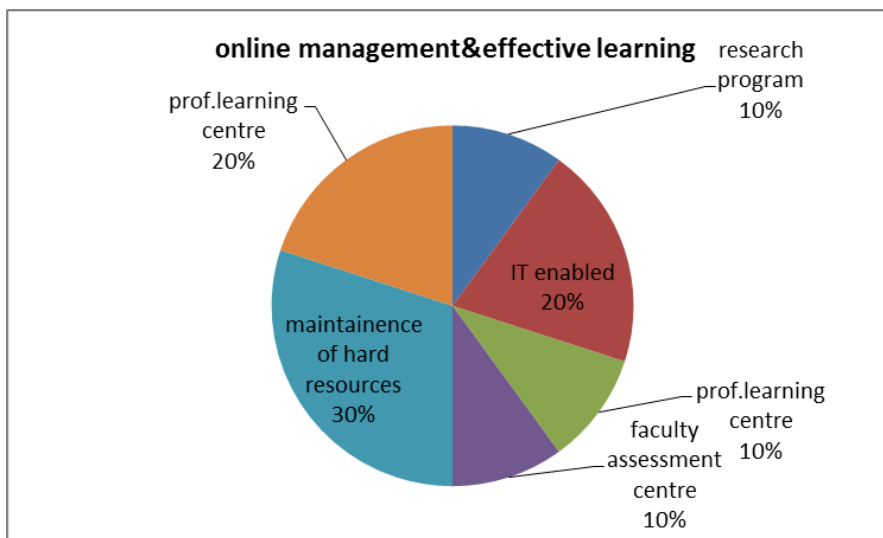


Fig 1.9: Online management & effective learning

**Interpretation:** It was found that maximum of the colleges are still following the traditional paper driven work, so according to our research we came into conclusion that online management is more in MITS and less in other institutes.

### Training & education assessment:

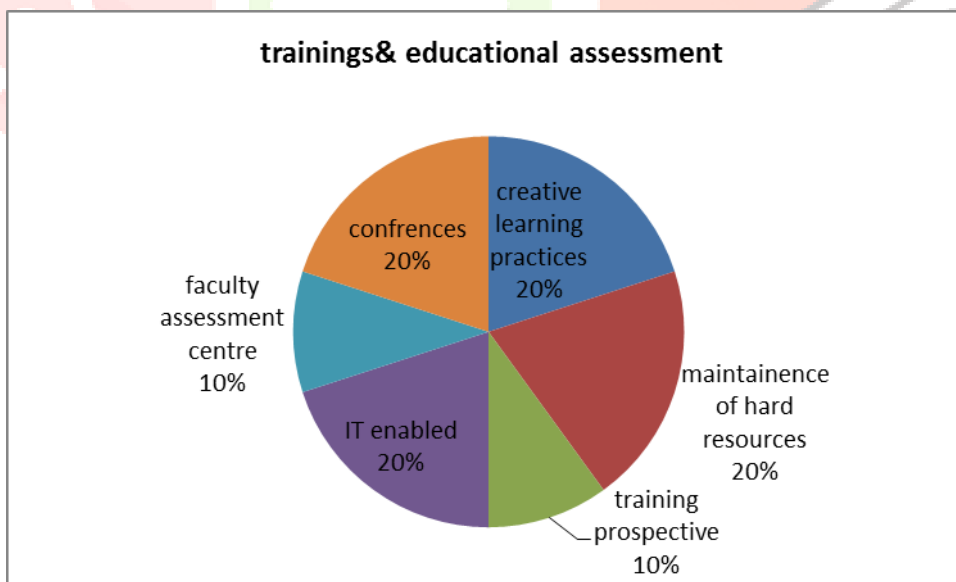


Fig 2.0: Training & education assessment

**Interpretation:** The Institutions are satisfied enough with their training programs and conferences as it was found that most of the colleges prefer to participate in conferences.

### Simulation & cultural diversity:

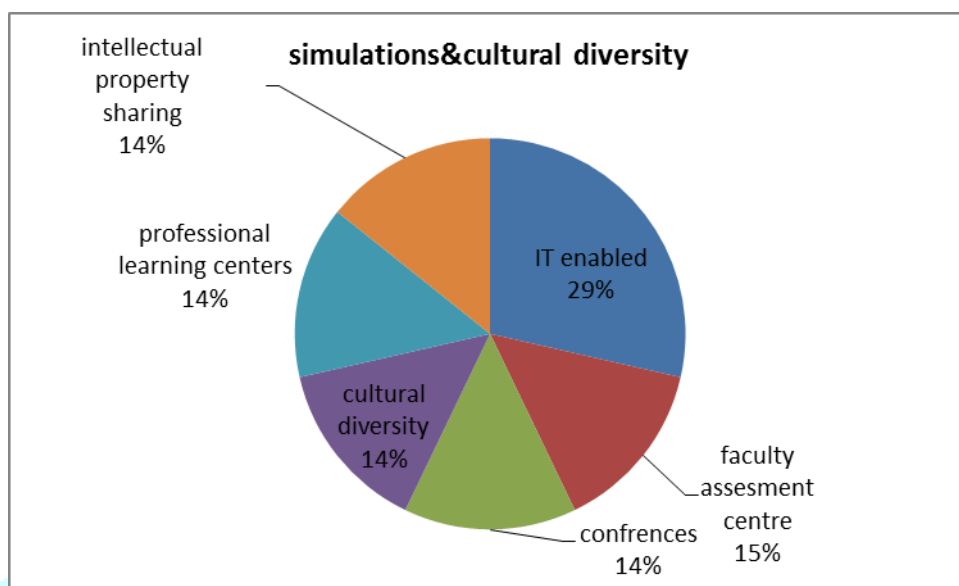


Fig 2.1: Simulation & cultural diversity

**Interpretation:** Regarding Cultural Diversity it was found that other than MITS college the colleges are not having cultural diversity and simulations are according to them a new concept which is on its introduction stage.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.679	11.161	11.161	2.679	11.161	11.161
2	2.104	8.765	19.925	2.104	8.765	19.925
3	1.844	7.684	27.609	1.844	7.684	27.609
4	1.616	6.733	34.343	1.616	6.733	34.343
5	1.443	6.014	40.356	1.443	6.014	40.356
6	1.387	5.778	46.135	1.387	5.778	46.135
7	1.321	5.503	51.638	1.321	5.503	51.638
8	1.171	4.880	56.518	1.171	4.880	56.518
9	1.168	4.867	61.385	1.168	4.867	61.385
10	1.053	4.389	65.774	1.053	4.389	65.774
11	.964	4.016	69.790			
12	.864	3.602	73.392			
13	.852	3.550	76.941			
14	.807	3.362	80.304			
15	.772	3.217	83.521			
16	.630	2.626	86.147			
17	.614	2.560	88.706			
18	.532	2.216	90.922			
19	.496	2.066	92.988			
20	.446	1.857	94.845			
21	.423	1.764	96.608			
22	.311	1.294	97.903			
23	.291	1.212	99.115			
24	.212	.885	100.000			

Extraction Method: Principal Component Analysis.

**Table 1.1: Total Variance Explained**

### Factors Affecting the Performance of Leader Valves Employees

Factor Analysis- Factor analysis has been applied on the responses provided by respondents. Factor analysis is a good way of identifying latent or underlying factors from an array of seemingly important variables (Nargundkar, 2008). An exploratory factor analysis was performed to investigate/ find out the variables/factors that affect the performance of the employees in Leader valves Ltd.

1. KMO and Bartlett’s Test: Measures of sample adequacy such as Bartlett’s test of sphericity and KMO value showed that data was fit for factor analysis. Generally, KMO value greater than 0.5 is desirable. And KMO value is 0.504, it makes the data fit for factor analysis and Bartlett’s test also satisfied the condition of significance of chi square value.

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.504
Bartlett's Test	Approx. Chi-Square	639.221
of	Df	276
Sphericity	Sig.	.000

Table 1.2: KMO and Bartlett's Test

2. Principal Component Analysis: It was used for extracting factors and ten factors were retained depending on Eigen values and variance explained by each factor. The standard practice normally used is that all the factors with an Eigen value of 1 or more should be extracted. Table clearly shows that there are 10 factors having Eigen value more than 1. Total variance explained by extracted ten factors was 65.774%.

3. Naming of Factors: All the factors have been given appropriate names according to the variables that have been loaded on each factor. The ten (10) factors depicted in Table below, the factors were labeled as:

### Naming of Factors

Factor No.	Factor Name	Statements	Factor Loading
1.	Mode of Knowledge	Knowledge Sharing	.529
		Case Study	.394
		Faculty Development	.399
2.	Faculty Development	Workshop	.727
		Sharing Best Teaching Practices	.525
		Research Paper Presentation	.474
3.	Researches and Faculty Development	Research Program	.506
		Innovative ideas	.409
		Pedagogy	.382
4.	Basket Exercises	Creative Teaching practices	.473
		Online Resources	.411
		Case Study	.336
5.	Online Management	Research Program	.410
		IT enabled	.407
		Professional Online Learning Centre	.384
6.	Effective Learning	Faculty Assessment	.431
		Maintenance Hard of Resources	.377
		Professional Learning Centre	.344
7.	Trainings	Creative Teaching Practices	.457
		Maintenance of Hard Resources	.333
		Training Prospective	.301
8.	EducationalAssessment	IT enabled	.573
		Faculty Assessment centre	.474
		Conferences	.277
9.	Cultural Diversity	Culture diversity	.433
		Professional Learning Centre	.373
		Intellectual Property sharing	.340



10.	Simulation	Simulations	.494
		Maintenance of hard Resources	.382
		Cultural diversity	.303

**Table 1.3: Naming of Factors**

**Interpretation:**

As evident from the Table 3, 30 statements/variables are rotated into ten factors. The variables are excreted into these factors and a named is assigned to these factors on the basis of the variable’s characteristics.

Mode of Knowledge: Factor 1 is the linear combination of statements that has revealed that respondents have perceived this factor to be the ‘most important factor with the highest loadings.

Faculty development: As for factor 2, it is evident that variables in the statements highlight the development of faculty and that leads to the development of an organization.

Research: Looking at Table we see that variables in the statements have loadings, 0.506,0.409 and 0.382 on factor 3.

Basket exercises: It has been revealed to be the fourth important factor that affects the employee’s performance. It consists of three statements which put impact on the performance of the faculty as well as students.

Online management: To interpret factor 5,we find that variables have high loading on factor 5.this indicated that factor 5 is combination of following three variables i.e., research program, IT enabled and Professional online learning centre.

Effective learning: This is the most important factor, which includes the combination of three statements among which faculty assessment centres have been judged as a strongest variable with the loading of 0.431.

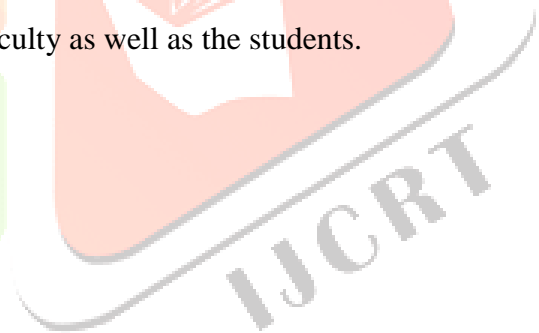
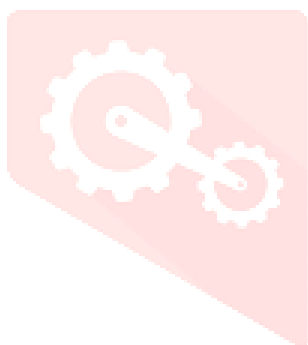
Trainings: During interpretation we found that training has been found as the best knowledge management tool because trained person can always guide others in a positive way so it got the loading of 0.457.

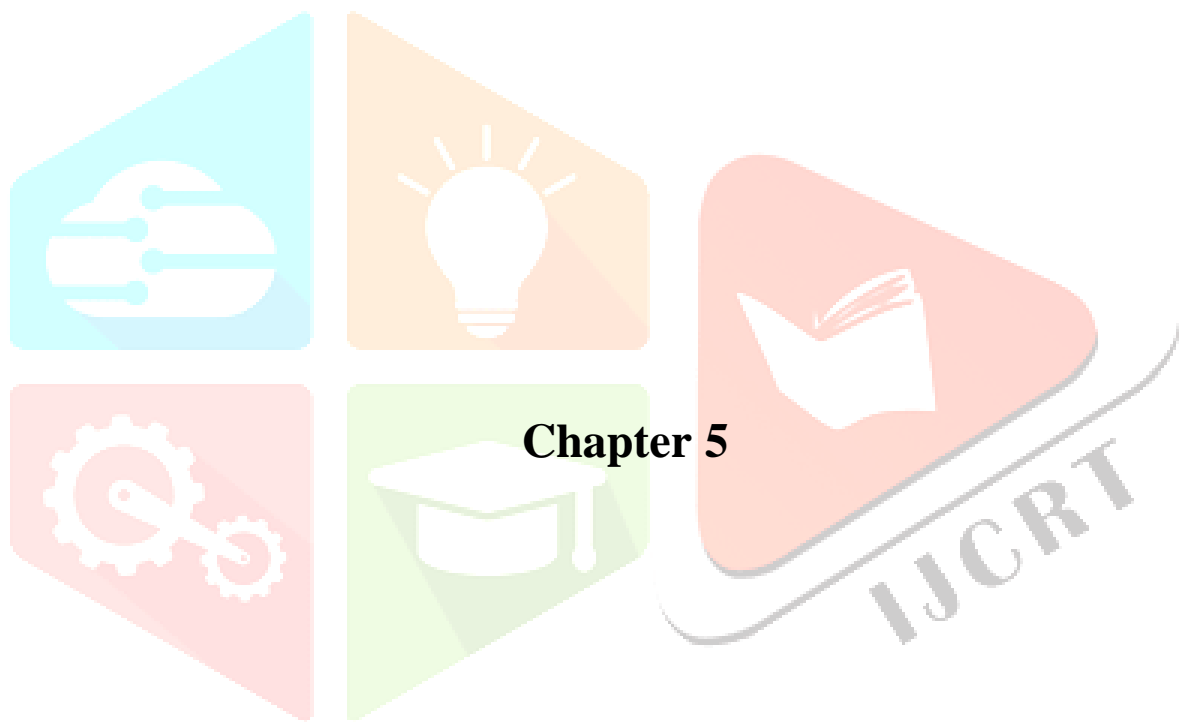
Educational Assessment: To interpret factor 8, we find that variables like conferences are being supported in every college and GNA-IMT specially said they are going to participate in conference i.e., INDIA Inc challenges ahead on 12<sup>th</sup> mar 2011.

Cultural Diversity: This was the weakest aspect of our study because the colleges we surveyed have less cultural diversity but in the case of MITS it is found that the diversity is maximum.

Simulations: Simulation is used in many contexts, such as simulation of technology for performance optimization, safety engineering, testing, training and education. Key issues in simulation include acquisition of valid source information about the relevant selection of key characteristics and behaviors, the use of simplifying approximations and assumptions within the simulation, and fidelity and validity of the simulation outcomes.

Hence by using factor analysis, various factors that affect the individual performance of the employees are there, as the objective of the study specified. From 30 statements 10 factors are there and naming of these factors is done as per the statements/ variable it included. It is clear from factor loading that knowledge sharing is according to the mode of knowledge of the faculty members, is the most important factor that affects the individual performance of the faculty as well as the students.





## **FINDINGS**

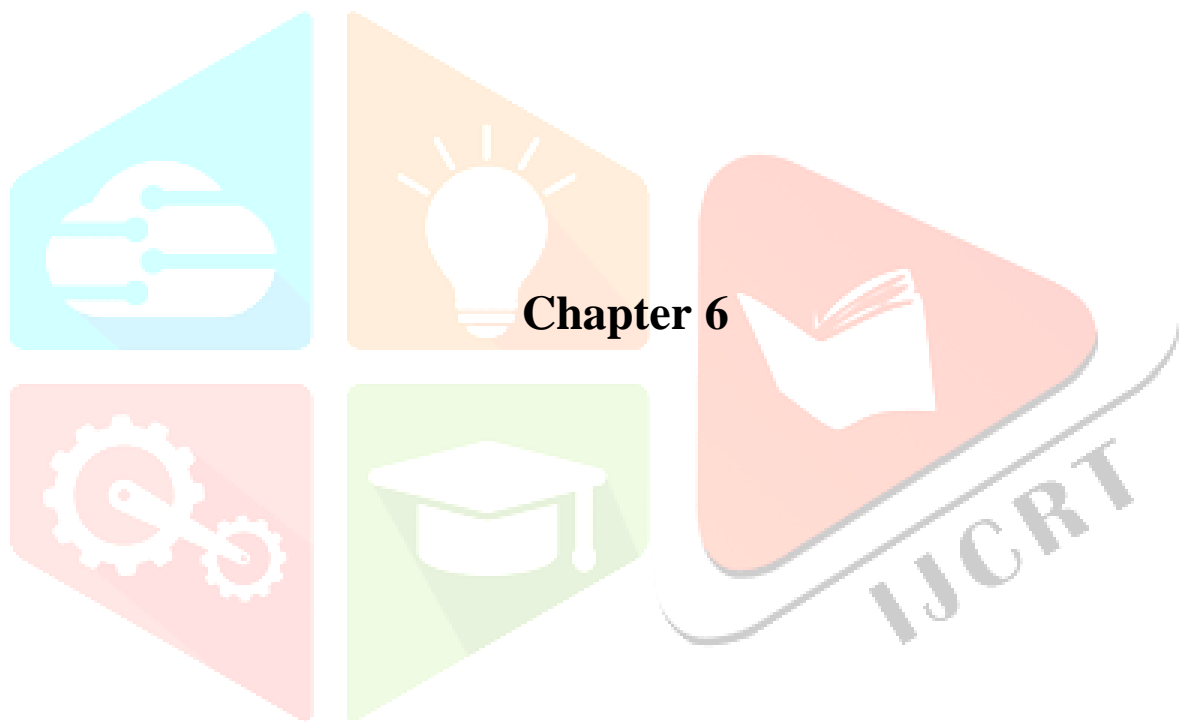
### **Perception of Teachers**

It was found that the colleges are more positive towards the knowledge sharing process and in basket exercises. Training programs provided to them are highly motivating. It was found that most colleges are still following the traditional paper driven work, they are not comfortable with online system. Knowledge Management Practices followed in the institutes are Research Program, E-Learning, Seminars, Workshops, Conferences, Simulation, Maintenance of Hard Resources, Case Study Method and Guest Lectures.

The voluminous growth in the number of higher educational institutions (HEIs) in India in the last decade has stressed the institutions with the extreme pressures of competition and the need to perform better. HEIs consist of a number of academic and administrative processes that produce knowledge during their activities. The question is what value is added to the products and services they deliver by the effective use this knowledge asset (Milam, John, 2001). The HEIs have to attune themselves to develop strategies for the utilization of the institutional knowledge towards enhancing their activities and performance. This requires them to respond timely to the dynamic technologies and the increasing demands of academia (Nagad, Amin, 2006). For this, the knowledge in the organization needs to be identified, encapsulated, transformed and disseminated effectively. This paves the way to recognize the urgent need for knowledge management (KM) initiatives which is a key asset. The application of a KM approach will enable institutions to gain a more comprehensive, reflexive and integrative view of the institutional knowledge for application in cross functional issues – ultimately leading to improved knowledge sharing and more effective decision making, planning and enhancement in performance.

## SUGGESTIONS

To boost awareness of KM, management staff at institutions of higher learning should have well-established hard and soft KM infrastructure and ensure the effective promotion of KM practices among staff. As such, there was a need for more investment in cultivating knowledge management practices and in training/retraining of staff to react to real-time complex problems. As the study found that staff at MITS perceive knowledge management practices as an important practice to ensure that knowledge is treated as an intellectual asset in an institution as well as in knowledge society, top management in institutions of higher learning should put in place both soft and hard structures to support knowledge management. Institutions of higher learning should also take initiatives at ensuring that there are knowledge management practices in place. Significant work has been accomplished in the area of KM in higher educational system and many new contributions have been made by the researchers in this field. The findings suggest that interest in KMS across a variety of industries is very high, the technological foundations are varied, and the major concerns revolve around achieving the correct amount and type of accurate knowledge and garnering support for contributing to the KMS. Implications for practice and suggestions for future research are drawn from the study findings. Lastly, from the view of the culture-based perspective of knowledge management, managers associated knowledge management with learning (primarily from an organizational perspective), communication, and intellectual property cultivation. Some suggested that the information/technology component of knowledge management was only 20% of the concept whereas the cultural and managerial aspects accounted for the bulk of the issue. However, the responses were nebulous in terms of specific cultural implications, perhaps indicating a root concern absent concrete ideas on how to address it. The responses were examined based upon whether the responding individual was from an organization with a KMS or not. However, there did not appear to be any major differences in the perceptions of KMS between the two groups, with the exception that individuals from organizations without KMS tended to offer technology-based responses slightly more frequently than individuals from organizations with KMS.



## CONCLUSION

Today, higher educational institutions need to be efficient to tackle problems from cross functional, cross organizational, ethical and cultural perspectives and equipped with tools to achieve excellence. For that they need to develop a thriving knowledge sharing culture and look beyond technology to achieve their goals and objectives. From the results of the survey as discussed in the paper, the authors conclude that IT based KM intervention in HEIs can prove to be a promising techno management tool to enhance performance in the vital areas of teaching and learning, research and administrative services. Based on the results, the authors have presented a conceptual framework for the development and refinement of knowledge management systems in higher educational institutions. The authors feel that if implemented, the framework will yield more benefits to improve the quality of knowledge sharing and use. The approach will enable higher educational institutes to proactively respond to the needs of the stakeholders and acquire enhanced capability to plan and develop. It was found that the importance given to the determinants for KM intervention differed from institution to institution depending upon the organizational structure, goals and targets, organizational responsibilities, stakeholders and the decision making authority. The results of the study assert the opinion that KM initiatives can play an important role in enhancing the performance and effectiveness of HEIs in their major work domains. Motivating users of a KM system to contribute their knowledge to the system is critical for the success of the overall KM initiative (Frappaolo, 2006; Mutter et al., 2005). Implementation of IT training programs, KM deployment sessions and recognition for KM practices will contribute towards the success of knowledge management initiatives in higher educational institutes. The study provides a description of emerging issues and practices of Knowledge Management Systems. While the respondents were not drawn from a random sample of organizations or industries and while the number of respondents was relatively small; their views do represent a range of industries, organizational levels, and nationalities. The study was not intended to build or test theory but does offer some insights into needed and relevant research in the area of KMS. One useful line of inquiry entails an exploration of KMS-culture fit. Much has been made of technology-structure alignment, but the success of KMS may be more related to organizational culture than to organizational structure as evidenced by the concerns of our respondents on getting knowledge sharing accepted in their organizations. Another useful line of research would consider methods of making users active contributors to KMS. The very

label of “user” is somewhat inappropriate in the context of KMS, as users are both contributors and beneficiaries of the system. Involving users in design is not sufficient: they must be involved in the consistent maintenance of KMS.

## LIMITATIONS

This study has a data collected from 5 selected Educational Institutions in Madanapalle city, further there are more Educational Institutions in the city. Results may vary from the selected institutions with other institutions. Results may replicate from place to place. To conduct the survey, the questionnaire was distributed to the respondents partly by mail and partly in person. The candidates for the survey consisted of senior faculty members, Deans, Heads of Departments, training and placement officer, administrative staff and section in charges. The selection of the respondents was done very carefully keeping in mind the nature of the institutions, academic qualifications, designations and professional experience. They consisted of participants with varied educational and cultural backgrounds, professional experience and exposure to varied learning experiences. The respondents were chosen from degree colleges, business administrative colleges and engineering colleges from Madanapalle city. The names of the HEIs and the respondents have not been disclosed. Research ethics was observed in the research process. Follow up telephone calls and e-mails were made to remind the respondents that the survey should be completed in order to maximize the response rates. It took about one month to complete the survey wherein 150 responses were received out of a total of 220 forms distributed. The time constraints for the study duration limited to two months. And the data is limited to 150 respondents as part of survey. The results are considered from the responses collected from 150 faculty only. The mode of collecting data is through questionnaire. The content analysis resulted in the identification of the activity domains in higher educational institutions and the determinants for KM intervention in these domains. The major domains were identified as institutional planning and development, research and consultancy, administrative services, purchase and procurement, finance and accounts, teaching and learning process, examination process, admission process, placements and faculty recruitment, faculty performance evaluation, student affairs and others. The authors restricted their study to only some specific domains. The successful implementation of a knowledge management system demands urgency in overcoming the barriers. It is required to conduct a culture audit to analyze the reasons for



unwillingness of the people to share knowledge proactively. The mindset of the people from “my knowledge” should definitely change to “our knowledge” (Ranjan, 2008).

## **FUTURE RESEARCH DIRECTIONS**

Future work it is intended to apply the proposed framework for developing a comprehensive IT based KM system to implement knowledge management in higher educational institutes in India. The framework can be implemented on the organizational intranets. In the next phase, the system can be integrated with knowledge bases of the companies, affiliating bodies, other colleges, suppliers and service providers resulting in an integrated KM system for the benefit of all the stakeholders – internal and external to the organization. It is natural that the popularity of knowledge will grow permanently. This is not only due to the fact that a great number of organizations in developed countries are in the process of transformation into organizations of knowledge, but also because the entire human civilization is in the process of transformation into the Society of knowledge – the society, whose development (and existence!) to the greatest extent depends on the efficiency of knowledge management. Knowledge Management will attract the attention of more and more researchers and practitioners, and not only of those being connected with management, but also of those from other scientific fields (especially justice, ethics, organizational conduct and philosophy). That is the reason why we believe that KM will last long enough to ‘see’ its intensive development, and that it will grow, in a relatively short period of time, into a new school of management, which will offer resolutions and will, if applied practically, contribute to the development of each separate organization and human civilization as a whole. KM, because this approach can result in systemic changes, not merely isolated changes in the operations of any single department. This view partly concurs with the suggestion made by Singh and Kant (2008) that KM barriers include the lack of top management commitment, lack of technological infrastructure, lack of clearly defined methods or processes for KM practice, lack of an organizational structure that supports a KM strategy, lack of organizational culture, lack of motivation and rewards, employee’s retirement, lack of ownership of problems and employee’s turnover. This reinforces the point made by Kok (2003) who wrote that KM practice is benchmarked by the use of enablers that include leadership, technology, culture and measurement. Despite these barriers, the modern information environment that includes a wide variety of information, information providers and platforms for doing so has made it necessary for organizations, including education institutions, to consider using KM tools and

techniques to identify what tacit and explicit knowledge exists in the organization and what knowledge they might require in the future to enhance work processes. The importance of capturing knowledge or institutional know-how could be a priority if the need for its retention was realized. The implication of this statement is that besides the requirement to have guidelines or procedures on what knowledge to capture, it needs to be systematically organized. This is important because not all information is knowledge and not all knowledge is valuable (Aswath and Gupta, 2009). Acquired knowledge is of limited value if it is not organized and stored for easy retrieval and archive, which needs proper organization, as retrieval depends more on the memory of individuals than on finding assistance.



## REFERENCES

- Agarwal, N.K., and Marouf, L.N.(2014). Initiating knowledge management in colleges and Universities: A template. International Journal of knowledge content Development & Technology 4,67-95. doi: 10.5865/ijkct.2014.4.2.067
- Ali,N.,Ahmed, L., and Rose, S.(2018). Identifying predictors of students' perception of engagement with assessment feedback.Act. Learn. High. Educ.19,239-251.doi:10.1177/1469787417735609
- Babita Gupta(California State University Monterey Bay, California, USA),Lakshmi.S.Iyer,(University of Dayton,Dayton,Ohio, USA), Jay E.Aronson(The University of Georgia, Athens, Georgia, USA) Babita Gupta,LakshmiS.Iyer,Jay E.Aronson,(2000)"Knowledge management:practices and challenges",Industrial Management &data Systems,Vol. 100 Iss:1,pp. 17-21
- bhu
- Davenport, T. H., De Long, D. W., and Beers, M. C. "Successful Knowledge Management Projects," Sloan Management Review, Winter 1998 1998, pp. 43-57.
- Davenport, T. H., and Prusak, L. Working Knowledge: How Organizations Manage What They Know, Cambridge, MA: Harvard Business School Press, 1997.
- Dimitrios G. Mavridis, (2004) "The intellectual capital performance of the Japanese banking sector", Journal of Intellectual Capital, Vol. 5 Iss: 1, pp.92 – 115
- Donath, J., Karahalios, K., and Viegas, F. "Visualizing Conversation," Proceedings of the Thirty-second Annual Hawaii International Conference on System Sciences (HICSS 32), Los Alamitos, CA: IEEE Computer Society Press, 1999.
- Ganesh D. Bhatt, (2001) "Knowledge management in organizations: examining the interaction between technologies, techniques, and people", Journal of KnowledgeManagement, Vol. 5 Iss: 1, pp.68 – 75
- Granovetter, M. "The Strength of Weak Ties: A Network Theory Revisited," in Social Structure and Network Analysis, P. Marsden and N. Lin (eds.), New York: John Wiley and Sons, 1982, pp. 105-130.
- Hansen, M. T., Nohria, N., and Tierney, T. "What's Your Strategy for Managing Knowledge," Harvard Business Review, March April 1999, pp. 106-116.

- Hey, J. (2004). The data, information, knowledge wisdom chain: The metaphorical link. Available at: <http://www.dataschemata.com/uploads/7/4/8/7/7487334/dikwchain.pdf>.
- Jacky Swan, Sue Newell, Harry Scarbrough, Donald Hislop, (1999) "Knowledge management and innovation: networks and networking", Journal of Knowledge Management, Vol. 3 Iss: 4, pp.262 – 275
- Jennifer Rowley, (2000) "Is higher education ready for knowledge management?" International Journal of Educational Management, Vol. 14 Issue: 7, pp.325 – 333.
- John Storey, Elizabeth Barnett, (2000) "Knowledge management initiatives: learning from failure", Journal of Knowledge Management, Vol. 4 Is: 2, pp.145 – 156
- Nonaka, I. (1994), "A Dynamic Theory of Organizational Knowledge Creation" Organization Science, (5) 1, pp. 14-37.
- Lecture Notes in Computer Science, (2005), Volume 3682, 403-409, DOI: 10.1007/11552451\_53
- Linda Argote, Bill McEvily and Ray Reagans (2003), Management Science Vol. 49, No. 4, Special Issue on Managing Knowledge in Organizations: Creating, Retaining, and Transferring Knowledge , pp. 571-582
- Maryam Alavi and Dorothy E. Leidner (2001), MIS Quarterly Vol. 25, No. 1 , pp. 107-136
- McDonald, J., & Star, C. (2008). The challenges of building an academic community of practice: an Australian case study. In Paper presented in HERDSA 2008 International Conference: Engaging Communities, Rotorua, New Zealand. Retrived from <http://eprint.s.usq.edu.au/4219/>.
- M.S. Khan and S.S. Mahapatra (2008), Volume 3, Number 1, pp. 127-143.
- Natalija Sedziuviene & Jolita Vveinhardt (2009) The Paradigm of KnowledgeManagement in Higher Educational Institutions,pp. 1392 – 2785
- Open Courseware: Learning Beyond Classroom (2008), 111-119
- René Peinl and Ronald Maier (2010), Knowledge Management in Organisation,Oxford University Press, pp. 456-461

- School of Business, Queen's University, Room 111, Dunning Hall, Kingston, Ontario, Canada K7L 3N6
- Syed Z. Shariq, (1997) "Knowledge Management: An Emerging Discipline", Journal of Knowledge Management, Vol. 1 Iss: 1, pp.75 – 82
- Toro, U., & Joshi, M. J. (2013). A review of literature on knowledge management using ICT in higher education. International Journal of Computer Technology and Applications, 4(1), 62.
- TW.Luen(2001) "Knowledge management in the public sector: principles and practices in police work" Journal of information science
- Wang.W(2009) The role of knowledge management in achieving effective crisis management", Journal of information science,pp.635-659
- Wille Rudolf (2010), Knowledge Management in Organisation, Oxford University Press,pp. 226-249
- Williams, Jeremy B. and Jacobs, Joanne S. (2004) Exploring the use of blogs as learning spaces in the higher education sector, Australasian Journal of Educational Technology, pp. 232-247.
- Wonga, K.Y. & Aspinwall, E. (2006). Development of a knowledge management initiative and system: A case study. Expert Systems with Applications, 30, 633-641.
- Zhaohao Sun and Gavin Finnie (2005), Knowledge Management in Organisation, Oxford University Press, pp. 979-986

## ANNEXURE

### Questionnaire

We are doing our project on “knowledge management practices in educational institutions”. We request you to kindly co-operate us by providing us following information. We assure you that your information will be kept confidential and purely for academic purpose. Your co-operation in this regard will be praiseworthy. Thank you for your kind co-operation.

Name : \_\_\_\_\_ Designation: \_\_\_\_\_

Organization : \_\_\_\_\_ Place : \_\_\_\_\_

Experience : \_\_\_\_\_ Gender : \_\_\_\_\_

Income : \_\_\_\_\_ Age : \_\_\_\_\_

Institutions Name: \_\_\_\_\_

Please put a tick mark  in the appropriate box wherever required. SA: Strongly agree

A: Agree N: Neutral

SD: Strongly disagree D: Disagree

What is the current status of Knowledge Management in Education Sector?

- a) Not in existence at all. [ ] b) Maturity stage [ ]  
c) Introduction stage. [ ] d) Growth stage [ ]

What do you think about the following statements (Please tick the relevant response)

STATEMENTS	S	A	A	N	S	D	D
Training is being provided in your institution.							
Ample opportunities for research are there in the institution.							
Innovative ideas are being shared for faculty development							
Knowledge sharing with other institutes is a regular practice.							
E-learning is commonly used.							
Seminars are being conducted on regular basis.							
Teachers are being provided with the workshops.							
Faculty development program are regular in the institute							
My institution is IT enabled							
Your institution organizes the Conferences.							
Teachers get opportunity to present their Research papers.							
Guest lectures are held twice in a month.							
Cultural diversity (sharing knowledge with other countries and states) is there.							
Professional learning center is encouraged.							
Sharing best teaching practices by faculty.							
Simulations are being frequent in the institution.							
There is a faculty assessment centers supported by our institution.							
Maintenance of online resources is done frequently by institution.							

Intellectual property sharing.					
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Maintenance of hard resources is very particularly done by the teachers.					
Training is being provided to teachers in practical way					
Research is being encouraged to uplift the teachers.					
Knowledge sharing is within the institute.					
The teachers are being encouraged to go to different colleges.					
Real time situation are given to be handled.					
Teachers are motivated to introduce some creative teaching practices.					
Pedagogy improvement goes on regular basis.					
Knowledge sharing is being encouraged outside the institution even.					
The institute use IT enabled technology in most of the conferences like conferences/ seminars.					
Case study method is being a routine in institute.					

**MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE**

**An Autonomous Institution**

**(Approved by AICTE, New Delhi & Affiliated to JNTUA, Anantapuramu) Department of  
Management Studies**

**PROGRAMME OUTCOMES (POs)**

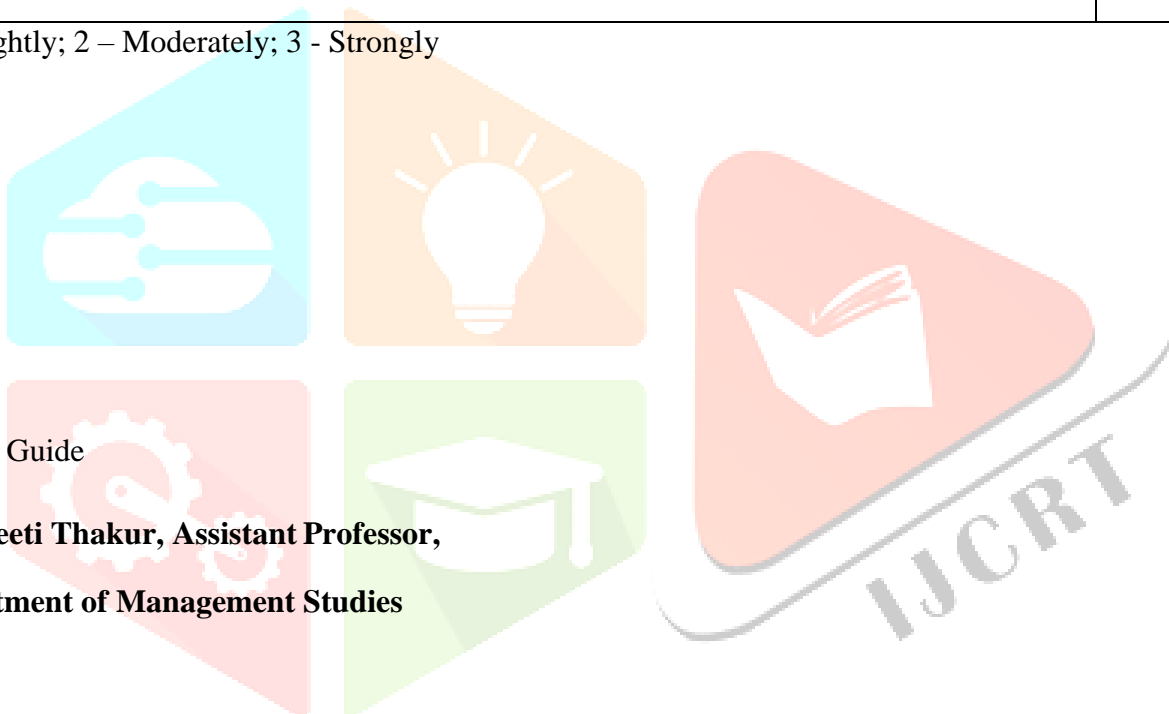
At the end of the programme, graduate will be able to

<b>PO</b>	<b>Statement</b>
<b>PO1:</b>	Apply knowledge of management theories and practices to solve business problems.
<b>PO2:</b>	Foster Analytical and critical thinking abilities for data-based decision making.
<b>PO3:</b>	Ability to develop Value based Leadership ability.
<b>PO4:</b>	Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
<b>PO5:</b>	Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.
<b>PO6:</b>	Apply statistical tools and techniques for better decision making in managing an organization.
<b>PO7:</b>	Possess the skills required to integrate concepts from various disciplines to identify and develop business strategies.
<b>PO8:</b>	Ability to engage in independent and life-long learning in the broadest context.

**Contribution of Project work towards attainment of POs**

PO1: A study on knowledge management practices in educational institutions would apply to understand the current scenario of the educational institution in terms of knowledge.	3
PO2: This helps the faculty to enhance their skills and contribute their skills towards the deliverability.	2
PO3: Ability to develop knowledge based teaching.	3
PO4: Ability to understand, analyze and utilize the sources of knowledge and practices	3
PO7: Possess the skills required to integrate concepts from various disciplines to identify and develop knowledge management practices.	2

1 – Slightly; 2 – Moderately; 3 - Strongly



Project Guide

**Dr. Preeti Thakur, Assistant Professor,  
Department of Management Studies**