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Knowledge Retention: A Key Attribute in Organizational Growth

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ABSTRACT

We are living in a world of knowledge revolution today. Every organization and firm is now heading towards a specialized branch of management called knowledge management. Knowledge is something which is stored in the heads of individuals working with in an organization. Managing such knowledge is a difficult task. However, organizations are able to manage knowledge from their employees and are able to strategize this knowledge for enhancement of employee performance and in turn the organizational performance. One key aspect of knowledge management is knowledge retention. Retaining knowledge and knowledgeable employees in organizations is the need of the hour for every business firm. Biotechnology is an industry which is completely dependent on creation of new knowledge and applying the knowledge for betterment of mankind. To gain financial benefit of an invention or discovery, the companies have a tough competition to patent their invention first. This makes knowledge retention very important in the Biotechnology industry. The present study focusses on understanding the knowledge retention practices in Biotechnology industry with reference to Andhra Pradesh.

Keywords: Knowledge retention, Key attribute, Organizational growth

INTRODUCTION

Centuries have gone by, days have passed and today the entire world is looking towards knowledge and innovation. The 17th century was marked by scientific revolution, 18th century by political revolution, 19th century by industrial revolution, 20th century by information revolution and the 21st century by knowledge revolution. In the present century, knowledge has become the most important aspect of our everyday life. An individual plans his life and moves ahead after critically understanding his situation with the help of knowledge acquired by him through education. Personally and professionally, knowledge and understanding of situations and subjects helps an individual lead his life in a peaceful manner. Same is the case with organizations and firms today. Even, organizations and firms are putting knowledge and knowledgeable employees on the forefront. Every organization works similarly, however, they differ from each other in the knowledge located in the heads of its employees. Knowledge is a cognitive product. It is invisible. Managing knowledge is a challenge to the business organizations and firms. Organizational learning enables firms to process information about their environment and makes adaptations to achieve optimal fit and performance [1]. By means of absorptive capacity, firms acquire and assimilate this new information and incorporate it into their knowledge base [2]. This process depends on prior knowledge to understand and interpret the information acquired [3] and requires mechanisms to store the new knowledge in a sustainable way that facilitates retrieval at a future date. According to Walsh and Ungson [4], organizational memory refers to 'stored information from an organization's history that can be brought to bear on present decisions'. Retained knowledge is thus the result of decision stimuli (i.e. new information or problems encountered) and their responses [5]. It is embedded in various repositories that are either located on an individual, group, or an organizational level [6]. Knowledge retention may therefore refer to an individual's direct experience, observations and knowledge [7], as well as to routines, organizational processes and practices and/or culture [4,8,9]. Scholars have generally argued that retained knowledge enables a process of sorting,

categorizing and organizational sense making which creates the potential to apply existing knowledge in new and strategic ways in the future [10]. Consequently, retained knowledge influences the interpretation of newly acquired information [2], which may lead to organizational learning through permanent behavioural changes [6]. The two concepts are therefore inextricably intertwined [11,12] and each is necessary to understand the other better [5]. From an organizational perspective, groups of individuals retain knowledge through the process of knowledge sharing, thus exceeding any individual's cognitive abilities [4]. In organizations, knowledge sharing refers to the process by which units transfer and use retained knowledge developed by other units [13]. Although scholars have outlined that collective knowledge retention exceeds the level of individual knowledge retention, the antecedents and moderators of knowledge retention throughout the organization have not been sufficiently delineated.

The present study was designed to understand the knowledge retention practices currently being followed in the Biotechnology industry in Andhra Pradesh. The effectiveness and execution of knowledge retention practices have also been studied.

STATEMENT OF THE PROBLEM

Every company tries to innovate and develop something new to stand in the competition with its competitors. During the process of innovation to produce new products sought by customers, the company invests a lot of time and money in the process. In the Biotechnology industry, until and unless a company stands first in developing a product and patenting it, it will only go into losses. All the work done will go in vain. It is therefore essential that the biotechnology industry get maximum financial profit out of the knowledge its organization is possessing.

The proposed study aims at understanding the extent of implementation of effective knowledge retention in Biotechnology companies with reference to Andhra Pradesh.

METHODOLOGY

The methodology used to conduct the research for this study begins with the employee understanding about knowledge retention and the research questions that determine the empirical design. Furthermore, it describes the research design and sampling design, followed by detailed discussions of the measures used in the study, the data collection procedures and the data analysis procedures which include the instrument validation. The study focus is on knowledge retention and organizational growth in biotechnology companies in Andhra Pradesh.

The methodology followed for conducting the study includes the specification of research design, sample design, questionnaire design, data collection and statistical tools used for analyzing the collected data. To study the strategies and practices of knowledge management and its impact on employee retention in biotechnology sector, biotechnology industries like Dr. Reddy's Laboratories, Indian Immunologicals, Mylan, GVK & Shantha Biotech situated in Andhra Pradesh have been considered. The survey questionnaire was framed in such a way that the answers reflect the ideas and thoughts of the respondents on employee's opinions. The respondent has to choose their answers on the basis of five point Likert Scale. The questionnaire was administered to five different companies.

Research design

This study used questionnaire survey to obtain data measuring knowledge retention practices in biotechnology industries of Andhra Pradesh. Data collected from the survey was input into Microsoft Office Excel, examined, described and cleansed as discussed below and was analyzed using SPSS for Windows.

Instrument validation

The instruments that have been adopted for use in the present study measured information quality and employee opinion outcomes using five values each on a Likert scale are not deemed to significantly increase measurement capability.

To test the reliability of the data Cronbach's alpha test was conducted and the indent value of alpha was found to be 0.705. This indicates that the data has a high reliability and validity.

Sampling design

A wide range of recommendations regarding sample size in statistical analysis has been made. The target population for this study was individual employees from the biotechnology companies of Andhra Pradesh. Given the size of a

total 467 biotechnology employees in the sampling frame, the selection of a representative sample is the preferred approach for efficiently gathering data about the population. The different variables measured in this study and how those variables were measured is described in the study.

Data collection procedure

This section presents the procedures used for data collection, data security, storage and protection of human participants who provided the data. Data for this research was collected by means of questionnaires through the survey method. Biotechnology company's employees were required to participate through the personal interaction. Upon completion of the survey, participants submitted their responses to the researcher. Upon completion of the survey, the data was retrieved from the server in the form of an Excel spreadsheet, which was downloaded to the researcher's personal computer.

SOURCES OF DATA

The whole analysis is based on both primary and secondary data. The primary data has been collected from direct formal and informal interviews, personal interaction with officials, etc.

Primary data

The main source of primary data comprises of structured questionnaire, formal and informal interviews and feedback obtained from the employees.

Secondary data

The sources of secondary data were generated within the organization especially from records, magazines published by the organization. The secondary data was collected through journals, seminar papers and other relevant books, magazines, periodicals and journals. Stratified random sampling technique was used to collect the data.

DATA ANALYSIS AND INTERPRETATION

The data collected was thoroughly analyzed with the help of various statistical techniques. We have taken the help of tools like average, percentage and graphical tables, etc. to analyze and interpret the data collected through the primary and secondary sources.

Distribution of respondents on attitude of the senior management towards knowledge retention

The information related to respondents on attitude of the senior management towards knowledge management is furnished in Table 1. The opinion of the respondents of biotechnology companies about attitude of the senior management towards knowledge retention was collected in terms of the following attributes: 1) Sees it as very important provides full support 2) Sees it as very important but hardly supports it 3) Sees it as waste 4) Was very supportive in the beginning but now lost interest 5) Hardly bothers (Figure 1).

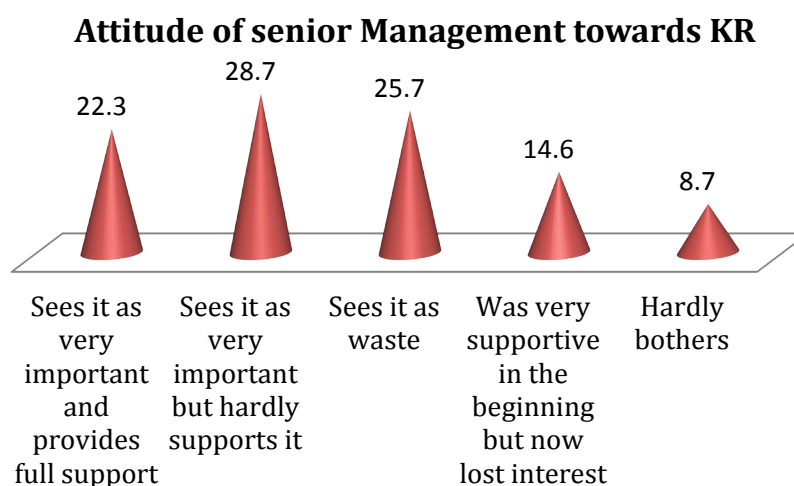


Figure 1: Distribution of attitude of the senior management towards KR

Table 1 and Figure 1 elaborates the opinions about attitude of the senior management towards KR. 28.7% of respondents sees it as very important but hardly supports it, 25.7% sees it as waste and 22.3% sees it as very important and provides full support, 14.6% were of the opinion that they were very supportive in the beginning but now lost interest and 8.8% feel that senior management hardly bothers accordingly.

Distribution of respondents towards recognition of knowledge

The information related to respondents by recognition of knowledge is furnished in the following Table 2. The opinion of the respondents of biotechnology companies about recognition of knowledge was collected in terms of the following attributes: 1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree 5) Don't Know (Figure 2).

Table 2 and Figure 2 explain about recognition of knowledge as part of their asset. In this regard, 58.8% agreed that their organization recognizes their knowledge is an asset for their company, 29.1% employees strongly agree that their organization recognizes their knowledge as an asset for their company, 5.3% disagree, 4.7% strongly disagree and 2.1% opined don't know.

Distribution of respondents towards organization culture

The information related to respondents towards organization culture is furnished in Table 3 The opinion of the respondents of biotechnology companies towards organization culture was collected in terms of the following attributes: 1) Their basic values and purpose emphasize on sharing of knowledge 2) They have an open, encouraging and supportive culture 3) They think knowledge management is each and everybody's job 4) The prevailing notion is that KR is the task of few designated ones and no need for knowledge sharing 5) They restrict knowledge sharing.

Table 3 and Figure 3 show that 25.5% of respondents think knowledge management is each and everybody's job. 22.9% opined that their organization restrict knowledge sharing, 19.3% opined prevailing notion is that KR is the task of few designated ones and no need for knowledge sharing and 17.1% have an opinion that they have an open,

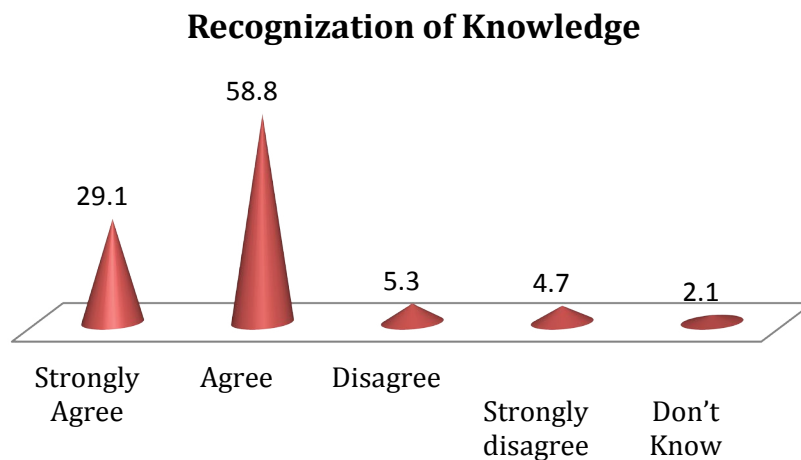


Figure 2: Distribution of respondents on recognition of knowledge

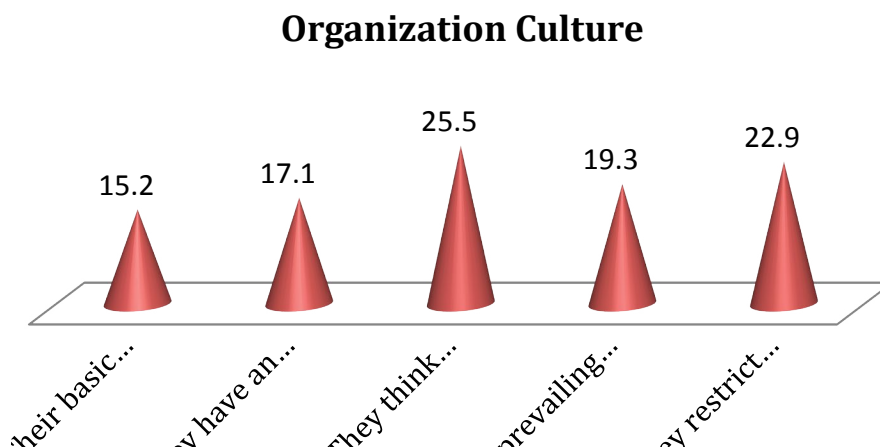


Figure 3: Distribution of respondents of organization culture

Table 1: Distribution of attitude of the senior management towards KR

Attributes	Count	Percentage
Sees it as very important and provides full support	104	22.3
Sees it as very important but hardly supports it	134	28.7
Sees it as waste	120	25.7
Was very supportive in the beginning but now lost interest	68	14.6
Hardly bothers	41	8.7
Total	467	100.0

Table 2: Distribution of respondents on recognition of knowledge

Attributes	Count	Percentage
Strongly Agree	136	29.1
Agree	274	58.8
Disagree	25	5.3
Strongly disagree	22	4.7
Don't Know	10	2.1
Total	467	100.0

Table 3: Distribution of respondents towards organization culture

Attributes	Count	Percentage
Their basic values and purpose emphasize on sharing of knowledge	71	15.2
They have an open, encouraging and supportive culture	80	17.1
They think knowledge management is each and everybody's job	119	25.5
The prevailing notion is that KR is the task of few designated ones& no need for knowledge sharing	90	19.3
They restrict knowledge sharing	107	22.9
Total	467	100.0

encouraging and supportive organization culture. 15.2% opined that basic values and purpose emphasize on sharing of knowledge regarding organizational culture.

Distribution of respondents on knowledge exchange to perform work better

The information related to respondents on knowledge exchange to perform work better was furnished in Table 4. The opinion of the respondents of biotechnology companies about knowledge exchange to perform work better was collected in terms of the following attributes: 1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree 5) Don't know (Figure 4).

Above Table 4 and Figure 4 shows that 61.5% agreed that knowledge exchange with others helps to perform their work better and 20.8% strongly agreed that knowledge exchange with others helps to perform their work better. 9.0% disagreed that knowledge exchange with other.

Distribution of respondents on major problem related to knowledge retention

The information related to respondents on major problems related to knowledge retention was furnished in Table 5. The opinion of the respondents of biotechnology companies about challenges in sharing information with other departments was collected in terms of the following attributes: 1) Lack of information 2) Information overload 3) Loss of crucial knowledge due to key employee leaving organization 4) Poor sharing of knowledge in the organization 5) Retirement of employees.

Table 5 and Figure 5 illustrate that 39.4% are of an opinion that poor sharing of knowledge in the organization is a major problem related to knowledge retention and 26.3% opined that loss of crucial knowledge due to key employee leaving organization is the major problem related to knowledge retention. 14.1% opined that lack of information is a problem of knowledge retention, 11.1% opined that retirement of employees is a problem of knowledge retention. 9.1% opined that information overload is a problem of knowledge retention.

Distribution of respondents on factors that mostly influence knowledge retention

The information related to respondents on factors that mostly influence knowledge retention was furnished in Table 6. The opinion of the respondents of biotechnology companies about factors that mostly influence knowledge retention

Knowledge Exchange

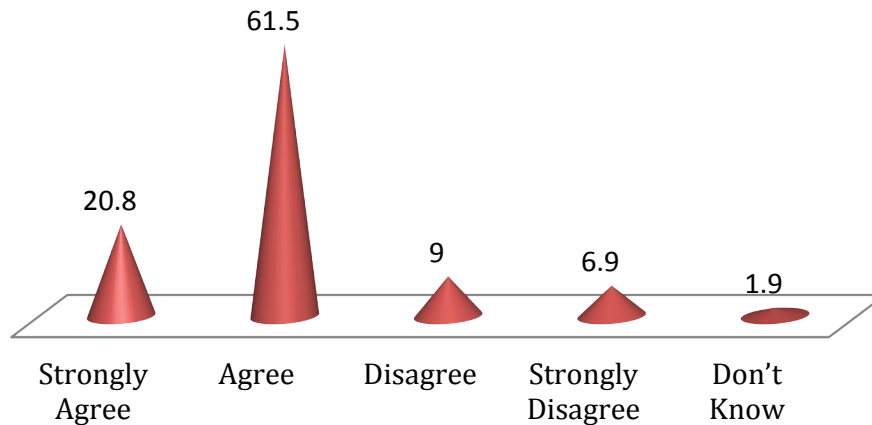


Figure 4: Distribution of respondents on knowledge exchange to perform better

Table 4: Distribution of respondents on knowledge exchange to perform better

Attributes	Count	Percentage
Strongly Agree	97	20.8
Agree	287	61.5
Disagree	42	9.0
Strongly Disagree	32	6.9
Don't Know	9	1.9
Total	467	100.0

was collected in terms of the following attributes: 1) Employee leaving for a better job 2) Retirement 3) Promotion 4) No proper relocation 5) Downsizing and external factors.

Table 6 and Figure 6 show that 31.5% opined that downsizing and external factors mostly influence knowledge retention in their organization. 29.1% opined that the employees are leaving for better job and this is a major factor mostly influencing knowledge retention in their organization. 19.5% opined that retirement is a factor which mostly influences knowledge retention in their organization. 12% opined that promotion is a factor which mostly influences knowledge retention in their organization. 7.9% opined that relocation is a factor mostly which influences knowledge retention in their organization.

Knowledge retention Problems

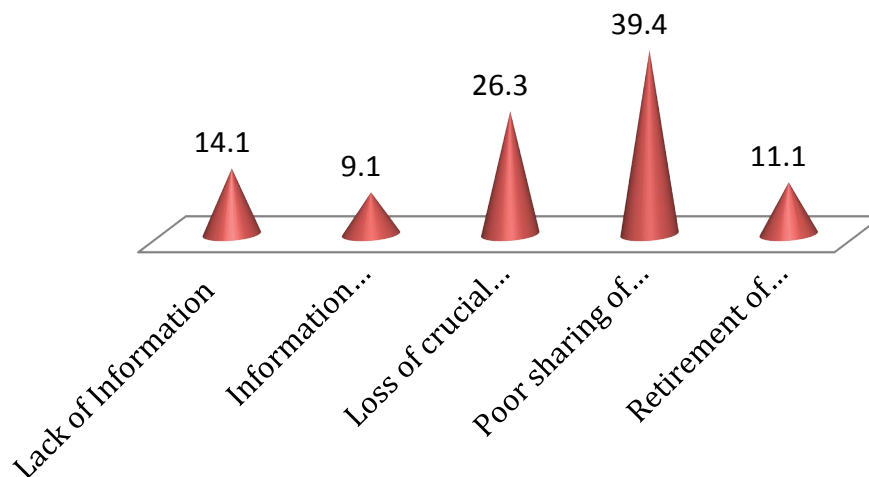
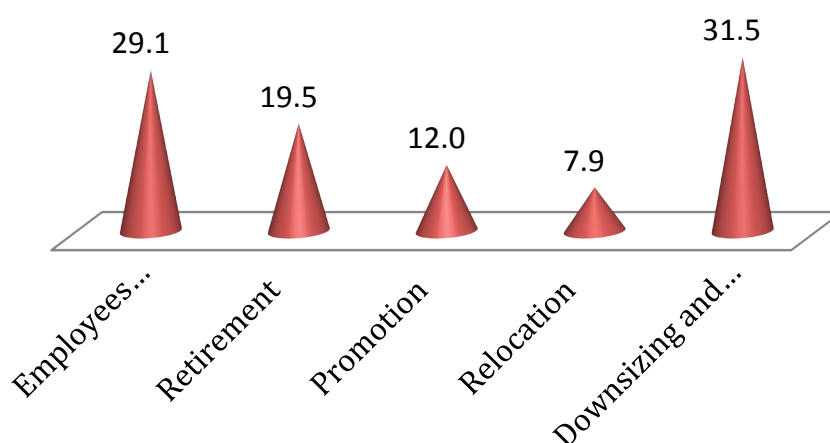


Figure 5: Distribution of respondents on major problem related to knowledge retention

Table 5: Distribution of respondents on major problem related to knowledge retention

Attributes	Count	Percentage
Lack of information	66	14.1
Information Overload	42	9.1
Loss of crucial knowledge due to key employee leaving organization	123	26.3
Poor sharing of knowledge in the organization	184	39.4
Retirement of employees	52	11.1
Total	467	100.0

Knowledge retention factors

**Figure 6:** Distribution of respondents on factors that mostly influence knowledge retention**Table 6:** Distribution of respondents on factors that mostly influence knowledge retention

Attributes	Count	Percentage
Employee leaving for a better job	136	29.1
Retirement	91	19.5
Promotion	56	12.0
Relocation	37	7.9
Downsizing and external factors	147	31.5
Total	467	100.0

RESULTS AND DISCUSSION

Knowledge management in business organizations and firms is the most sought after aspect today. One of the key aspects of knowledge management is knowledge retention. Biotechnology industry is an industry which deals with knowledge creation and application of knowledge for inventing something new which is useful to the mankind such as medicines, vaccines, etc. The company which gets a product patented first gains financial profit for the invention. The other companies lose their time, resources, man power, knowledge and money spent on the same invention. Hence, knowledge management is important in Biotechnology industry. Knowledge lies with the employees of an organization. A key employee leaving an organization will also take the knowledge he has with him. Hence, knowledge retention is another important aspect in the Biotechnology industry. In the present study, a survey was conducted for the employees of Biotechnology industry to understand the knowledge retention practices in Biotechnology industry with reference to Andhra Pradesh. The employee's opinions were analyzed critically. The study revealed that some Biotechnology companies see knowledge retention as very important but the management does not support it whereas others see knowledge retention as time waste. The study revealed that the Biotechnology companies recognize knowledge as a part of their organizational asset. Knowledge management is considered to be each and everybody's job in Biotechnology industry. However, the study revealed that there is also restriction in knowledge sharing. But the employees feel that knowledge exchange is necessary to perform better at work. The study also revealed that the major drawbacks or problems related to knowledge retention is poor sharing of knowledge in the organization and

loss of crucial knowledge due to a key employee leaving the organization. The study also showed that downsizing and employee leaving for a better job are the factors which mostly influence knowledge retention.

From the study, it is clearly evident that knowledge management and retention are the terms familiar to every employee of the Biotechnology industry. The managements of the companies consider knowledge retention as a very important entity for their business enhancement but are not able to support the knowledge retention practices or consider them as time waste. The Biotechnology companies consider their knowledge base as an organizational asset and see knowledge management as each and everyone's job. Though the Biotechnology companies see knowledge retention to be important, downsizing, poor knowledge sharing, key employee leaving the organization and restrictions in knowledge exchange are creating barriers for knowledge retention. The companies should concentrate more on knowledge sharing and knowledge exchange among employees within the organization which will help them perform better. Employees leaving organization may be due to lack of recognition of knowledge in the present job, insufficient salary, for career advancement, etc. The companies should recognize the key employees, involve them in the decision making process and give them recognition. Offering rewards, promotions, incentives and bonuses can also be an option for the management to make the employee realize that the company is recognizing his knowledge, talent and his services. Downsizing is another important factor influencing knowledge retention.

The Biotechnology industry can move a step ahead by retaining its knowledgeable employees and recognize their knowledge and services. Hence, the present study shows that knowledge retention is considered important however, a knowledge retention programme is not being implemented effectively in the industry in Andhra Pradesh.

CONCLUSION

The study revealed that knowledge retention is an important issue in Biotechnology industry. The companies see it as important. However, they are not supporting knowledge sharing and knowledge exchange among employees within the organization which is creating a major problem. Downsizing and loss of crucial knowledge due to a key employee leaving the organization are also problems in knowledge retention. The Biotechnology industry in Andhra Pradesh should design suitable knowledge retention practices such as recognizing the key employees, involving them in organizational matters and giving them rewards, promotions and incentives at appropriate time to protect the interest of the employee.

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