

## **Knowledge Management of Industrial Hygiene in Small Industry**

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### **Abstract**

Industrialization is a fundamental key in progress of a developing country, which has inherited problems of occupational safety, health and environment. Knowledge of industrial hygiene deals with problem of occupational safety, health and environment and can be considered a manageable asset by the industries. There is growing recognition in the Industrial community of the importance of managing knowledge; the concept of knowledge management in general is established but nascent in the field of industrial hygiene in country. There are long-standing barriers to sharing knowledge, as in all professions, including industrial hygiene. One of these is the mistaken belief that hoarding knowledge increases a person's importance in an organization. This also protects him against downsizing in his organization. This creates the hoarding knowledge or personalizing of knowledge. Basically the fundamental of the knowledge management lies in sharing, transferring and utilizing the knowledge. It is a tough task to make the knowledge shared but there is a need for incentives to encourage employees to share their knowledge and to make sharing simple and part of the workplace culture. The nature of industrial hygiene is the interdisciplinary it comprises of engineering, chemicals, medicine, toxicology, physiology, anthropometry etc. This compels the practitioners to communicate across boundaries of component disciplines.

### **Introduction**

Industrialization is fundamental key in progress of developing countries, which has inherited problem of occupational safety, health and environment. Knowledge of Industrial hygiene which deals with problem of occupational safety, health and environment can be considered a manageable asset by

industries. The concept knowledge management was introducing to only the electroplating units and to the entrepreneur and manager of shop. The totals of 45 electroplating users were given the questionnaires, out of which 45 returned the completely filled in questionnaires. The Knowledge management of Industrial hygiene concept was explained to the respondents.

### **Knowledge management**

There are many concept came up in the field of knowledge management, but the basic concept of knowledge sequence is applied in the field of knowledge management will work more effectively. The concept of Knowledge sequence is considered as the creation, transfer, and utilization of knowledge. Apply the knowledge sequence to the field of industrial hygiene, which will provide opportunities to synchronize different functions in industries, different agencies and approaches within the field in order to identify opportunities for partnership, collaboration and leverage. The knowledge sequence has both feedback and feed-forward aspects. Knowledge is fed forward as needs and gaps in existing knowledge are identified, while feedback occurs every time knowledge is applied and new knowledge is created.

### **Objectives of the Study**

**The objectives of this study were:**

1. To obtain a feedback from the electroplating enterprise entrepreneur regarding their satisfaction levels with the current Knowledge Management.
2. To obtain useful feedback for designing Knowledge Management system.

### **Methodology**

This study was carried out on the electroplating units in and around the Mumbai region. In all 30, electroplating units has been covered. The enterprise owners working with the electroplating units were in a position to give feedback for development of the system. A questionnaire was employed for the study. After ascertaining their keenness in knowledge management, these respondents were asked to fill in the questionnaire. It was ascertained that all the respondents accessed the Internet and used emails. This ensured that they had the basic knowledge of information communication technology ICT. A total of 45 electroplating users were given the questionnaires, out of which 45 returned the completely filled in questionnaires. The Knowledge management of Industrial hygiene concept was explained to the respondents.

**Limitations**

Since the scope of science education is large, this paper was limited to discussing only the electroplating units and to the entrepreneur and manager of shop. Another limitation of the study was that the sample size was small and purposive. It was taken from Mumbai region only, and therefore, the findings may not be generalized to all the electroplating units spread across India.

**Results and Discussion**

Entrepreneur satisfaction levels with existing system of Knowledge management

This study found out that almost all the entrepreneur and manager of shop learners (90 %) were satisfied with the existing system of Knowledge management

Table 1: Respondents satisfaction levels with the course material

How satisfied are you with existing system of Knowledge management?	Very Dissatisfied	dissatisfied	satisfied	Very Satisfied
Respondent (%)	9.4	0	60.4	30.2

The education on process safety and safe handling of chemical material in electroplating has been well documented and this has been substantiated by the learners in this study. The theory and demonstration parts are well written by experts in the subject, taking care of the academic principles.

**Importance of Knowledge management in electroplating**

The importance of practical component was highlighted by almost all the learners (95 %). They agreed that practicals were an essential component in chemical safety (Table 2).

Table 2: Respondents opinion on importance of lab practical

Do you think it is essential to develop system of Knowledge management?	Not Essential	To some essential extent	Essential	Very Essential
Respondents (%)	0	5.17	24.13	70.68

### **Experience of respondent on nine Degree of satisfaction Parameter for Knowledge Management**

The learners were asked how the practical experience helped them in their learning process, in terms of nine parameters viz., a) bringing a new perspective of Knowledge Management, b) learning how to use Knowledge Management tools, c) improving Knowledge Management skills, d) understanding the Knowledge Management better, e) preparing for Knowledge Management, f) completing Knowledge Management, g) sustain interest in Knowledge Management, and h) interact with fellow colleague and exchange knowledge, About 58 % of the respondent said that the knowledge management is a new perspective in industrial hygiene management. This is possible because they were able to observe and analyse the phenomena of managing industrial hygiene. About 68 % of the entrepreneur said that the how to use the tools that are required to use in knowledge management. Almost an equal number of respondent (69 %) said that the knowledge management will helped in improving their practical skills. This shows that they were keen to learn the techniques of knowledge management. They were also able to improve their skills with practice of knowledge management. The knowledge management also helped the respondent in understanding the Industrial hygiene better (65 %), completing an assignment of management of industrial hygiene (50 %). The sustained my interest in the Knowledge Management of industrial hygiene will be high (72%). Knowledge management will helped me interact with my fellow colleague to exchange knowledge (70%).

Table 3: Experience of respondent on nine parameters

Sr.	Degree of satisfaction Parameter	Lowest	Low	Moderate	High	Highest
	It brought me a new perspective of Knowledge Management	8	16	18	24	34
	It helped me learn how to use Knowledge Management tools	5.8	8	17.6	29.4	39.2
	It helped me improve my Knowledge Management skills	8.1	8.1	14.2	16.3	53
	It helped me understand the Knowledge Management	9.8	3.9	21.5	27.6	37.2
	It helped me prepare for Knowledge Management	8	10	26	26	30

It helped me complete an assignment Industrial hygiene Knowledge Management	8	24	18	28	22
It helped me sustain my interest in the Knowledge Management	10.8	4.3	13.0	26.0	45.6
It helped me interact with my fellow colleague to exchange knowledge	10	6	14	12	58

Note: Figures indicates percentages

### Respondent Liked / Disliked

However, when asked about the specific aspects of Knowledge Management the respondents liked or disliked, they gave the following feedback:

What respondent Liked a) The Knowledge Management was very useful to manage industrial hygiene b) Direct interaction and sharing knowledge with fellow colleague will be very useful in getting cooperation and guidance.

What respondent Disliked a) Proper infrastructure and sharing platform has to be developed to enhance the knowledge management. e) Non availability of information and proper guidance.

### Conclusion

There is growing recognition in the Industrial community of the importance of managing knowledge; the concept of knowledge management in general is established but nascent in the field of industrial hygiene in country. There are long-standing barriers to sharing knowledge, as in all professions, including industrial hygiene. One of these is the mistaken belief that hoarding knowledge increases a person's importance in an organization. This also protects him against downsizing in his organization. This creates the hoarding knowledge or personalizing of knowledge. Basically the fundamental of the knowledge management lies in sharing, transferring and utilizing the knowledge. It is a tough task to make the knowledge shared but there is a need for incentives to encourage employees to share their knowledge and to make sharing simple and part of the workplace culture. The nature of industrial hygiene is the interdisciplinary it comprises of engineering, chemicals, medicine, toxicology, physiology, anthropometry etc. This compels the practitioners to communicate across boundaries of component disciplines.

The field of industrial hygiene is undergoing significant changes, making knowledge management skills more important than ever for industrial hygiene professionals. The area of industrial hygiene knowledge transfer and use has not received the attention that research and surveillance initiatives have. There is a need for strategic thinking in this regard, with assessment of resource

allocation and planning in these areas to determine where more resources should be focused.

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