

COMMUNITY SYSTEMS APPROACH FOR STAFF MEMBERS' SAFETY-RELATED KNOWLEDGE MANAGEMENT

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Abstract

In order to maintain or improve resilience of staff members in socio-technical systems, it should be a crucial issue to share each members' safety related knowledge with others, for example, information of each members' experienced incidents – especially subjective information, information of threats discovered by each members when they practiced their jobs, or know-hows to avoid an expected threat or prevent an error.

Usually, management such safety-related knowledge is conducted by applying a “Safety Information System”. Such a system is composed by three steps: In first step, staff members such as operators or maintenance workers should report their safety-related information to managers or management division. In second step, managers or members of management division should review and analyze it, extract any lesson and compose materials to be learnt. In third step, those materials are disseminated to the organization. These systems are believed effective to enhance double loop learning in the organization mentioned by J. Reason, while there are some issues should be solved and would be not easy to be solved as well, such as how to encourage members to report information and how to let them read and review materials composed by managers more sincerely. Further it is also a crucial issue that there is information being difficult to be captured caused on limitation of human cognitive systems.

Thus, “Community system” approach will be proposed in this study in order to compensate for these limitations of safety information system approach. In this work, I will discuss what community system is and how to build it among staff members.