The Expert’s Opinion

Information Management and Lean Manufacturing

An interview with Dr. Arlie Hall
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Interviewed by Anita Lee-Post, Associate Editor of Industry and Practice

JDM: What is your opinion on the current status of information/ knowledge management?
Hall: The concepts of data, information, and knowledge are not clearly defined at the practical level. Managers are under the pressure of keeping abreast and being competent with using technology to sift through a massive amount of information. It is neither apparent nor easy to sort through and select the right piece of information at the right time.

JDM: What is your opinion on the current status of lean manufacturing?
Hall: Lean manufacturing is a buzzword. 40% of American manufacturers have tried some form of lean manufacturing and the number is growing. Managers have a sense that the Japanese have their own way of implementing lean manufacturing. The question that needs to be addressed is how to reinvent it in the States.

JDM: What kind of information is most critical to lean manufacturing?
Hall: A good statement of information requirement is critical to the success of lean manufacturing. However, it is often difficult for managers to perceive the information content of its product — “you cannot see it, so it is not there” is the general perception of things. In addition, it is already not easy to understand the current information flow from a system perspective, not to mention how to change the flow to meet the needs of a lean setting.

JDM: How does information management impact lean manufacturing?
Hall: The recognition that manufacturing runs on information flow. Too much emphasis has been placed on the technical side of things such as what should this machine do? A consistent information flow across organization boundaries is critical. By consistent, I meant without distortion as the information flows across organization boundaries.

JDM: What are the challenges in implementing lean manufacturing through information management?
Hall: I believe the major challenge is for managers to recognize that implementing lean manufacturing is an information management issue, not a technical issue. For example, lean manufacturing cannot be implemented by just putting all the technical pieces such as machines together without its information component. The problem with a lot of managers is to use information systems to support rather than to drive lean manufacturing. The key is to assure consistency of information between organizational boundaries, i.e., information flows across organizational boundaries without distortion.

JDM: What are the skills needed to manage information in lean manufacturing?
Hall: They can be grouped under the category of organization development process skills which include a mastery of the understanding, assessment and management of the following concepts: (1) vision, (2) self management or people-centered strategy, (3) ownership at the source, (4) shop floor management excellence, (5) process management mentality, and (6) progressive organization. A mentality of problem solving at the shop floor level is very important.

JDM: What are your suggestions for implementing lean manufacturing through information management?
Hall: I suggest finding answers to the following questions:

(1) Where are we and where are we going?
(2) Does everyone share the same clear vision of the future?
(3) Do we have a process to understand the mind of our customers?
(4) Is leadership demonstrated?
(5) Are employees empowered so that they view themselves as the president of their own company?
(6) Is glass wall management practiced, i.e., is information about the company freely accessible so that everyone knows where the company is at all time?
(7) Are operators at the shop floor recognized as the agents of change?
(8) Does a charter developed for the action plan?

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