Real Time Information Management to Increase Productivity in Industrial Plants

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ABSTRACT

Intelligent systems (IS) technologies have received much attention in a wide range of process engineering applications including process operations. With the revolutionary progress in information and computer technologies applying the latest technologies in industrial complexes has become a serious challenge to both management and technical teams. Objects and components are changing the way everyone relates to their computer and networks.

Today’s information technology systems are mostly data and communications tools for personnel. The industrial desktop is simplifying automating decisions, intelligently analyze large amounts of data, and to learn from past experiences. The industrial desktop is enabling the operators, engineers and managers to simplify their access to the economic, process and equipment information. They can adapt their desktop according to their domain knowledge, roles, skills and responsibilities. Collaboration between several functions (Operations, Management, Maintenance, and Engineering) is enhanced. Access to classified information enables to exercise new ideas, determine the right targets, determine best patterns, transform and store knowledge.

A description a data hierarchy to transform data into information, them knowledge for action is presented. A new continuous improvement and innovation loop emerges as a close loop for active decision making and collaboration.

Results translate in extended sub critical equipment availability, increase production by faster detection of process bottlenecks and operating costs reduction. Descriptions of three in the process industries are presented.

Brief Biography of presenting Author for Introductory Purposes:
OAB is Industrial Manager for OSI Software, Inc. His duties include consulting, design and implementation of enterprise plant information systems. His contributions have been in the design of a blue print for strategic information systems. Experience includes work as process control supervisor with Duval Corporation and staff engineer for Pennzoil Products Company. During his career he has been involved in the analysis, simulation, control and optimization of industrial plants. He holds dual BS degrees in chemical and metallurgical engineering from the University of Concepcion, Chile and a Ph.D. degree specializing in process control and optimization from the University of Utah. He is active member of AIChE, SME, ISA, AISE and ATCP.