

TITLE: e-Manufacturing: the Enabling Highway for Factory Productivity Improvement

Abstract: The hunt for factory productivity improvements opportunities is not only one of the fundamental precepts of competitive manufacturing, it is also an ever expanding search for finer levels of analysis and action, with a voracious appetite for data. e-Manufacturing is the vision and delivery of data access, transport, management, and manipulation infrastructure and mechanisms within the factory that leverage existing and advanced information technologies to provide productivity improvement. Equipment Data Acquisition (EDA) otherwise known as Interface A provides an unprecedented 10 to 100 times increase in the amount and rate of data available to the factory for automated control and decision making. The opportunity to use data driven decision making, increased levels of automated process controls, decreased delay to feedback and risk reduction mechanisms such as fault detection systems promise to deliver factory improvements in areas that were previously inaccessible.

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