5 Places You May Have Hidden Paper on Your Shop Floor

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If you're currently planning on implementing a Manufacturing Execution System [1] (MES) or other applications in the Manufacturing Operations Management [2] (MOM) space, you may think you have all the shop-floor areas and situations that still use manual, paper-based processes identified, but this may not necessarily be the case.

Sure, there are shop-floor areas that probably still have an obvious and highly visible paper presence. Many production facilities have paper runners circling from work center to work center alongside work in process information about material movements or shift production. Another area you're probably not surprised to see paper is in the daily schedule that's handed out to operators by supervisors or posted in the cafeteria.

But there are other production areas where you may not realize immediately the potential for piles of paper, or how these particular suboptimal manual processes are costing you money and operational efficiency that can add up over time. In this post, we'll look at five areas of your production facility where you may be unaware paper-based systems are holding you back, as well as how today's next-generation solutions are facilitating the move to a paperless manufacturing environment.

1. Standard Operating Procedures (SOPs)

Your default operational M.O.—the step-by-step outline on how to perform particular tasks. These are uniform across a particular discipline and must be followed by all employees to ensure consistency and accuracy in areas like: asset start-up and operation, product assembly, quality inspections, maintenance procedures, and others. Given the importance of and reliance on SOPs, it's essential that workers have access to up-to-date SOPs, and only up-to-date SOPs.

Having an electronic, centrally managed SOP system allows for better and more frequent review of SOPs requested by employees, electronic version control for different employee roles, access rights for relevant external users, upon request, and, of course, a reduction in paper costs.

2. HACCP Data Recorders

Especially relevant in food safety, today, many Hazard Analysis Critical Control Point (HACCP) programs are decades old. Given the rising compliance requirements in the food and beverage industry, not to mention the costly potential for transcription errors, HACCP is another area where manual paper systems and recording methods may be costing you in time and labor as well as data quality. It's time to do away with paper-based recorders of temperature, flow, time, and more.

3. Pick Lists for Raw Materials

Although not all fork trucks today are smart and not all warehouse workers are using wearable devices with augmented reality to pick raw materials and deliver to the shop floor, that doesn't give us carte blanche to run around with printed pick lists and check off with pen and paper as we go. Simple barcode readers can eliminate this outdated, error-prone process, and can help avoid mistakes like the delivery of the wrong raw material to the shop floor and inaccurate inventory counts in storage.

4. Maintenance Work Orders Managed in Secondary Systems

Often, work orders generated by electronic means for asset maintenance are taken by maintenance leaders and distributed throughout the department in manual form. This is often a simple log book in the maintenance shop that's a mistake just waiting to happen. A two-tier system like this can often lead to delays in maintenance, working on the wrong machines as production demands change, or a lack of communication between shifts.

5. Downtime Data Collection

Whether planned or not, every production environment is going to have shop-floor assets offline at various times. However, recording this information is often done after the fact by paper, with inaccurate down time codes that miss the micro stoppages, and then are entered shifts or days later into the proper system by clerical staff. Manual recording of this information is a sub-optimal strategy as it fails to capture real-time data and visibility across maintenance and operations.

Increase Your Operational Efficiency and Agility

Each of the cases above represents the best practices of yesteryear. Today's next-generation software applications, like Document Management, Electronic Work Instructions (EWI), Enterprise Manufacturing Intelligence [3] (EMI) and others are capturing this data in real time and integrating it with other overall business processes to produce actionable analytics and intelligence for decision makers.

In addition to immediacy, the information provided by automated systems isn't subject to the errors of a human hand or interpretation, and can be made immediately visible to workers in different job roles that take this contextualized information and use it to make any necessary operational adjustments at a much faster rate than through spreadsheet reporting.

*The above should've given you a good idea of the aggregate improvements in cost and efficiency integrating these tasks into higher level systems can deliver. There are many initiatives related to people, processes, and technology companies are pursuing to promote greater operational efficiency as well as increased agility to customer demands and production dynamics. For more information, read our free report on "*Software Strategies for Achieving Agile, End-To-End Production Process

Excellence *[4].”*

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