

Losing Millions of Dollars at the Click of a Mouse

Authored by
Don Howarth, Executive Partner
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Are your Control Room Operators fully engaged? A recent Gallup survey found 70.3% of employees are either disengaged or actively disengaged at work. Control Room Operators can cost your company literally millions of dollars each and every day, at the click of the mouse.

While working with a client a couple of years ago, it was observed that every operator that worked on the exact same DCS adjusted the system when their panel reading reached 80%, not 100%. When they were asked why they did not wait for the panel reading to reach 100% as the policy manual stated, they all answered the same way - *"It is better to initiate early because it keeps the process cleaner. It saves us hundreds of thousands of dollars."*

The operators were right that initiating the process at 80% would make it cleaner and saves money in the long run, but the operators were unaware

that the process engineers had already corrected the automatic loop which called for the process cleaning to be initiated at 80% when the panel reading read 100%. So when the panel reading indicated 80% and the operators took action, the system was actually at 60%, not the 80% they thought they were doing. That single action by the control panel operators cost the operation \$150,000 per day (or over \$50 million per year). ***The question is why did the control panel operators not know about the change?***

If you have ever been in a control room for any amount of time it would seem impossible for the control room operators

to be disengaged from their work. They are always adjusting processes, reviewing information, watching screens, talking to people, etc. ***The question you should ask is not about a control room operator being disengaged, but what are they engaged in?***

For example, in one control room, 80% of the operators were operating in manual mode when the plant could operate more effectively in automatic mode. In manual mode, control room operators made 4 times more process changes than a comparatively sized competitor and spent half their shift in non-value activities. Automation
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Today's control room operators are increasingly responsible for adjusting processes to yield higher performance, while monitoring to avoid "off-spec" conditions, and identifying potential equipment failures or reliability issues.





It is estimated that billions of dollars are lost each year due to operator effectiveness issues in the control room.

promotes disengagement because it removes tedious tasks, and repetition once handled by the operator. The operators wanted to be more engaged in their operation and took action to make that happen but in order to do that they were applying their old ways and habits of managing the process. Automation or “Smartware” has changed the dynamics of work content and operators need to accept that dynamic.

Before “Smartware”, an operator’s job was very hands on. In some cases, the operator was 80% task and 20% active decision making. With “Smartware” an operators job is 20% task and 80% active decision making. The unintended consequence of this technology is an operator can feel more disengaged with the process because they are just “sitting” looking at screens. If an operator does not understand or accept that making decisions is now his/her primary job, he/she

will find ways to feel useful.

For example, in one control room there were over 2000 alarms being set off every hour but not heard because they were muted. Panel operators perceived them as a nuisance and the alarms were better turned off because they were *“irritating and driving everyone crazy”*. The operators believed the plant was running better without the alarms because their field experience and time on the panels was superior to any automation. Without the alarms they felt more needed and thought they were making a greater contribution to the successful running of the plant. However, what they perceived as running the plant more successful was in fact false. The data proved that they were always late with their process corrections costing the company millions of dollars per year. Defeating “Smartware” by turning the working aids off, or running in manual mode should

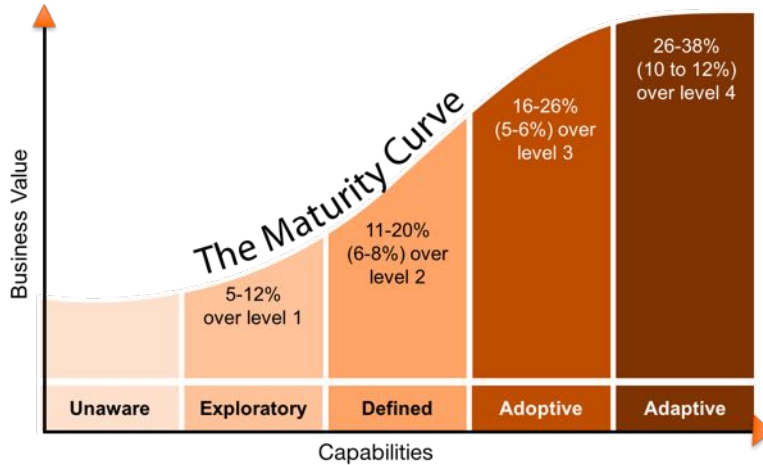
be done only in very limited circumstances such as large process upsets.

Plant control rooms are typically isolated and located outside of the physical plant. They have several pieces of information on screens and displays and they visually see 100’s of pieces of data in real time during their shift. This flow of information can cause an operator to feel overwhelmed and/or cause the loss of a broader view perspective of the plant or assigned unit.

An operator’s interactions with technology is increasingly more significant and is becoming more demanding. They are adjusting the process to achieve or exceed “*nameplate*” performance, monitoring specifications to avoid quality issues, and identifying potential equipment failures or reliability issues.

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Significant operational step changes are achieved as operators move up the maturity curve beyond a focus on execution to that of strategic value creation



Finally, in abnormal situations the operator has to regain running conditions as soon as possible. Being overwhelmed by information, constant monitoring, and complicated algorithms that operators do not trust are all “good” reasons why they should take more control rather than just react to technology. However, it is these types of thinking and actions where operating costs can significantly increase.

“Smartware” technology provides information and trends in real-time with predictive algorithms enabling your people to deliver outstanding financial results. However, when operators override the technology when they do not have to, or ignore it because they do not trust the data can cost your company millions of dollars. Don’t let that happen to you. Be proactive, identify the behaviors and take action before it happens.

Synovum Helps You Tackle Key Challenges

- ▶ Ensuring adherence to safety standards to avoid injury, environmental releases, and reputational damage
- ▶ Aligning the operators and their support team to improve collaboration across the process control system.
- ▶ Engaging operators to better utilize key information to manage and implement improvements quickly.
- ▶ Overcoming operator decision paralysis, ensuring enhancing production efficiency and quality outcomes.

Do you want to **understand where the gaps are in your integrated operations and control rooms** and what the key focus areas that will contribute significant operational step-changes and increasing strategic value?

Want to find out more about how Synovum can help you increase **control room operator capability and collaboration** in your assets?

For more information, let’s talk it through with a no obligation video conference call or a meeting with one of our executive partners. Email: info@synovum.com to arrange a call.



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