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## **Making better decisions based on simulation workshop**

*Monday, 17 May 2021 16:25 (1 hour)*

This workshop explores the importance of understanding variation within business simulation. The use of one-dimensional Value Stream Mapping (VSM) with a focus on average process times and average stock levels is widespread throughout business. This approach is useful but not without limitations particularly in complex and high interactive processes, often seen in process industries.

The workshop is split into three sections.

The first section details how Statistical Process Control (SPC) can be used in Excel to provide a model to demonstrate the impact of variation in a two-step process.

The second section briefly discusses the limitations of the VSM techniques which has widespread use throughout business.

The third section demonstrates how a simulation package can be used to provide a dynamic view of how a real-world process/system will behave under different conditions. Thus, allowing various hypotheses to be tested to identify the impact of process variation/average and find appropriate solutions before implementation. These different scenarios can be examined without disruption or enormous costs.

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**Session Classification:** Simulation workshop

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