1. **TITLE OF PUBLICATION:**

Smoothing Parameter and the Performance of Exponentially Weighted Moving Average and Variance Control Scheme

1. **TYPE OF PUBLICATION**: Conference Paper
2. **ABSTRACT** Exponentially weighted moving average and variance (EWMA&V) control charts are regarded as one of the most convenient tools used in monitoring process shifts. Although EWMA&V control charts have been extensively used to monitor quality characteristics, there are few studies concentrating on the effect of different values of smoothing parameter on the control scheme. In this paper, we look at how different values of the smoothing parameter influence the exponentially weighted moving average and variance (EWMA&V) control chart. Exponentially weighted moving average and variance are applied on simulated process with different values of smoothing parameter and the obtained results show that the EWMA&V control chart are very sensitive in detecting shift in production process when the smoothing parameter is small and every shift in the process mean is always preceded by shift in the process variability.
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