

Swimming in the Value Stream

Conducting a More Robust Quality Audit Using Value Stream Mapping (VSM)

By Lance B. Coleman, Senior

LED Publications Subcommittee Chair, CSSGB CQA, CBA

I attended my first ASQ Lean and Six Sigma (LSS) conference two years ago in Phoenix. Being relatively new to LSS, I wasn't sure how much of what I might learn would be directly applicable to my then, day to day duties as a Quality Auditor. However, since the conference was local, I was curious enough to pay my own way and am certainly glad that I did.

I have always used flow charts and process maps when preparing for audits, however, in preparing for my first audit of 2011, I decided to incorporate Value Stream Mapping (VSM) into my analytical toolbox. When conducting a quality audit, it is customary of course to, (1) match documents and procedures to regulations/standards, (2) match employee actions to internal documents/procedures and (3) verify appropriate training, operating controls, environmental controls and record keeping, as a minimum. Additionally, an auditor might look to identify best practices as well as opportunities for improvement.

Incorporating VSM into an audit adds another level of analysis. Which actions are value-add and which are not? Are value-add actions optimized, while non-value-add actions, minimized? How efficient are the feeder value streams that flow into the primary value stream that is being audited? Where are the potential bottlenecks in the value stream flow? What are the feedback loops in place to monitor and evaluate the effectiveness of the system under review? How close are we to matching product cycle time to takt time? As I was preparing for this audit of our Purchasing Department, I found myself thrilled at the prospect of the additional lines of investigation that VSM had opened up for me. VSM, particularly when incorporated seamlessly in the internal quality audit program, grants a level of analytical detail that is needed when the goal is system level improvement.

Despite the many additional avenues of investigation that VSM presents, I am able to incorporate them seamlessly within my previously developed audit plan without falling prey to the pitfall of many an auditor – “scope creep”. I am grateful to the ASQ Lean Enterprise Division for acquainting me with this powerful tool, which I have used on multiple occasions since that first audit.

For comments or questions you can email lance at lance@fullmoonconsulting.net