

A Study on Code Peer Review Process Monitoring using Statistical Process Control

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ABSTRACT

Software development process (SDP) and Software products are like two sides of a coin. We cannot achieve one without another. Today, in our software industries, monitoring software process is very challenging. Many problems of software process monitoring are hampering the quality of our software products. In this paper, we plan to address the problem of process instability and causes of process anomalies. These problems can be addressed using one of the powerful statistical techniques known as statistical process control (SPC). Also, control chart would be used in our study as it has been proved to be one of the suitable tools of SPC in monitoring process stability. As we know, the more defects we found during SDP, the less quality of the software product. Therefore, this study considers defect density as the metric to be use due to its significance in determining product quality.

Keywords : Software development process, Statistical process control, Control Charts, Defect density.