

Quality Control Techniques Utilized to Reduce Nonconformities in Warehouse Management Software

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Abstract: This effort is focused on analyzing the reasons for, and reducing the number of nonconformities observed in a Warehouse Management System (WMS) for a large toy distributor in the USA. In order to achieve these objectives, a variety of quality control and improvement tools are utilized. Process flow diagrams, Pareto charts, Ishikawa diagrams, and attributes-based control charts are utilized to identify the root causes. Subsequently, 5S, Lean Warehousing, Value Stream Mapping, and other techniques are utilized to effect improvements. Three priority (criticality) areas that related to the nonconformities were studied. Two of these areas had a reduction in the mean number of nonconformities. The third area did not see a reduction in the mean number, however, the time to resolve issues of that type has been reduced as a result of this effort.

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