

The Use of EDMS in Performance Management

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Abstract

Construction enterprises operate within a dichotomous paradigm when trying to measure and manage performance. On the one hand they are dispersed project based entities and on the other they are a centralised entity.

The measurement of construction performance at project level is therefore not sufficient to assess the “performance” of the whole construction process. What is required is an approach that drills-down into project performance measures and ties these to the broader enterprise measures.

Tools that measure performance are only valuable if they improve end results. The tools however must not remain static: dynamic tools provide management with a clear view of what is happening within the metrics platform. It is important however to consider how performance is measured. In the construction sector this “performance” measure has traditionally been focused at “project” level therefore omitting a thorough view of the overall construction organisation. The process before the project and the customer perspectives seem to be of little importance to the organisation carrying out the project.

The current nature and scope of the construction industry means many processes are being replicated which ultimately results in waste and inefficiencies throughout the construction supply chain. Furthermore, demands being made by the client to improve the overall quality and performance of the end product are beginning to lead to an increase in productivity and efficiency. The highly complex construction environment also means that cross discipline communication is problematic resulting in a lack of integration and co-ordination between the industry’s distinct professionals, all of whom have conflicting priorities and objectives.

Increasingly, construction professionals and in particular site based personnel find that their working environment is awash with construction data that is difficult to interpret and analyse as it arrives from sources that are at best ad-hoc. These ad-hoc sources all

use their own unique processes to undertake tasks. In order to undertake these tasks effectively however they have become reliant on information that has been supplied by others. The time wasted chasing the correct information ends in frustration which ultimately results in a lack of trust between the distinct construction professionals.

The more data you have about performance problems the better a performance management system will operate. Collecting data regarding performance problems is not easily achievable. Within the construction industry the collection of data is primarily paper based which itself is difficult to disseminate. The emphasis of managing this data needs to move away from managing the process paper based to managing the process electronically.

Recent advances in Information Technology (IT) and the adoption of these services within the construction sector means more and more construction information is now generated in a compatible electronic format. Electronic Document Management Systems (EDMS) coupled together with web-based applications are now becoming commonplace and have been used with great success within a number of construction organisations.

'g2-matrix is web-based performance management software offering a solution to the challenge of managing performance in a multi-location, multi-service and multi-supplier environment. g2-matrix operates on a met-failed basis where weightings and thresholds, based on business impact, build in tolerance to manage the level of impact any non-performance has relative to the actual service provided and its importance to the receiving organisation. The output of g2-matrix is a series of real-time, exception, trend and benchmark functions that are presented in a traffic light analysis format meaning the output data presented is in a series of red, amber and green prioritised performance stats providing a filter to highlight the non-performance areas that need attention'

It is important that a performance management system can be altered and remoulded to take into account the changes and distinctiveness of the construction project/process that an organisation will find itself involved in. The challenge for the construction sector is not the industry's capabilities to improve performance at project level but to improve performance throughout the whole construction process. With increasing focus and fuller awareness now being placed upon performance, the importance of using EDMS is beginning to emerge as a powerful tool for improving the performance level of organisations operating within the construction environment.

This paper will discuss the applicability of EDMS within the performance management perspective. The use of EDMS to manage performance data will also be discussed. EDMS will also be put forward as an overall solution to the collection of performance management data and demonstrate that the systems are more than capable of measuring and managing data applicable to the overall performance management process.