

1. Effects of Introducing a Concrete Placement Management System and Suggestions for Improvements

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Around a quarter of all workers in the construction industry are 60 years of age or older; those 29 or younger account for only about 12% of the total. This has led to challenges such as shortages of skilled workers and the transfer of technical skills.

One solution to these challenges is to digitalize construction sites. With the intention of reducing workloads, a concrete placement management system was developed and deployed at seven construction sites. We then undertook surveys at these sites to evaluate and improve the system.

The survey results showed that introducing the system reduced workloads for construction managers by approximately 23%. However, challenges such as increased workloads for plant employees were also identified.

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