

How Industry 4.0 is Influencing Concrete Investigations

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Often dismissed as a buzz word Industry 4.0 literally means the fourth Industrial Revolution. The ever-accelerating shift towards technological advancements like Cloud Computing, Artificial Intelligence, The Internet of Things and many more. These leaps forward permeate our life and work: saving time, providing efficiency and opening up a world of collaboration not considered possible a decade ago.

These are grand statements, and it is hard not to be cynical. References such as the “Gartner Hype Cycle” demonstrate how new technologies take time to mature and move from only having a “wow factor” to providing measurable impacts on our daily toil.

This paper will provide a new overview of the technologies that have matured and provide significant gains for Engineers and Technicians undertaking concrete inspection. It will demonstrate how Cloud computing is productivities gains, how Lidar and laser sensors are providing location information that is traditionally time-consuming, and how AI will streamline defect cataloguing with quantification.