

Automate Construction or Become Obsolete



Technological advancements have encompassed industries around the world. However, the land and infrastructure industry has been wary of treading digitally, due to a fear of high capital involvement. In this blog, Yogesh Khandelwal, CEO of geoAMPS, an India-based company specialized in software solutions serving the land rights and infrastructure management industries,

shares his vision on the necessity to embrace digitalization as a key pillar of the construction industry in the next decade.

Barriers to upgrading

In the endeavor to cut capital costs, a lot of companies refrain from deploying available advanced technologies and are hence left behind the times. While other sectors are replacing manual labor with machinery, this industry is opting for the reverse to remain less capital intensive.

The rate of productivity is on a decline in comparison to other industries that have embraced digitalization. While the hesitation of adopting new technologies is mainly to avoid capital investments it is also partly due to lack of enough knowledge and the ambiguity about the feasibility to do so. The resistance of employees to embrace the changes often stands as a barrier in upgrading to newer technologies.

Grey areas

A huge chunk of production cost gets wasted on the field due to co-ordination errors, labor inaccuracy, wasted materials and other sorts of discrepancies in the supply chain management. Lack of investment in digitalization means a delay in sharing and recording important information. Performance management and project planning techniques are not efficient enough to create a smooth structure of communication between the laborers and the decision-makers.

Benefits of digitalization

The finances put in to digitalize the management of assets, workforce and overall functioning would mean sustainable and far more efficient operations for all future projects. Geological information be it topography, structure, surrounding environment are all necessary factors in determining project decisions. Miscalculations and inefficiencies may lead to an immense drop in profitability. geoAMPS' GIS (Geographical Information System) technology helps to improve the quality of information with its intuitive geo-spatial view of the land assets. Plus, GIS technology simplifies and speeds what can be time-consuming processes, such as project area selection, route planning, selection re-routes, cost analysis, environmental assessment, 3-D visualization, and project management.

Different departments in the system use different software to maintain records, which are very often not in sync. This prevents the management from having a clear view of the real-time asset and project mapping. With [gisAMPS](#), for instance, a quick view of the status of tracts within a project is possible. Through color-coded maps and graphs. It can analyze project features by overlaying multiple layers. gisAMPS offers software solutions that are user-friendly and require minimal training.



gisAMPS is a good example of an integrated GIS mapping solution for project planning & management.