Digital Engineering + Reality Mesh

Panel Session

Geospatial World Forum 2018

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AECOM Imagine it. Delivered.

Imagine It. Delivered.

It's one thing to imagine a better world. AECOM was built to deliver it.

Worldwide, we design, build, finance, operate and maintain projects and programs that unlock opportunities, protect our environment and improve people's lives.

We develop and implement innovative solutions to the world's most complex challenges.

- **US$18.2 billion of revenue in fiscal year 2017**
- **Ranked #1 in *Engineering News Record*'s "Top 500 Design Firms" for 8th consecutive year**
- **One of *Fortune* magazine's "World's Most Admired Companies" for the third consecutive year**

Now Imagine … Industry 4.0

Industry 4.0 imagines a rapid, disruption + innovation in digital technology that will change the way we manufacture, plan, build, maintain, and use our infrastructure assets.

This disruptive shift is driven by interactions between currently disparate technology fields, leading to total digitization and automation of certain workflows.

Enabling us to design more effectively, build at lower costs, and operate / maintain assets more efficiently.

Data is the key: Right data, right time, right place.

The push to digitize is driven by public sector clients who are looking to modernize. It makes a lot of sense to have real – time data to support decision making.

Creates a need for 'frictionless data' that moves across the lifecycle of an infrastructure asset lifecycle.

With today's advances in Artificial Intelligence and Machine Learning new methods of analysis will find patterns and predict long term strategy at any point in an asset's life cycle.

Hyper connectedness

In the near future, all assets will be bi-directional as their data is pushed and pulled to other data sets or city information models.

Today, BIM is good for feeding data forward…but, we need to feed it backwards too.

The renewed interest in connecting BIM + GIS data sets will refocus how the information can work together to provide bi-directional, environmental, geospatial context to an asset.

Advanced Algorithms.

Our end goal is to create an asset that is constantly learning and growing and providing savings through advanced predictive analytics.

Clients will see a savings of 33% costs and over 50% delivery time

It will also enable citizens to make better use of the buildings and assets we already have.

Today we are not only consumers of information to complete our tasks. We have also become a key supplier in the data supply chain.

THANK YOU

FOR MORE INFORMATION

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