

# **HxGN Smart Build™ Insight**

Simply Smarter





Megaprojects are expected to increase rapidly to 24% of the global GDP in the coming 10 years ... The project management community is still struggling to find consistent ways to improve the performance of megaprojects ..."

The Past and Present of Megaprojects

Project Management Journal, January 2018

# The Challenges of Building Smart

Building construction projects are among the most difficult undertakings to plan, coordinate and execute. That difficulty, compounded by the continued flat line of productivity in the industry, increasing complexity of projects and growing risk of schedule and cost overruns, makes the need to invest in technology solutions clearer than ever.

The HxGN Smart Build™ Insight solution meets these challenges, leveraging decades of Hexagon's leadership in multi-industry project planning and control. By intelligently linking model, schedule and cost information in a simple-to-use, cloud and mobile solution, HxGN Smart Build Insight provides real-time insight into project performance that drives predictable outcomes to keep projects on schedule and within budget.

As megaprojects are increasing, engineering and construction firms must improve their ability to manage technical complexity to avoid delays and costly rework.



We are excited to partner with Hexagon to work together toward Skanska's vision of a new level of construction, where we will move toward an integrated construction process."

Per-Ola Svahn

Regional Manager, Skanska Sweden



## **Bringing a Smart Solution to Complex Tasks**

HxGN Smart Build Insight brings simplicity and order to tasks and processes that have historically been complex, time-consuming and error-prone. From the field to the office, HxGN Smart Build Insight breaks through traditional communication silos and puts actionable information at your fingertips, wherever you are.

Designed around model visualization and easy-to-understand reporting, HxGN Smart Build Insight supports 3D and 4D BIM processes to increase visibility for better control of resources throughout the project lifecycle. General contractors gain real-time insight into progress and are able to improve the planning and execution of work at the construction site.

HxGN Smart Build Insight is flexible and can integrate with complementary Hexagon solutions to provide the right amount of visibility on your project. With HxGN Smart Build Project Controls, we build upon that foundation to offer a True 5D BIM experience.

## Capabilities:

Capability	HxGN Smart Build Insight	HxGN Smart Build Project Controls
Model Management	✓	<b>v</b>
Schedule Management	<b>v</b>	<b>v</b>
4D Visualization	<b>~</b>	<b>v</b>
Quantification (QTO)	<b>v</b>	<b>v</b>
Work Package Planning	<b>v</b>	<b>v</b>
Production Planning	<b>v</b>	<b>v</b>
RFI & Issue Management	<b>v</b>	<b>v</b>
Document Library	<b>v</b>	<b>v</b>
Project Dashboard	<b>v</b>	<b>v</b>
5D Visualization		<b>v</b>
Budgeting & Forecasting		<b>v</b>
Cost Control		<b>v</b>
Project Change Management		<b>v</b>
Project Performance Management		<b>v</b>



## **Smart Features**

## **Schedule Work Assignments**

HxGN Smart Build Insight intelligently links the 3D model to project schedules for assigning site activities with all supporting information to field teams and for 4D visualization of planned, in-progress and actual delivery of construction.

## **Project Controls**

HxGN Smart Build Project Controls provides a comprehensive suite of project controls capabilities including budget and cost control, progress and productivity management, forecasting, earned value management and more that allow real-time monitoring of budgets and costs.

## **Field Mobile Enablement**

HxGN Smart Build Insight enables mobile access to all relevant information to support site activities and captures feedback of site progress and issues to the office in real-time.

## **Digital Layout, Scanning and Verification**

When combined with Leica reality capture solutions, HxGN Smart Build Insight permits models to be taken to the field and used in conjunction with Robotic Total Stations or as-built scan data for construction layout and verification.

## Reporting

HxGN Smart Build Insight and Project Controls allow the model to visually represent progress and cost status of the project compared to current budget and schedule and additionally provides a wide range of other graphical and tabular report formats.



## **Smart Benefits**

HxGN Smart Build Insight supports a smart digital strategy for building construction management throughout the project lifecycle. Benefits include:

## **Simplified Workflows**

HxGN Smart Build Insight brings simplicity and order to tasks and processes that have traditionally been complex, time consuming and error prone. By putting critical information at your fingertips wherever you are, collaboration between site and office is streamlined and simplified.

### **Accelerated Schedule**

HxGN Smart Build Insight facilitates communications and progress updates and feeds real-time insights to all stakeholders to ensure an accelerated schedule. By making individual field workers more productive, HxGN Smart Build Insight can help minimize delays and errors.

## **Early Projections**

Thanks to its real-time progress and cost-tracking capabilities, HxGN Smart Build Insight can accurately predict a project's final cost through project completion.

### **Better Coordination**

HxGN Smart Build Insight optimizes team efficiency and coordination by getting every project member on the same page, ensuring execution is aligned with plans and helping to reduce costly mistakes and rework.

## **Reduced Risk**

HxGN Smart Build Insight dynamically captures and reports progress and deviations from plan throughout the construction phase of the project. This constant collaborative connection between people, workflows and real-time data minimizes surprises, establishes accountability and creates visibility for proactive decision-making.

## **Field Empowerment**

HxGN Smart Build Insight is a mobile solution that passes tasks and required documents to the field from the office, ensuring field workers have the information they need to perform onsite functions. This empowers the teams to move forward with time and budget-critical components of a project.

## **Transparency**

The office and site are transparently connected so the impact on the design, scope, schedule and budget can be seen — in context — by all.

## Interested in learning more about HxGN Smart Build Insight?

#### Visit our website at:

hexagonppm.com/hxgnsmartbuildinsight



Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build, and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 21,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB.

