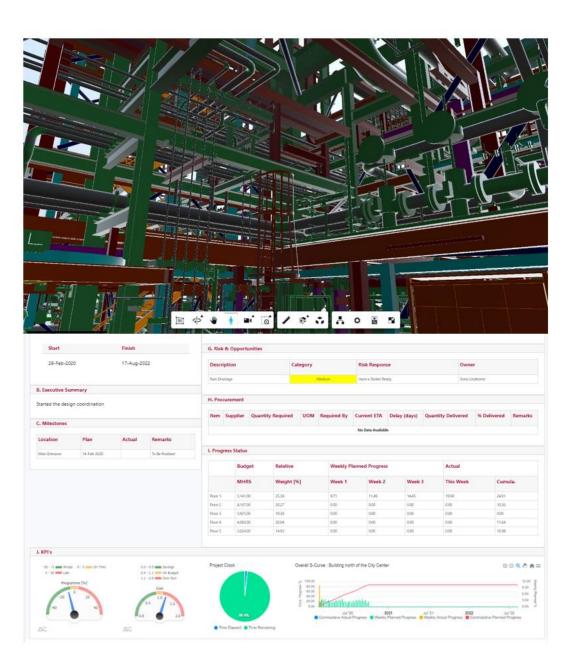
# BlackSmithSoft

### **BlackSmithSoft Digital Construction**

Fusing Cloud Technology with Construction Management



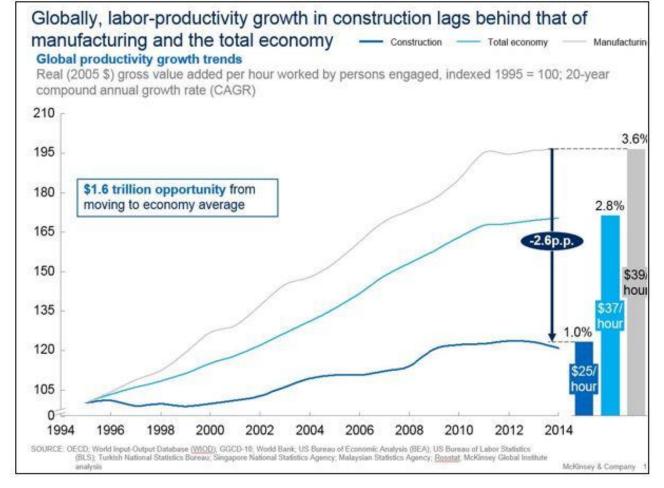


#### WebGL Meetup - November 18, 2020

# Why BlackSmithSoft DC

**Built by Construction Experts for the Construction Industry** 

About our Team: Combined 50 Years of Construction Management Experience in Mega projects: airports, office buildings and complexes, universities, oil & gas facilities and infrastructure (roads, bridges, stations,) etc.





A New Experience for Contractors & Owners

# BlackSmithSoft DC: People & Technology

Adaptable/Customizable to company operational workflow  $\succ$ 

Modular System, no need to transform all operations

Strategy: Don't Enforce, Buy IN.

	4D Simulations	Reality vs BIM				
N	Clash Management	On-site Progress Update				
Do	cument Management	Constraints Management				
E	xecutive Level Reports	Material Management				
	N-Week Look Ahead	Cost Management				
	Handover	Lean Planning				
	Manpower	Management				
	Auto Scheduler	Business Intelligence				

#### #1 tool in the Construction industry is **Excel**!

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# Cloud and COVID-19

- Requirement for Remote Work increased Buy-In for Cloud.
- Using Local Cloud Service Providers. (when required)

CWAs	Select	C	WPs	Select	IWPs	S	Select			
Users	Select		ypes	Select					Apply	
elayed	28 Jul-3 Aug 2019						Week	Month	2 Months	
9.001.001-17-5993										
Spool Fit Up (88%) 9.001.001-17-6007	Sun 28	Mon 2			Thu 1		Fri 2	5	Sat 3	
Spool Weld (10%) 9.001.001-17-6007		04-Spool Supported ( 029.001.001-17-6007	02-Spool Fit Up (38) 029.001.001-17-60		05-Grouting as required (10%) 018.001.001-5	04-Spool St 029.001.00	pported (5%) 1-17-6000			
Spool Fit Up (38%) 9.001.001-17-6014		03-Spool Weld (10%) 029.001.001-17-6014	01-Spool Erect (40% 029.001.001-17-601		03-Spool Weld (10%) 029.001.001-17-5993	04-Spool St 029.001.00	pported (5%) 1-17-6014			
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Spool Weld (10%) 9.001.001-17-6035			_				<ul> <li>✓ Push Back</li> <li>≫ Push - All</li> </ul>			

Virtual Daily Operations Planning – Sync Instead of In-person Meetings

Activity	Planned Completion	Forecast Completion	Actual Completion %	View Progress	06-11-2020			
A1410 - Earthworks	Jun 15, 2020	Jun 15, 2020	92.00 %	Complete		N HE SHOW NOT THE		Can 2
A1420 - Foundations	Aug 01, 2020	Jul 08, 2020	100.00 %	75%			11 Anna	FRONT
A1430 - Superstructures/ Roofing	May 10, 2021	May 10, 2021	0.00 %	50%			A CONTRACTOR OF THE OWNER OF THE	-
A1450 - Finishes	Oct 22, 2021	Oct 22, 2021	0.00 %	Started		A Second Second	ALL REAL OF	
A1440 - MEP	Jul 14, 2021	Jul 14, 2021	0.00 %			and the second second		
KPI's					C Image: Second sec		. o I	5
Project Clock	Overall S-Curv	/e :				⊕ © Q ≞ <b>≜</b> ≡		
10.376	8 120.00 8 90.00 6 60.00 E 30.00		1			12.00 Weeky Plan 9.00 6.00 10 3.00		

#### Buyer/Owner Report/Simulator Instead of Site Visits

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A New Experience for Contractors & Owners

### BlackSmithSoft DC for Renovation



#### Key features:

- Integration between point clouds and BIM
- Align scan point-clouds to BIM models.
- Complete, measurable documentation of site conditions on one platform.
- Model Review Tools (with point cloud support)
- Issue Management.

#### Use-case:

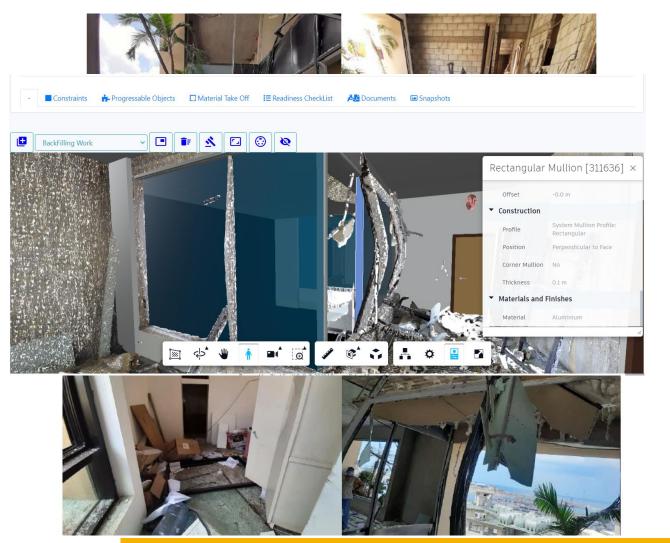
- Remodeling / reconstruction of historic buildings
- Reconstruction of destroyed buildings
- Renovation of hotels...

A New Experience for Contractors & Owners

### Use-Case: Rebuilding after the Beirut Blast on AUG-4

#### > <u>Description</u>:

- Contractor: German Company
- Architect: French Company
- Donor: EU based Foundation
- Building: 800 meters from blast center
- Donor Requirements:
  - Documentation
  - Proof of Damage
  - Proof of Progress
  - Proof of Quantities
  - Images NOT enough
- Need a Fraud proof Cloud Solutions.
- Laser Scan: 11 GB per Floor



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Web: BlackSmithSoft.com

**Email**: info@blacksmithsoft.com



### Demo:

### BlackSmithSoft DC in Renovation Live Project



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A New Experience for Contractors & Owners

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### **Read More**

- What is BIM: <u>https://www.autodesk.com/solutions/bim/benefits-of-bim</u>
- Advanced Work Packaging (AWP): <u>https://blacksmithsoft.com/services/certified-awp-wfp-training/</u>
- BlackSmithSoft DC: <u>https://blacksmithsoft.com/services/blacksmith-dc/</u>
- BlackSmithSoft Digital Renovation: <u>https://blacksmithsoft.com/services/digital-renovation/</u>
- Buyer Report: <u>https://blacksmithsoft.com/giving-visibility-to-the-buyer/</u>
- Mckinsey Report:
  - https://www.mckinsey.com/business-functions/operations/our-insights/how-construction-canemerge-stronger-after-coronavirus#
  - https://blacksmithsoft.com/post-coronavirus-engineering-construction-companies-need-tochange/
- Google Draco: <u>https://google.github.io/draco/</u>
- GLTF: <u>https://www.khronos.org/gltf/</u>
- Autodesk Forge: <u>https://forge.autodesk.com/</u>