

Just How Far Does BIM Reach?

Ron Gant

infotech[®]

Corporate Profile

Account Management
Business Analysis
Implementations
Hosting

40+
years in business

375
employees

Divisions

Customer
Services

AASHTOWare Products
Infotech Products
Consulting

infotech[®]

Only commercial you
will see in this
presentation

Agenda

- + BIM
- + Life cycle
- + LOD
- + Gap analysis



Watch this space
for disclaimers
and such

BIM

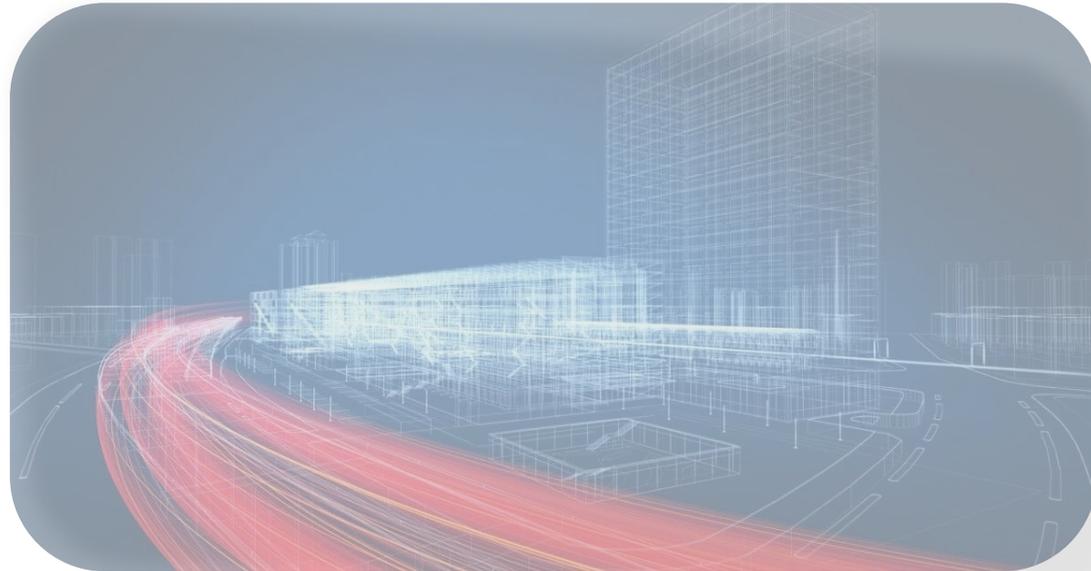


- + a highly collaborative process that allows architects, engineers, real estate developers, contractors, manufacturers, and other construction professionals to plan, design, and construct a structure or building within one 3D model.
- + a BUSINESS PROCESS for generating and leveraging building data to design, construct and operate the building during its lifecycle. BIM allows all stakeholders to have access to the same information at the same time through interoperability between technology platforms.
- + modelling and improving information flow throughout the construction lifecycle. Originally, the term applied to building construction projects, but it now encompasses infrastructure through to operations and maintenance.

This is almost like politics

Digital Project Delivery

- + the effective use of digital data to design, construct, inspect and record as-built conditions during the delivery of a construction project.



BIM & DPD are
not unrelated

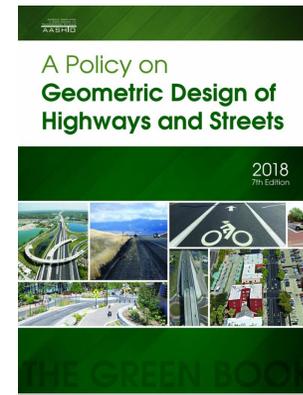
What Are We Trying to Accomplish?

- + Engineering
 - + Predictable
 - + Repeatable
- + Construction
 - + On time
 - + On budget
- + Operations
 - + Performant
 - + Reliable



Standards

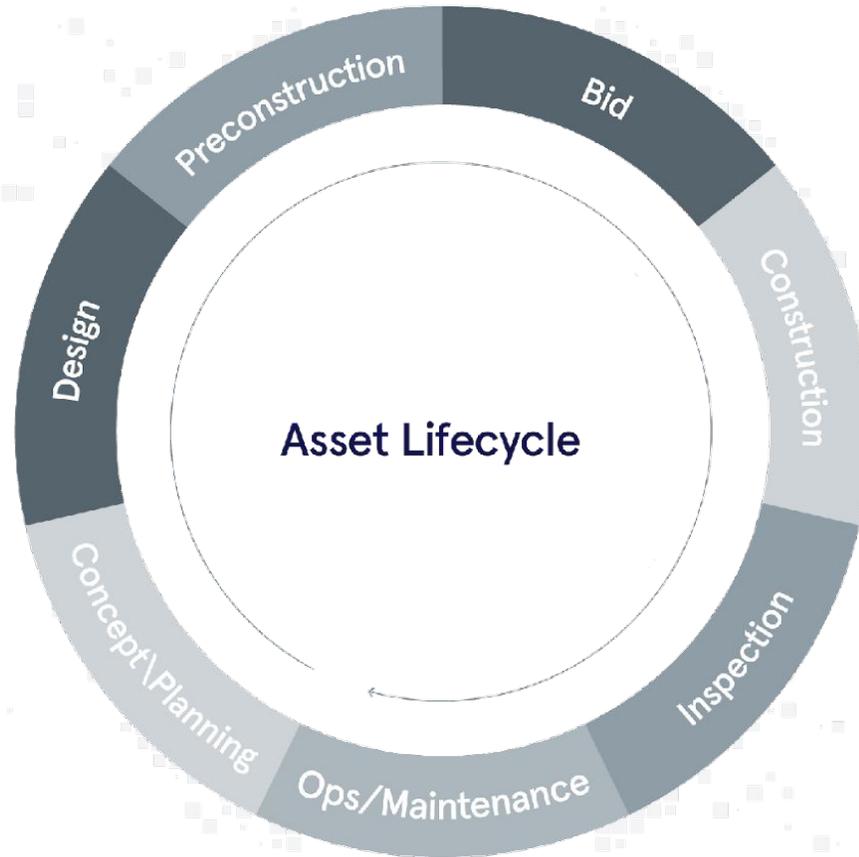
- + IFC
- + COBie
- + BIM
- + Digital Twins



only image I could find for COBie – Cobie Smulders

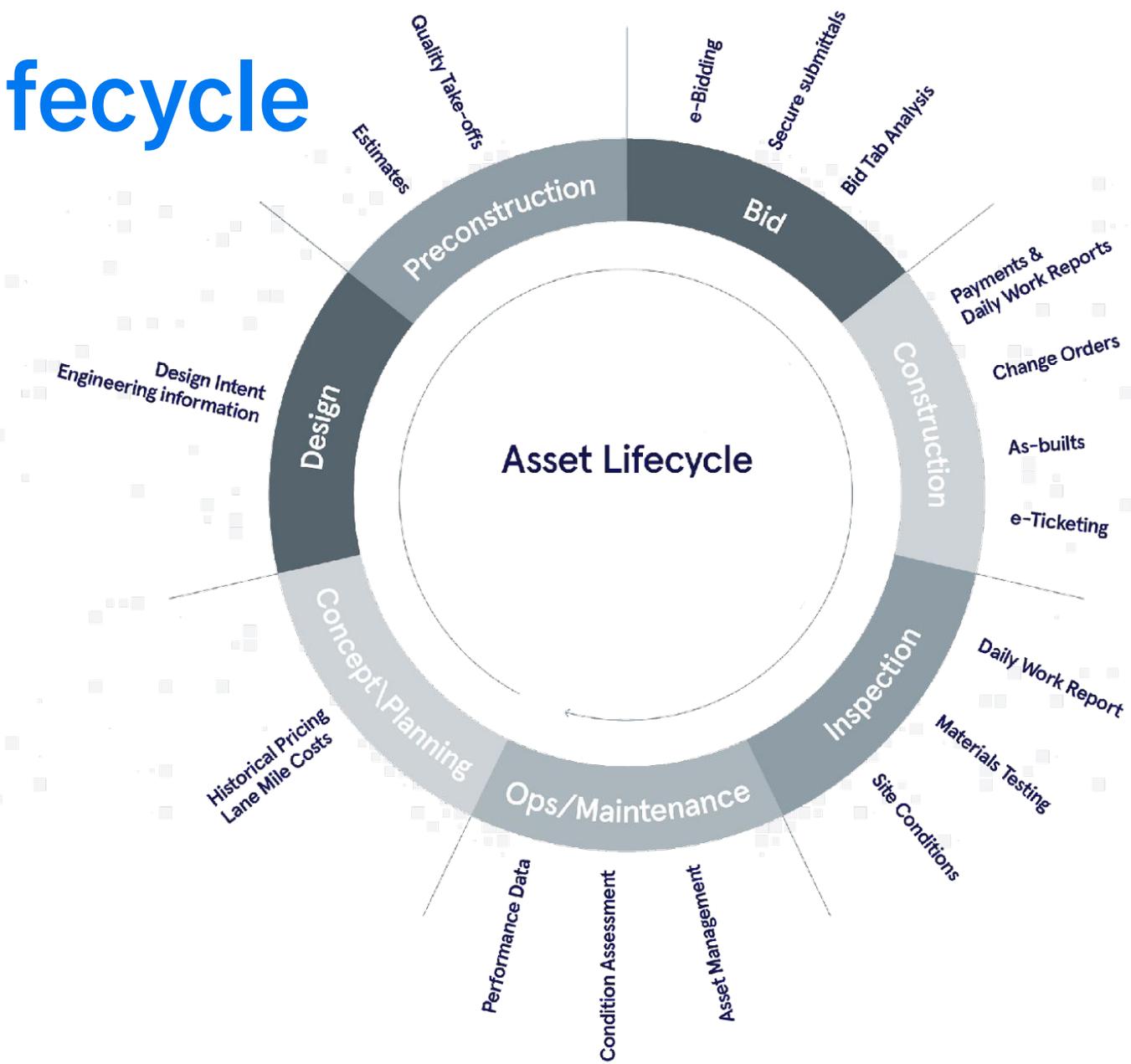


Asset Lifecycle



Are you still with
me?

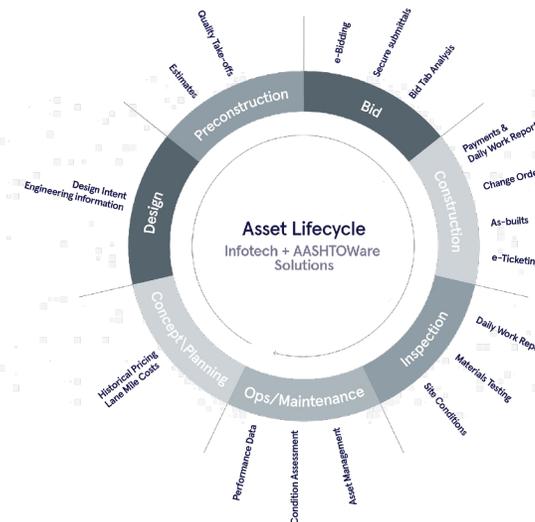
Asset Lifecycle



Anyone seen JD today?

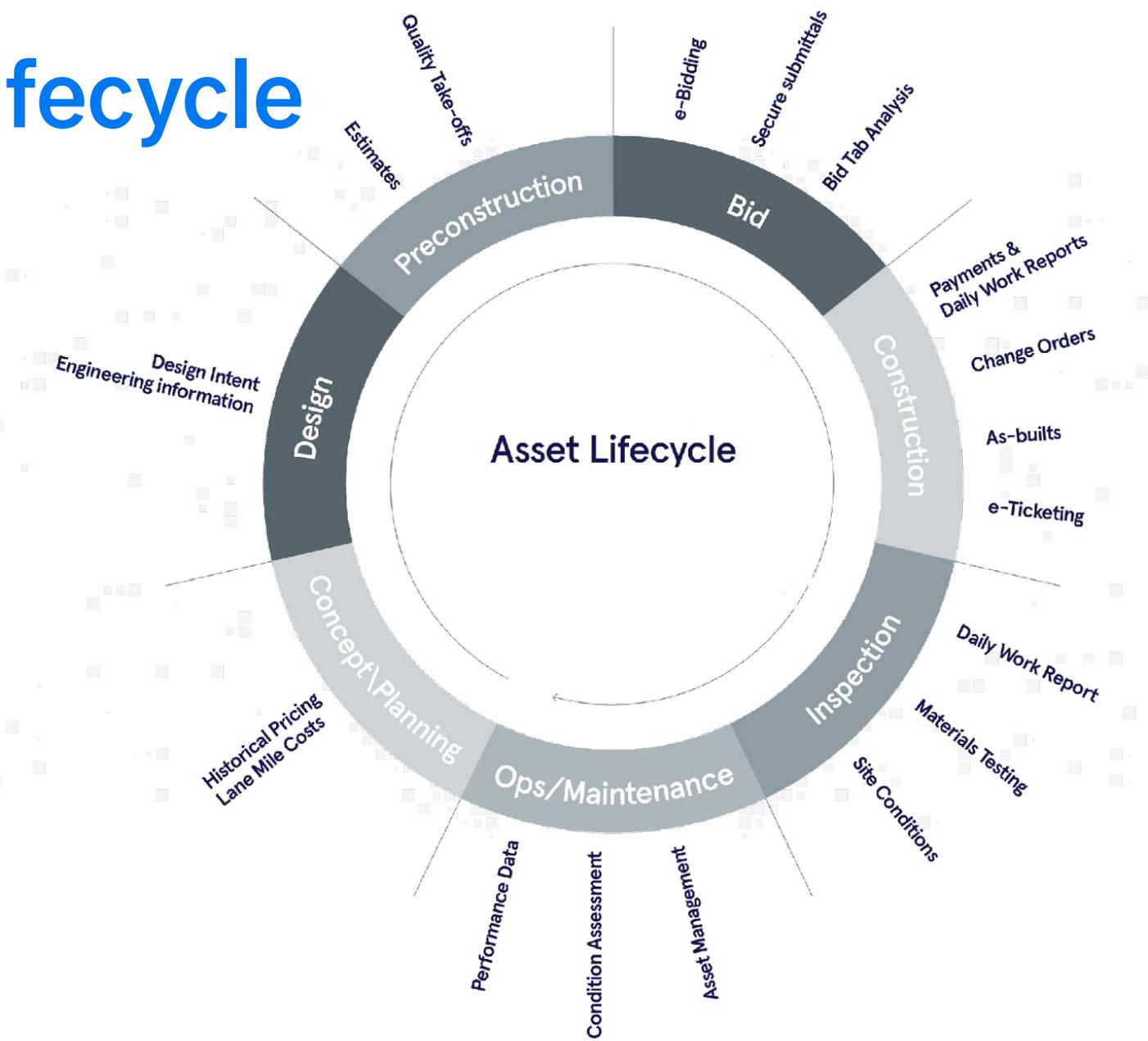
Model, Model, Model

- + Too much emphasis on digital model
 - + It is just part of the information
 - + Not all data tied to model
 - + Change orders
 - + Equipment
 - + DWR (maybe not or maybe multiple models)
 - + Bids
 - + Historical pricing
 - + ...



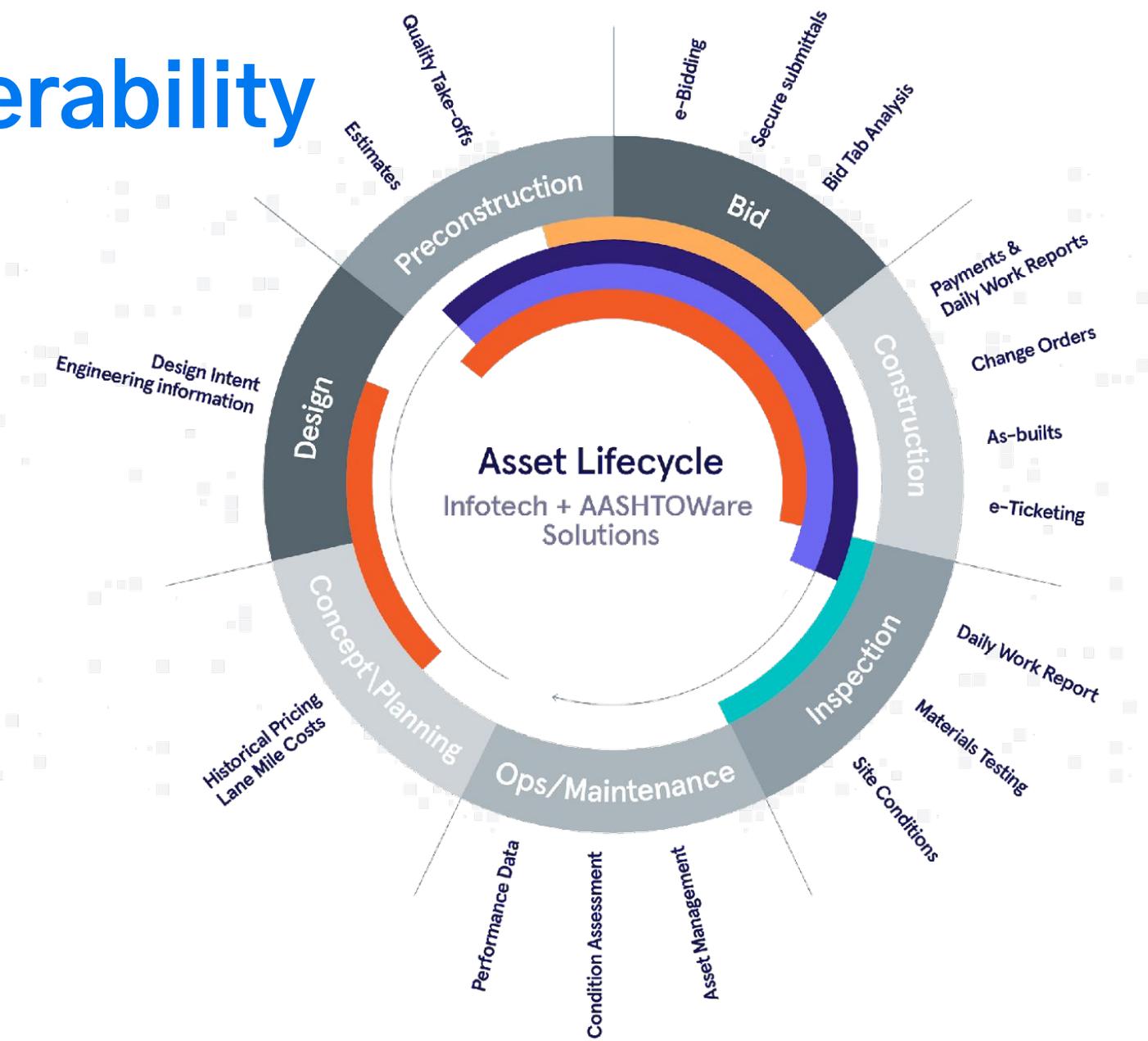
OK, Ron's opinion

Asset Lifecycle



Dan's gonna bust me on data governance now

Interoperability



- + Visual inspection data
- + Real-time multimedia
- + Actionable metadata



- + e-Ticketing
- + Safety
- + Data centralization



- + Rover data integration
- + Precise field measurements
- + Geospatial as-builts



- + Data visualization
- + Dashboards
- + Data sharing



- + Rover data integration
- + Precise field measurements
- + Geospatial as-builts

Bid Express®

Doc Express®

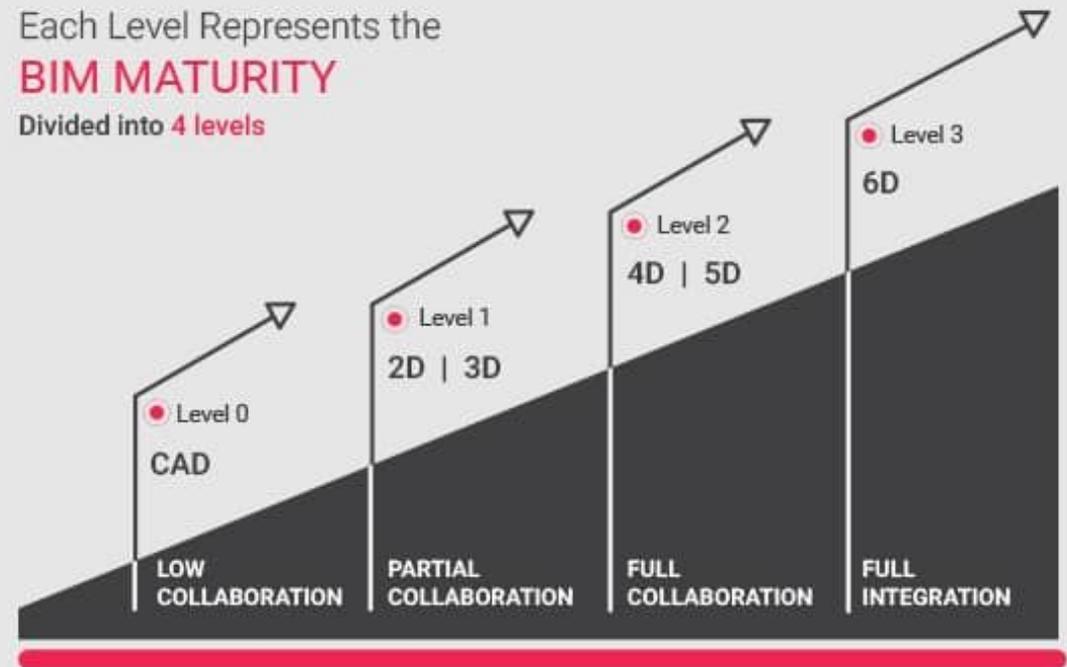
Appia®

Mobile Inspector®

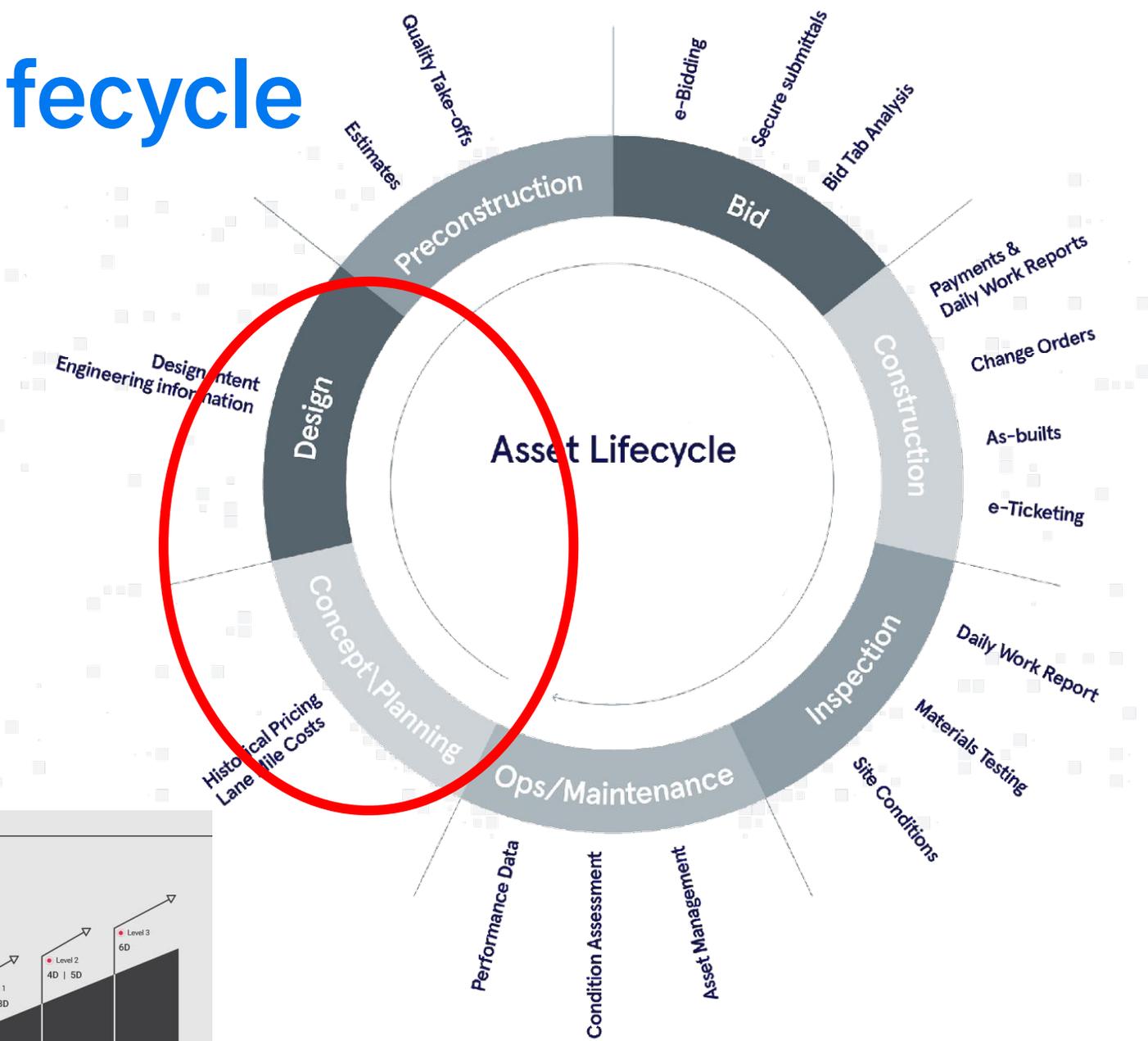
AASHTOWare Project™

BIM Levels Explained

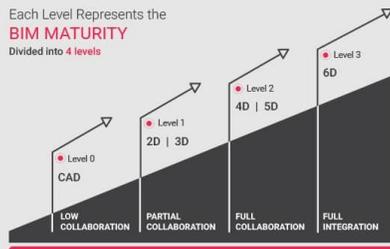
Each Level Represents the
BIM MATURITY
Divided into 4 levels



Asset Lifecycle

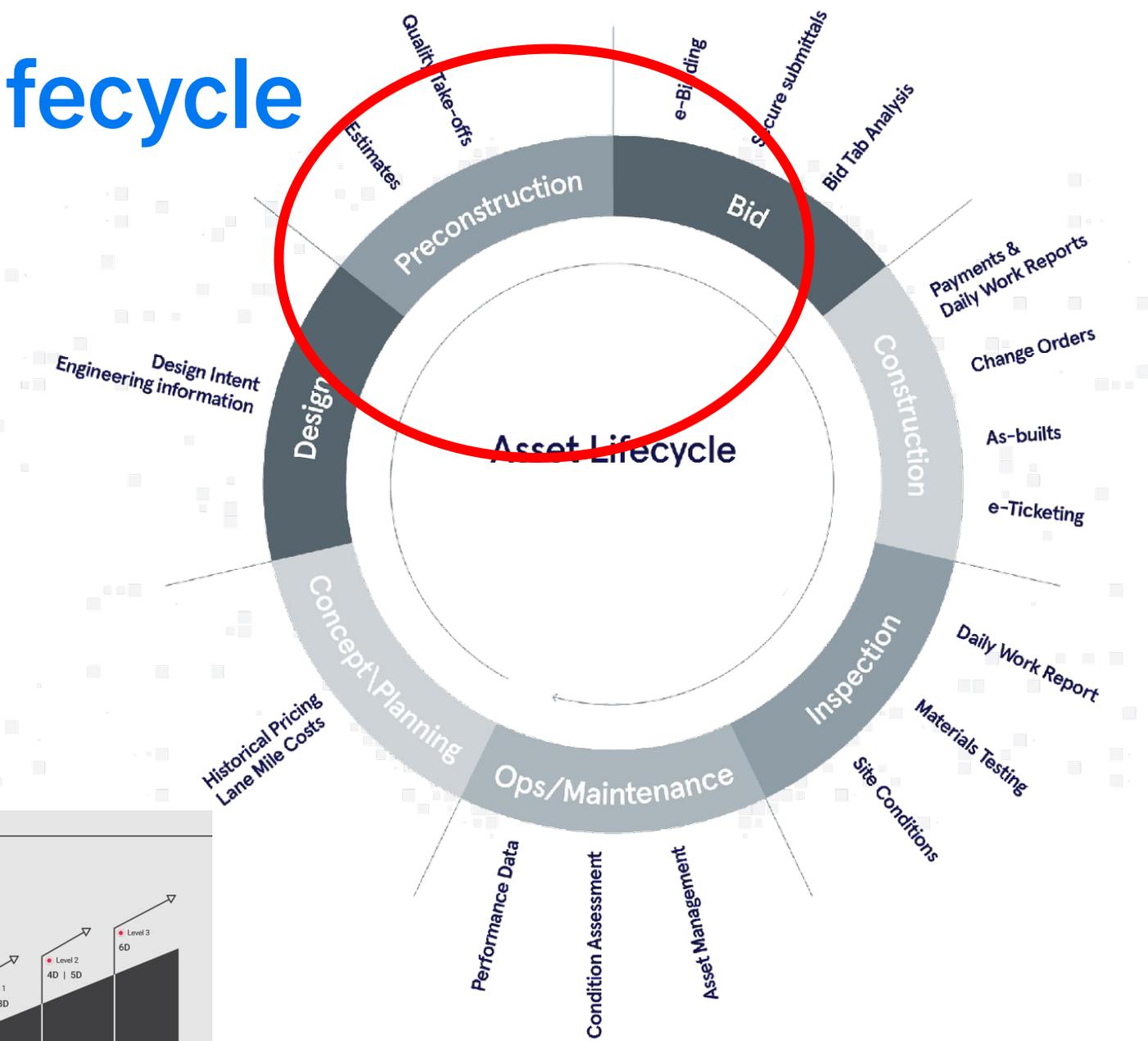


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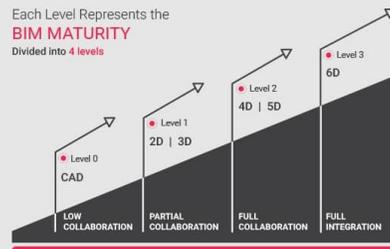


Anyone using the Bentley or Autodesk conceptual tools?

Asset Lifecycle

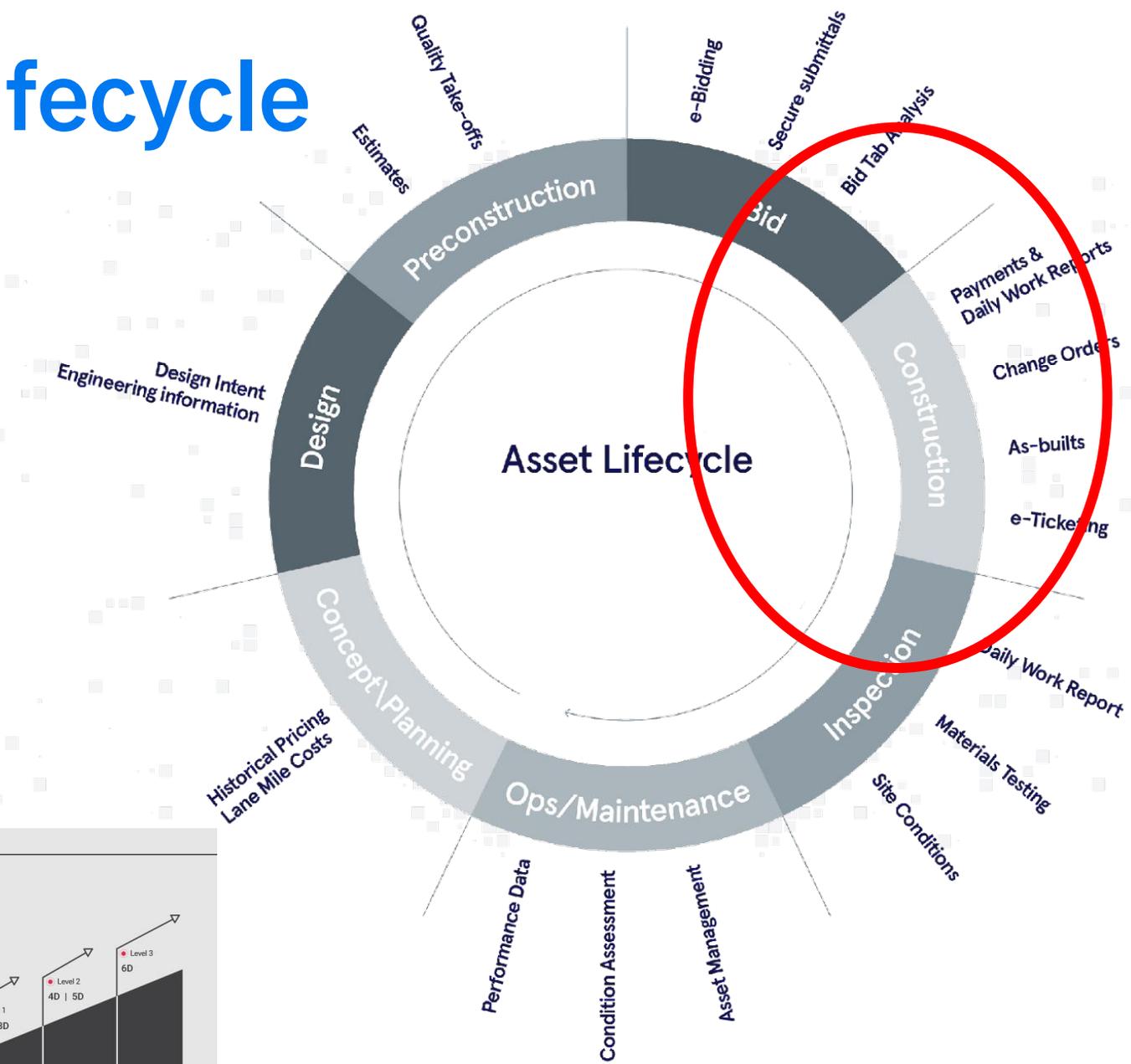


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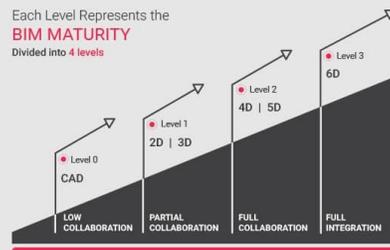


I knew I should have stayed out of the hospitality suite

Asset Lifecycle

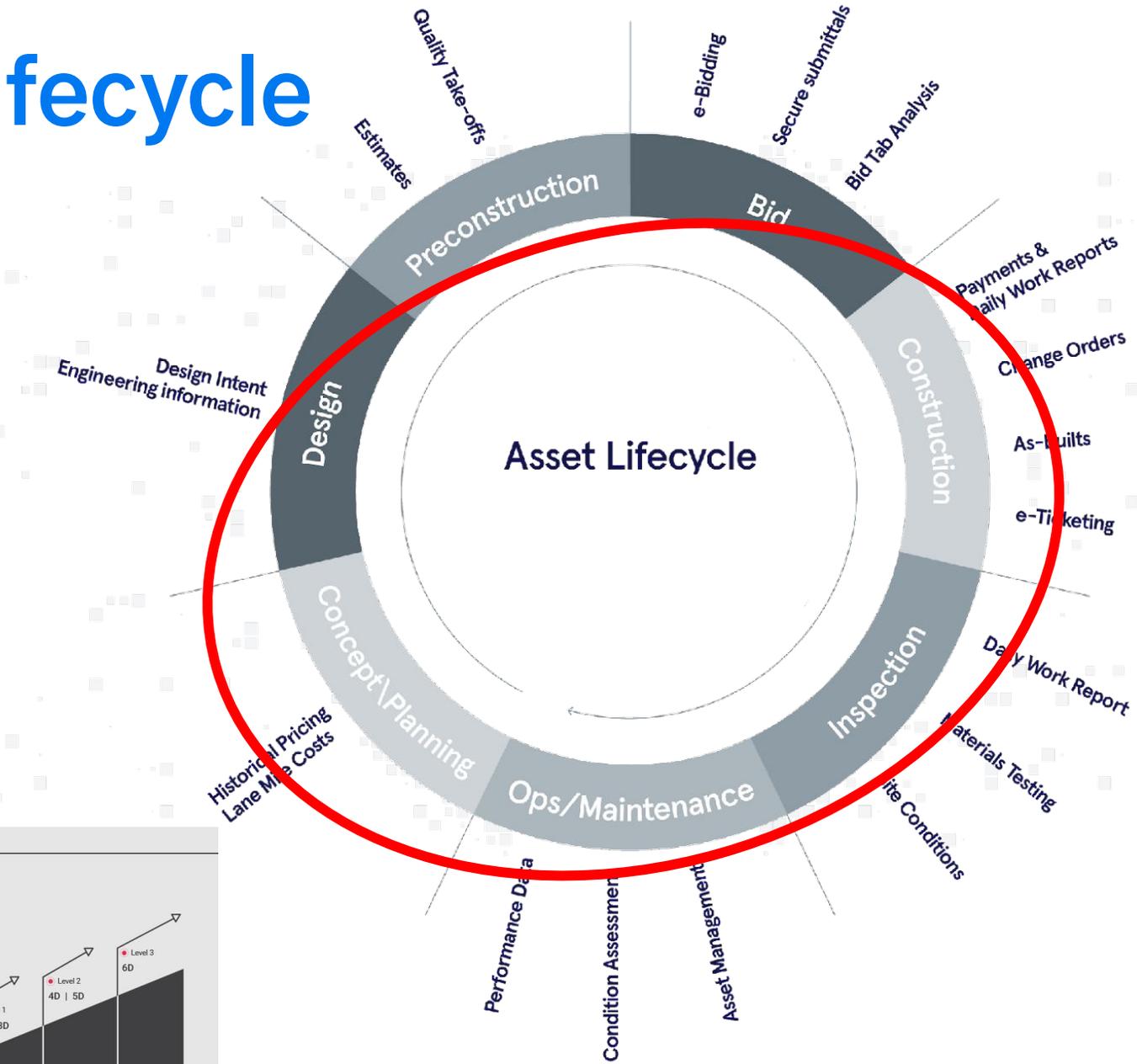


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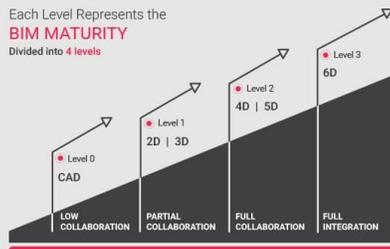


Where is JD?

Asset Lifecycle

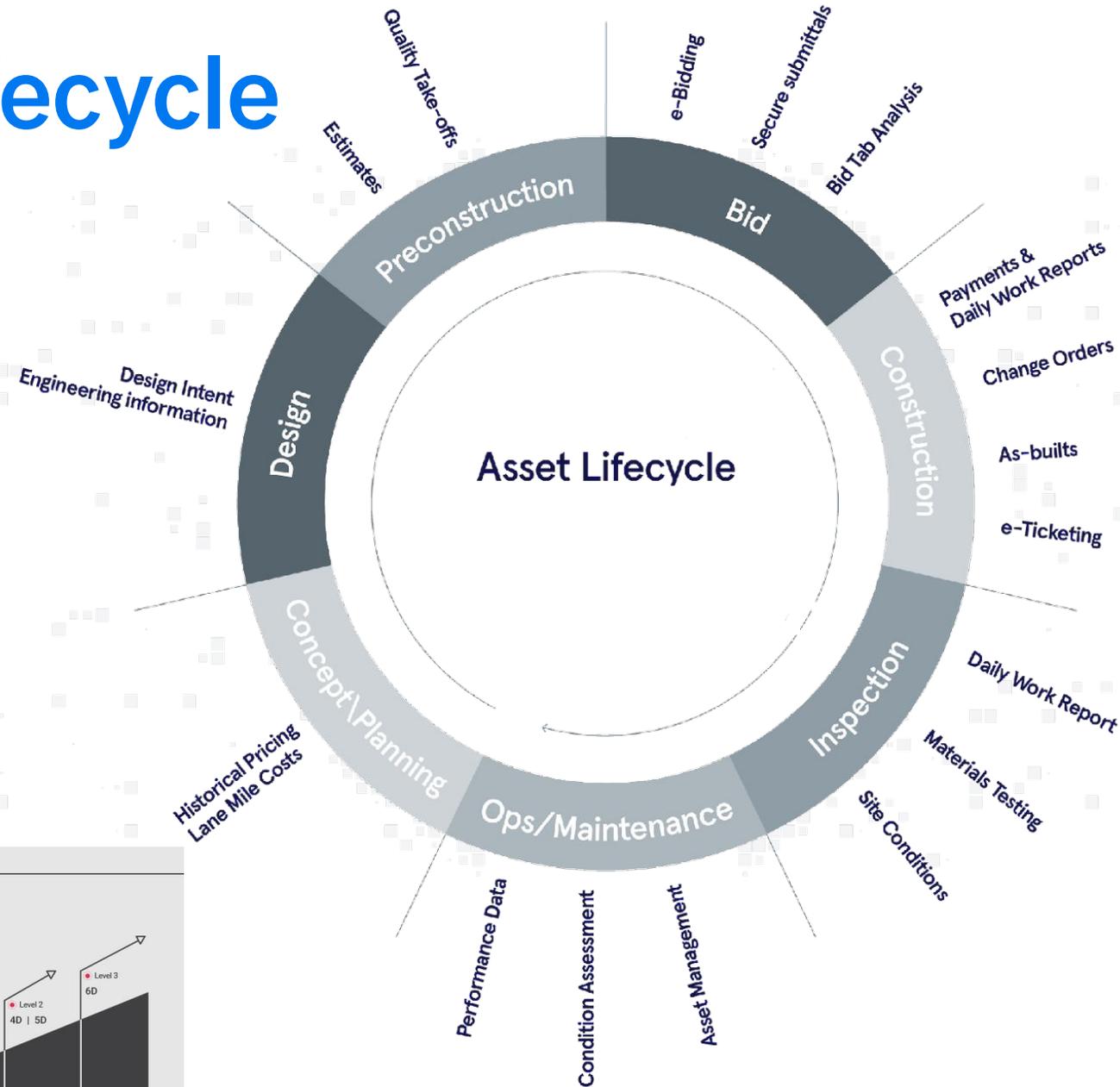


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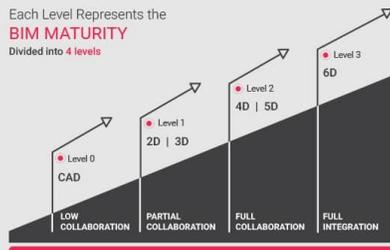


I never was any good at that circle stuff.

Asset Lifecycle



BIM Levels Explained

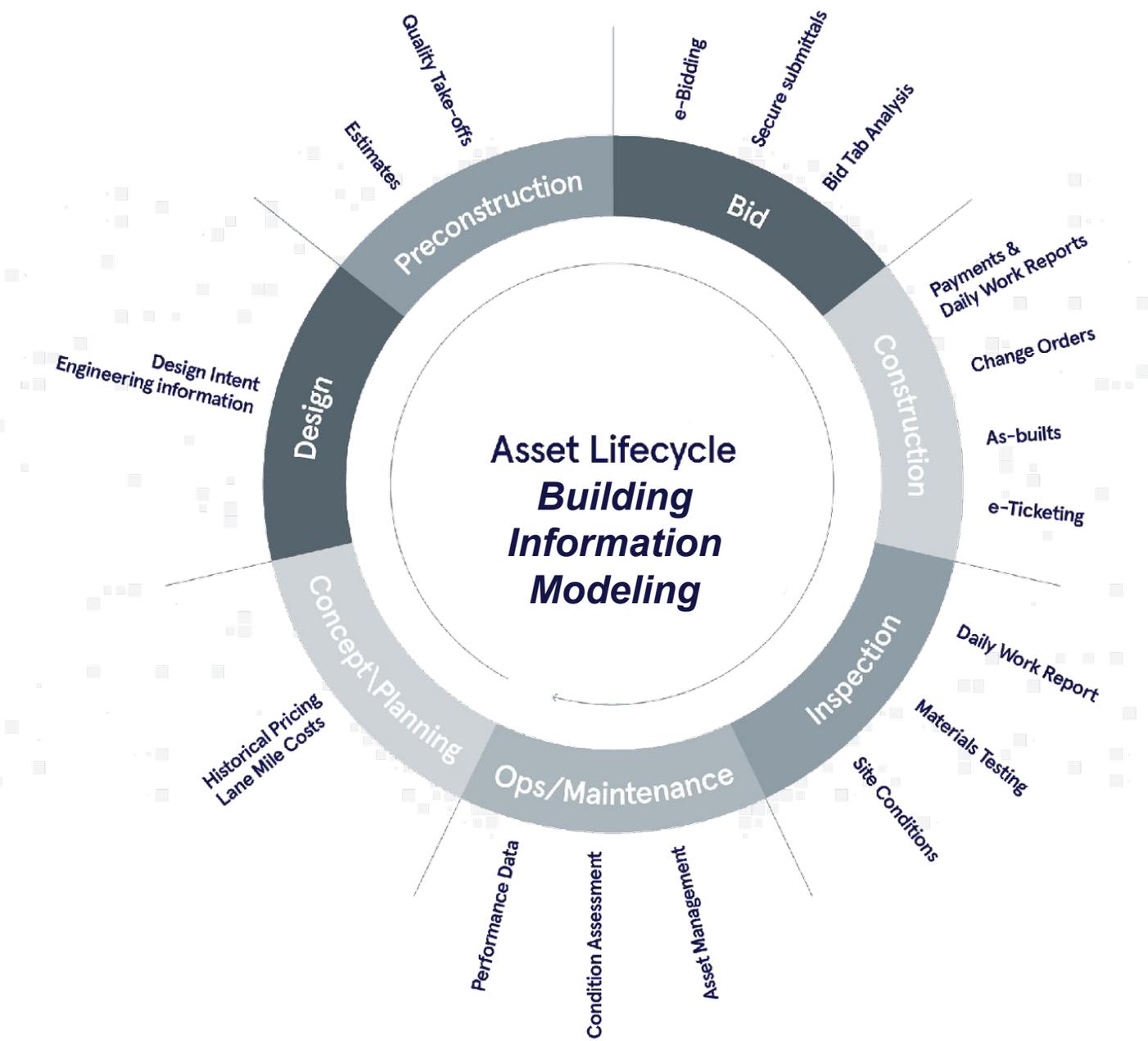


Did you know Mo is a master cook?



The Gaps

- + Integration
- + Federation
- + Collaboration
- + Data provenance
- + Data governance
- + IFC



Finally, "that's all folks"