



# Platology: A DT Ontology Suite for the Complete Lifecycle of Infrastructure

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# Introduction (Who we are?)

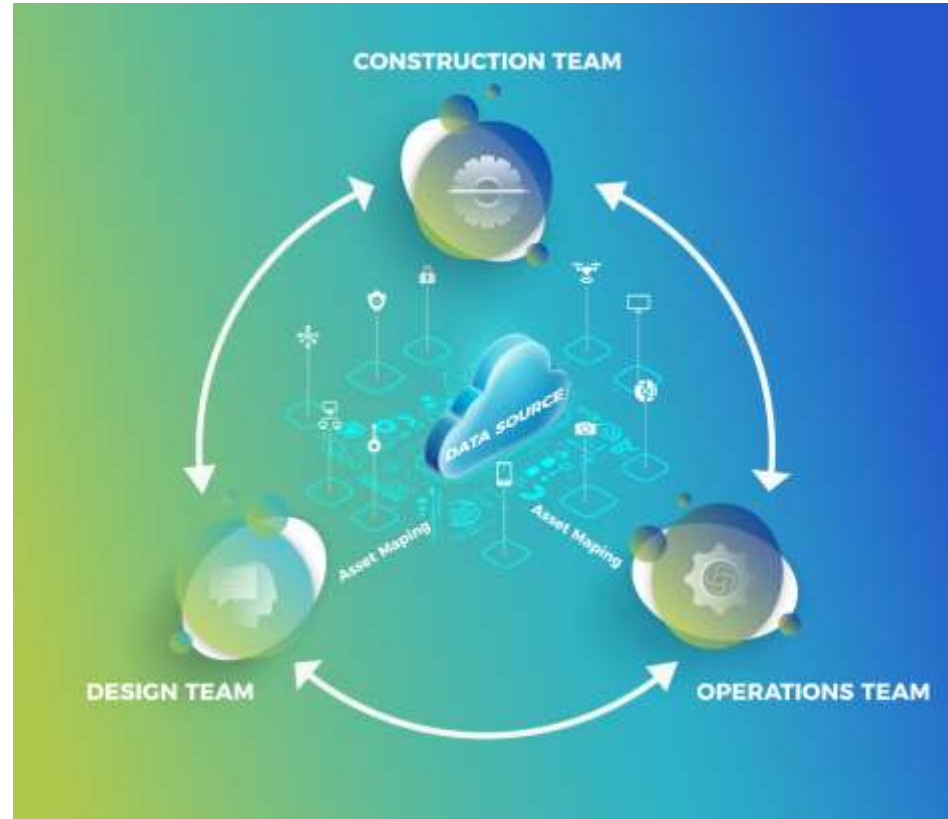
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- 14 Partners
- 9 EU Member States
- Strong expertise in:
  - Construction and engineering management
  - Digital twin technology
  - IoT
  - Data security & privacy

# Our Approach

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# Motivation

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- Digital solutions widely used across the AEC industry.
- DT's integrate many technologies and methodologies.
- Systemization/Conceptualization of core concepts for an Infrastructure digital twins through lifecycle
- The linkage between objects existing in the physical world and their virtual replicas





# 03

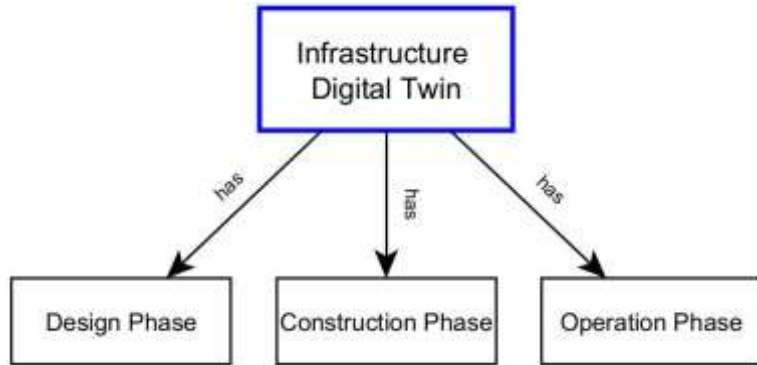
## Research Work

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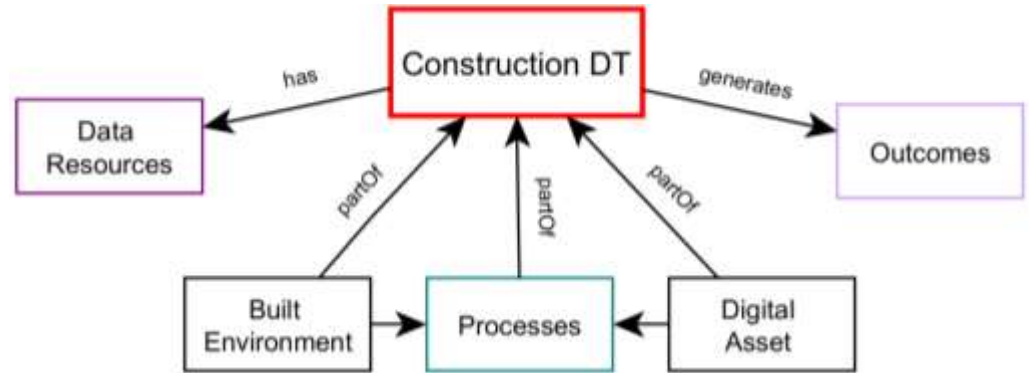
Platology: Ontology suite

# Platology

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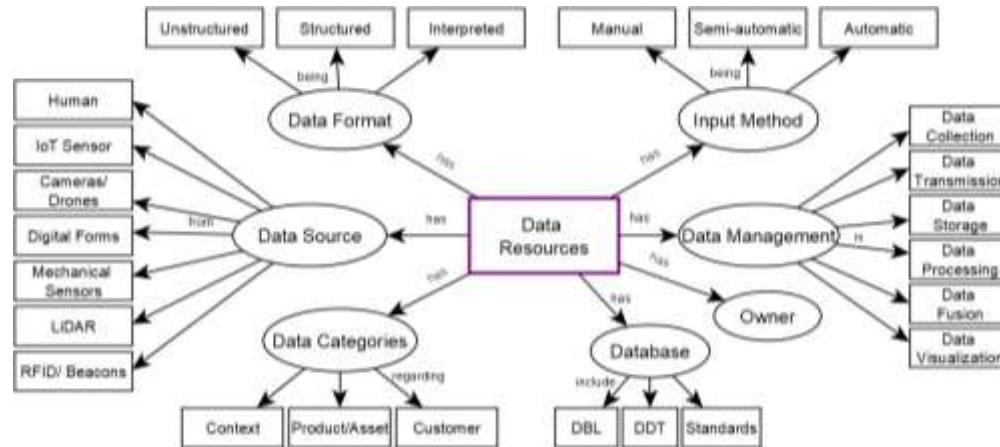


- DesDT
- ConDT
- OpDT

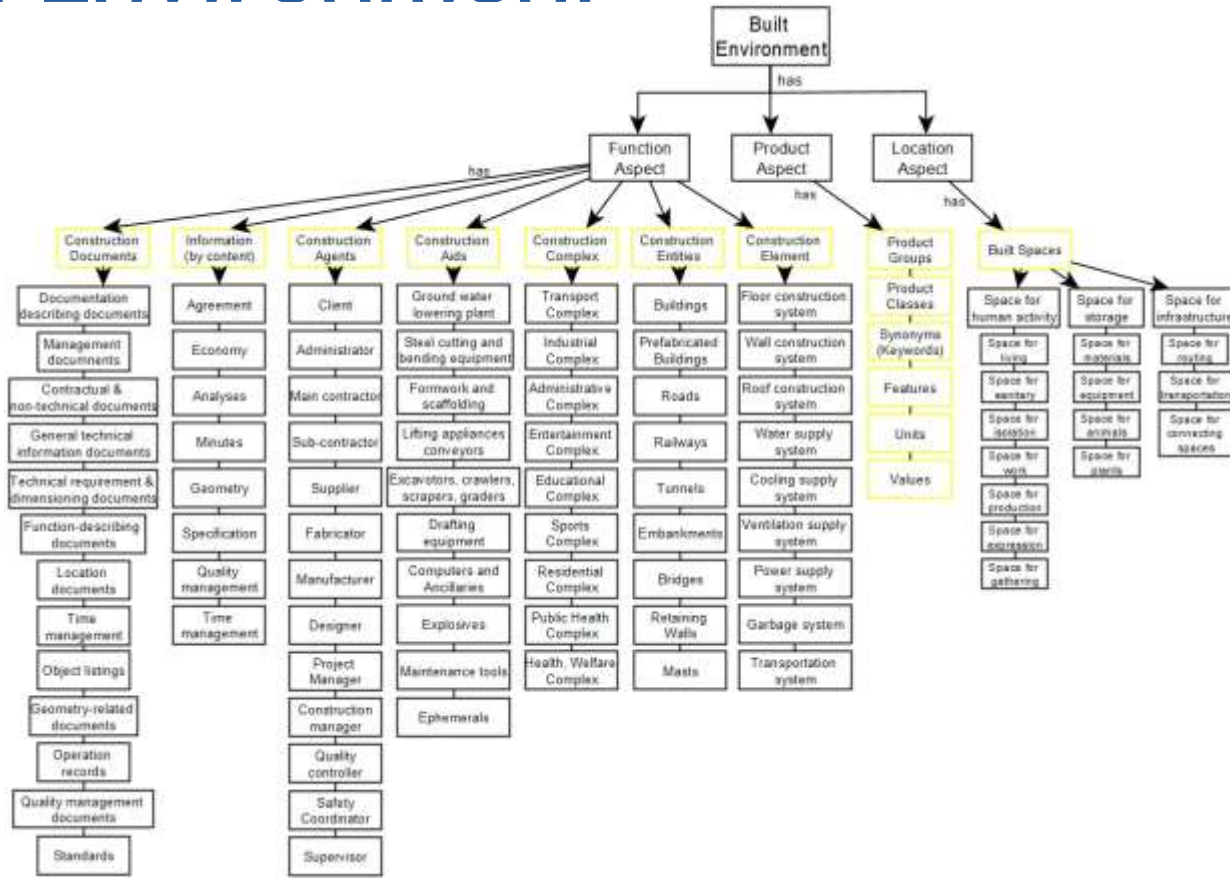


# Data (ConDT)

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# Built Environment

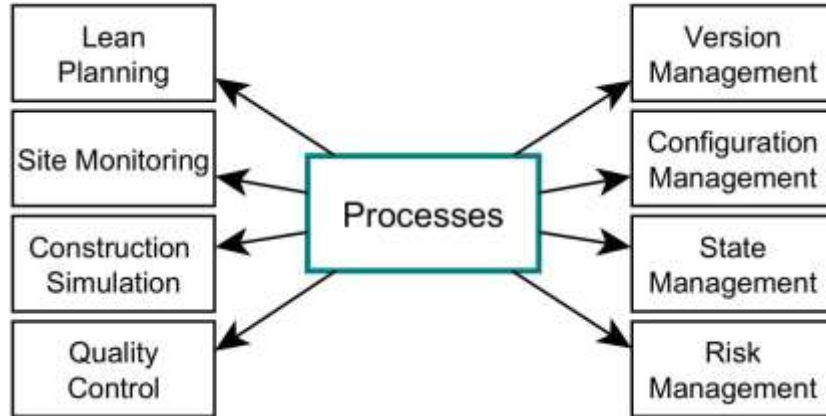


- ISO 12006 and IEC 81346
- EMT classification
- IEC 61355



# Processes (ConDT)

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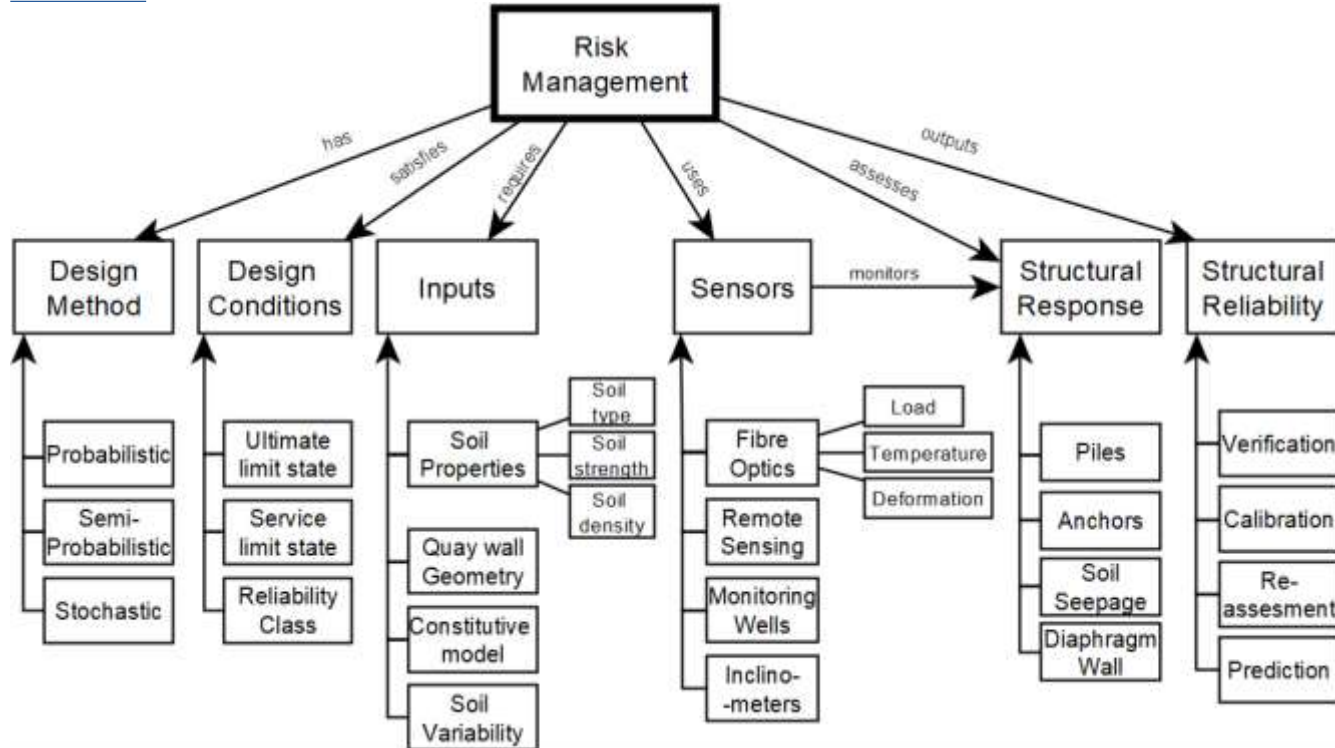
# Site Monitoring



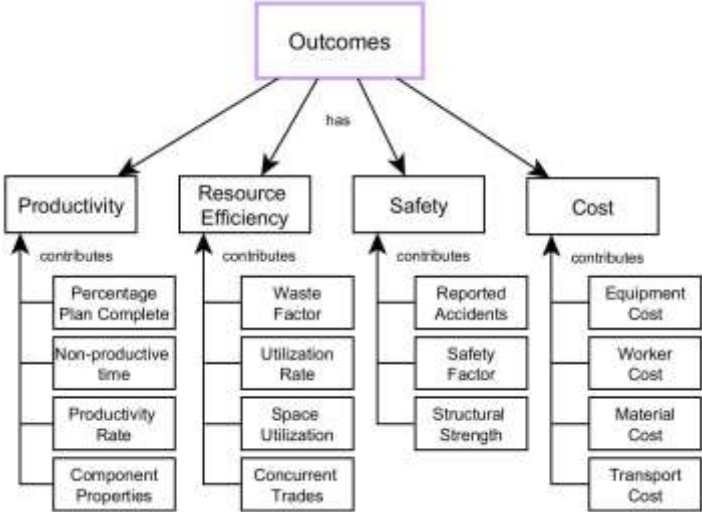
# Lean Planning



# Risk Management



# Outcomes



KPIs for productive, resource efficient, and safe construction work.



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# Outlook

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Platology: Ontology suite

# Conclusion

- Use of existing standards (ISO 12006 and IEC 81346)
- Integration of existing ontologies
- Aid the development of ASHVIN DT platform and its toolkits through API vocabularies

# Future Work

- Web visualization of the ontology
- Validation on more demo sites of ASHVIN H2020 project
- Populate and test with different scenarios

# Acknowledgement

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# Thank you

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MORE INFO

[www.ashvin.eu](http://www.ashvin.eu)



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