symbIoTe

Approaches to Semantic Interoperability and Semantic Mapping

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Workshop on IoT Semantic/Hypermedia Interoperability,
15th July 2017, Prague

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Motivation

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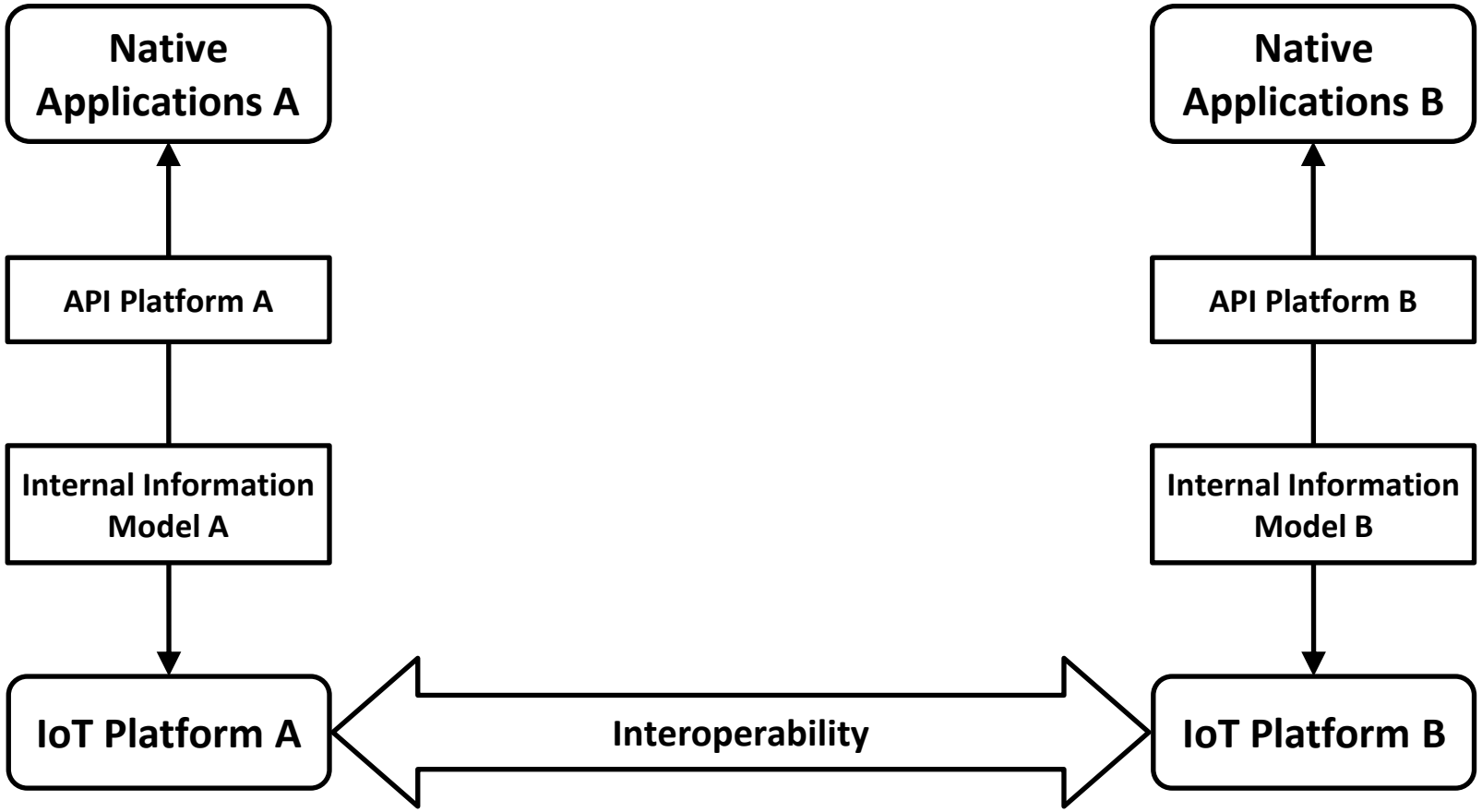

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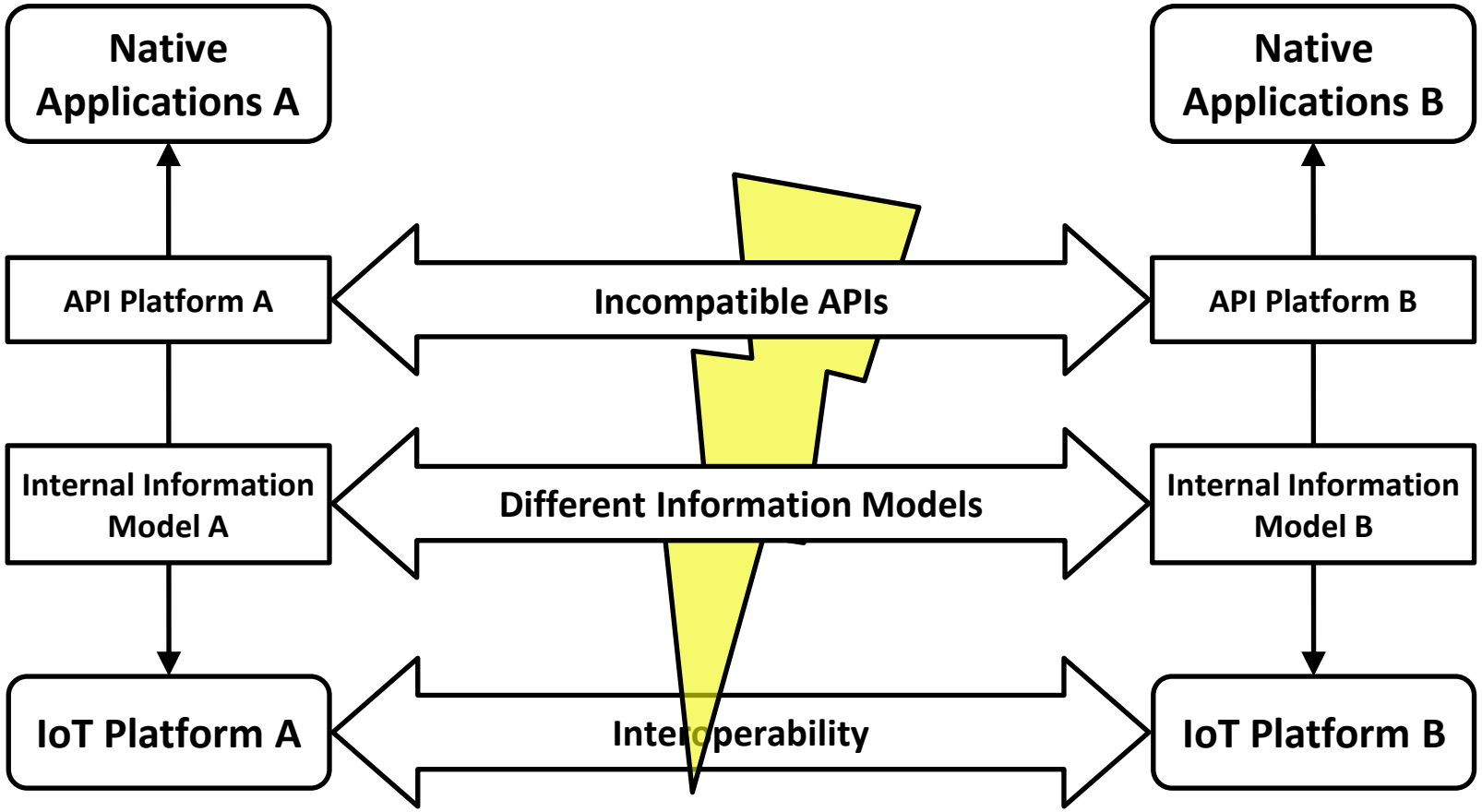

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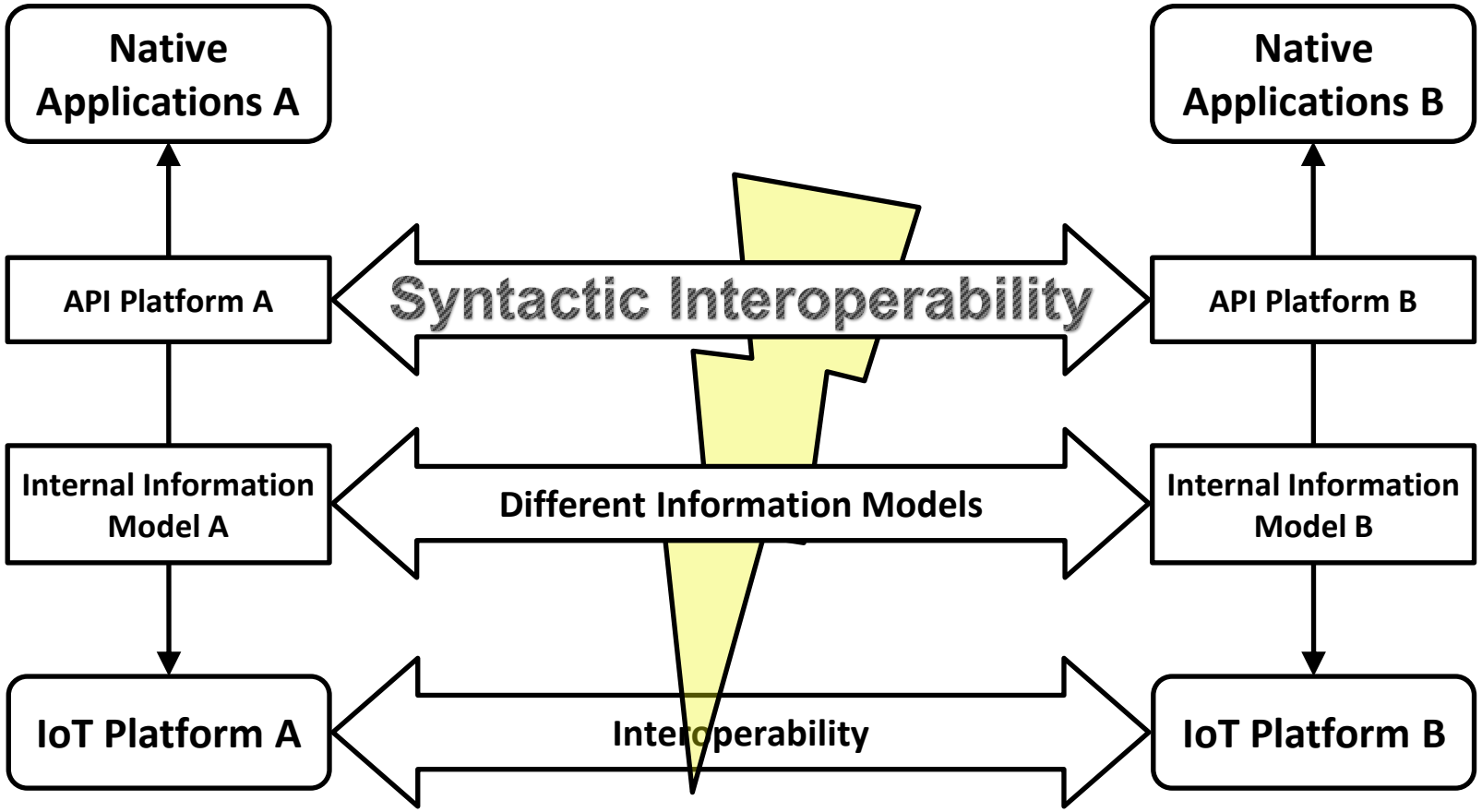

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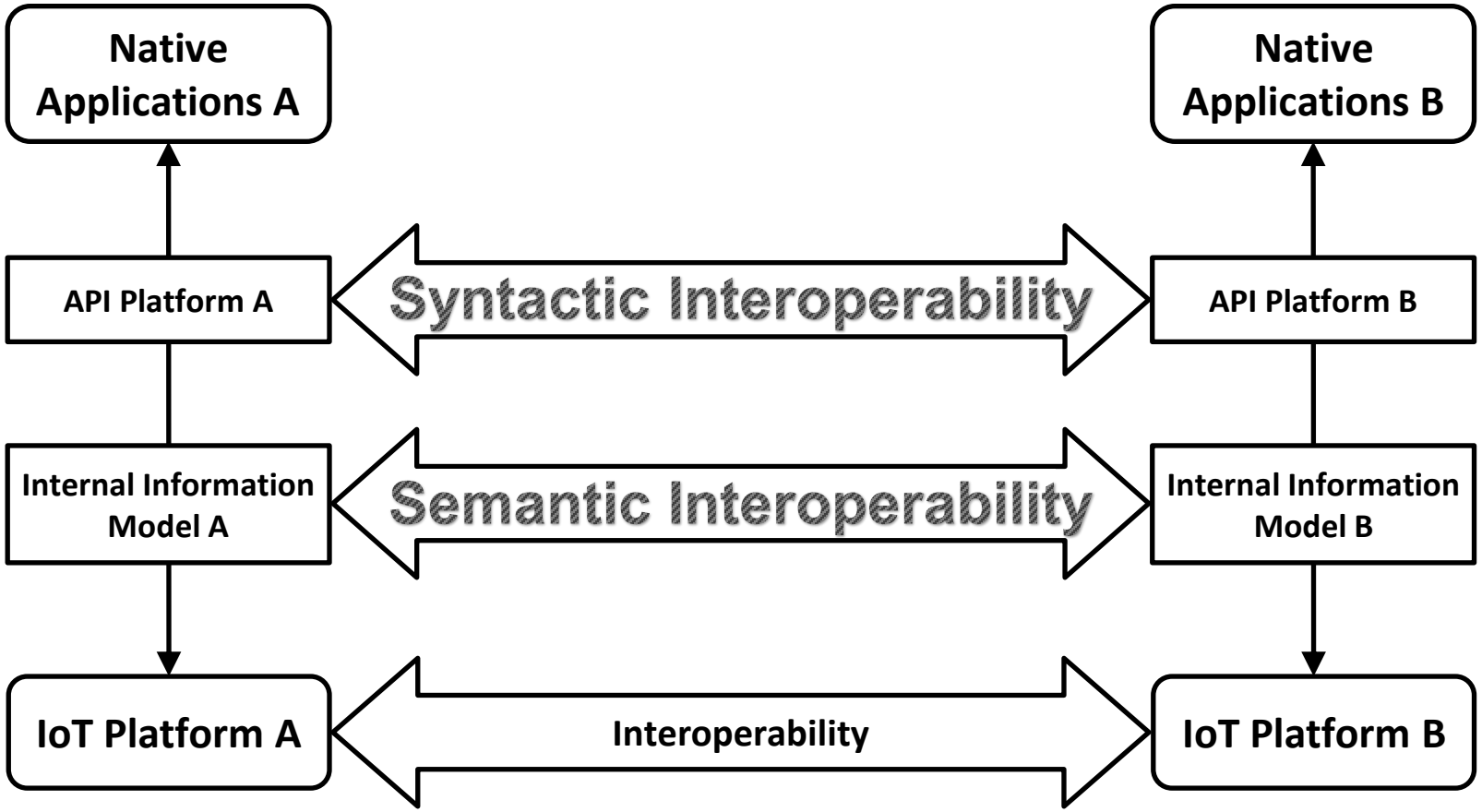

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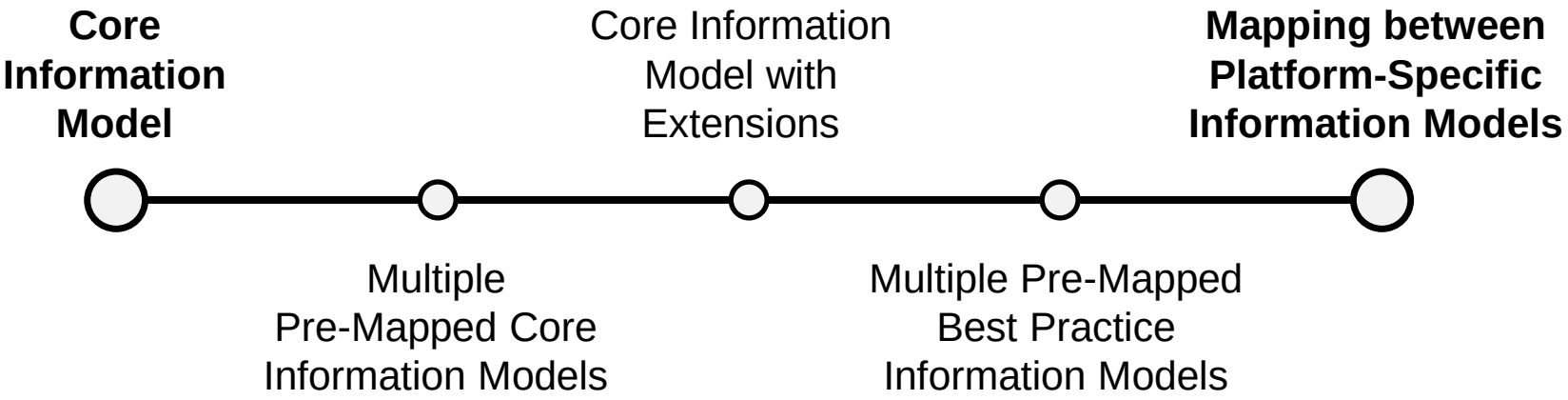

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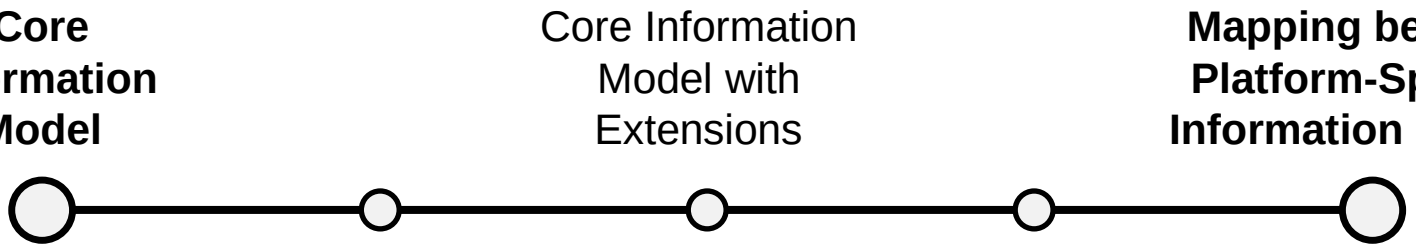

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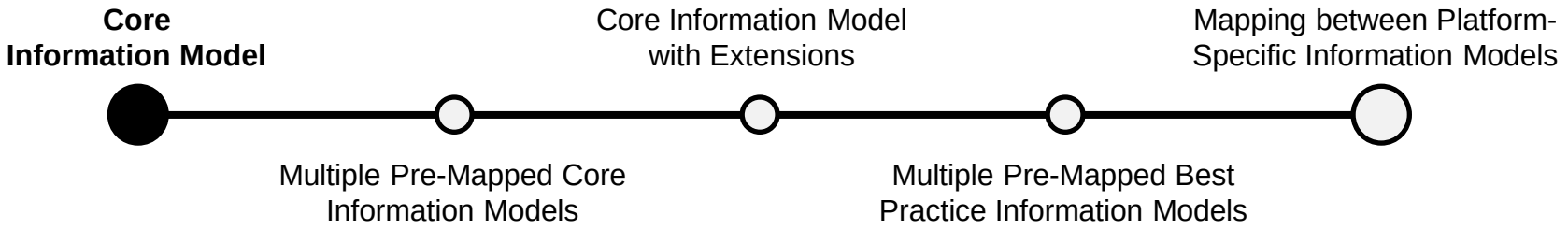

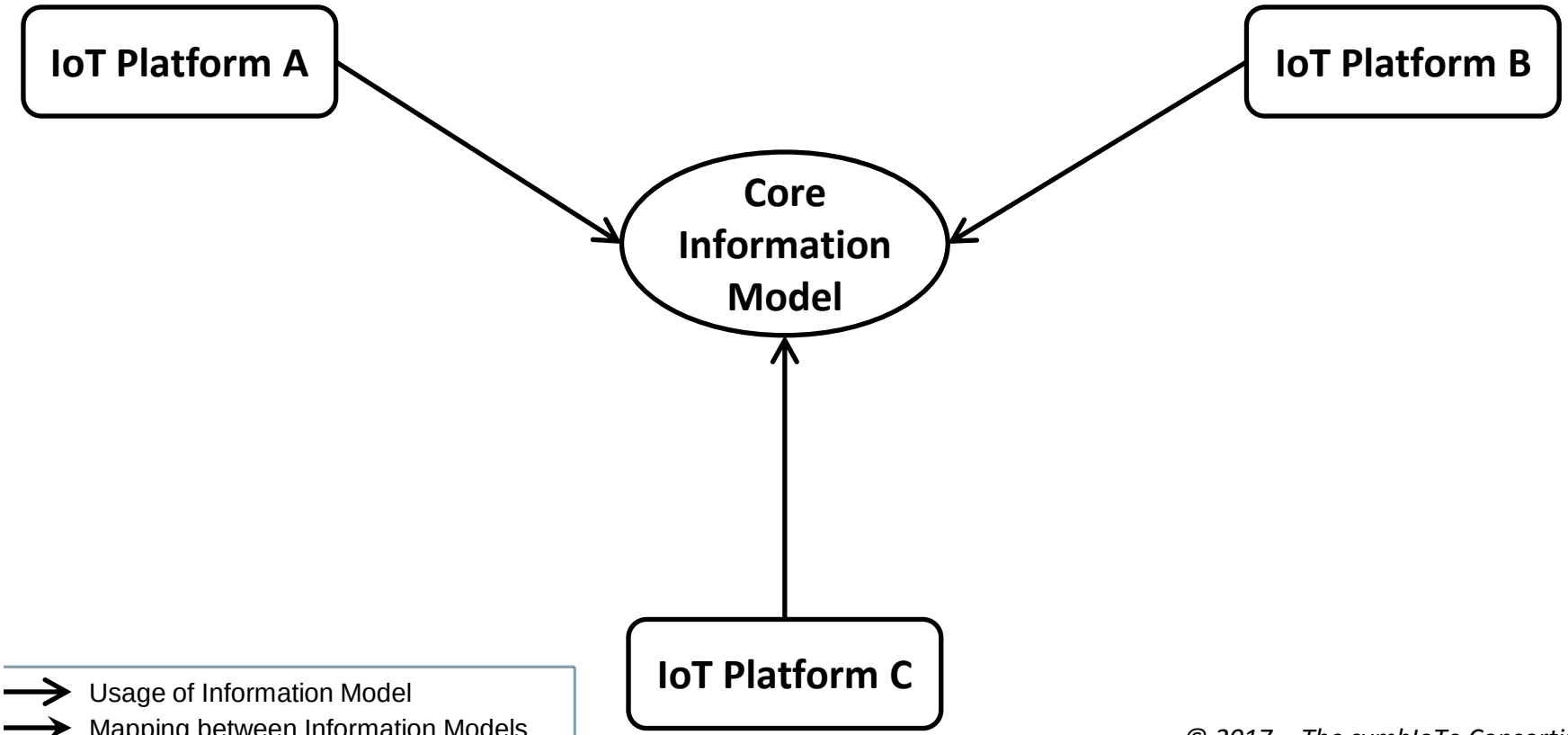

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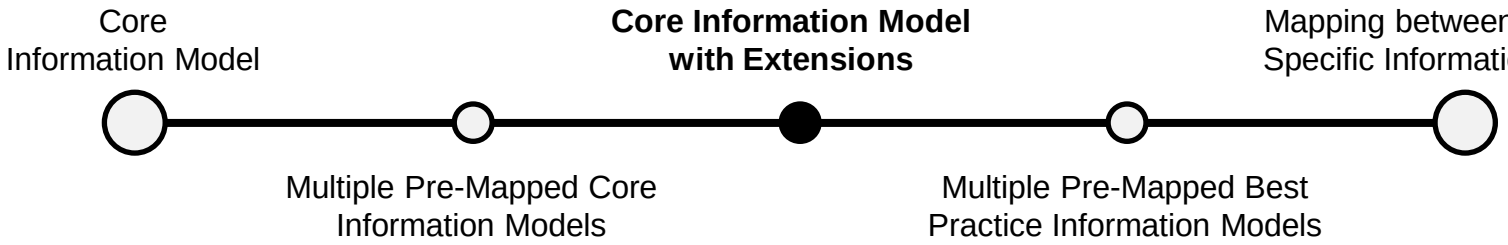

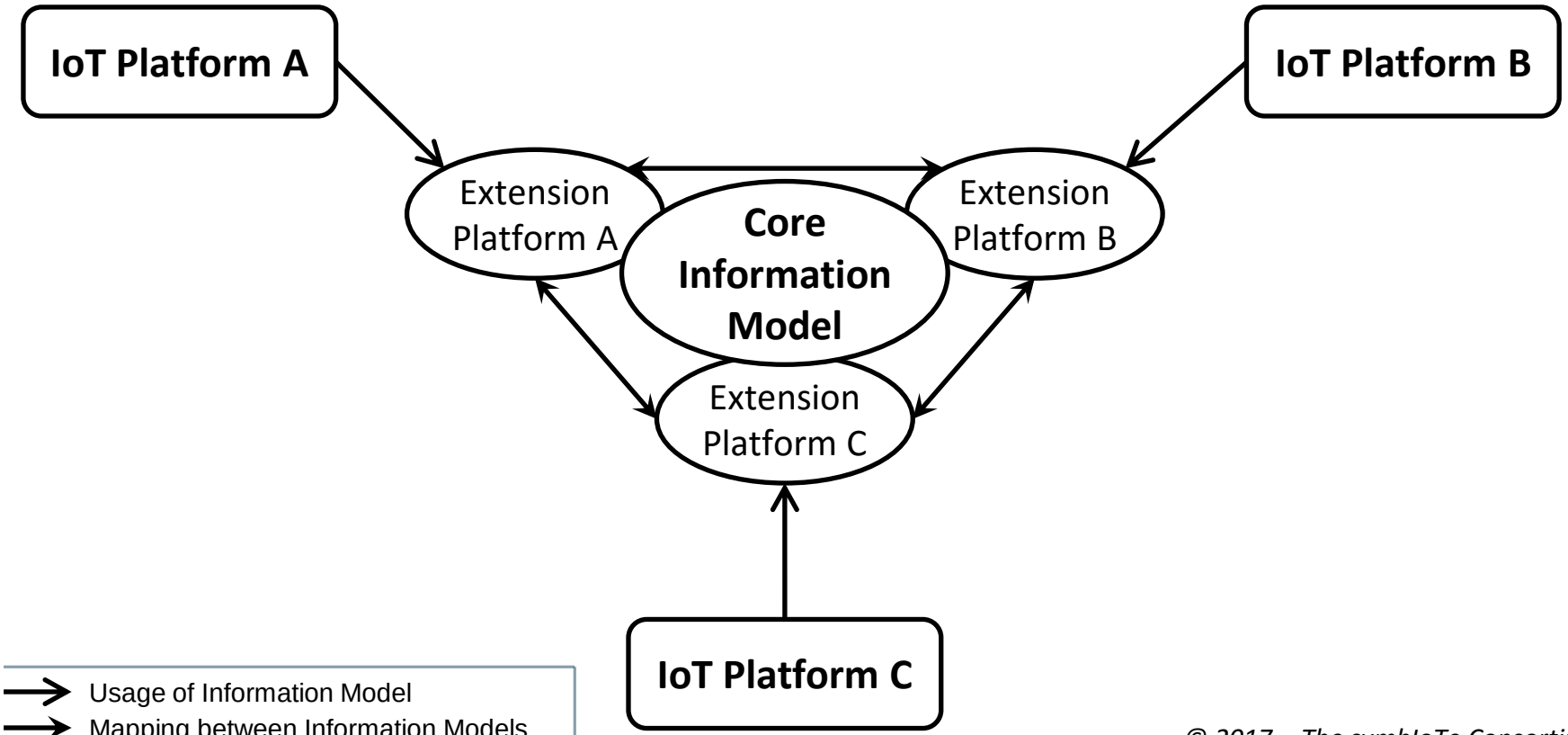

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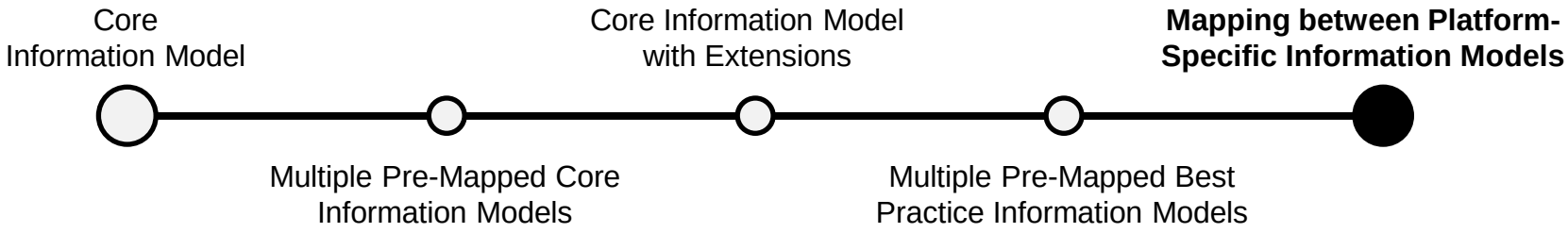

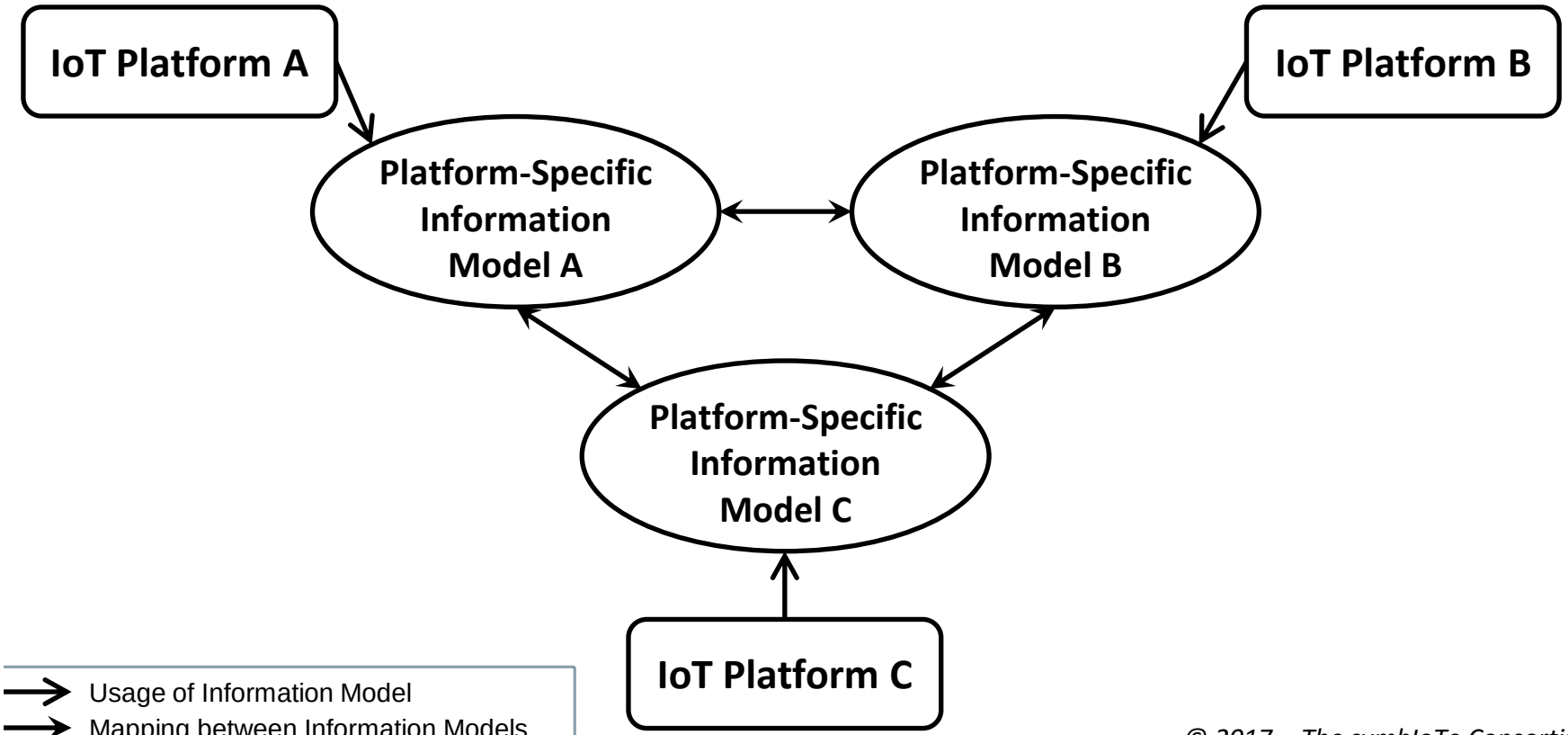

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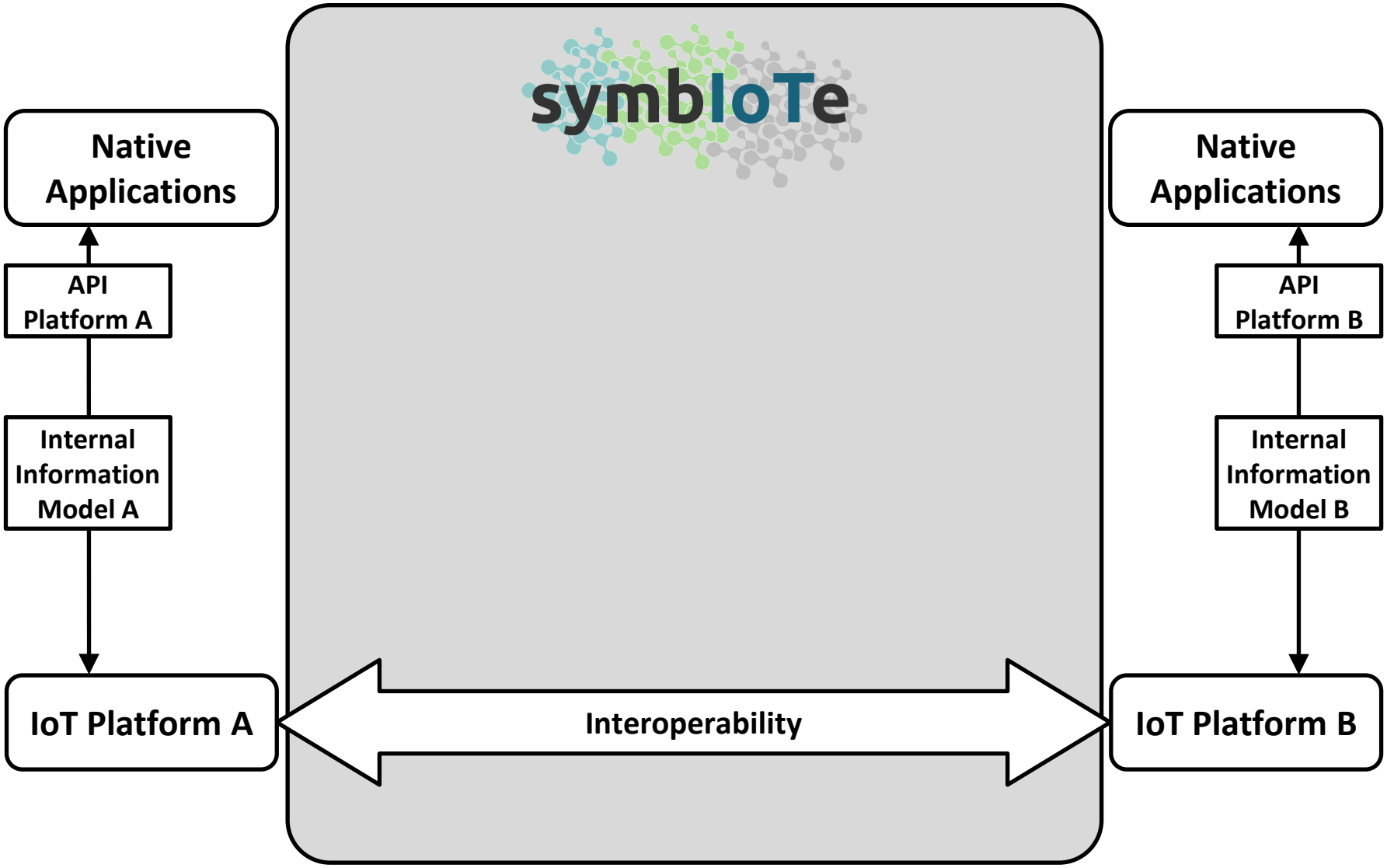
Interoperability in symbIoTe



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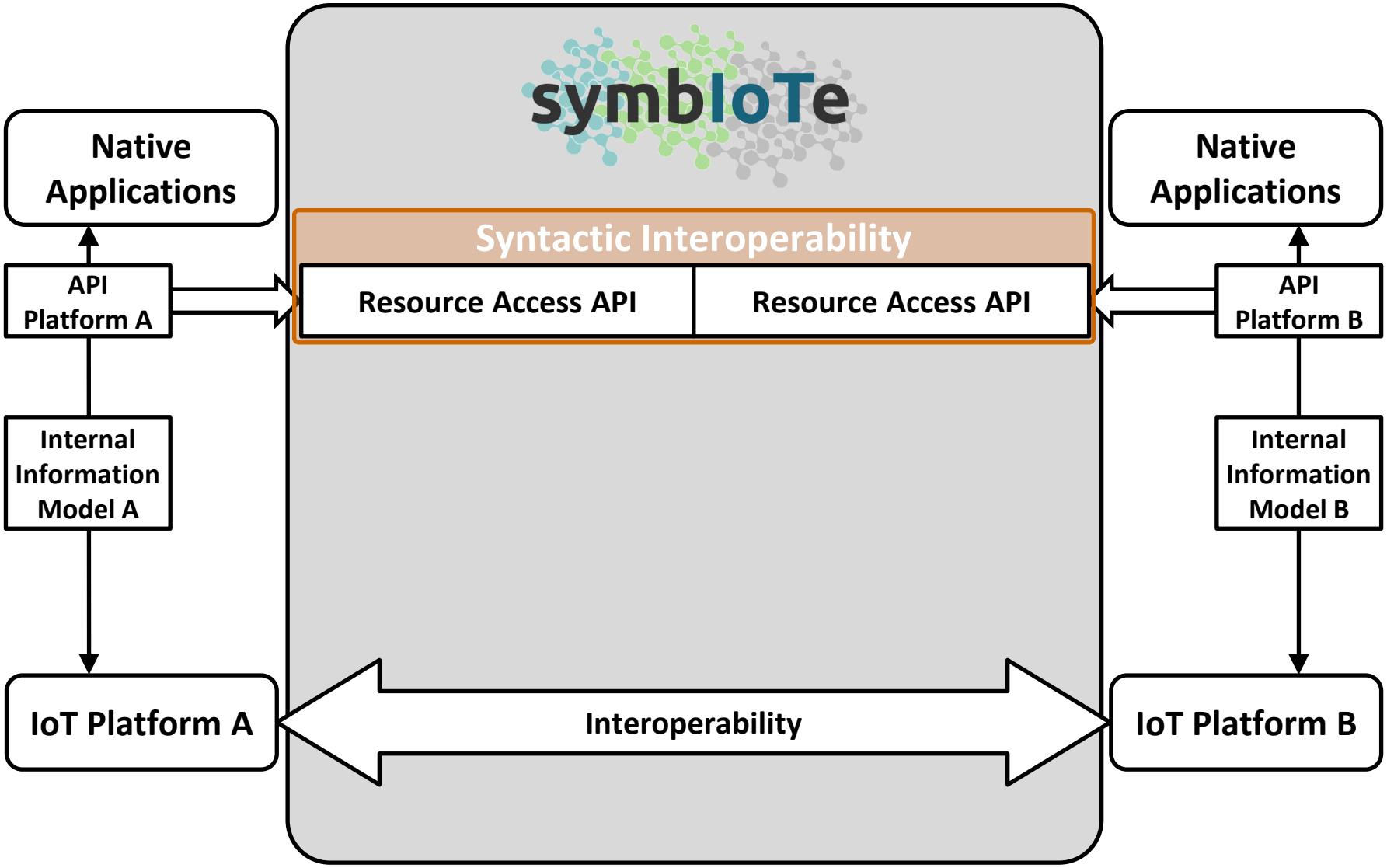

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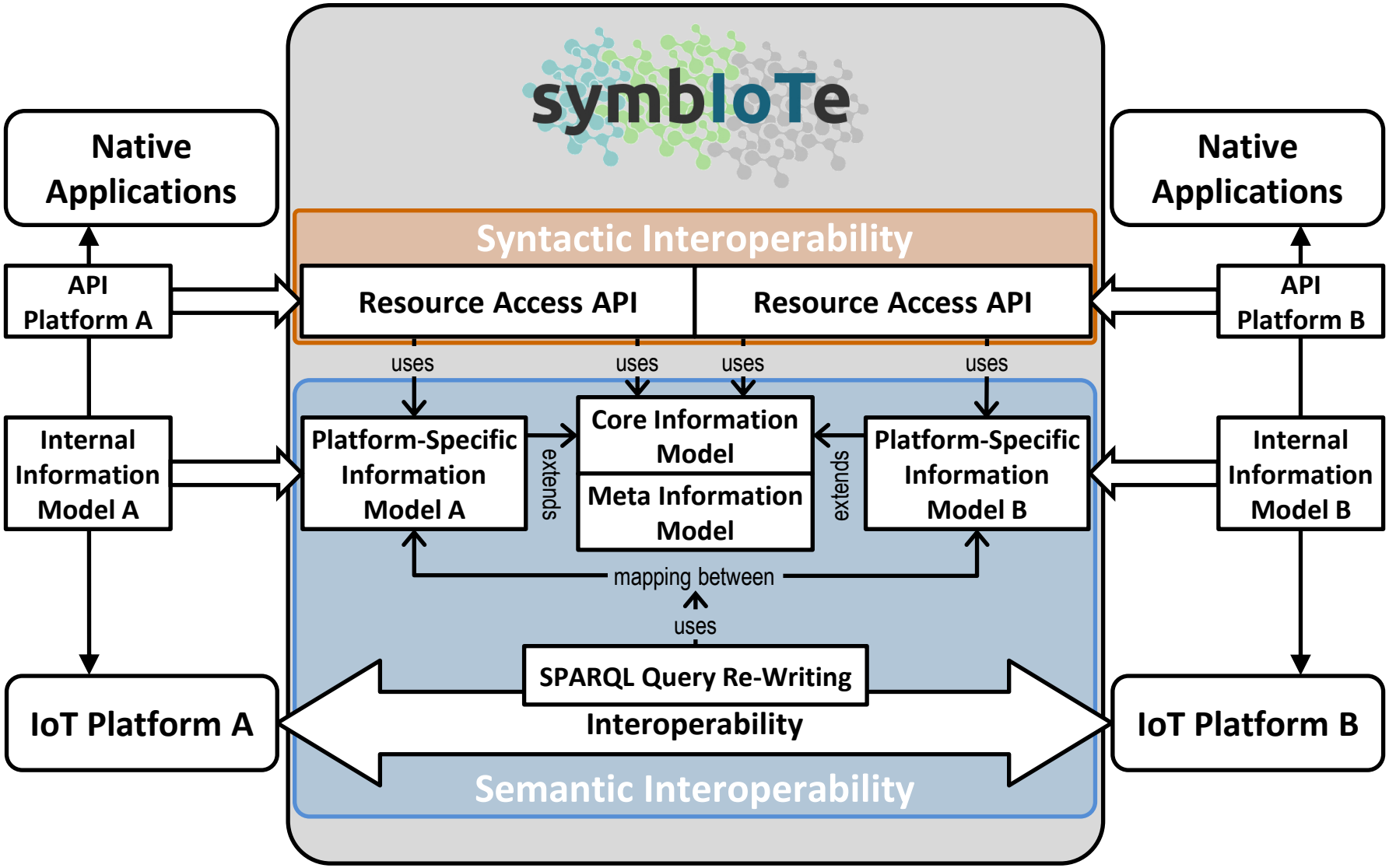

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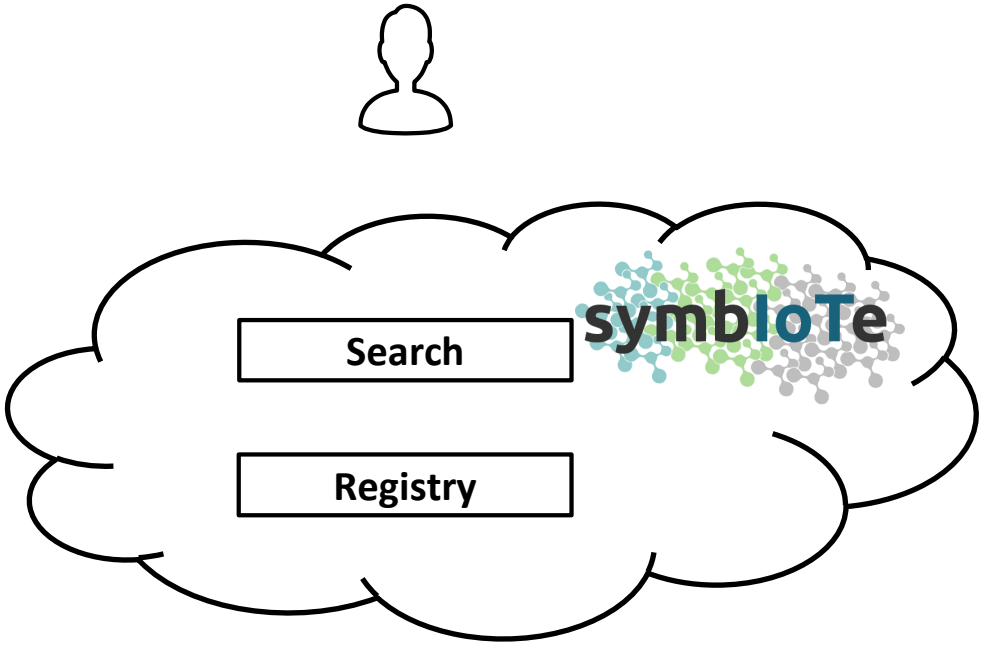

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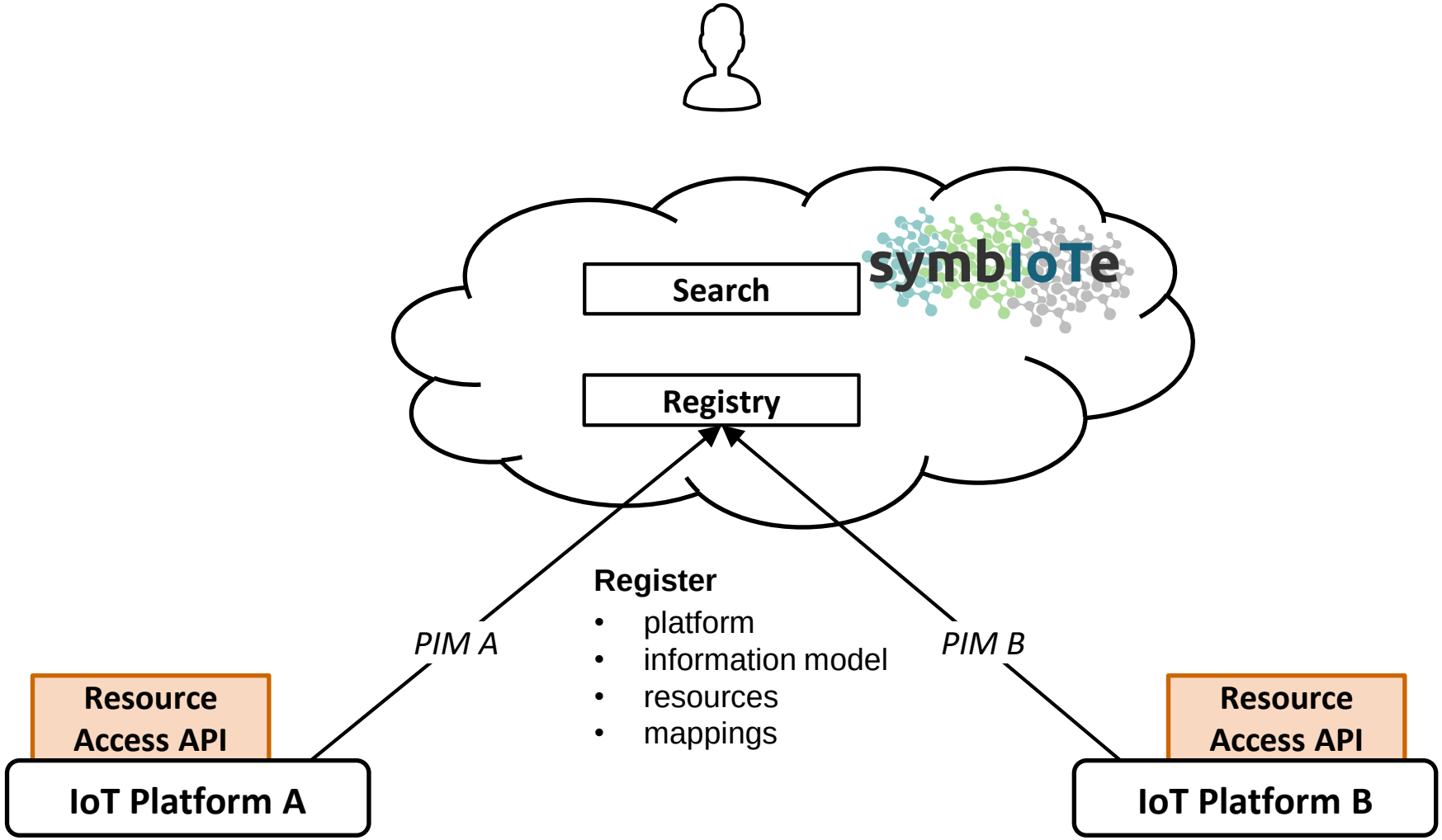

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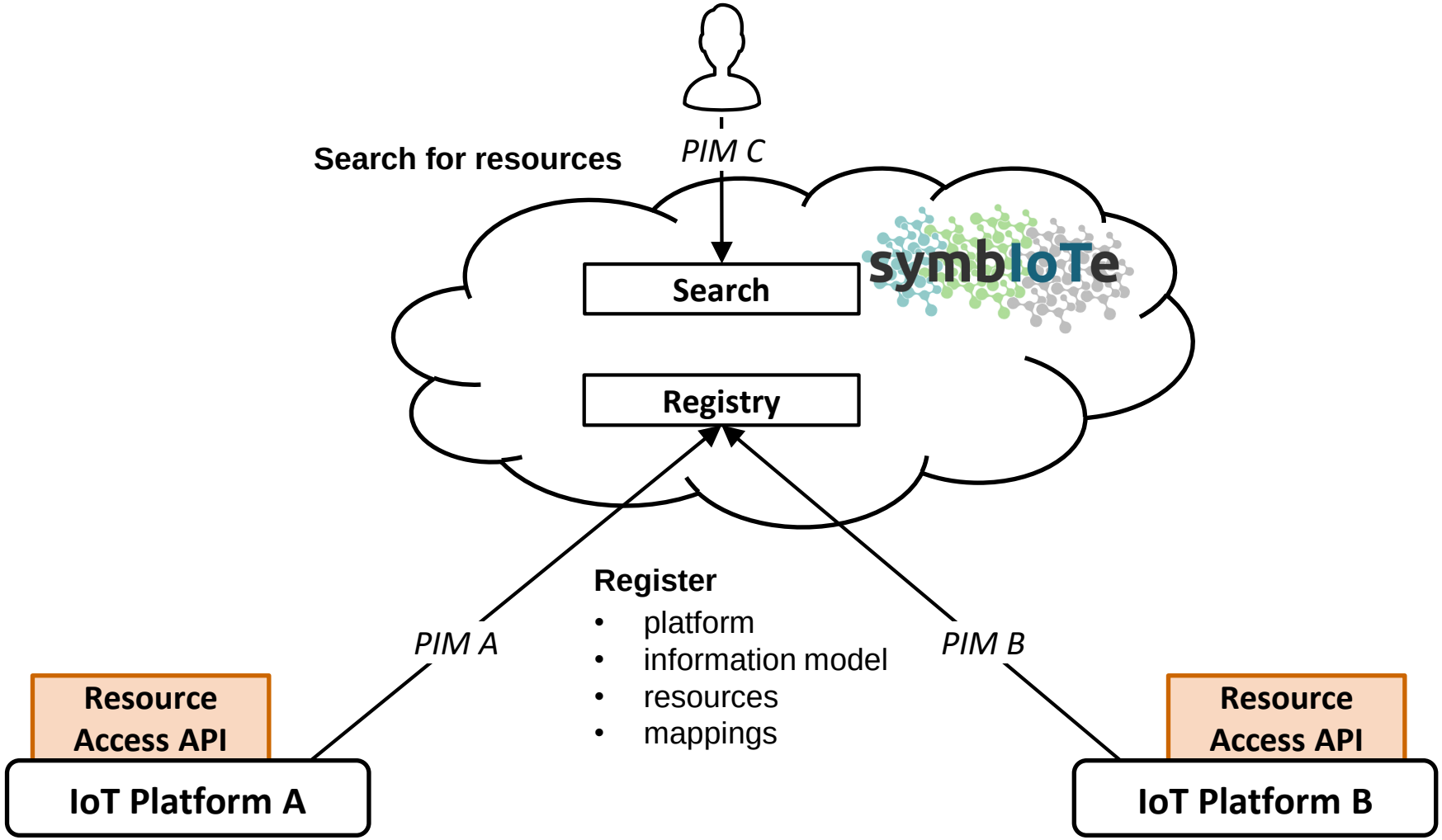

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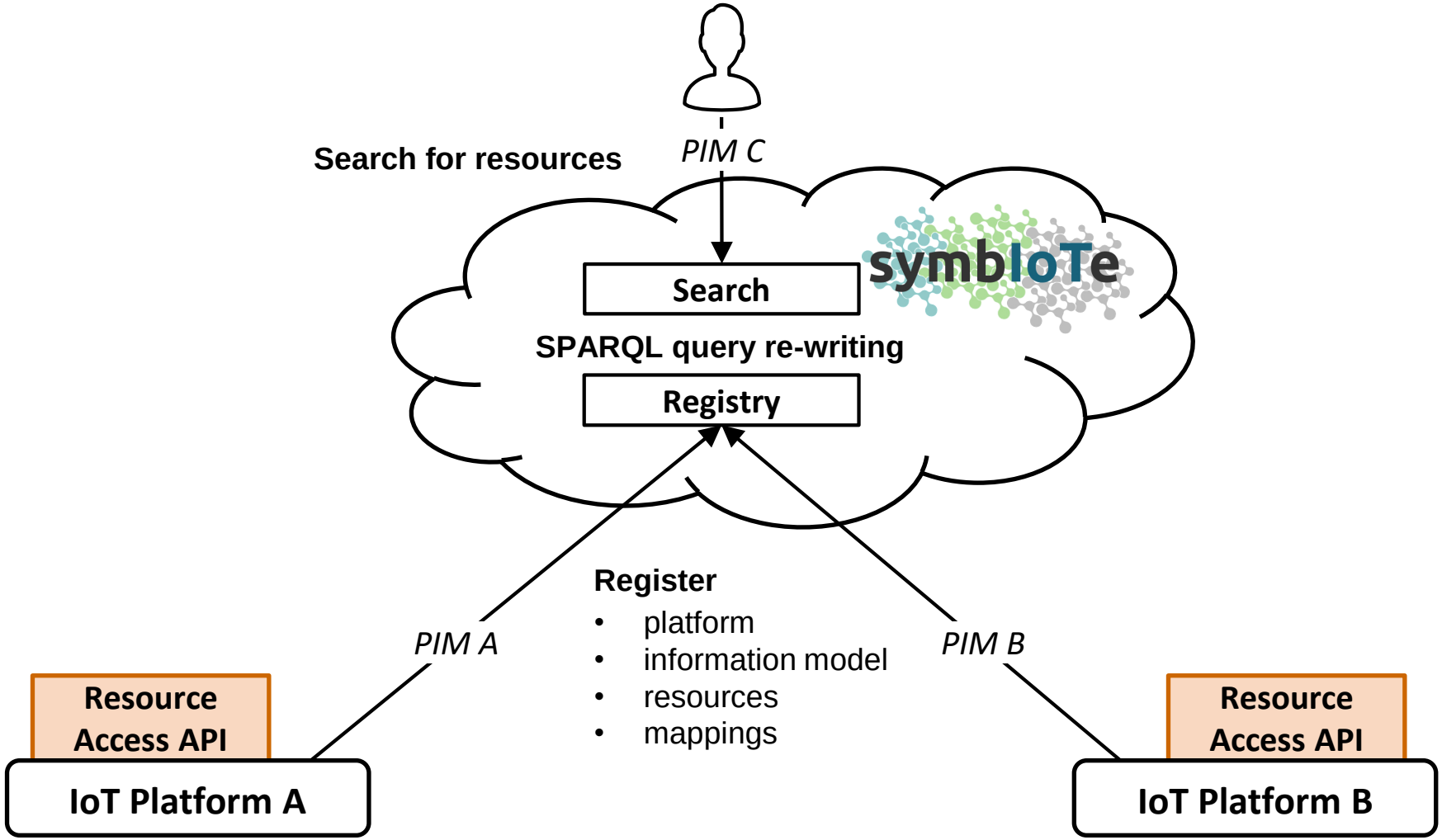

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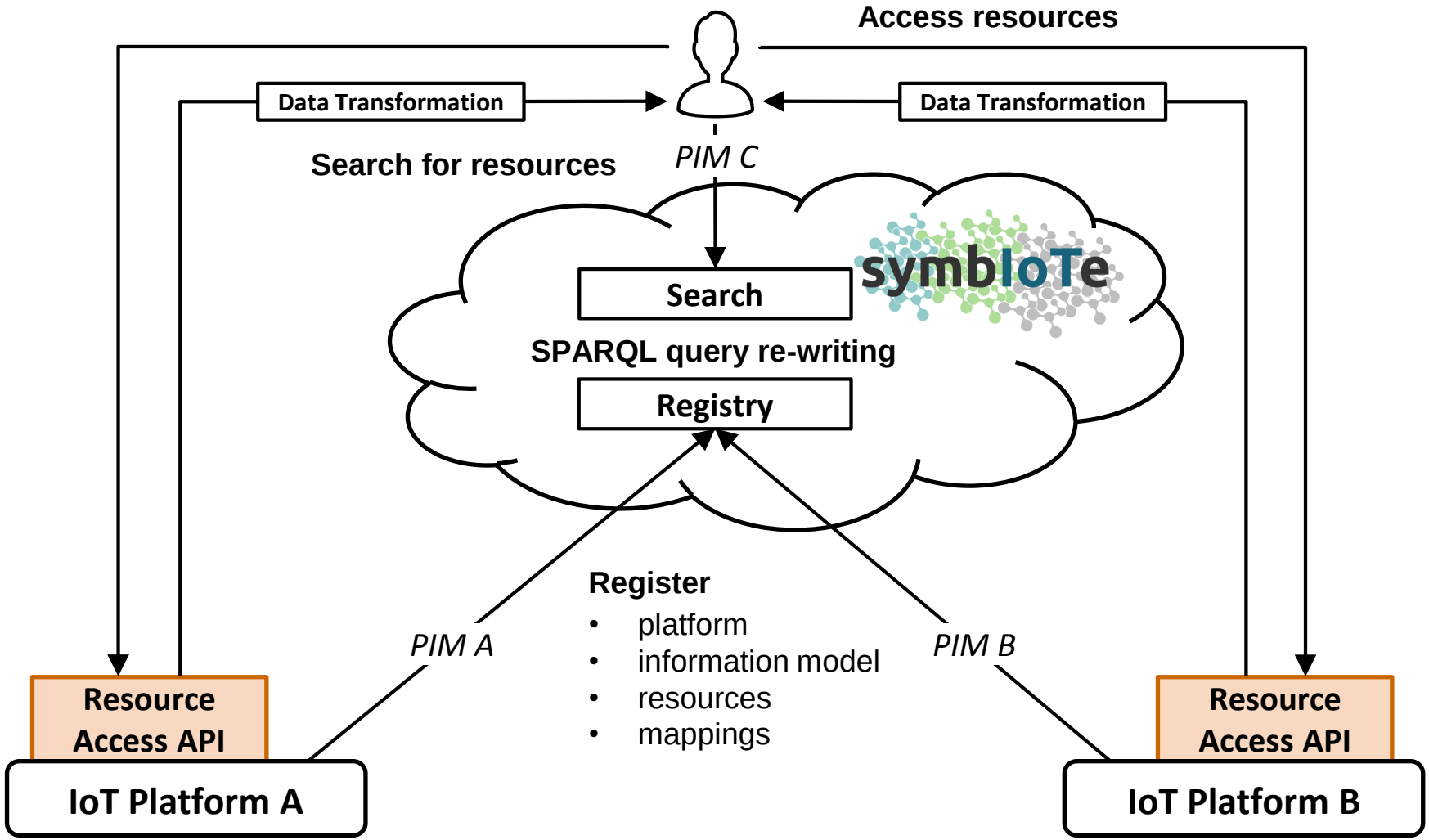

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Challenges

- Mapping language
  - EDOAL (Expressive and Declarative Ontology Alignment Language)
- Definition of mappings quite complex
  - Automatic pre-alignment (ontology matching)
  - Visual editors for mapping definitions
- Execution of mapping
  - SPARQL Query Re-Writing
  - Data Transformation

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Conclusion & Next steps

- Standardization of vocabularies not enough → additionally use Semantic Mapping
- Next steps (within symbIoTe)
  - Analysis & classification of ontology mismatches
  - Pick some mismatches with high occurrence and easy to resolve
  - Implement proof-of-concept
    - Mapping definition
    - SPARQL Query Re-Writing
    - Data transformation

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Thank you!

Questions?

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