

Week 1 Unit 4: Code-to-Data Paradigm



Code-to-Data Paradigm

Outline

Content

- Code-to-data: What's in it for you?
- Code-to-data by means of
 - OpenSQL & ABAP Dictionary views
 - Advanced view definition
 - ABAP Managed Database Procedures
 - Native SQL



Code-to-Data Paradigm

Performance Boost Example: Demo

Code-to-Data Paradigm in Action

- Performance improvements
- Comparison of two ABAP reports



Code-to-Data Paradigm

Implications of an In-Memory Database

In-memory computing imperative:

- Avoid (unnecessary) movement of large data volume
- Perform data-intensive calculations in the database

Today:

Data-intensive computations in application layer

calculate

Application Layer



Data Layer

calculate

SAP HANA:

Delegate data-intensive operations to data layer

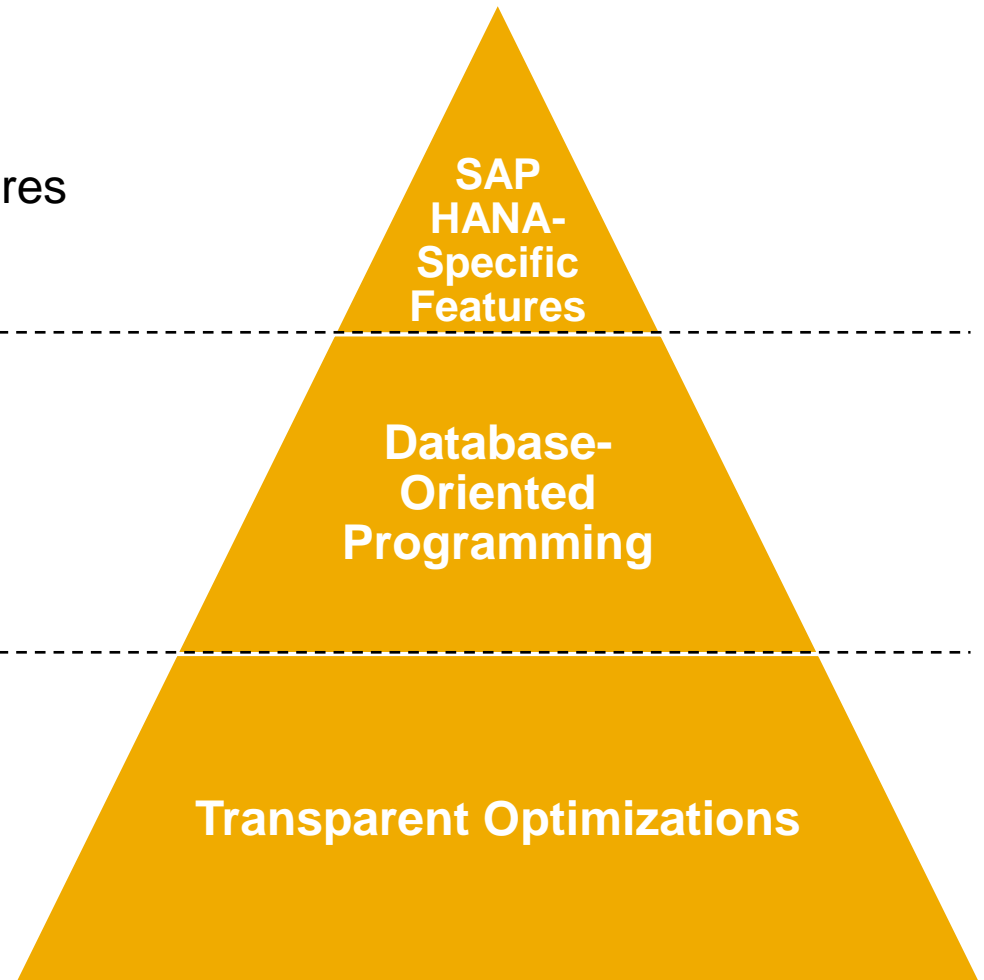
Code-to-Data Paradigm

Overview Code-to-Data Capabilities

- ABAP managed database procedures
- Native SQL

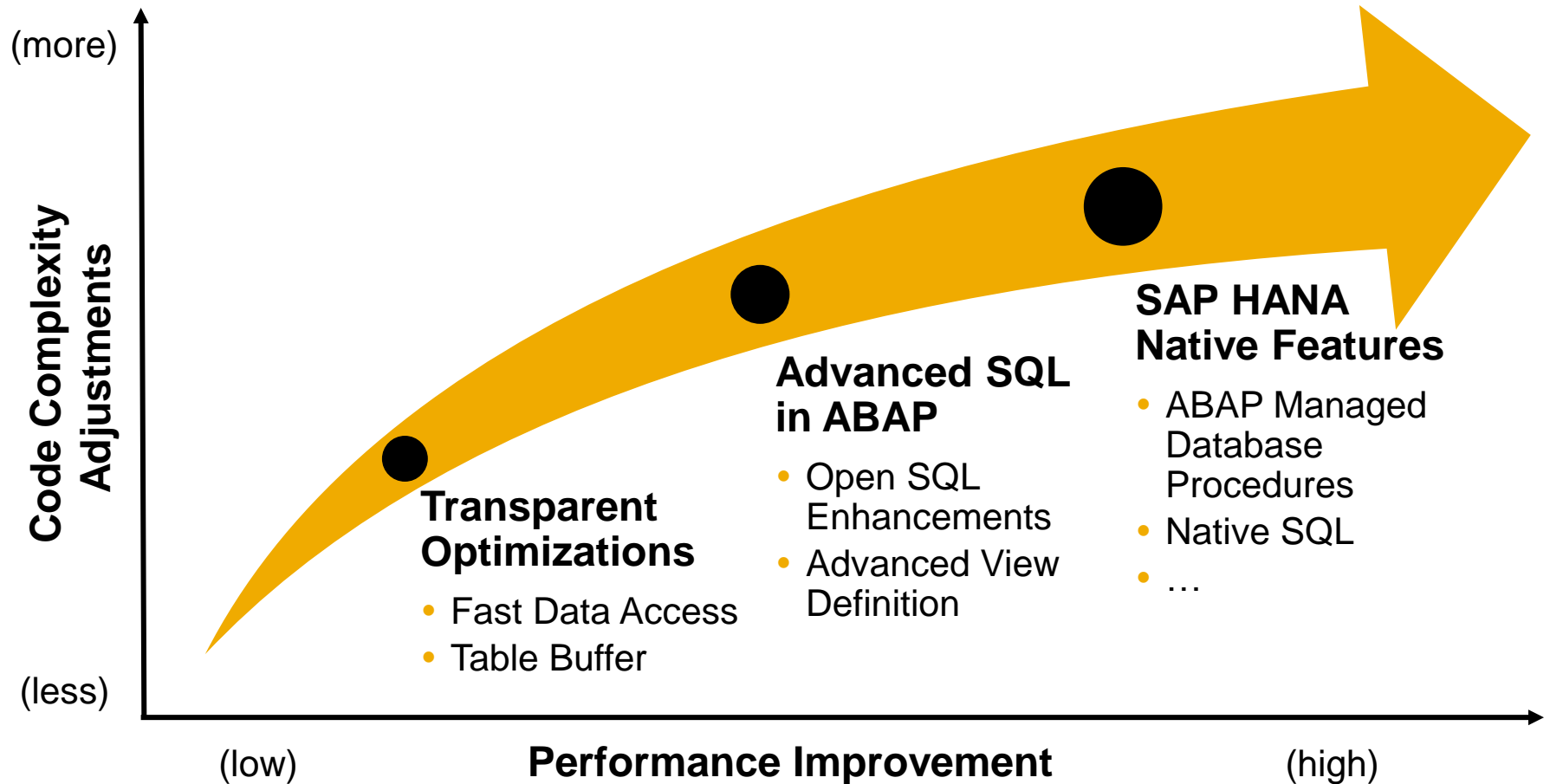
- Open SQL enhancements
- Advanced view definition

- Optimized protocols, such as Fast Data Access
- Table buffer enhancements
- ...



Code-to-Data Paradigm

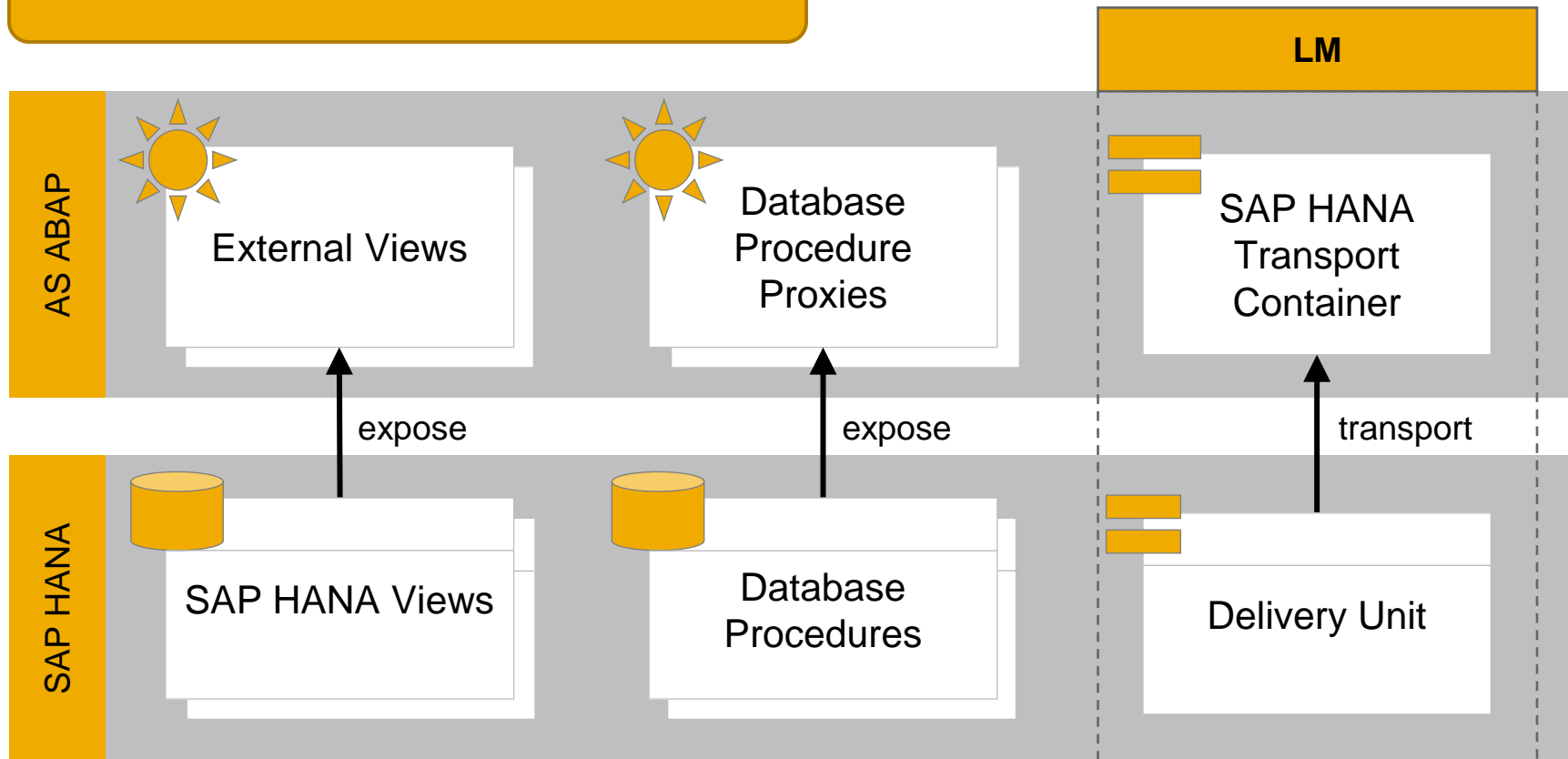
Performance Improvement vs. Code Adjustments



Code-to-Data Paradigm

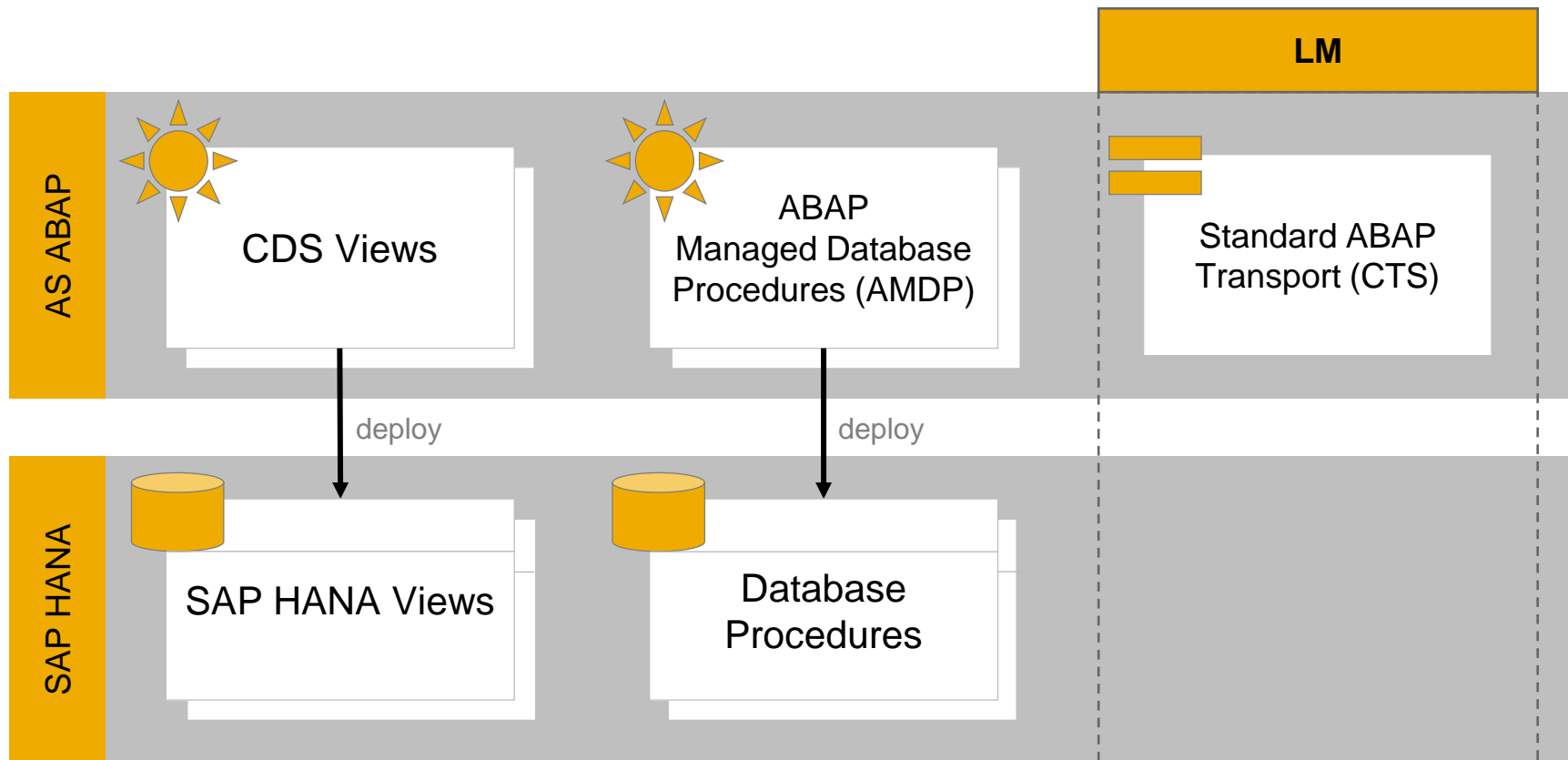
Bottom-Up Approach (\geq NW AS ABAP 7.40 SP02)

Not the focus of this course!



Code-to-Data Paradigm

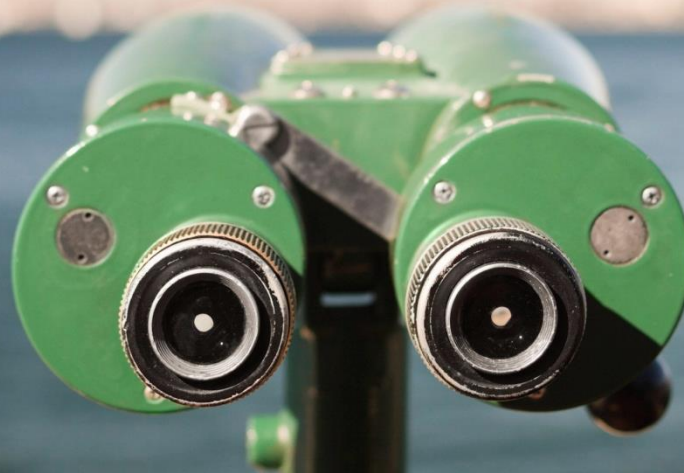
Top-Down Approach (\geq NW AS ABAP 7.40 SP05)



Code-to-Data Paradigm

What's Next?

Week 1 Unit 5 Your Development Tools





Thank you

Contact information:

open@sap.com

open**SAP**

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