Bechtel – PCA Instrument SIG Workshop 2010

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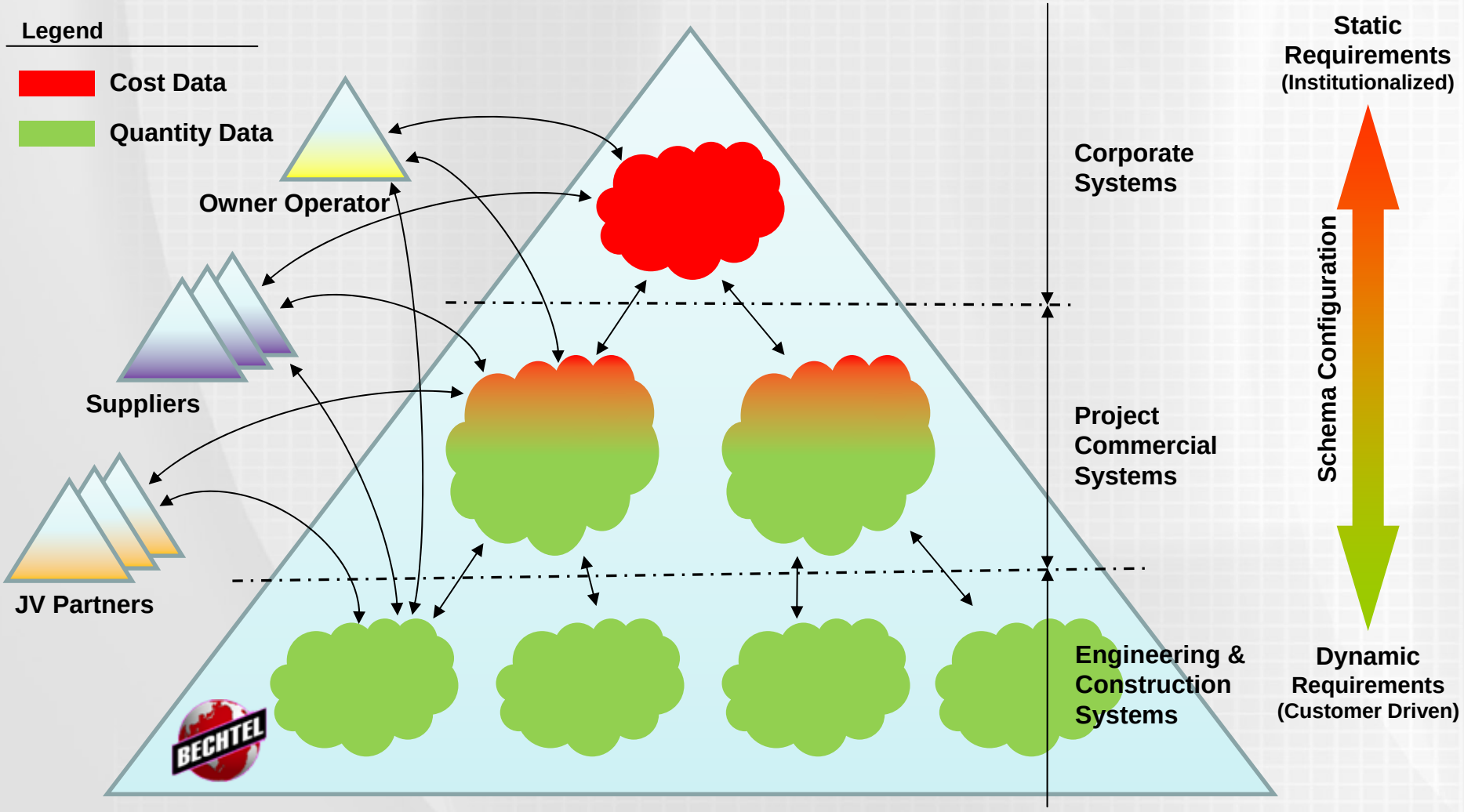
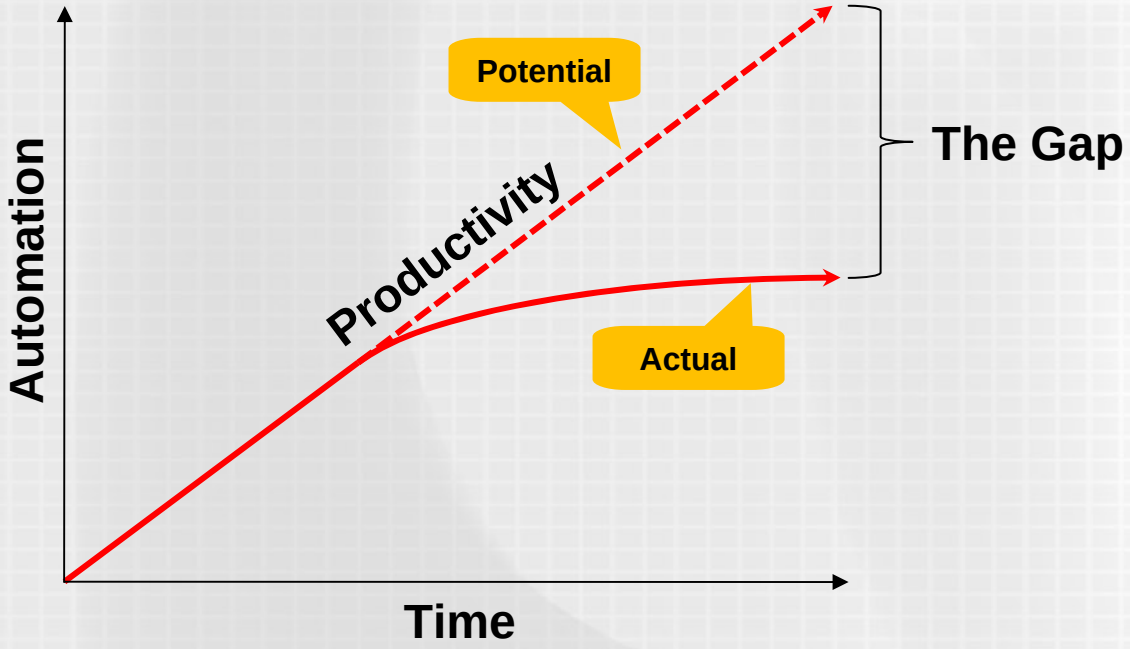
Bechtel

Central Engineering & Technology

Bechtel's Information Landscape

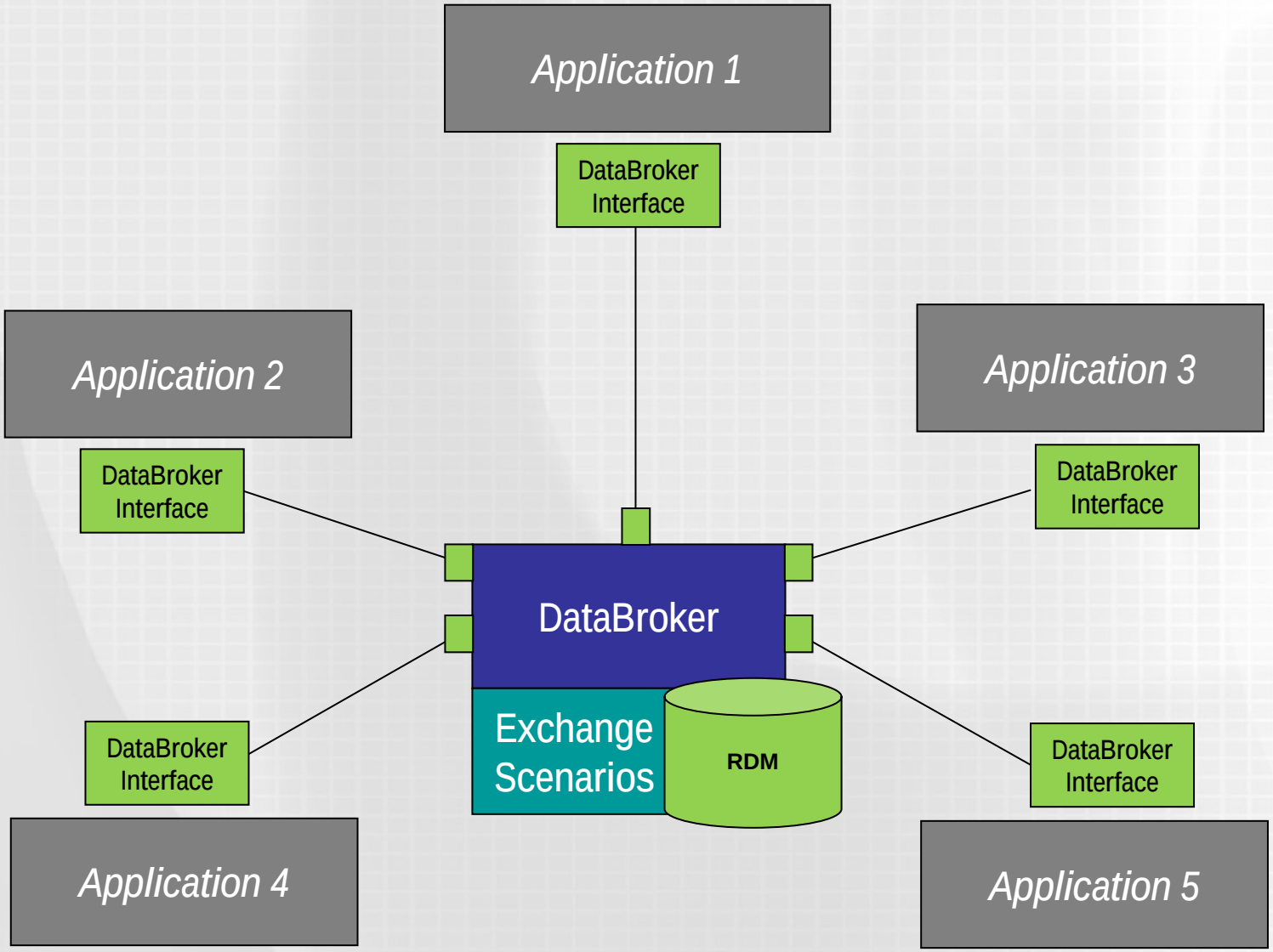


Productivity

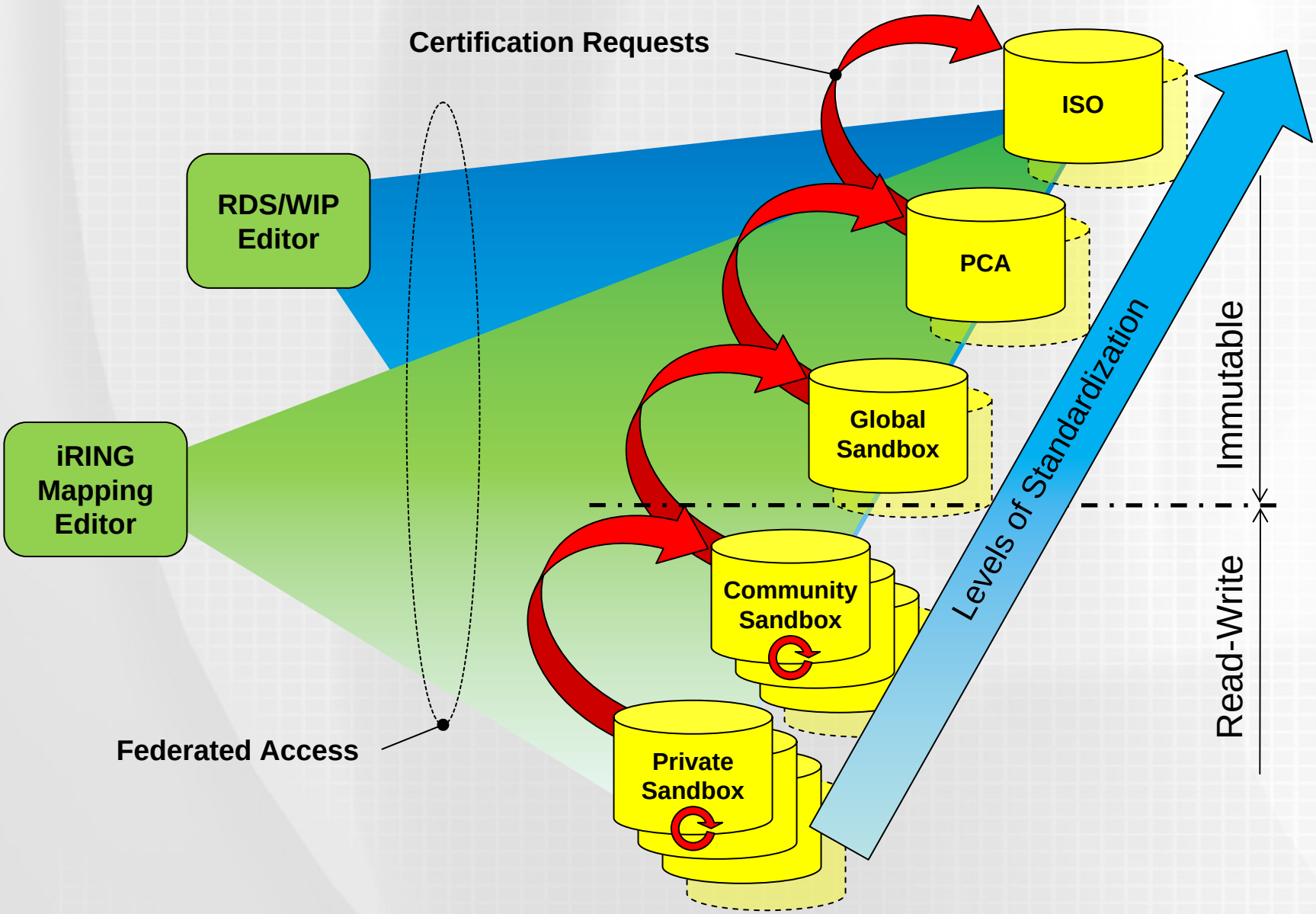


- Use of automation has resulted in productivity improvement but gains are not keeping pace with investment and expectations
- How can we break through the “Gap”?

DataBroker and the RDM



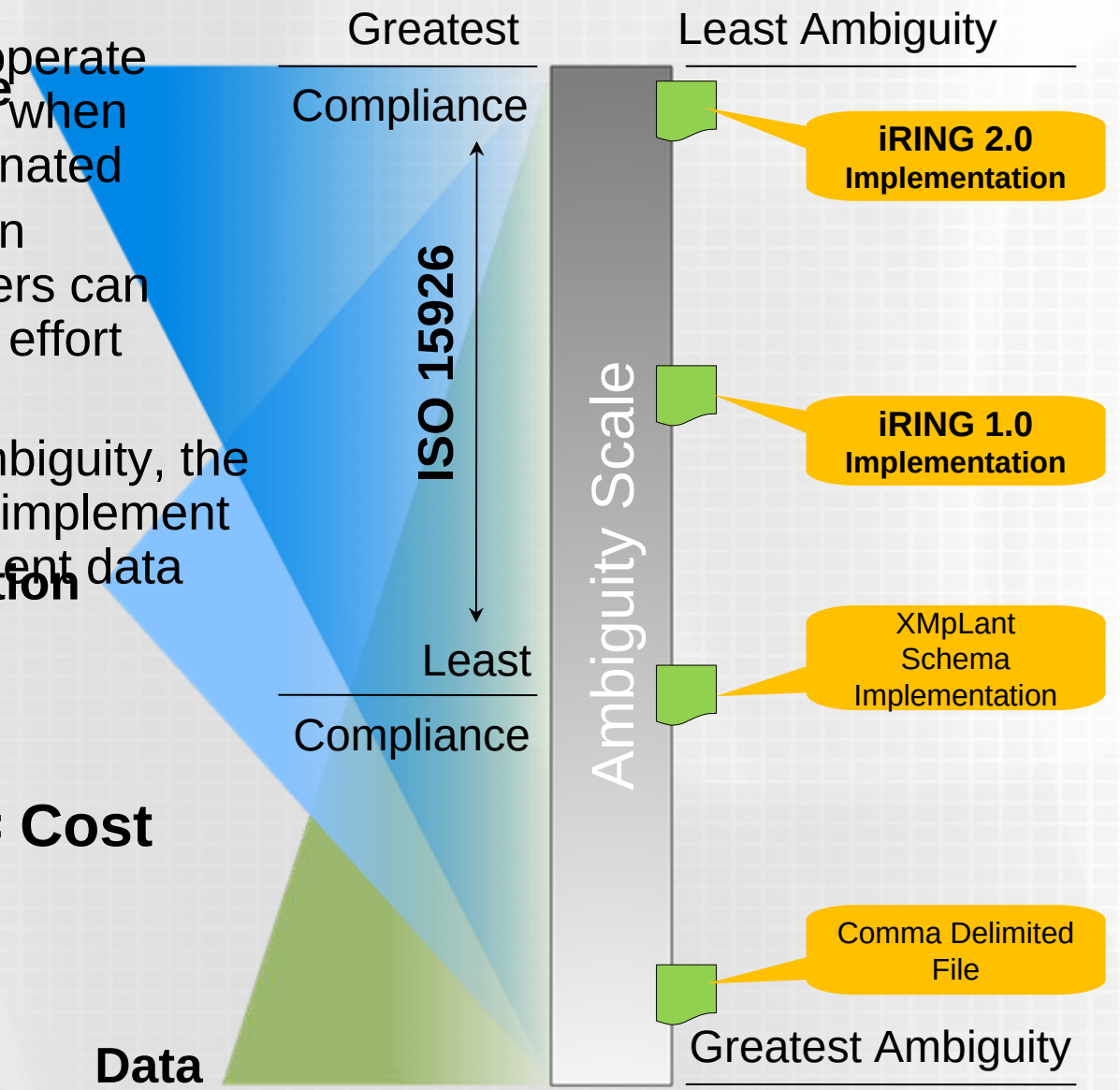
Reference Data Federation



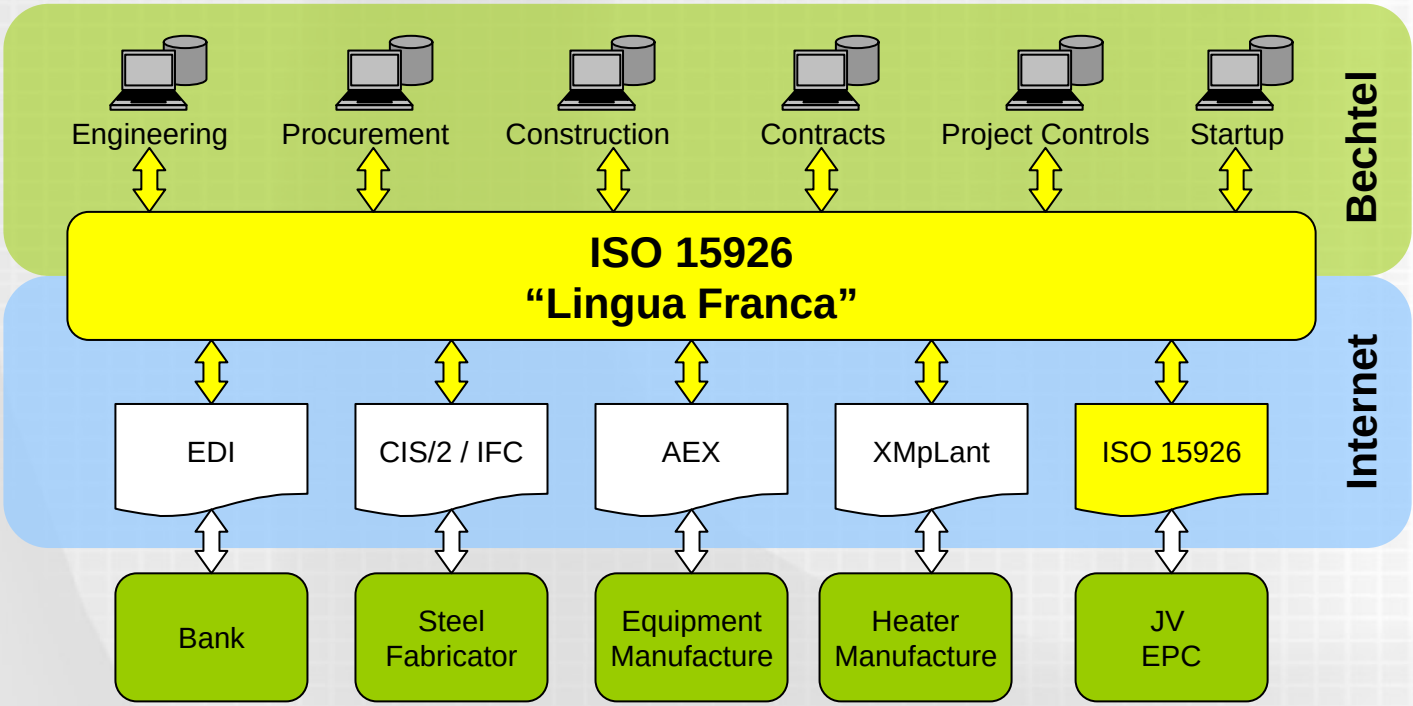
Information Ambiguity

- Data exchanges operate most successfully when ambiguity is eliminated
- Ambiguity between exchanging partners can require significant effort (labor) to remove
- The higher the ambiguity, the higher the cost to implement effective and efficient data exchanges

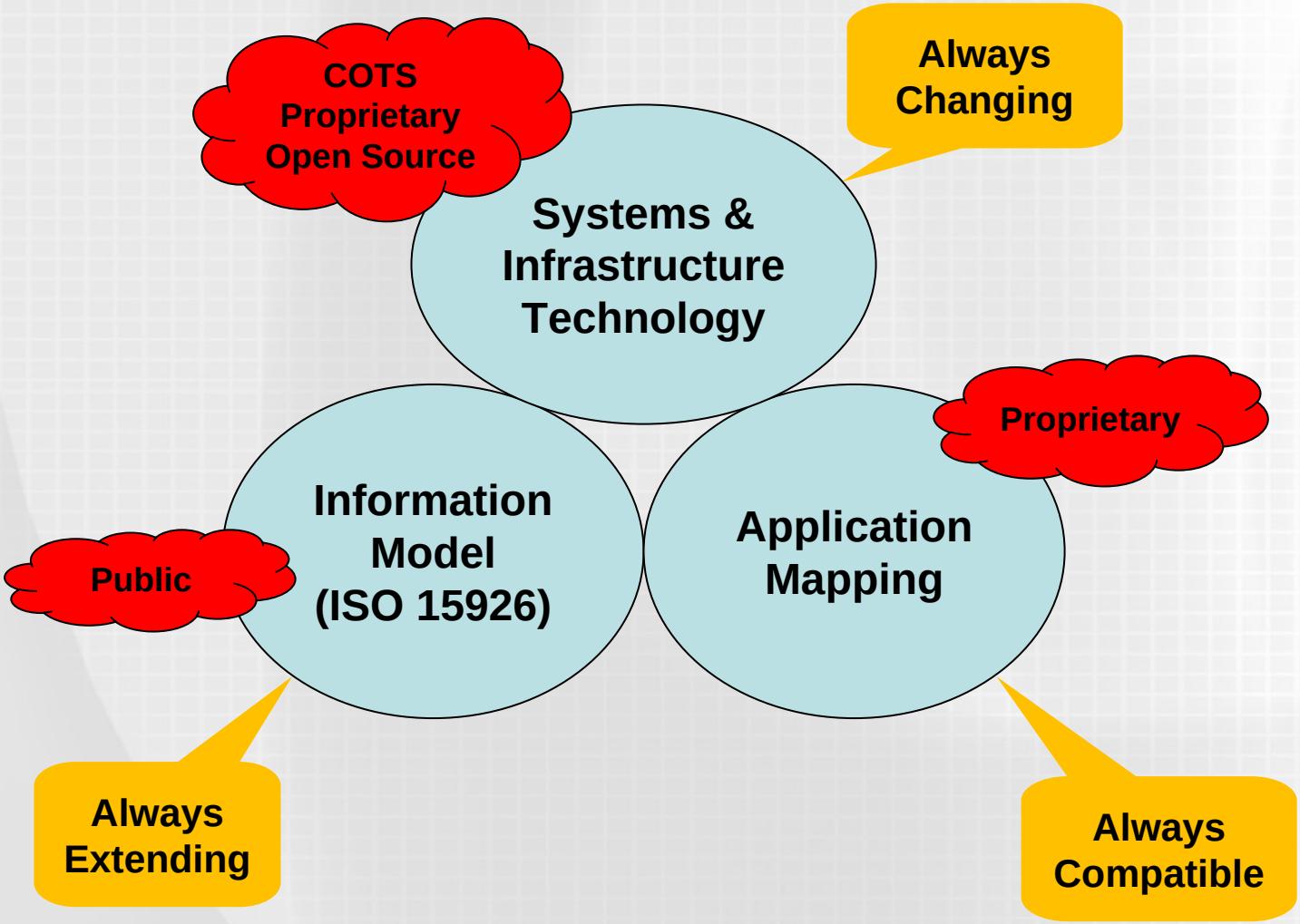
Ambiguity = Cost



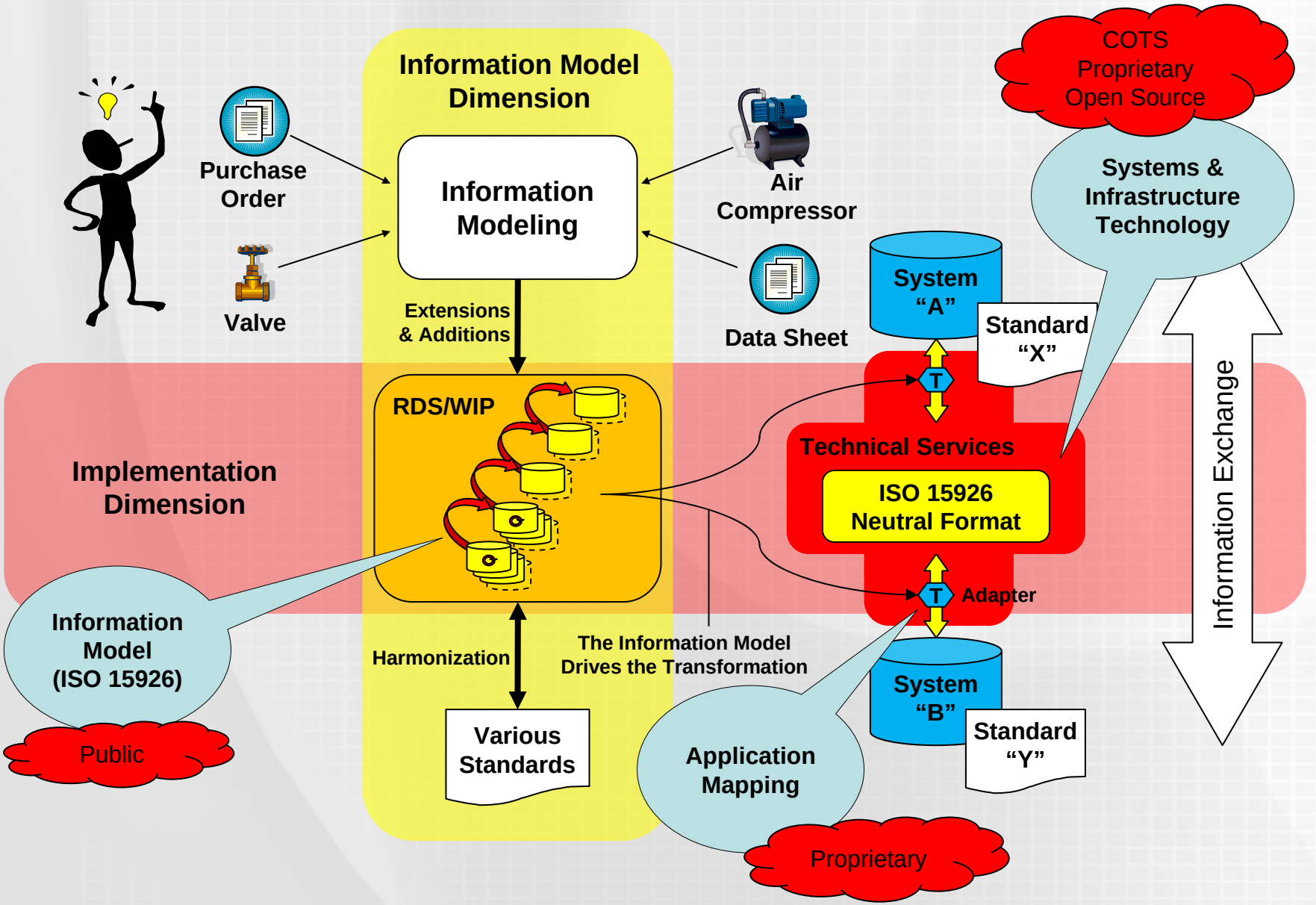
Plethora of Standards



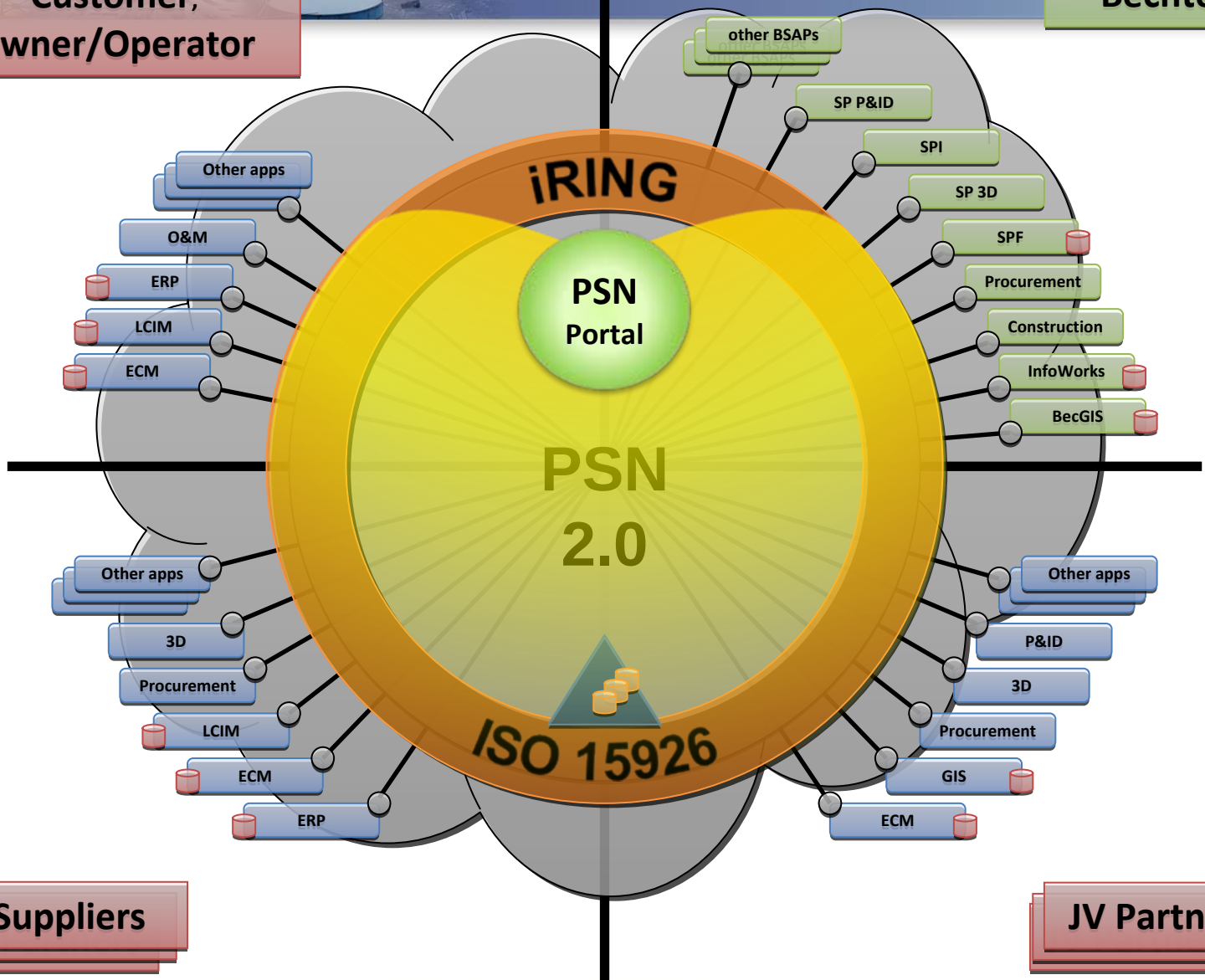
Automation Investment



Model Driven Interoperability



iRING Deployment



www.iringug.org

iRING

iRING – A set of information interoperability and integration protocols and reference data that are compliant with the ISO 15926, Parts 7, 8, & 9 standards, which builds and depends on ISO 15926 Parts 1 - 6.

http://iringug.org

iRINGUserGroup - An open online community of users, companies, and organizations who use, are considering using, or are developing or deploying ***iRING*** protocols. The ***iRINGUserGroup*** is also responsible for the management, enhancement, and maintenance of ***iRINGTools*** and ***iRINGSandbox***.

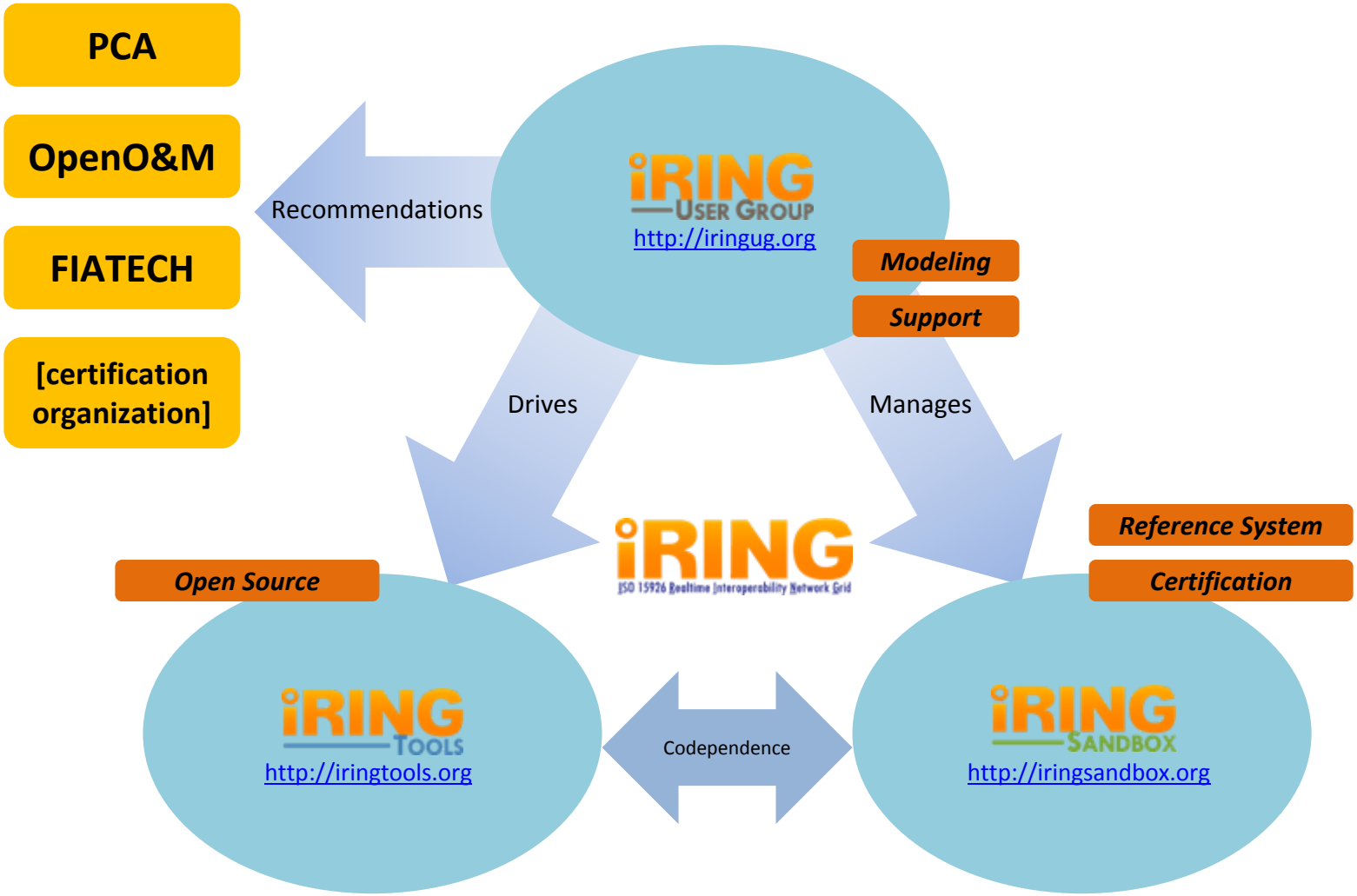
http://iringtools.org

iRINGTools - A set of free, public domain, open source (BSD 3 license) software applications and utilities that implement ***iRING*** protocols. ***iRINGTools*** provide users with production ready deployable solutions. ***iRINGTools*** also provides technology solution providers with usage patterns for the implementation of ***iRING*** protocols in their respective solutions.

http://iringsandbox.org

iRINGSandbox – An internet hosted, publicly accessible and publicly downloadable, ***iRING*** reference system that will showcase the use of ***iRINGTools*** and other technology solution provider's products that implement ***iRING*** protocols. This reference system will also include an example ***iRING*** community sandbox that will hold ISO 15926 RDL extensions.

iRING – Relationships



2010 Demonstrations

- Digital Plant 2010
  - iRINGUserGroup
  - iRINGTools/Bentley demonstration
- Private Demonstrations
  - Bechtel
  - Hatch
  - Emerson
- FIATECH Conference 2010
  - Bechtel
  - Bentley
  - CCC
  - CH2M Hill
  - Dow
  - Emerson
  - Hatch
  - Intergraph
  - TCS

FIATECH iRING Demo

iRING
FIATECH
Conference 2010
iRING
ISO 15926 Realtime Interoperability Network Grid
Demonstrations
ISO 15926
Bentley
Exton, PA
OpenPlant
PDxManager
Dow
Houston, TX
SmartPlant
P&ID
Hatch
Brisbane,
Australia
PlantSpace
P&ID
Emerson
Pune, India
EIO
CCC
Athens,
Greece
C3D
CH2M Hill
Denver,
CO
PDB
Bentley
Walnut,
CA
ProjectWise
LCS
Bechtel,
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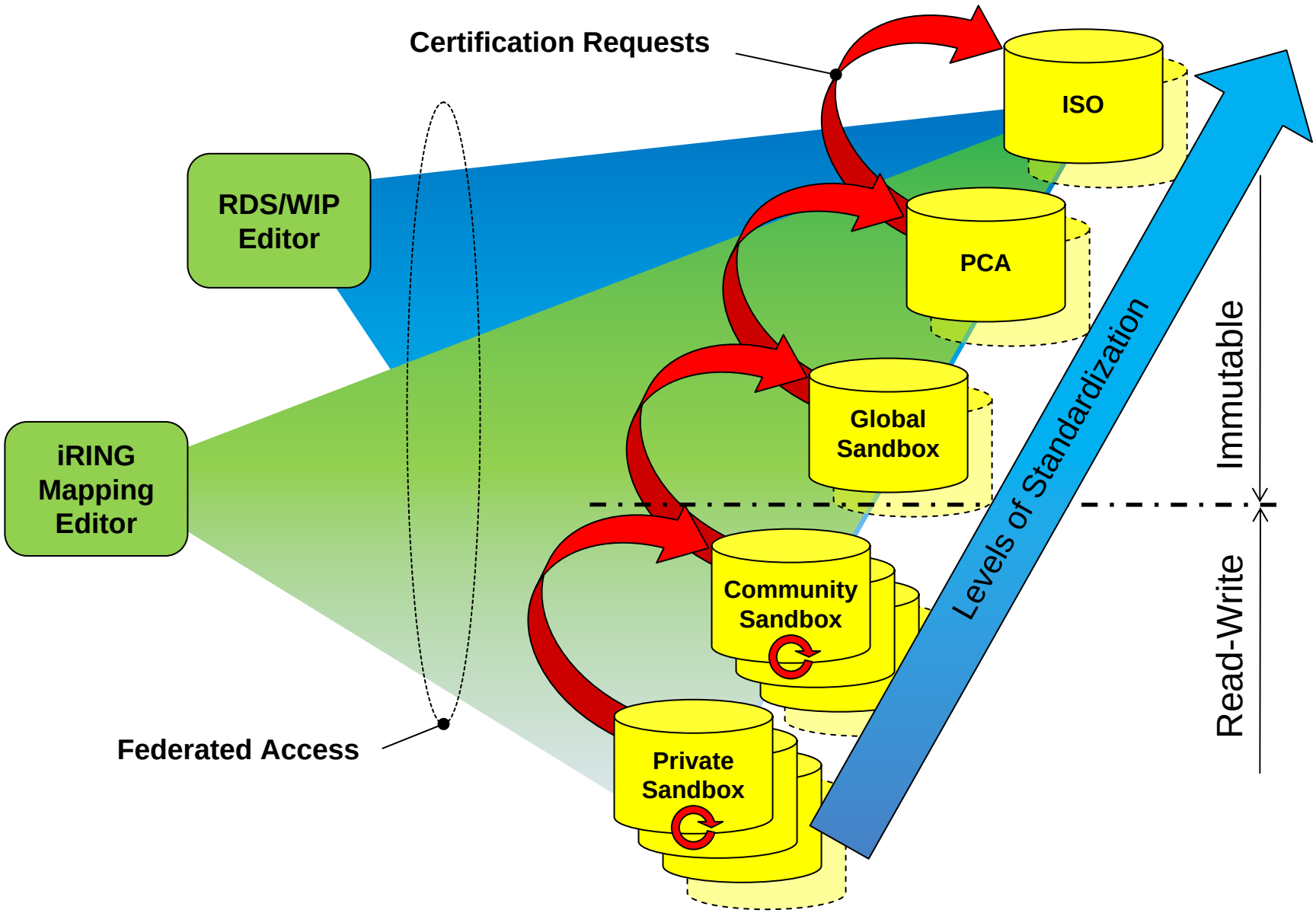
Huntsville,
AL
SPF

Reference Data Federation