

Industry Knowledge Graph LLC

Data-Centric Overview for Business Executives



Home of the
Industry Knowledge Graph
solution for Business Execs™



Industry Knowledge Graph LLC
Educational Service for:

- **Data-Centric Strategic Planning™ Clients**
- **IndustryKG™ Ecosystem Channel Partners**

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Data-Centric Overview for Business Executives



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Focus of this presentation

Note: Data-Centric Strategic Planning (DCSP) should be viewed as just the first use case for transforming into a data-centric company. It's a very logical 1st use case because executives throughout the company can benefit from it immediately; and the corporate framework can also be used to set the roadmap for future use cases. (Also, it's a generic subject for all industries – so we are able to do a lot of the work for you.)

The Data-Centric Strategic Planning (DCSP) Series



After 50 Years Of Companies Building Silos

With Costly Linkages & All The Associated Costs, Risks & Time Delays

A typical sketch of (application centric) enterprise architecture...



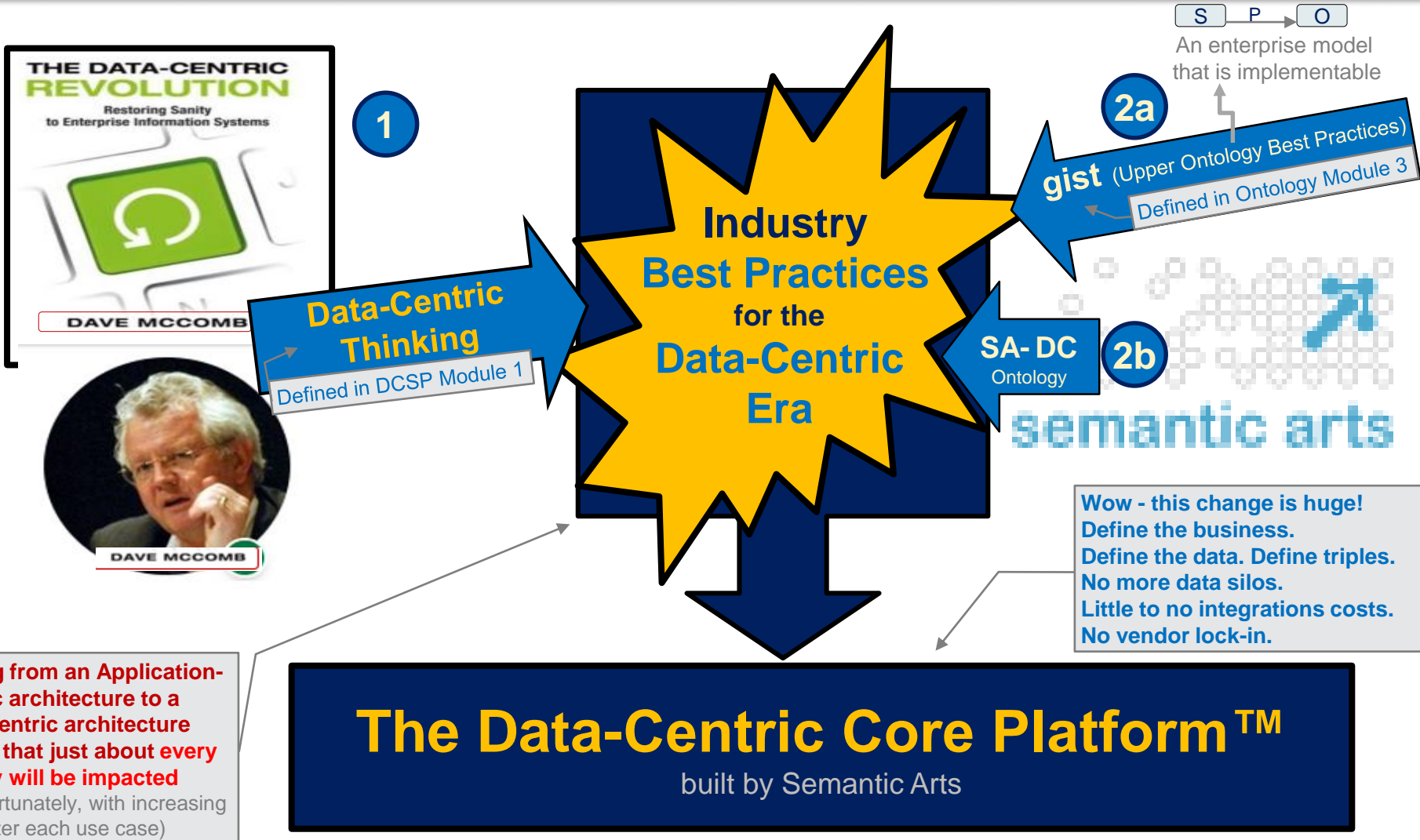
"It doesn't have to be this way."

Today's architecture is costly and risky.
This presents a great opportunity for leaders to lead.



Introducing:

The Data-Centric Core Platform



S → P → O
An enterprise model that is implementable



Data-Centric Revolution: Key Concepts

“A SINGLE, SIMPLE, EXTENSIBLE, FEDERATE-ABLE, UNIVERSAL, SHARED ENTERPRISE MODEL THAT’S DIRECTLY IMPLEMENTABLE ...”

- ✓ **Data-driven is a good; but it’s a tiny idea compared to data centric**
- ✓ **Data centric means that data is a 1st class citizen, where data is not beholden to any specific application** (as has been the case for the last 50 years)
- ✓ **When data is not trapped within application silos, it can be shared much more easily – and data can be defined just once**
- ✓ **In the data-centric world, Step 1 is to define the meaning of the data** (and to do so more precisely using semantics and ontology).
- ✓ **The data-centric approach is the road to knowledge graphs and the ability to access data (triples) with little to no integration costs**
- ✓ **Business execs should define the business – although much better tools need to make this more practical**

See DCSP module:
**Ontology for
Business Executives**

The DCA Revolution

Enterprise Knowledge Graphs

And What It Really Means to Be Data Centric

The What
is the Goal

**“A SINGLE*, SIMPLE, EXTENSIBLE,
FEDERATE-ABLE, UNIVERSAL, SHARED
ENTERPRISE MODEL THAT’S DIRECTLY
IMPLEMENTABLE (AND WHERE APPLICATION
FUNCTIONALITY IS LOOSELY BOUND)
AND ALIGNED WITH CORPORATE AND
LINE-OF-BUSINESS STRATEGIES.”**

— Dave McComb

* Either 1 enterprise data model or 1 “Core” + derivative data models



Data (Triples) Are At the Heart of the WHAT

“A SINGLE, SIMPLE, EXTENSIBLE, FEDERATE-ABLE, UNIVERSAL, SHARED ENTERPRISE MODEL THAT’S DIRECTLY IMPLEMENTABLE ... ”

To build it , think mostly of:

➤ **Data Models** (defined in terms of triples)

See DCSP module:
**Ontology for
Business Executives**

➤ **Data** (assertions + taxonomies expressed in terms of triples)

➤ **Data-Centric Architecture Components**

See DCSP module:
DCSP Technical Overview

This is **so different** from the 50-year, application-centric mindset where you first think of:

➤ **Major Applications** (ERP, CRM, SCM, HRM, etc.)

➤ **Specific Hardware**

➤ **Operating Systems, etc.**

KG Competitive Advantages – Top 10 cost advantages:

Data-Centric Organizations vs. Application-Centric Organizations

The Why

Knowledge Graph Cost-driven Competitive Advantages

1. Lower cost of integration, especially for firms competing in many lines of business
2. Lower cost of maintaining data quality and data consistency Typically, lowering the cost of data integration is the big \$ saver
3. Lower cost in adding data that can be leveraged across the organization
4. Lower cost in adding new functionality (because of opportunity to leverage existing data and ontology)
5. Lower cost in IT vendor procurement (via vendor neutral W3C industry standards)
6. Lower costs in M&A transactions with greater opportunity to leverage ontology and scale data usage
7. Lower costs in standardizing user interfaces
8. Lower costs in leveraging ML, AI, data analytics, and exploiting big data
9. Lower costs in accessing free and fee-based data in triplestores
10. Lower cost in training (via focus on standards)



KG Competitive Advantages – Top 10 differentiation advantages: Data-Centric Organizations vs. Application-Centric Organizations

The Why

Knowledge Graph Differentiation-based Competitive Advantages

1. Better knowledge management (data management, data governance + privacy)
2. Increasingly faster development (eliminating old integration issues)
3. Better integration, security sharing, and collaboration across disparate data silos.
4. Better at defining how things (data + facts) are related (greater focus on ontology)
5. Better at understanding + exploiting data relationships to discover new data
6. Greater ability to add functionality (not limited by the limits of an application)
7. Greater ability to design and implement strong control, including stronger security and authorization for multiple data sources and users
8. Ability to use a single query to leverage both structured and unstructured data
9. Greater platform flexibility given independent data connectivity and web of data informed by an ontology
10. Greater ability to add and reuse (better defined) data

Ability to infer more than the company knows now

The Data-Centric Strategic Planning™ Platform Is the Answer to “What Should Be the 1st Use Case for Knowledge Graphs?”

Intro to DCSP for Business Executives 	Ontology for Business Executives 	Strategic Planning in the Data-Centric Era 
DCSP Implementation Guidebook 	Are You Ready for Use Case #1 aka: DCSP	DCSP Resources & Extras 
DCSP Technical Overview for Business 	DCSP TTL for Strategic Planning 	DCSP Vocabulary for Strategy  <small>+IT+DCA+W3C+gist+ibbeo</small>



Use Case 1a – Market Intelligence

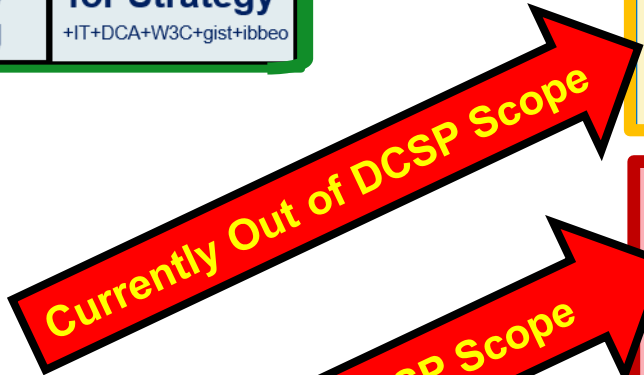
To begin or expand your Data-Centric journey, use DCSP for market intelligence, as well as:

- to analyze the industries you compete in
- to support business and IT alignment
- to create a strategically-relevant framework for developing a roadmap for future use cases

Use Case #1b – Competitive Positioning

+ Templates that can serve as a communication vehicle for ‘the business’ to inform IT (e.g., ontologists) on input they need.

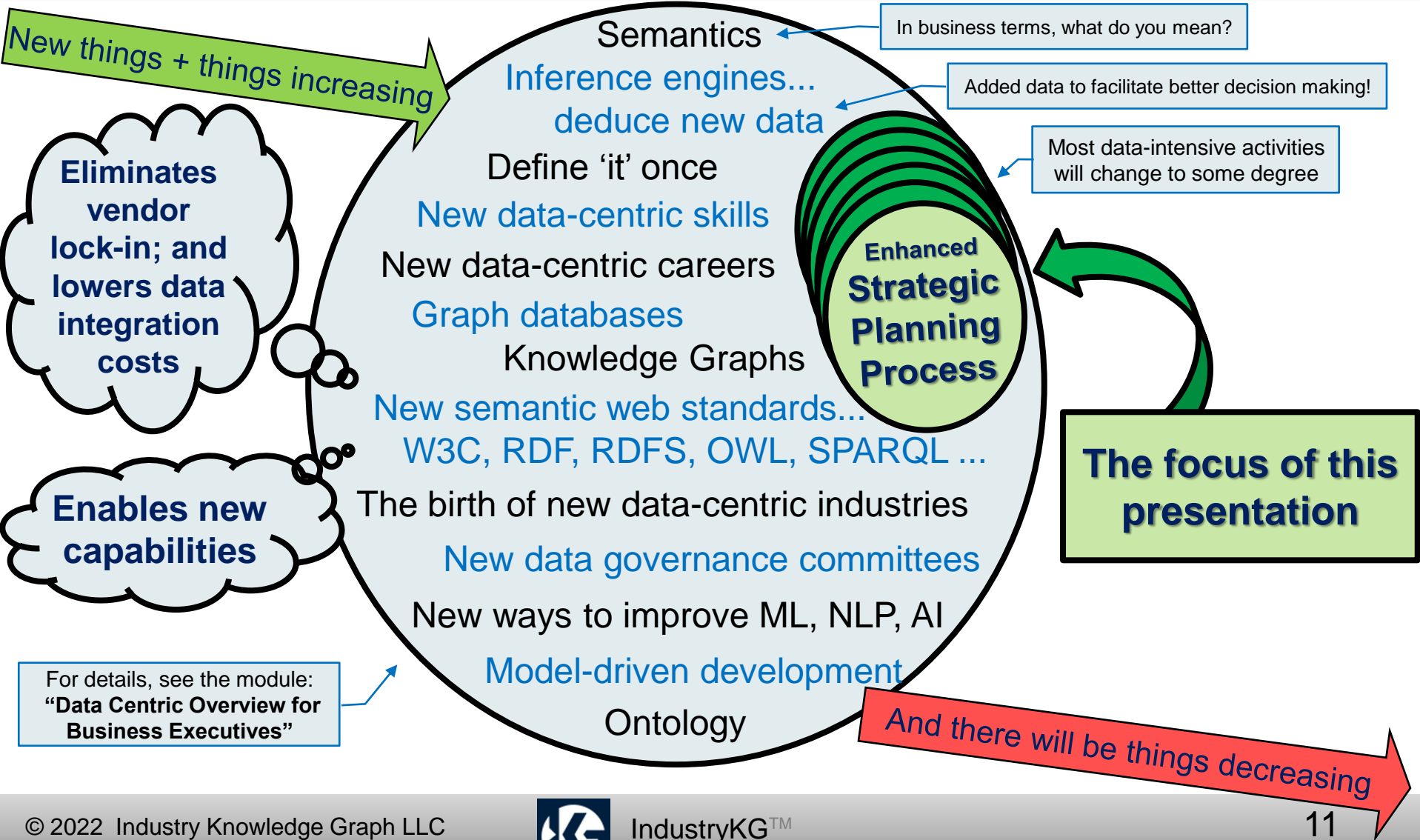
Not part of the initial DCSP offering.
(E.g., x-SBU activities)



Other Use Cases



The Data Centric Movement Is Impacting Many, Many Areas (with Strategic Planning Just One Area)



Industry Knowledge Graph LLC says



*Industry Knowledge Graph
solution for Business Execs™*

Thank you!

Part of our:

**Data-Centric
Strategic Planning
(DCSP) Series**

