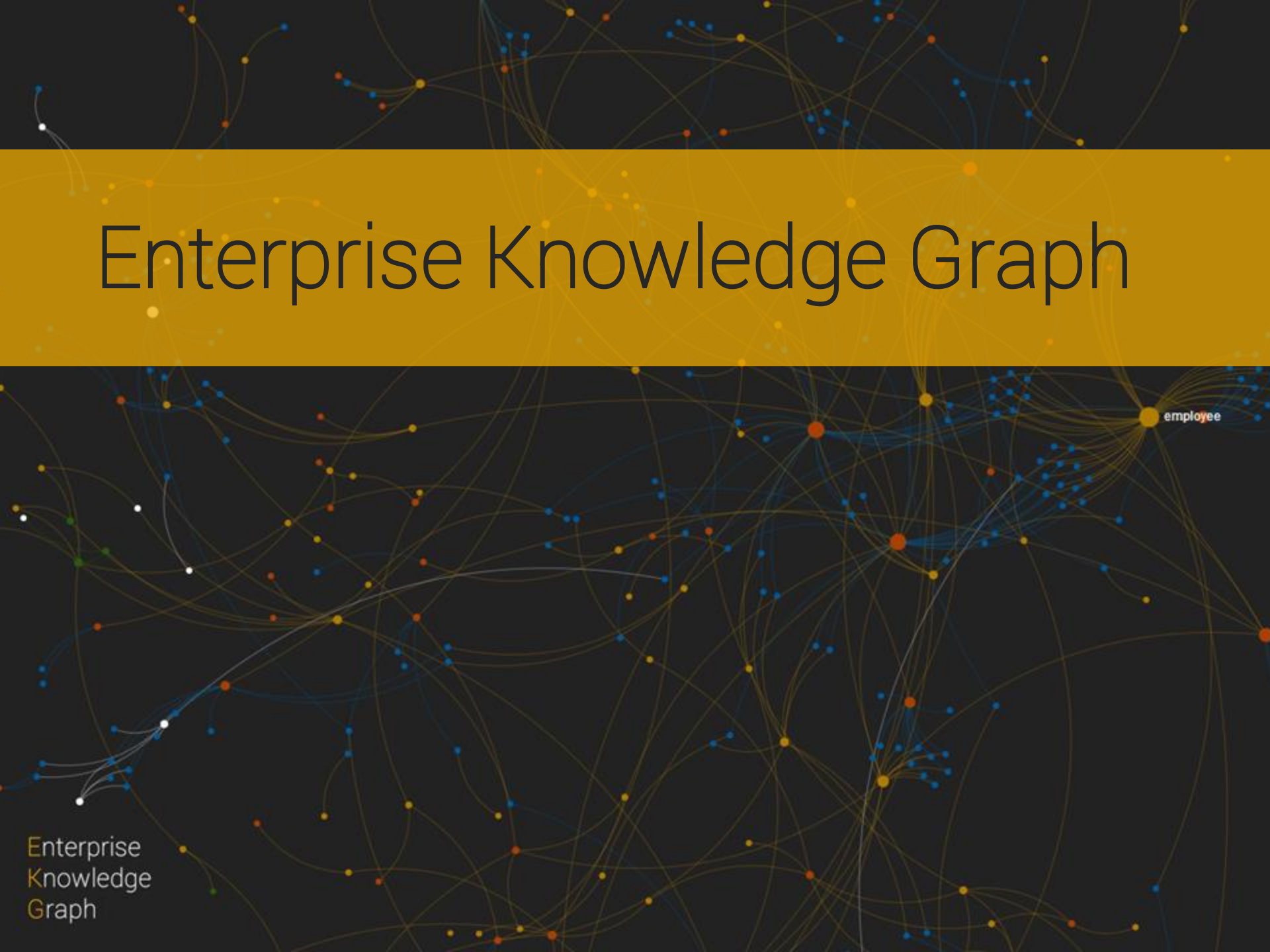
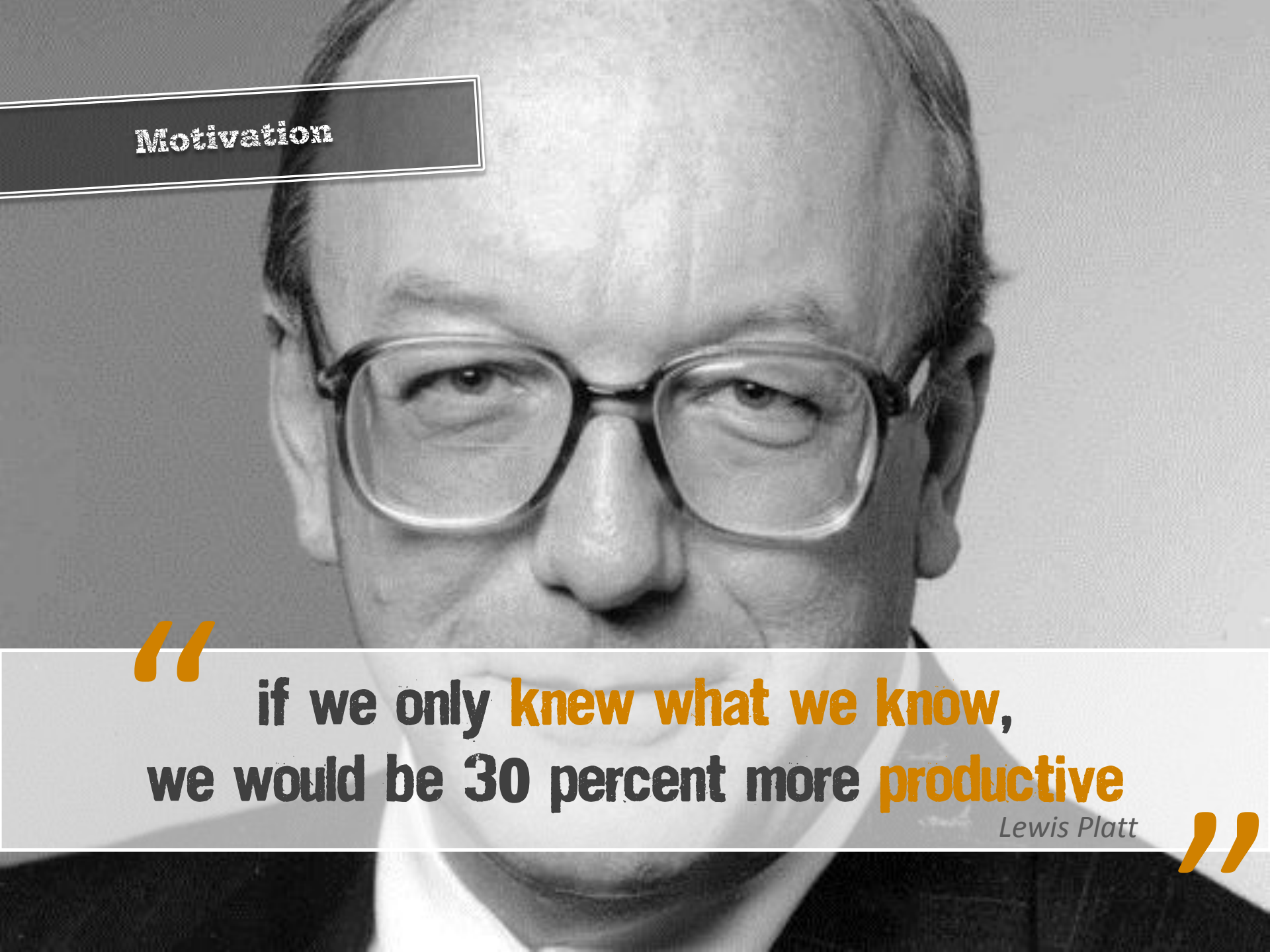
Enterprise Knowledge Graph



Motivation
“today knowledge has power.
it controls access to opportunity and advancement
Peter Drucker”

Motivation



"if we only knew what we know,
we would be 30 percent more productive"

Lewis Platt

Age of Big Data
2.5 billion gigabyte per day
80 % of enterprise data is unstructured

Problem Statement
knowledge in companies is hoarded in various datasilos.
it is hard to find the right information.

Knowledge Sharing

$550 Billion in lost productivity per year in U.S.

By **70%** unengaged employees.

Infrastructure

highly effective internal information infrastructure

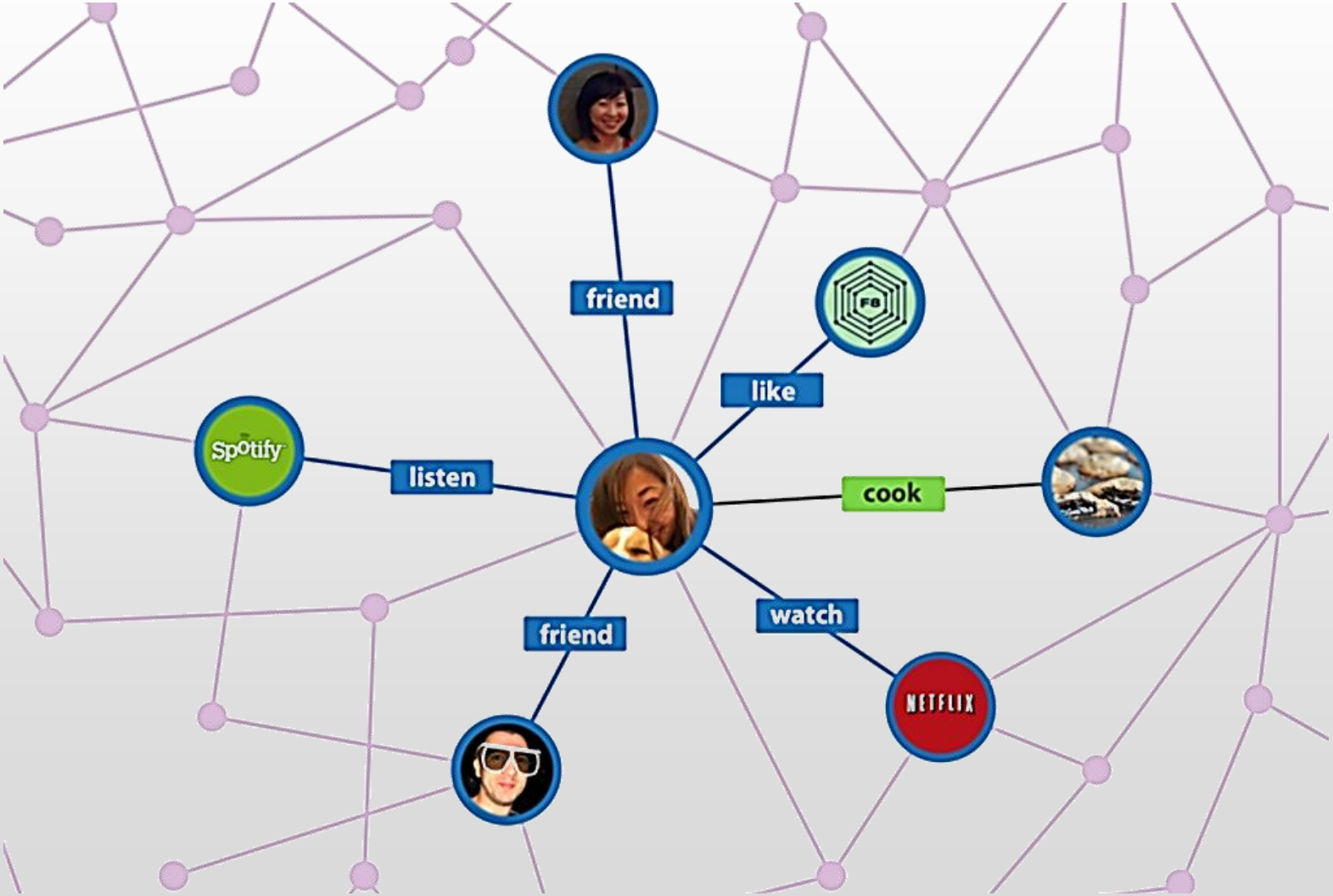
leads to 47% higher returns

Compared to companies with least effective infrastructure

Objective

organize and distribute the company's information and make it universally accessible and useful for every employee

Facebook – Social Graph (related)



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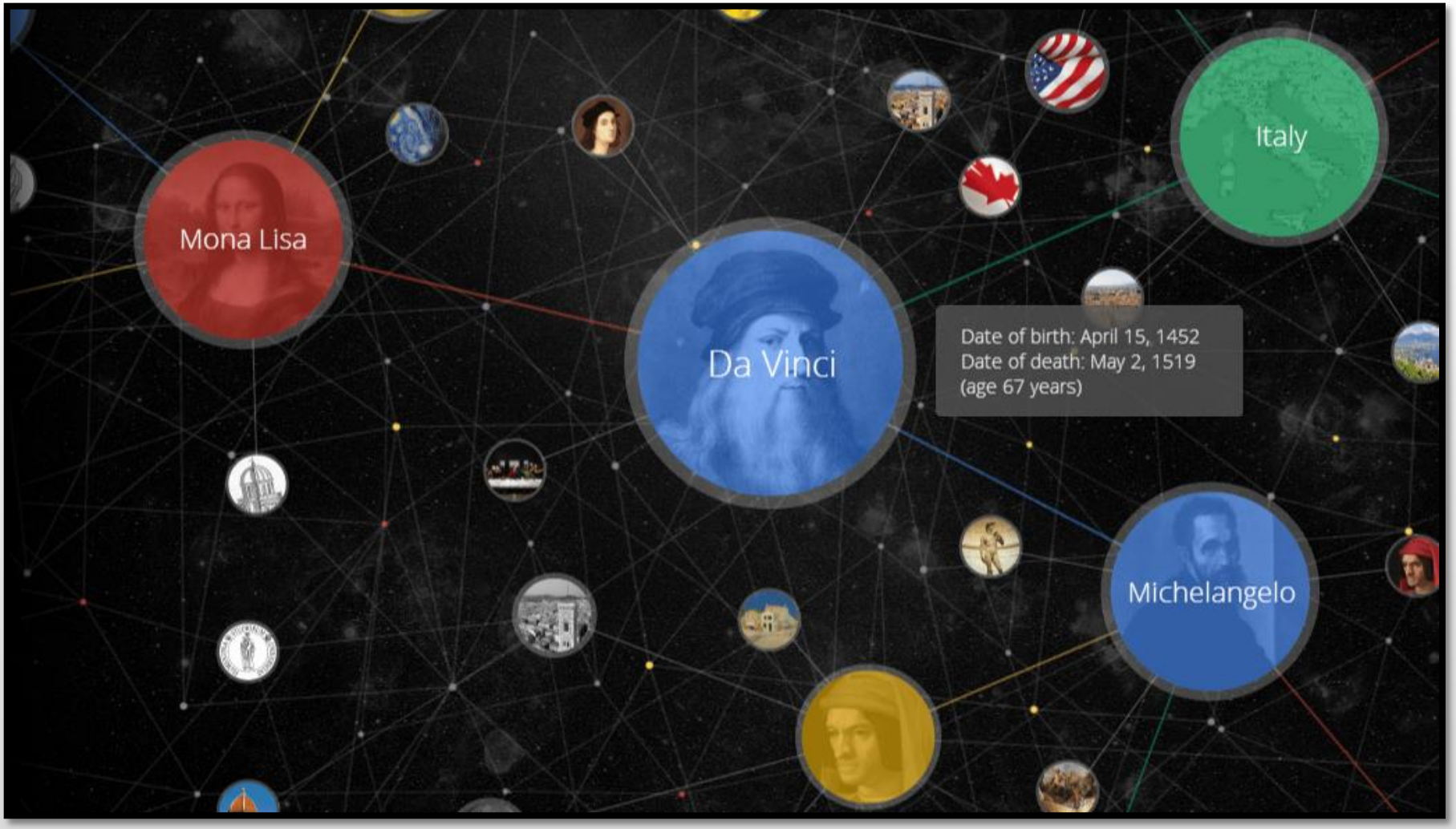
Google – Knowledge Graph (related)



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EKG -Concept

The Enterprise Knowledge Graph …

… is a **disruptive platform** that combines emerging Big Data and graph technologies to **reinvent knowledge management** inside organizations.

… **replicates the unique network** of an organization with most of its relevant entities into a graph database.

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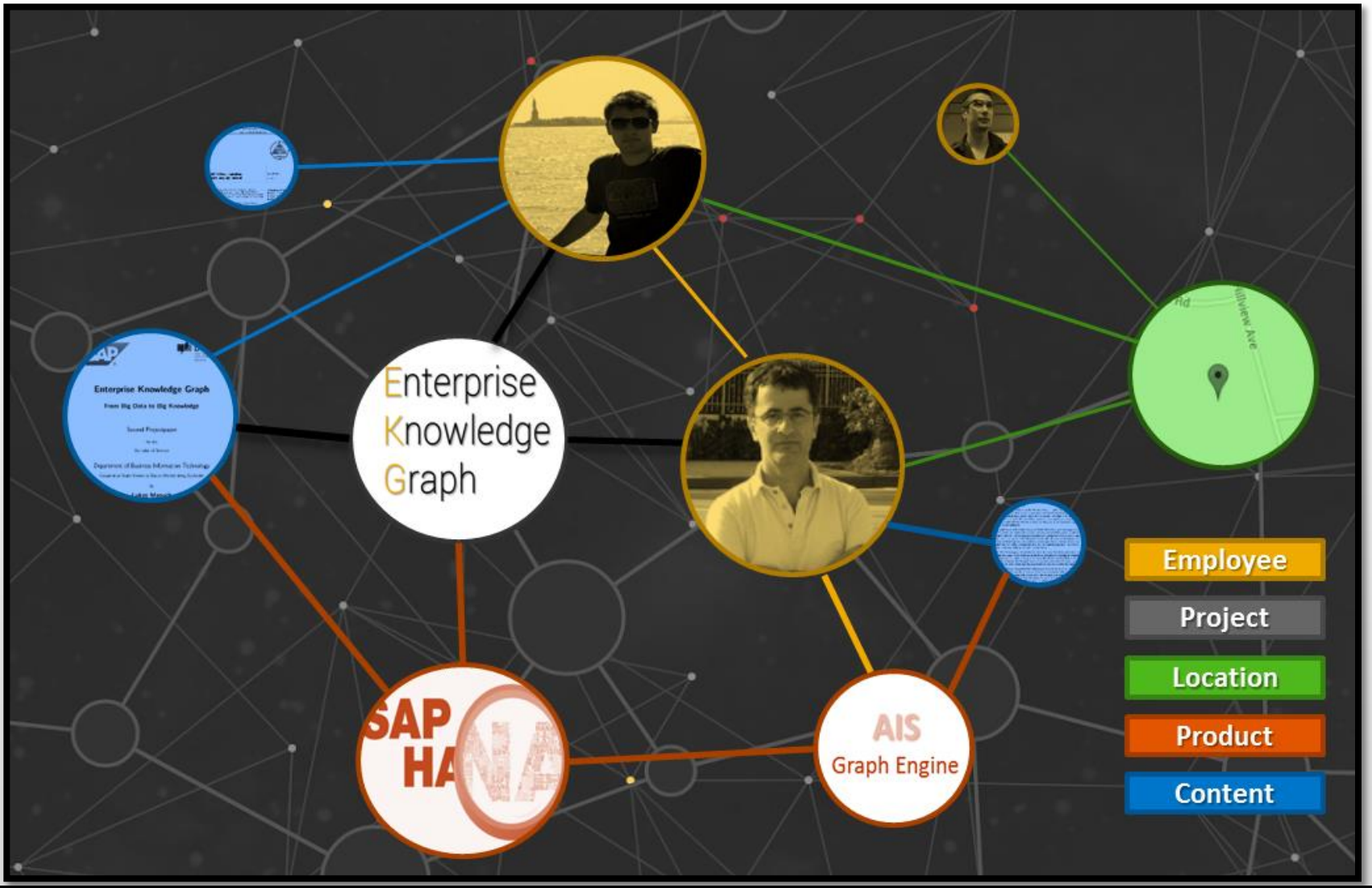
EKG - Concept



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EKG - Buzzwords

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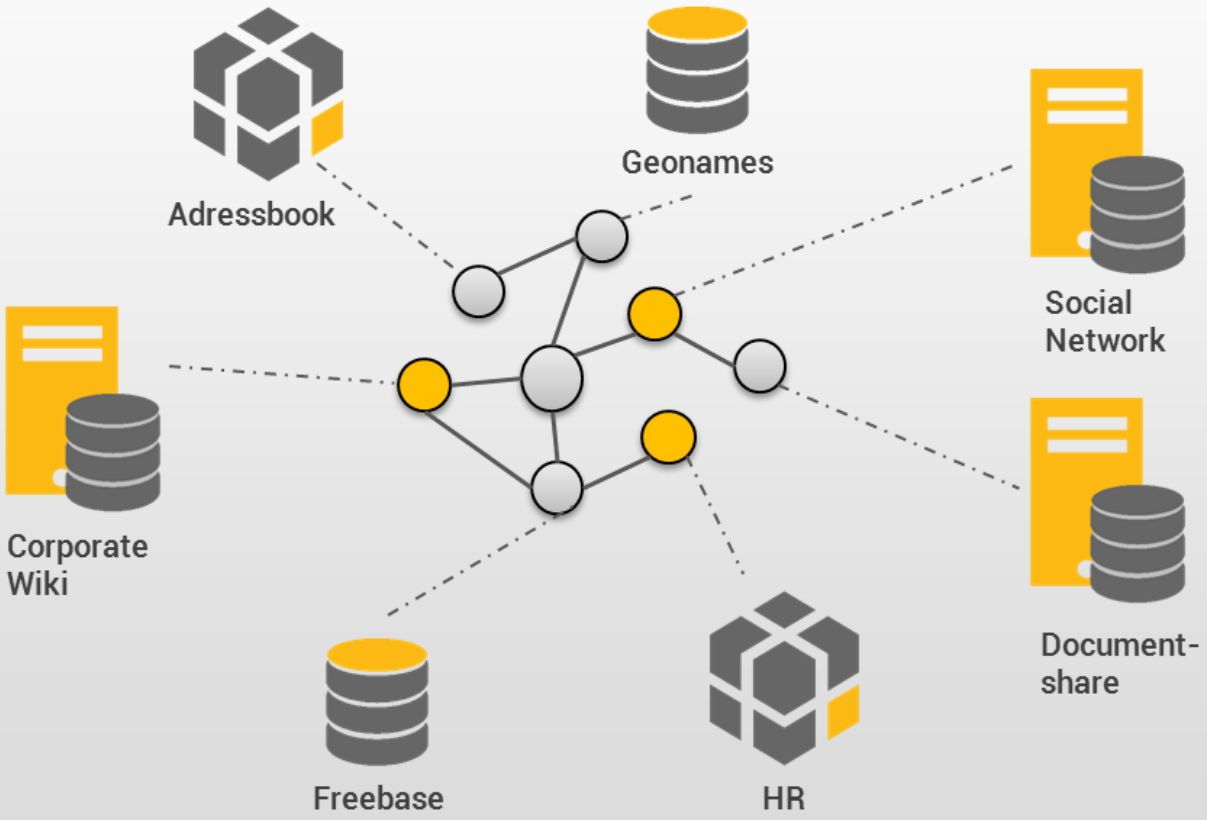
Data Aggregation



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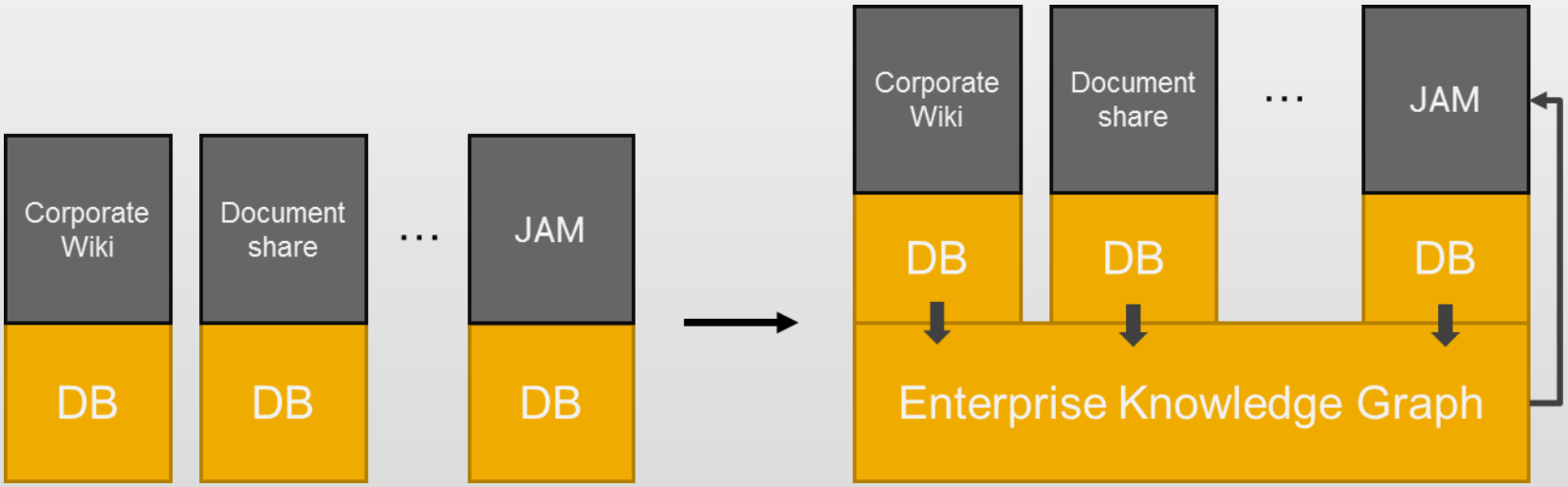
EKG – The Knowledge Layer



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EKG – Use Cases

Security Gap Detection

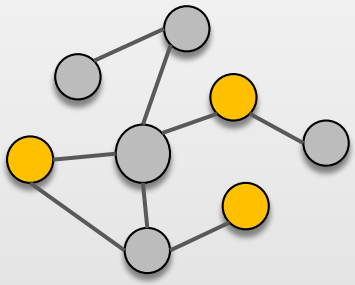
Information Flow Modeling

Gamification System

Social Network Analysis

Intelligent Business Assistant

Enhanced Enterprise Search



Automatic Tagging

Enhanced Employee Profile

Context Awareness

Duplication Detection

Expert Finder

Enterprise Recommendation System

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SAP Employee Network

development on hana | Search | Ask SAP Ninja

Experts

Hasso Plattner
Chairman of the Sup...

Vishal Sikka
CTO

Rui Nogueira
HANA - Product Ma...

Content

HANA Developm...
PDF - Community

HANA Dev Wiki
Wiki - Corporate Wiki

HANA Text Anal...
Document - Community

Other Entities

SAP HANA
Product

HANA Community
Group - JAM

HANA Studio
Tool

Type

PDF (1000+)
Presentation (751)
Document (551)
Spreadsheet (326)
Pages (316)
Blogs (138)
More

Results from

Date

Any time
Only archived
Custom date range...

More filters

About 5655 results

Results per page: 10 | Sort by: Relevance

Where to find documents for "HANA Native Development"-Workshop
http://scn.sap.com/thread/3338757
Discussion Forum | Ben Wolf
..., I'm doing the the **HANA** Native **Development** workshop and I'm wondering...automatic content with future revisions of **HANA**.

HANA and Test Driven Development
http://scn.sap.com/thread/3448309
Discussion Forum | Kostiantyn Kharchenko
... Does anyone know how Test Driven **Development** is applied during the **HANA** app **development**? Particularly in native **HANA** applications.... it as an important aspect during **development** of analytical...

Error when installing ABAP Development tools for SAP HANA
http://scn.sap.com/thread/3482470
Discussion Forum | Goutham Katarapu
Hi All, I have SAP **HANA** Studio Version:1.... I am trying to install ABAP **development** tools from the following : SAP **Development** Tools for Eclipse Juno...

CAL TRIAL openSAP Course: Introduction to Software Development on SAP HANA 2013.01 SOLUTION WAS NOT FOUND? ERROR
http://scn.sap.com/thread/3549524
Discussion Forum | geeta kri
... learning OpenSAP course Introduction to Software **Development** on **HANA**.... https://caltdc.**hana**.ondemand.com/... by OpenSAP course Introduction to Software **Development** on...

Recommended development approach for ABAP on HANA..
http://scn.sap.com/thread/3484830
Discussion Forum | Sean Holland
... future direction/role of SAP **HANA** Studio for use with SAP in SP5 for ABAP on **HANA** **development**, is that the future... only supported approach for SAP application

Vishal Sikka

CTO - Palo Alto (US)

User ID: I0812345
E-Mail: vishal.sikka@sap.com
Phone: +1 650 123-4567
Functional Area: General Management
Expertise: HANA, Development, Management ... People@SAP

Communicate | Request Meeting | Start Chat

Shared Content

HANA Developm...
JAM

Timeless Software
JAM

The Evolution from a ...
Community

HANA Architecture
Corporate Wiki

Efficient Transaction Processin...
Documents

Related people

Barbara Bitterle
Assistant

Bernd Leukert

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Displaying **1-10** of **11855** results

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Sort by: Relevance

Best Bets

Suggest a Best Bet

Facility Information Palo Alto
Check this page for information about SAP Facility in Palo Alto.

Palo Alto Campus
Welcome to Palo Alto - Campus.

Lunch Menu Palo Alto
This overview provides the lunch menu for SAP Palo Alto.

PAL (Palo Alto) - SAPedia
https://sapedia.wdf.sap.corp/wiki/index.php/PAL_(Palo_Alto)
Wiki page | SAPedia
Palo Alto SAP Palo Alto Office Phone: +1-650-849-4000; Internal Dialing: 8-289-xxxx (user ext.) Palo Alto, California 94304 SAP PALO ALTO Buildings & Addresses: PAL01 3410 Hillview Ave PAL02 3412 Hillview Ave PAL03 3420 Hillview Ave PAL04 3450 Hillview Ave PAL05 3408 Hillview Ave PAL0...

COIL Palo Alto
https://research-navigator.wdf.sap.corp/index.php/Lab:COIL_Palo_Alto
Wiki page
Lab COIL Palo Alto Situated in Silicon Valley, the Palo Alto location combines particularly the proximity to a wide range of branches of innovative technology and software solution partners with the SAP Americas field organization, and SAP development to accelerate co-innovation. Facts Attachments (...

Technology Development Support, Palo Alto
https://portal.wdf.sap.corp/irj/portal?NavigationTarget=navext(ROLES%3...
Webpage | Tatjana Heinrich | (HTML 17 KB)
Technology Development Support, Palo Alto Page

SAP Palo Alto
https://mediashare.wdf.sap.corp/public/media/0_ydriud9w/
Image | Kalsi, Prabhpreet Singh
HDR image of SAP Palo Alto

SAP Labs - Palo Alto

Directions | Shuttle Services | View Campus Map

SAP Palo Alto campus is located in the midst of one of the world's most successful and best-known research parks located in the San Francisco Bay Area in the center of Silicon Valley. With its rich concentration of high growth technology companies and internationally recognized research labs... read more

Address: 3410 Hillview Ave, Palo Alto, CA 94304
Phone: (650) 849-4000
Headcount: 2126
Main Boards: P&I, GS, SQ&S
Cafeteria: Cafe 1, Cafe 2, Cafe 3 - Lunch Menu

Employee Services

FIT Club

Commuter Club

Fun Room

Auto Services

Group Exercise

Buildings

PAL01

PAL02

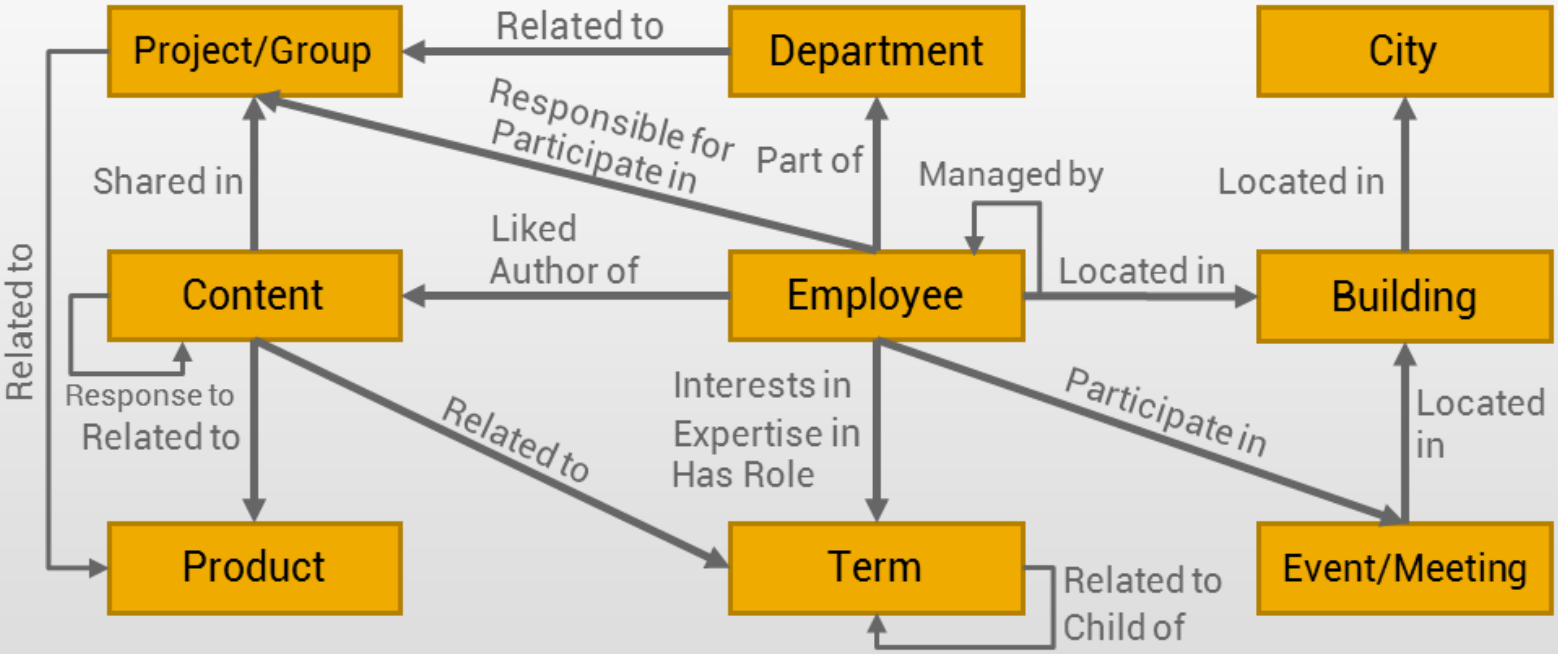
PAL03

PAL05

PAL08

EKG -Implementation

Enterprise Ontology Model (simplified)



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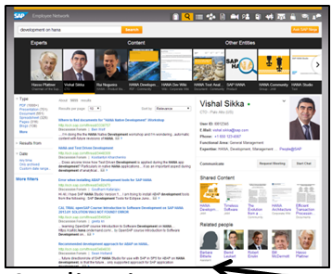
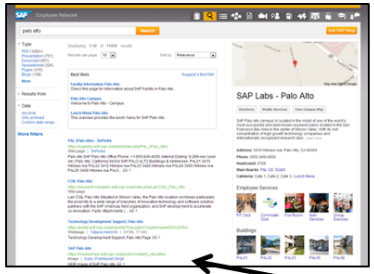
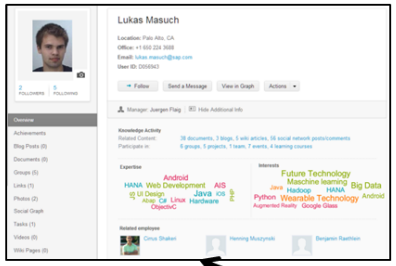
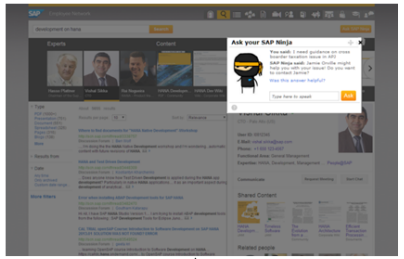
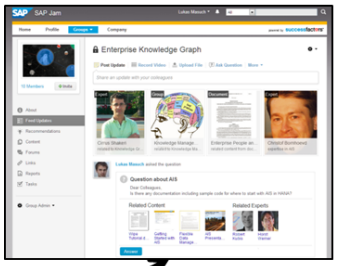










Applications

EKG-Infrastructure

External

GeoNames

WordNet

Freebase

Internal

successfactors jam

HR Systems

Document Share

Corporate Wiki

Address book

Building list

hadoop

Data Aggregation

Type Mapping

Metadata Mapping

Text Extraction

Maintenance Process

Data Analysis

Text Analysis with SAP HANA

Taxonomy

Data Mining

Text Analysis

Machine Learning

WIPE / SQL

EKG APIs

Knowledge Access

XSEngine

Exploration API

Relations API

Recommendation API

Graph Store

HANA Graph

Flexible Data Schema

Graph Algorithms

SAP HANA

Hybrid

Items

Content

Associations

WIPE / SQL

Recommendation System

Ranking Calculation

Collaborative Filtering

Content-based Filtering

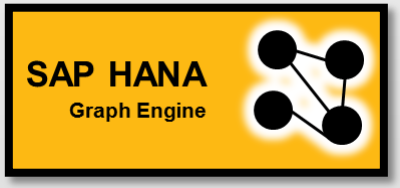
kxen Predictive Analytics

Data Visualization

Data Exploration and Editing

Dataflow

Prototype – powered by SAP HANA



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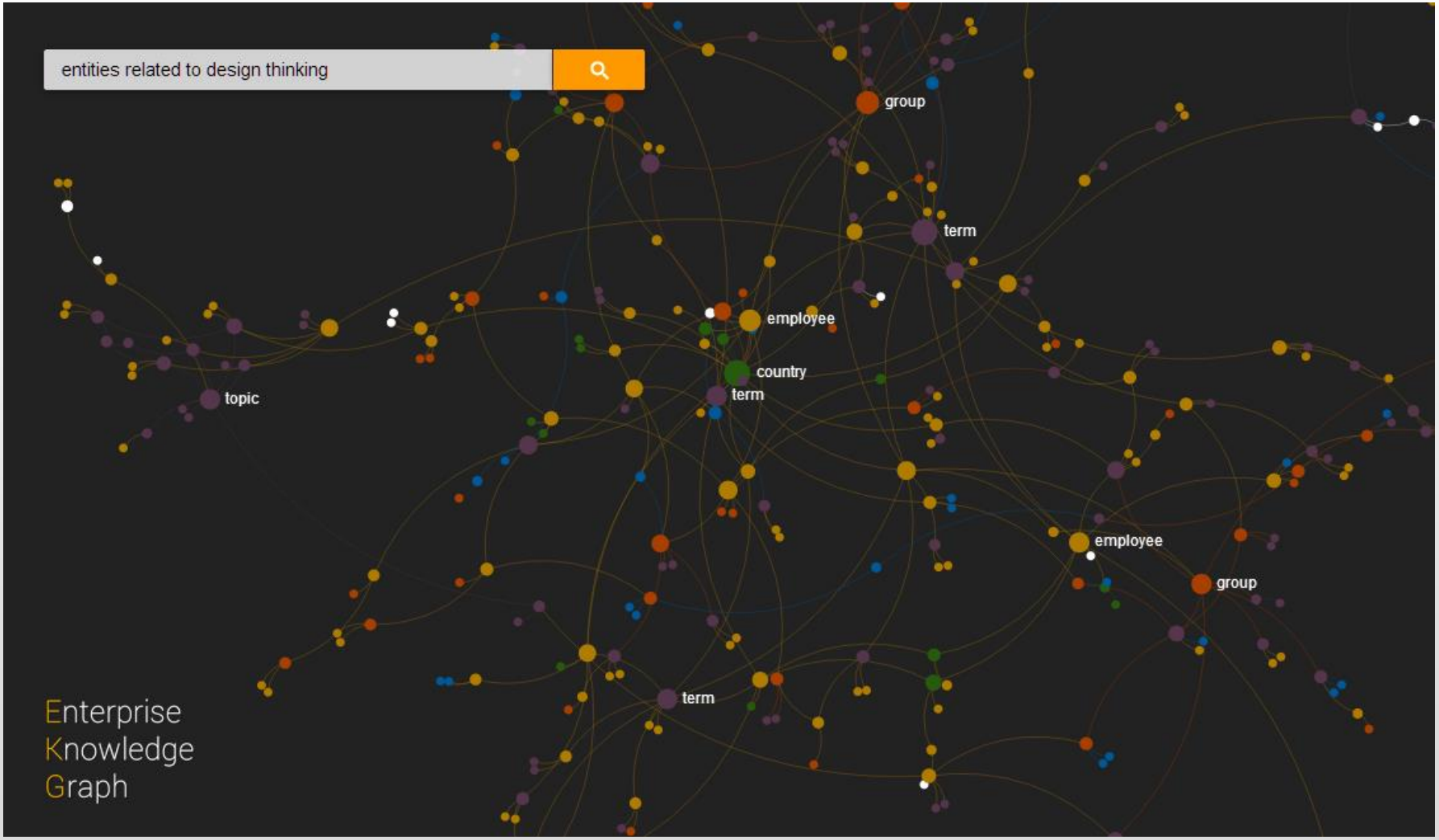
Prototype - Visualization



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Prototype - Status

Graph Store – Deployed
Data Aggregation – Implemented
Knowledge Access – Implemented
Data Visualization – Implemented
Data Analysis – In Development
Recommendation Engine – In Development

30
Connected Datasources

1
Million Aggregated Entities

20
Entity Types

8
Different APIs

4
Million Aggregated Associations

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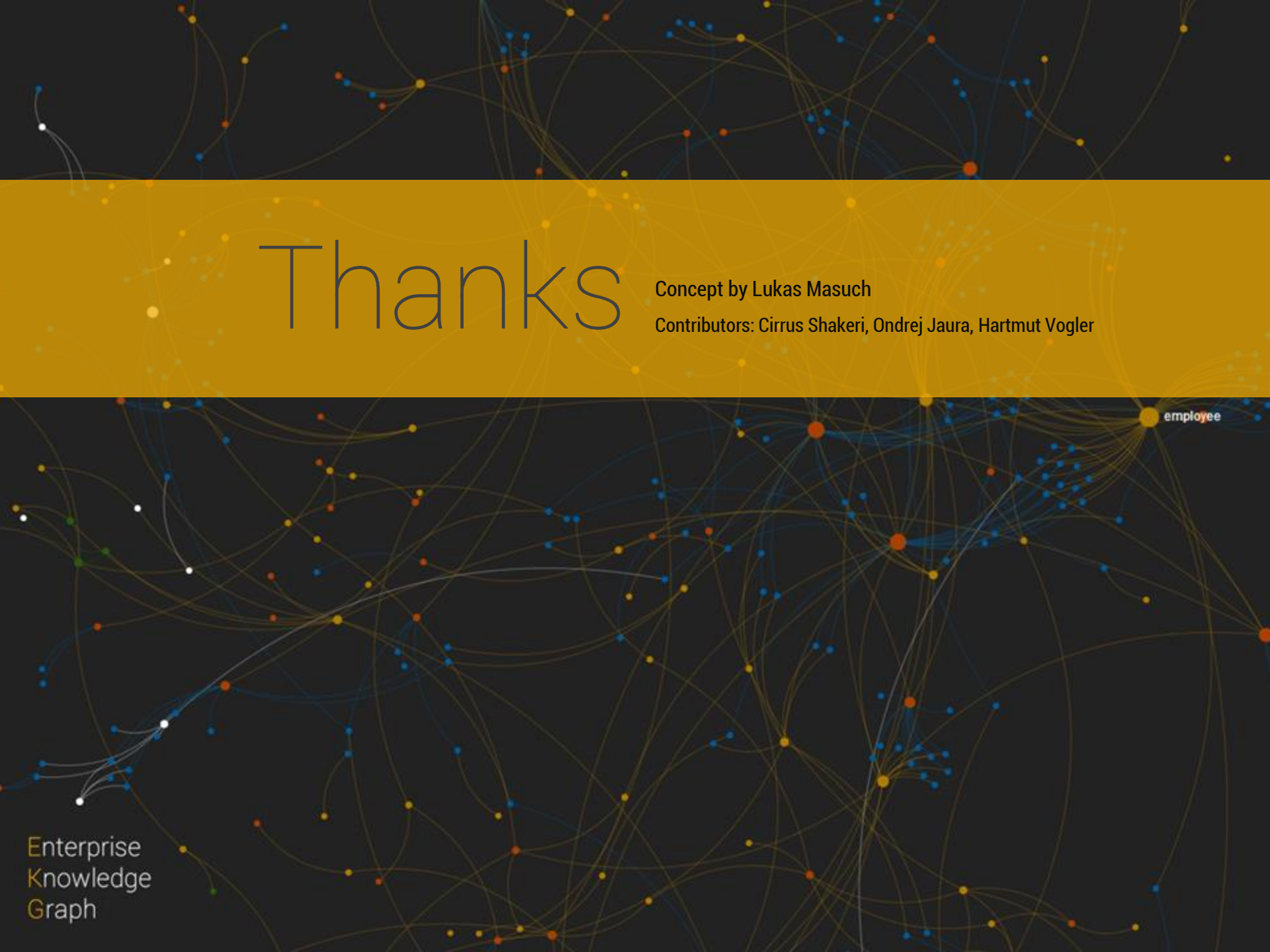
Thanks

Concept by Lukas Masuch

Contributors: Cirrus Shakeri, Ondrej Jaura, Hartmut Vogler