



Collaborating with Business to Model the Enterprise

*Introducing **ELM** & the emerging focus on the Agile Business Model*

Presented by:

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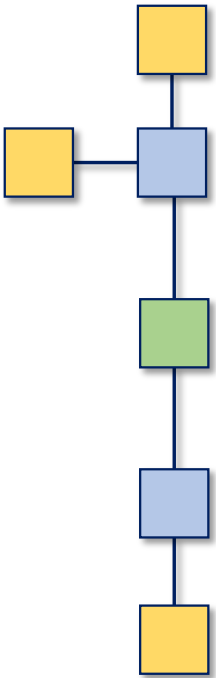


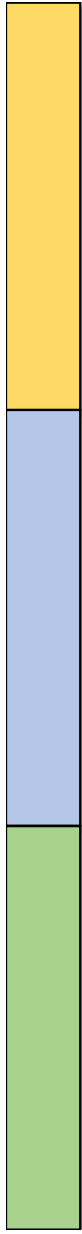
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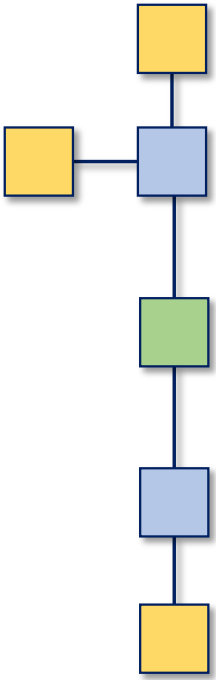
**An Employee In A Store Is
Selling Products To A
Customer**

GO!!

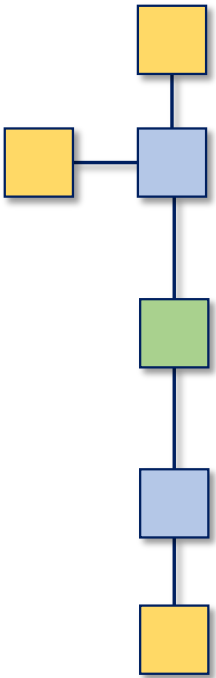




	Event	Person	Place	Thing
EMPLOYEE		✓		
STORE			✓	
SALE	✓			
PRODUCT				✓
CUSTOMER		✓		



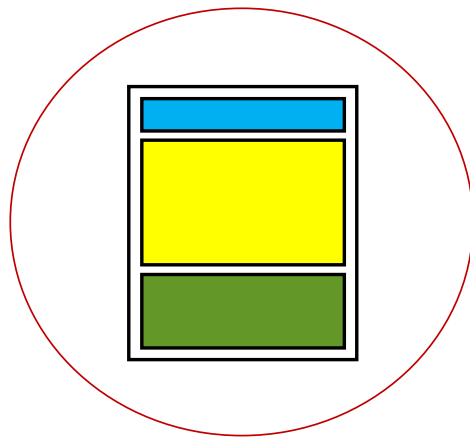
What is Ensemble Logical Model



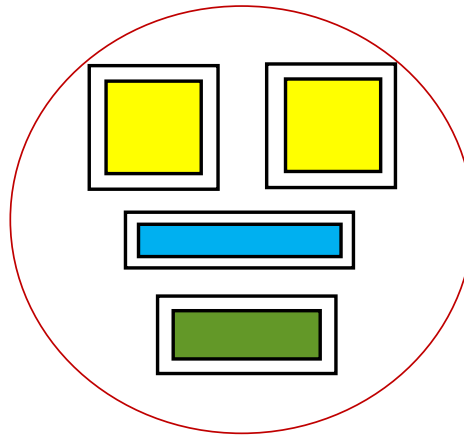
Ensemble Modeling

- Based on the core idea of *Unified Decomposition*TM.
 - Basically break things out into component parts for reasons of flexibility, adaptability, agility, and generally to facilitate the capture of things that are either interpreted in different ways or changing independently of each other. But at the same time keeping them consistent.
 - Is a family name for Data Vault, Anchor modeling, Focal Point, 2G, 6NF, ...

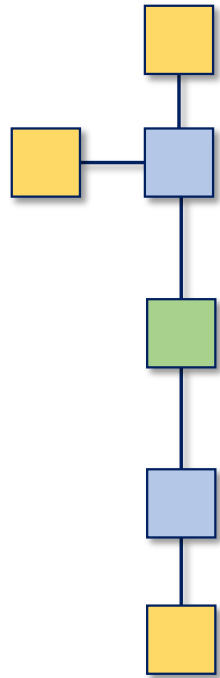
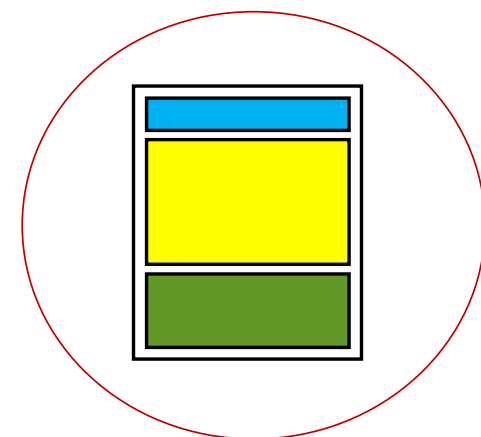
ENTITIES



ENSEMBLES



DIMENSIONS

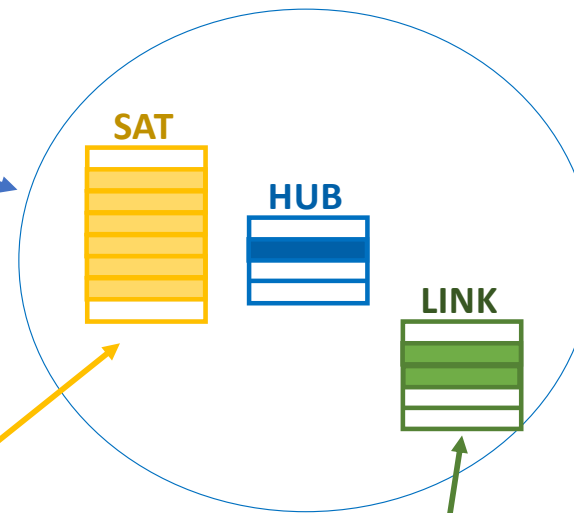


The Ensemble

Core Business Concepts (CBC)

- Event
- Person
- Thing
- Place
- Concept

ENSEMBLE

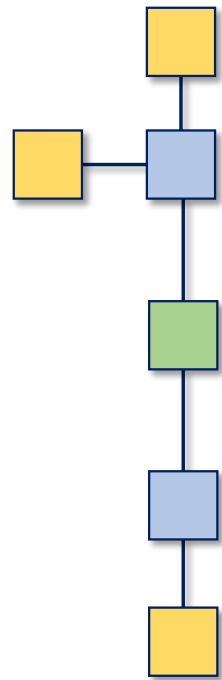


Context & History

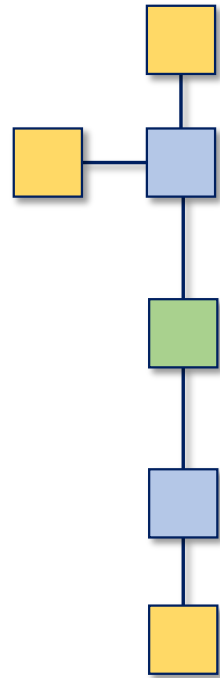
- Descriptive Attributes
- Changing Context over Time
- Types, Classifications, and Categorizations
- Status/State changes over Time

Natural Business Relationship (NBR)

- Unique, Specific NBR
- Based on Naturally Correlated Concepts



Ensemble Logical Modeling

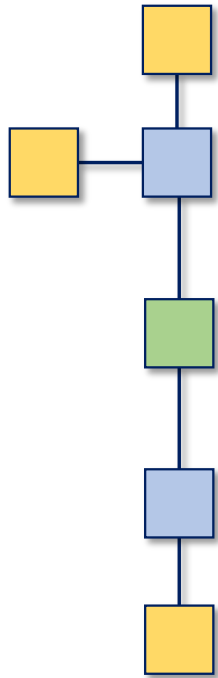


ELM workshops are
interactive,
facilitated,
business-driven
design sessions for
Business-Driven
Models

Why a Business-Driven Model?

“You can’t hit a target if you don’t know what it is.”

— Tony Robbins



“If you aim at nothing you will hit it every time.”

— Zig Ziglar

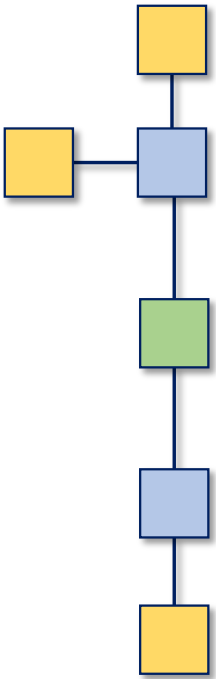
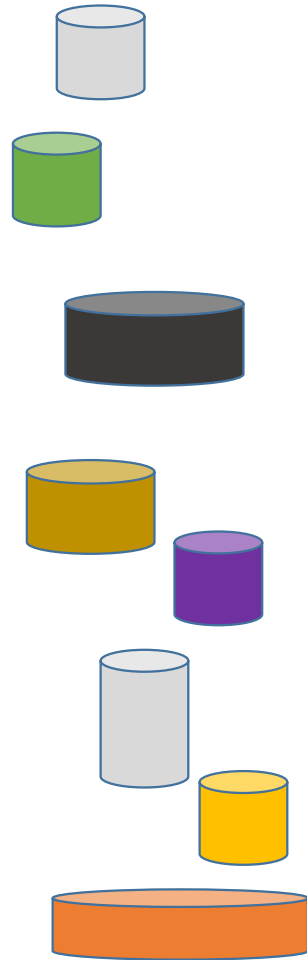
“nothing improves your aim like having a target”

— Aristotle

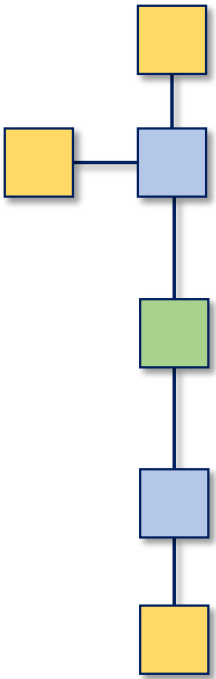
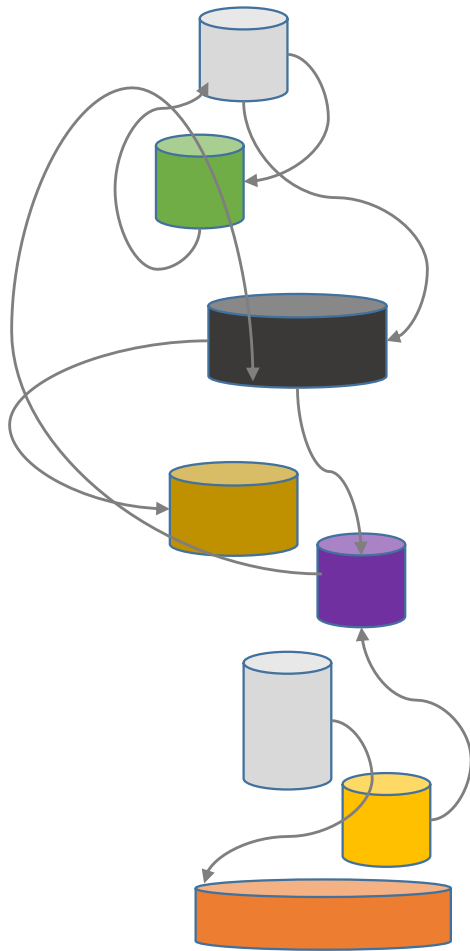


“Without a goal, you can't score”

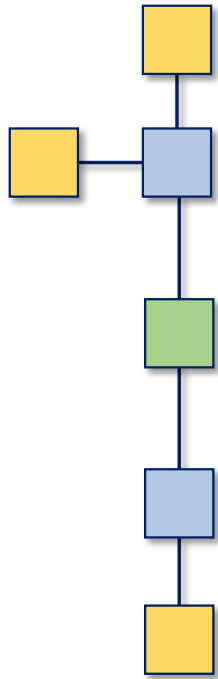
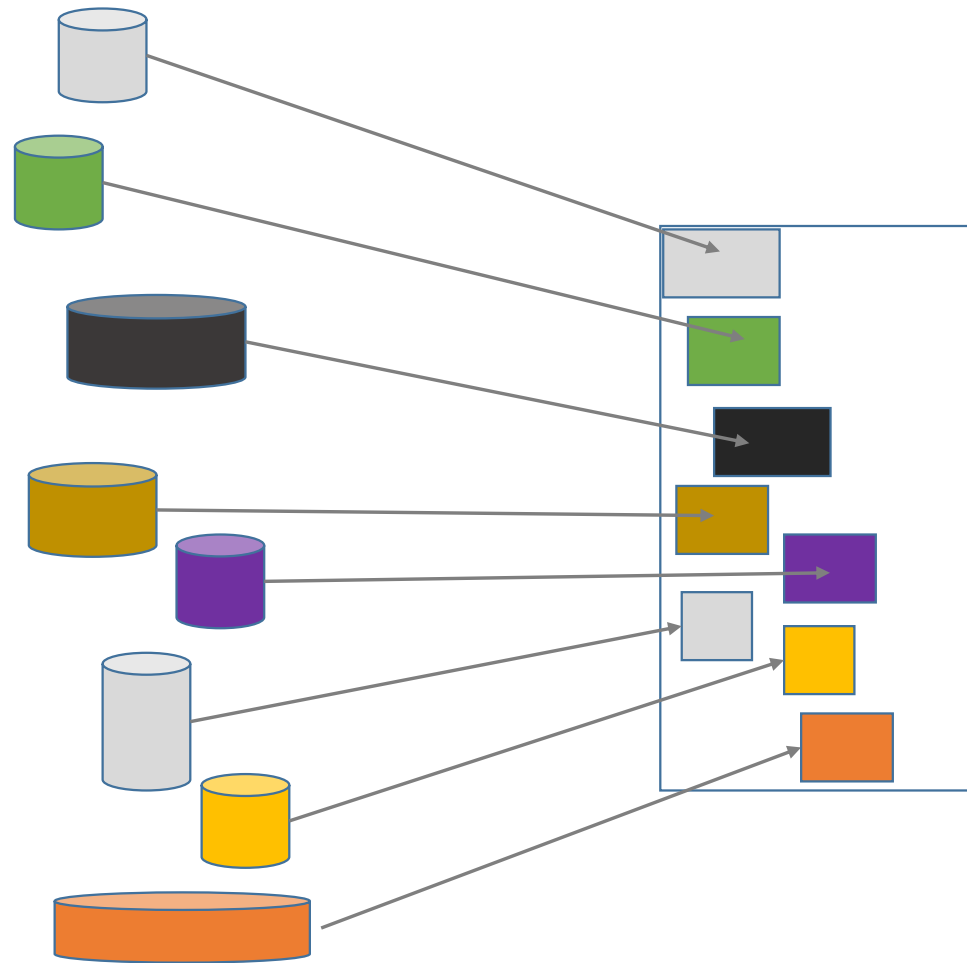
Why a Business-Driven Model?



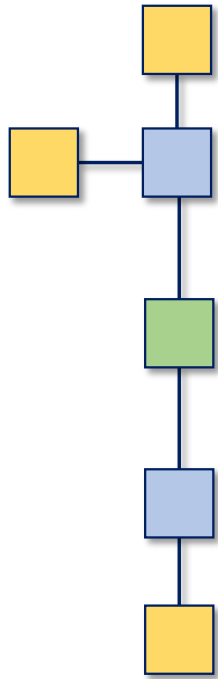
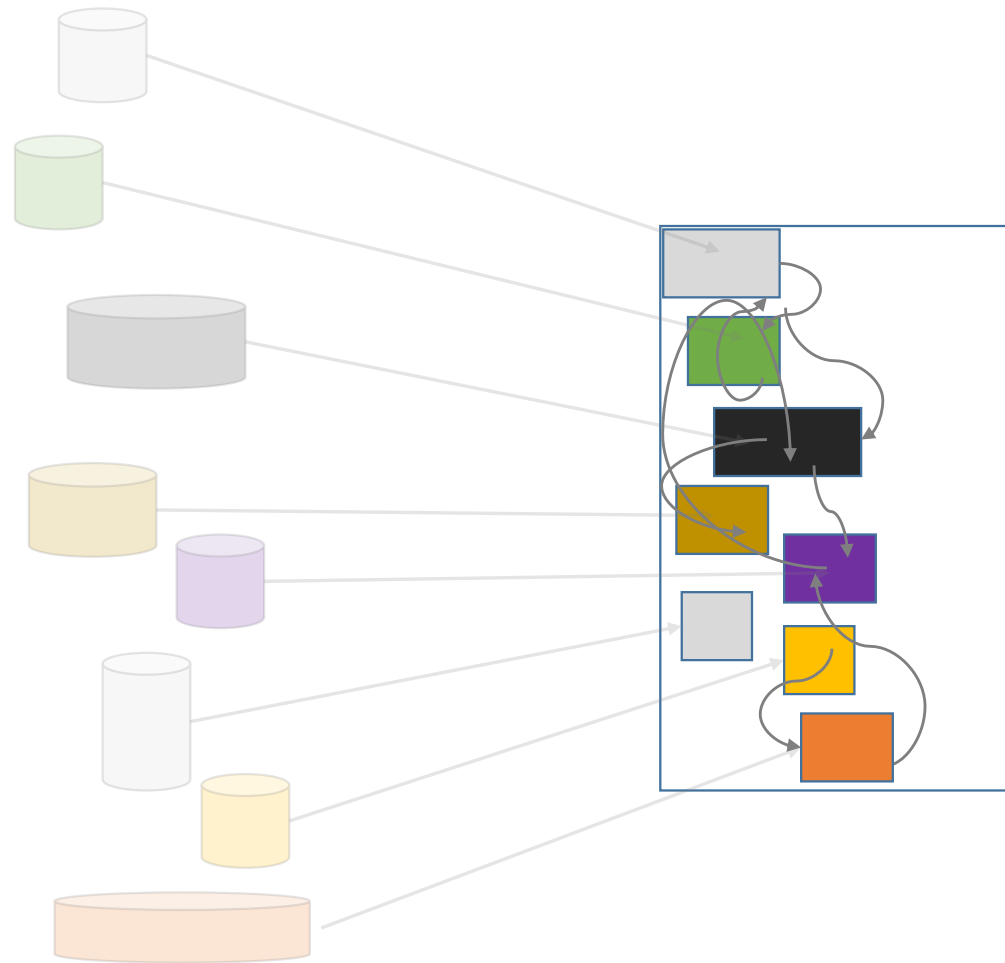
Why a Business-Driven Model?



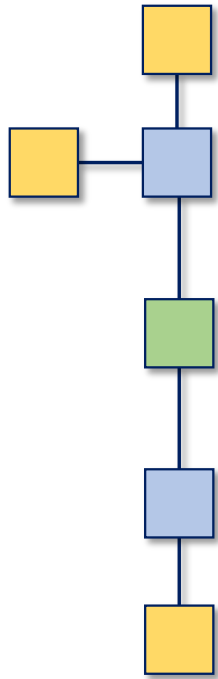
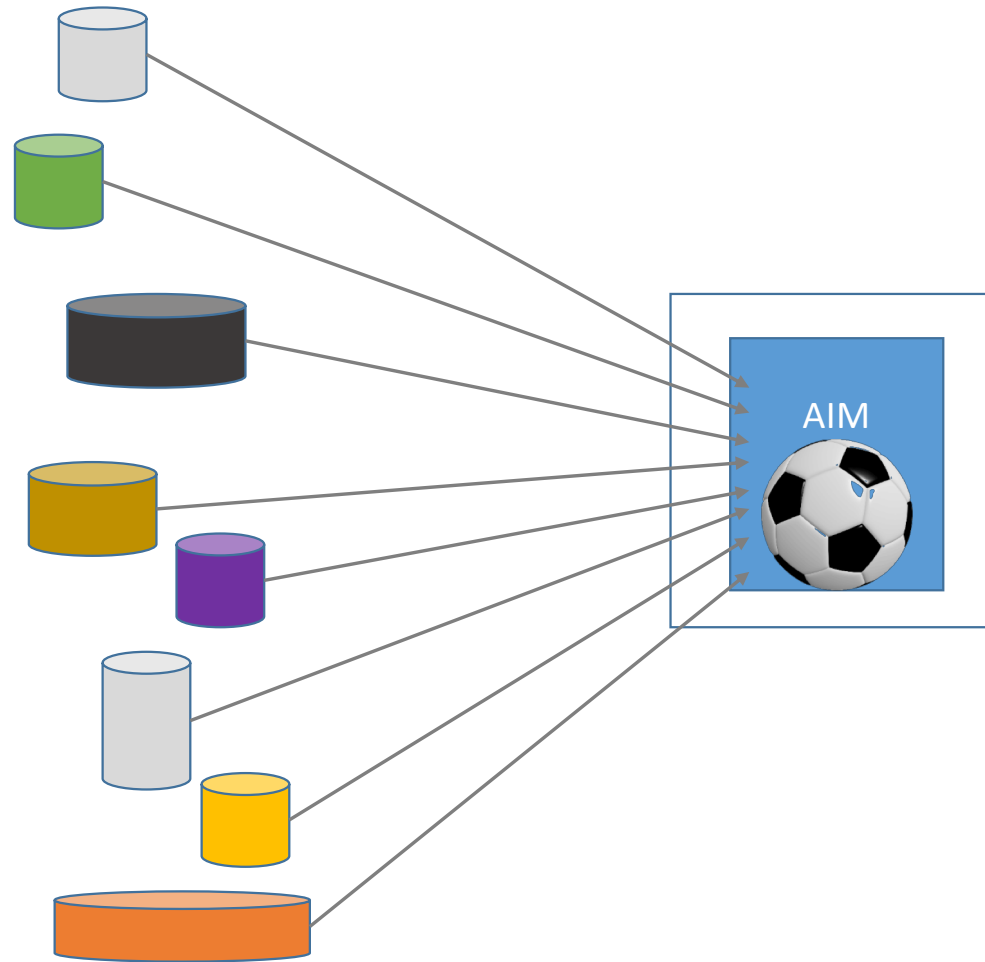
Why a Business-Driven Model?



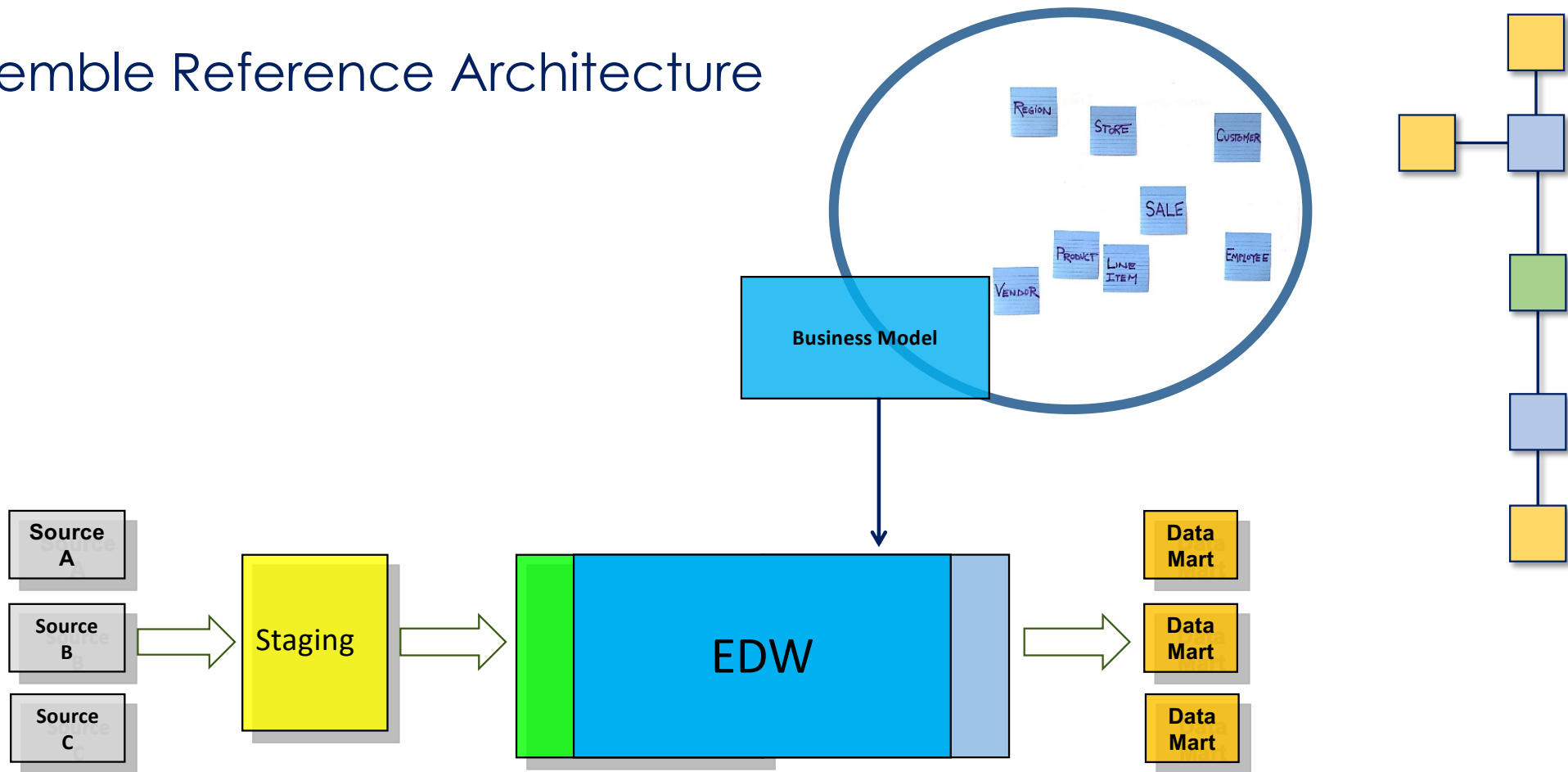
Why a Business-Driven Model?



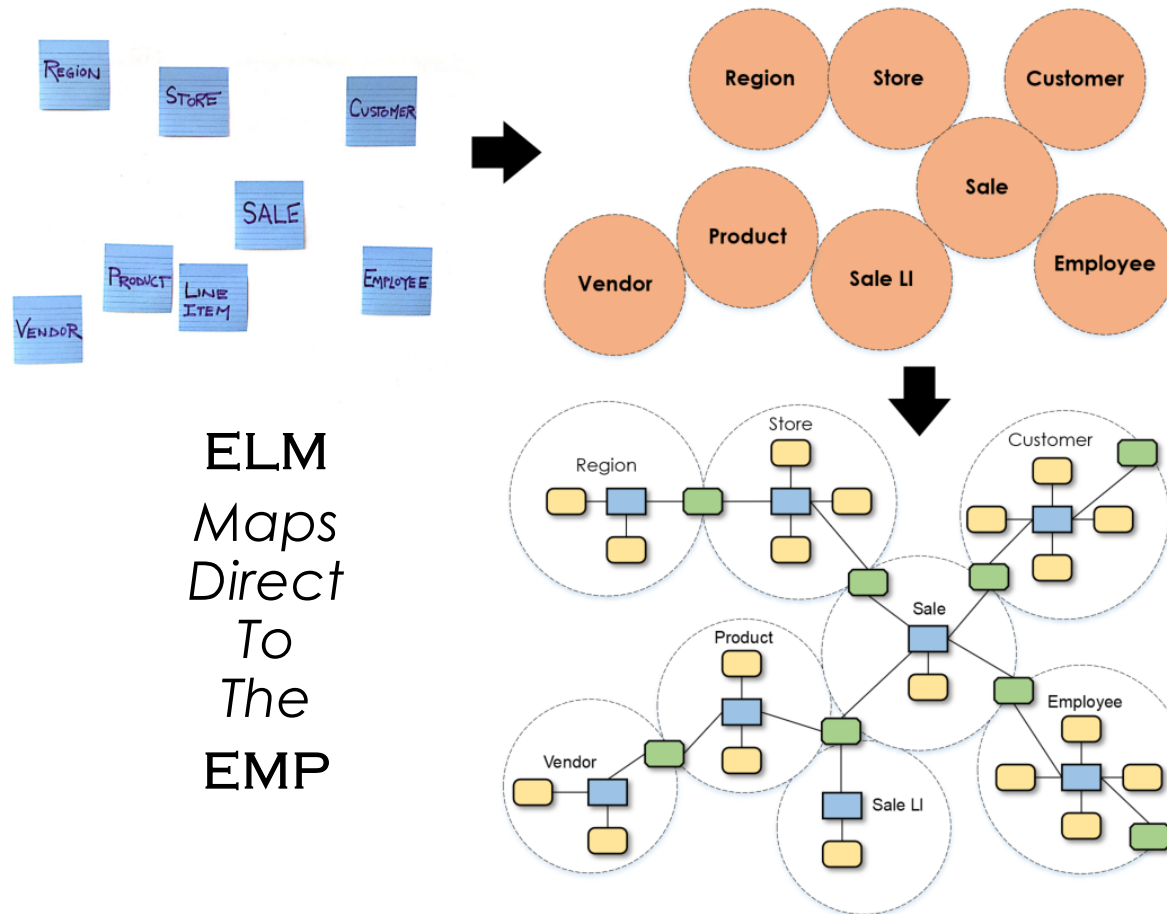
Why a Business-Driven Model?



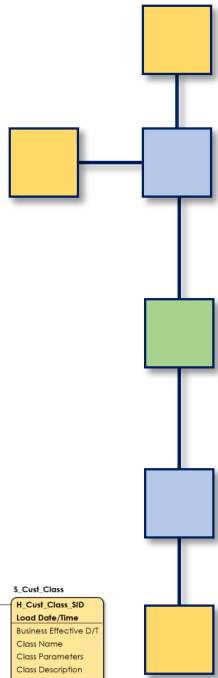
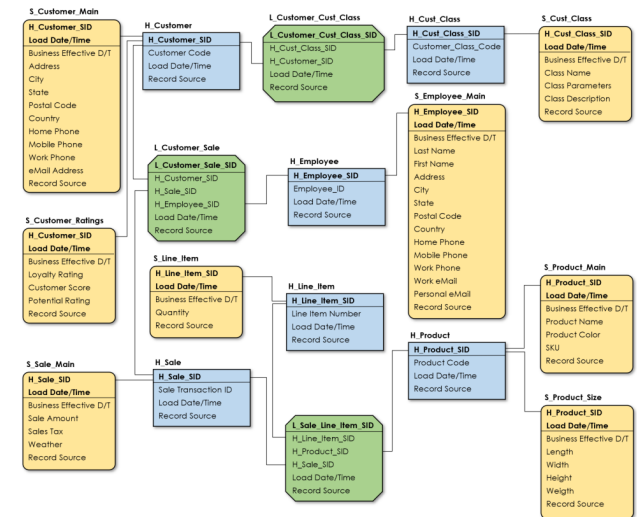
Ensemble Reference Architecture



ELM maps directly to Ensemble Modeling Pattern (EMP)



ELM
Maps
Direct
To
The
EMP



What are we going to do?



Analyze



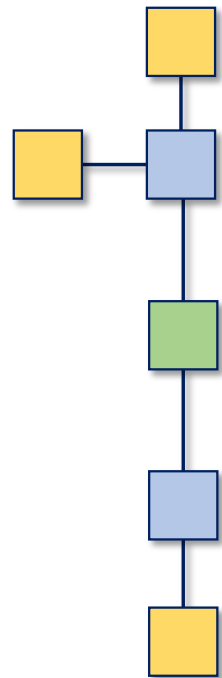
Contemplate



Discuss



Present



Ensemble Modeling Process

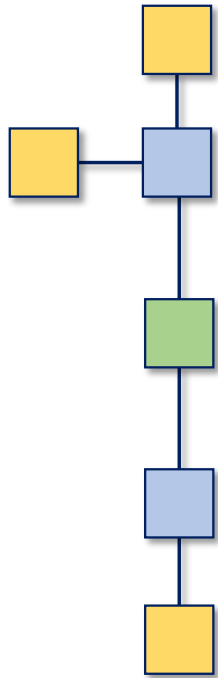
- The Modeling Process for creating any Ensemble is basically the same:

1) Identify and Model the Core Business Concepts

- What does your organization/department do?
 - Elevator pitch (keep it short and to the point)
 - Explain to nitwit (10 yr old)
- What happens in your organization/department on a given day?
- What do you think other departments / people in the organization tell me what your department is doing and/or is responsible off?

2) Identify and Model the Natural Business Relationships

- What is the relationship between the CBC's
- How do we know?
- Is this relationship a driver for your organization/department?



Ensemble Modeling Process: Step 1 CBC

An **EMPLOYEE** in a store **STORE** selling **SALE** products **PRODUCT** customer **CUSTOMER**

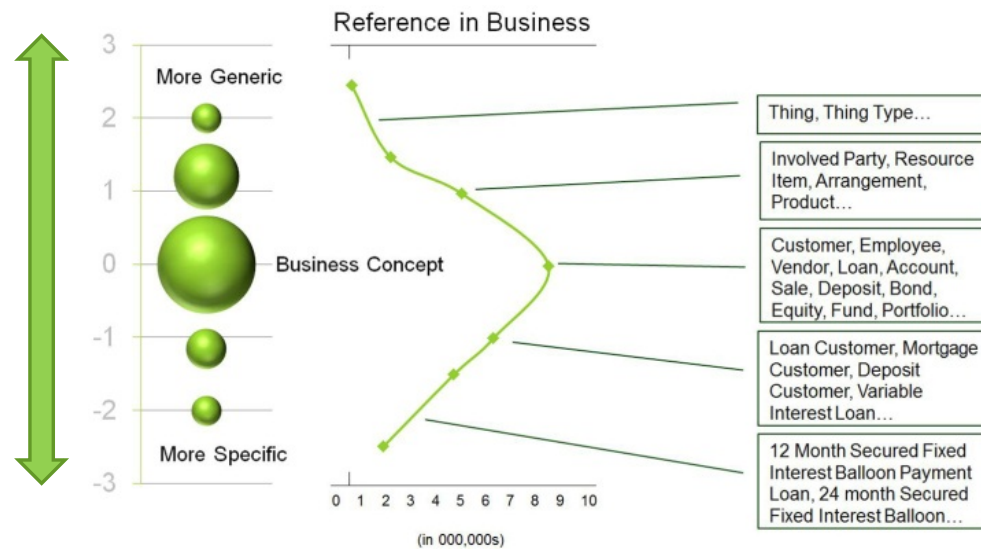
Coming from a **VENDOR**

	Event	Person	Place	Thing
EMPLOYEE		✓		
STORE			✓	
SALE	✓			
PRODUCT				✓
CUSTOMER		✓		
VENDOR			✓	

- What are the Core Business Concepts (CBC) in the story?
- Write all recognized identifiers on PostIts – most likely to be the nouns & verbs

Organize into Event, Person, Place, Thing, Other Concepts

Identifying the Core Business Concepts



- Student
- Course
- Patient
- Appointment
- Delivery
- Return
- Repair
- Part
- Flight
- Passenger

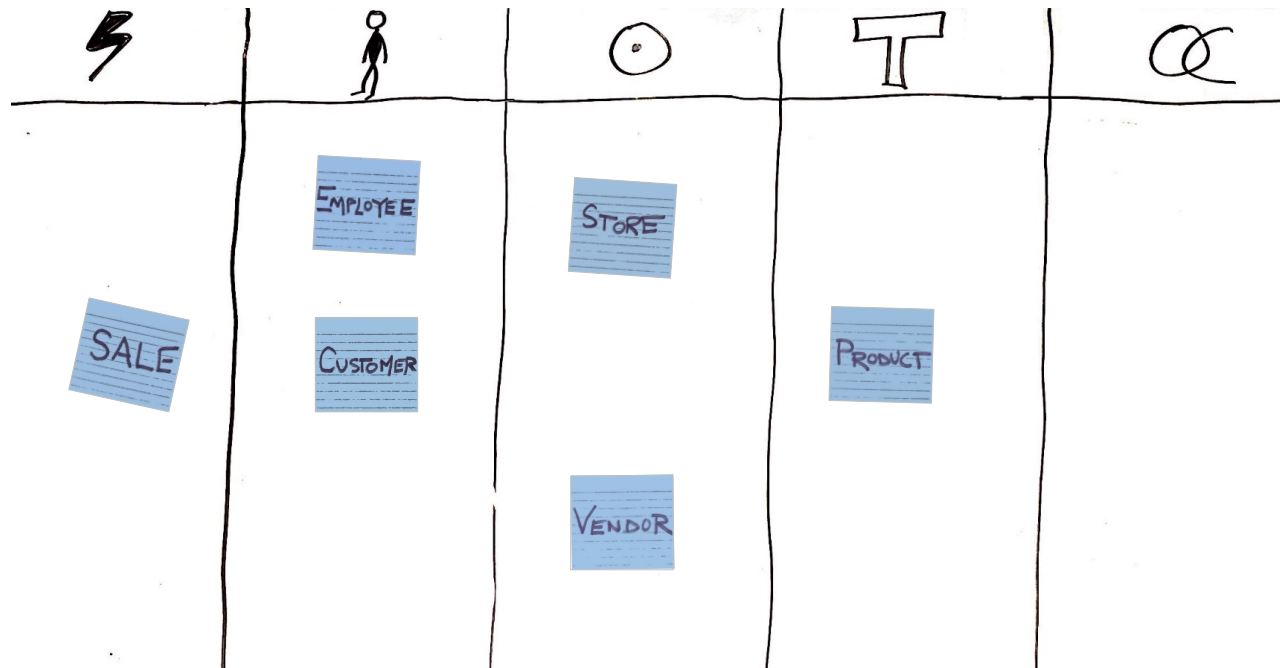
This **involved party** has an **arrangement** with our **involved party** regarding a **resource item**!

Be specific!

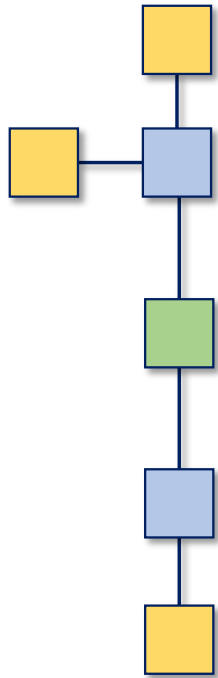
Business must recognize the terms used

Say what???

CBC Canvas



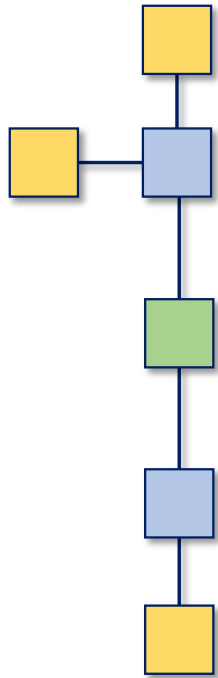
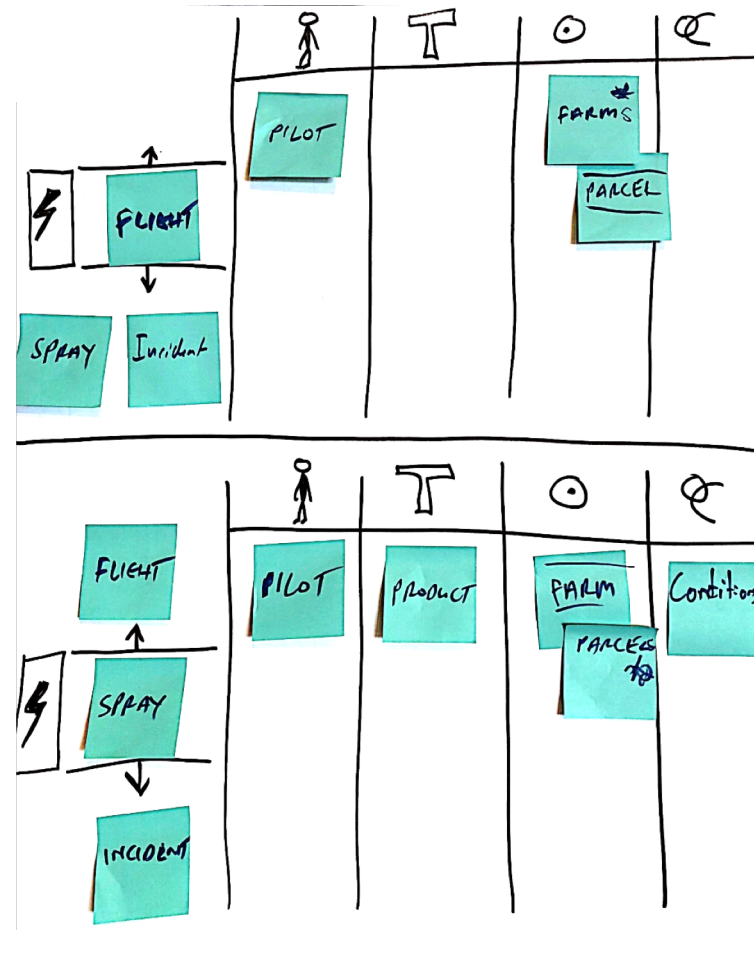
- Begin to consider CBCs that might be the same
 - Semantic integration
 - Level of CBC
- Discuss any missing CBCs in each category related to this event
- Don't worry about the technical stuff at this point!



UoW Event Matrix

■ For each Event:

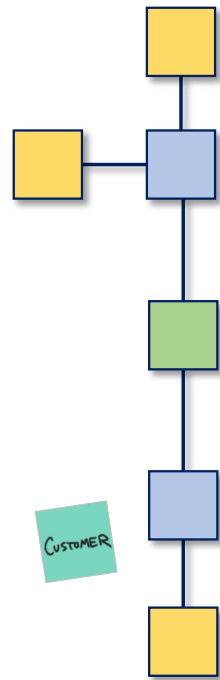
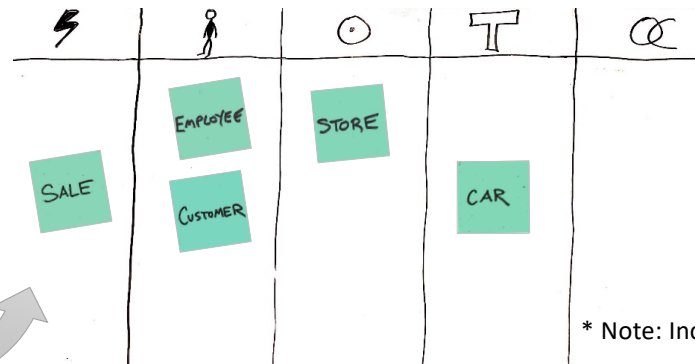
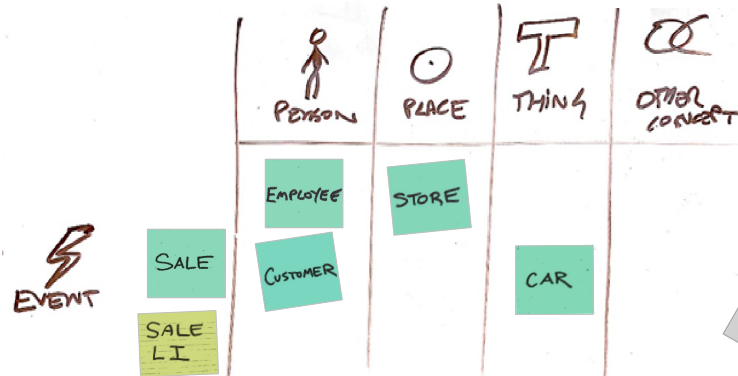
- Align with all other CBCs that are involved
- Organize by Person, Place, Thing, OC
- Consider CBC that might be the same
 - Semantic integration
 - Level of CBC
- Discuss any missing CBCs in each category related to this event



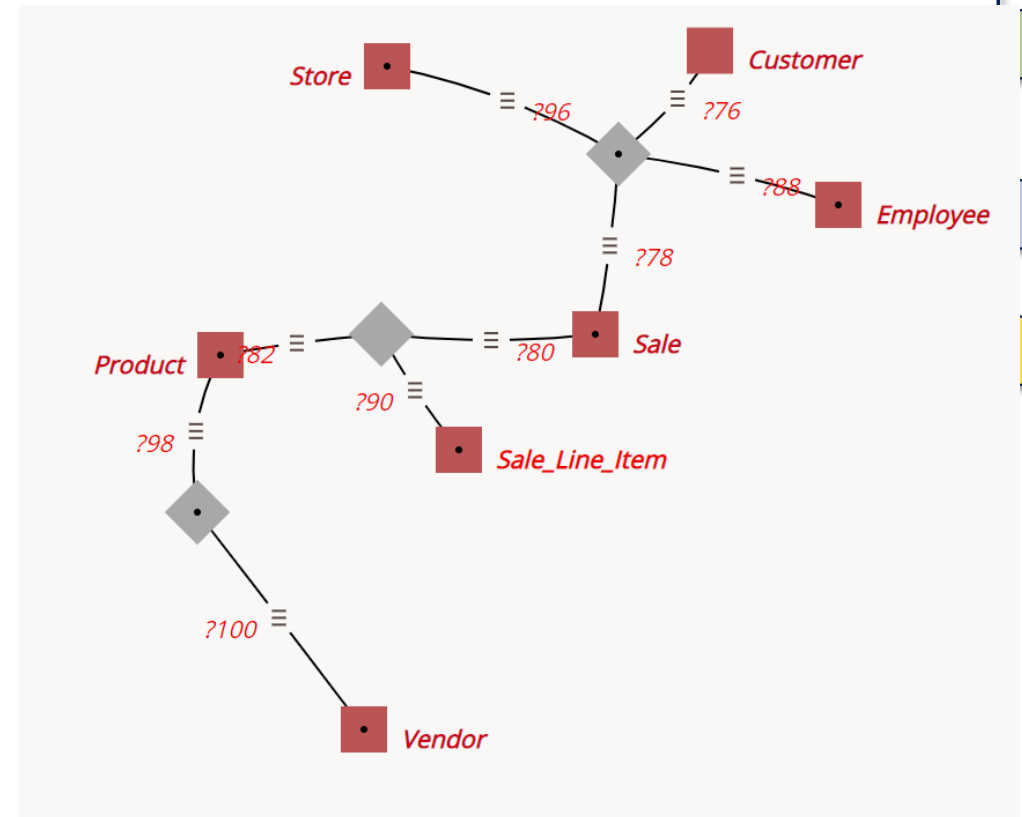
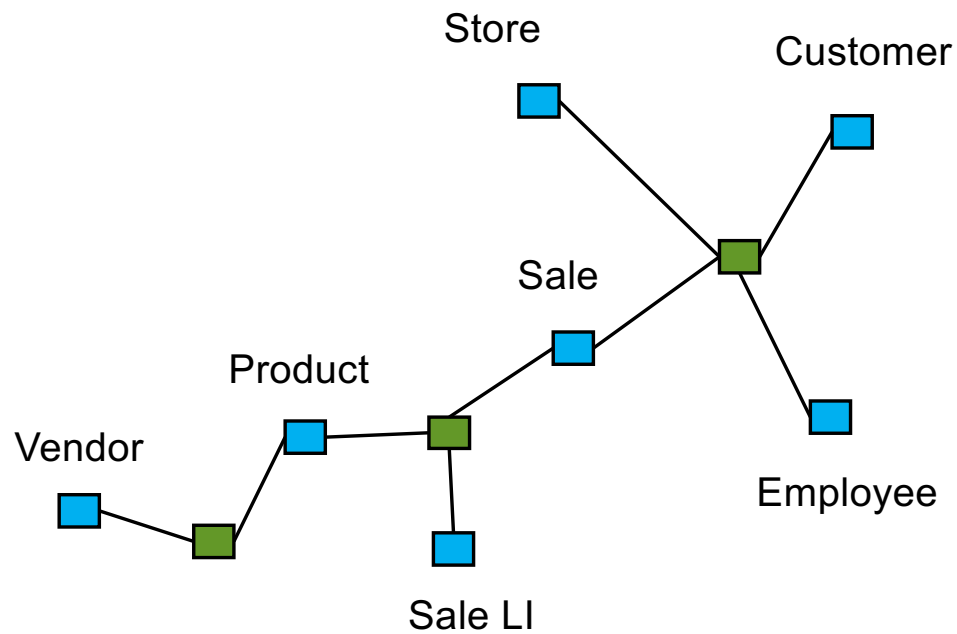
From business process to UoW Event Matrix to ELM

An employee in a store is selling a car to a customer

	Event	Person	Place	Thing
Employee		✓		
Store			✓	
Sale	✓			
Car				✓
Customer		✓		

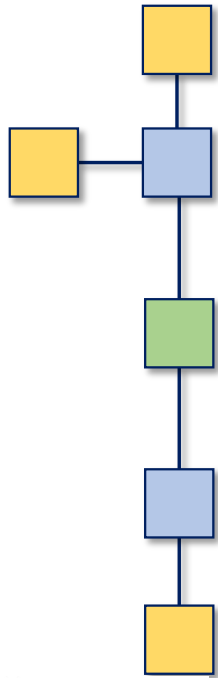


Sales Ensemble Model - Backbone



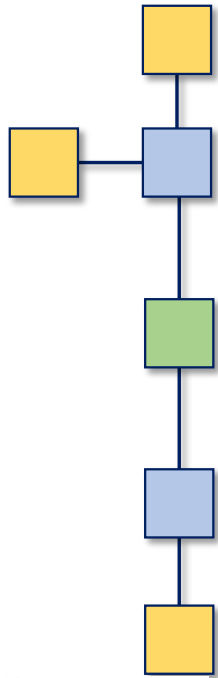
Case Joe's Pizza

- Joe's Pizza is a famous Pizza restaurant in Rome. It's the 1st restaurant which can prove the origin of each of the used ingredients.
- Pizzas are made only using the best ingredients from local suppliers.
- The Chef and her team bake all the different pizza's following the right recipes. Multiple cooks can work on the same pizza.
- Customers however might alter the recipes by adding extra ingredients or losing some.
- Pizza's can be delivered or eaten in the restaurant
- Customers orders 1 or more pizza's online via Joe's Pizza website.
- After the pizza's are made an employee delivers the pizza's to the customers door.
- In a delivery round the employee can make multiple deliveries

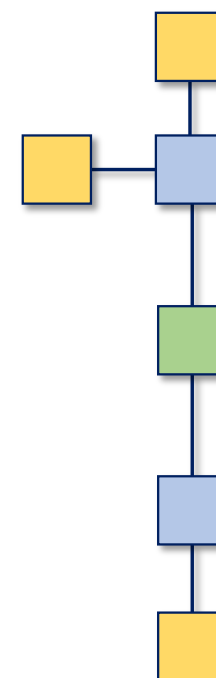
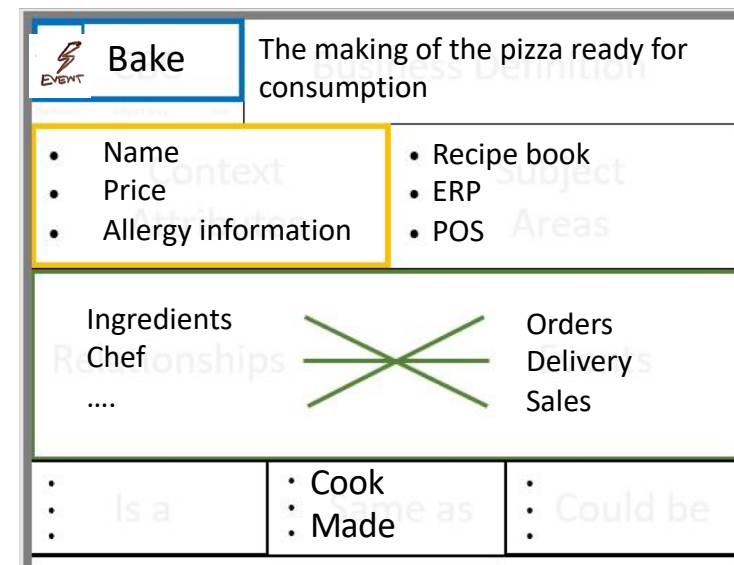


Case Joe's Pizza

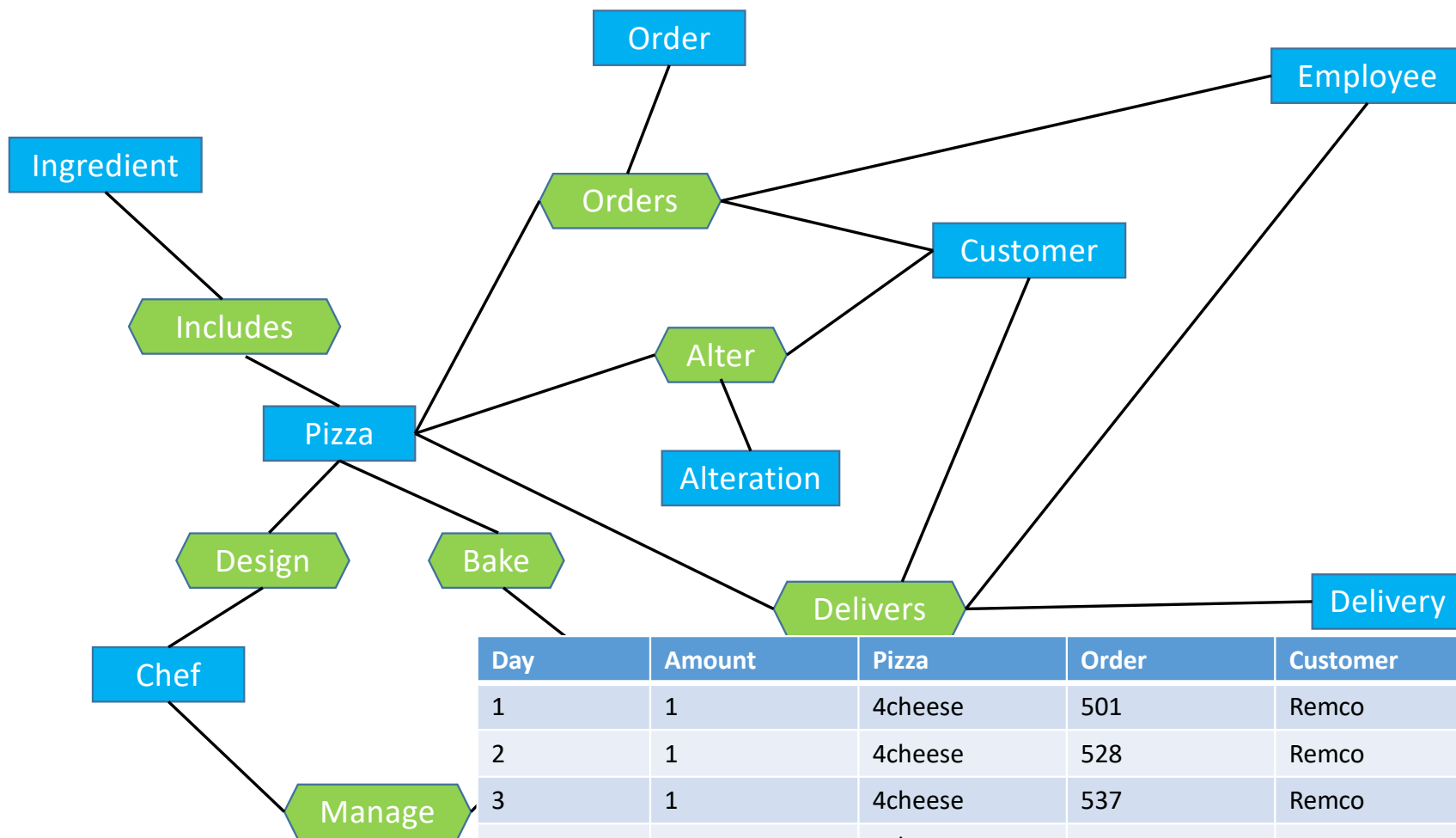
- **Joe's Pizza** is a famous Pizza **restaurant** in **Rome**. It's the 1st restaurant which can **proof** the **origin** of each of the used **ingredients**.
- **Pizzas** are **made** only using the best ingredients from **local suppliers**.
- **The Chef** and **her team bake** all the different pizza's following the right **recipes**. Multiple **cooks** can work on the same pizza.
- **Customers** however might alter the recipes by adding extra ingredients or losing some.
- Pizza's can be **delivered** or **eaten in** the restaurant
- Customers **orders** 1 or more pizza's **online** via Joe's Pizza **website**.
- After the pizza's are made an **employee delivers** the pizza's to the **customers door**.
- In a **delivery round** the employee can make multiple deliveries

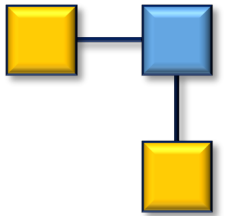
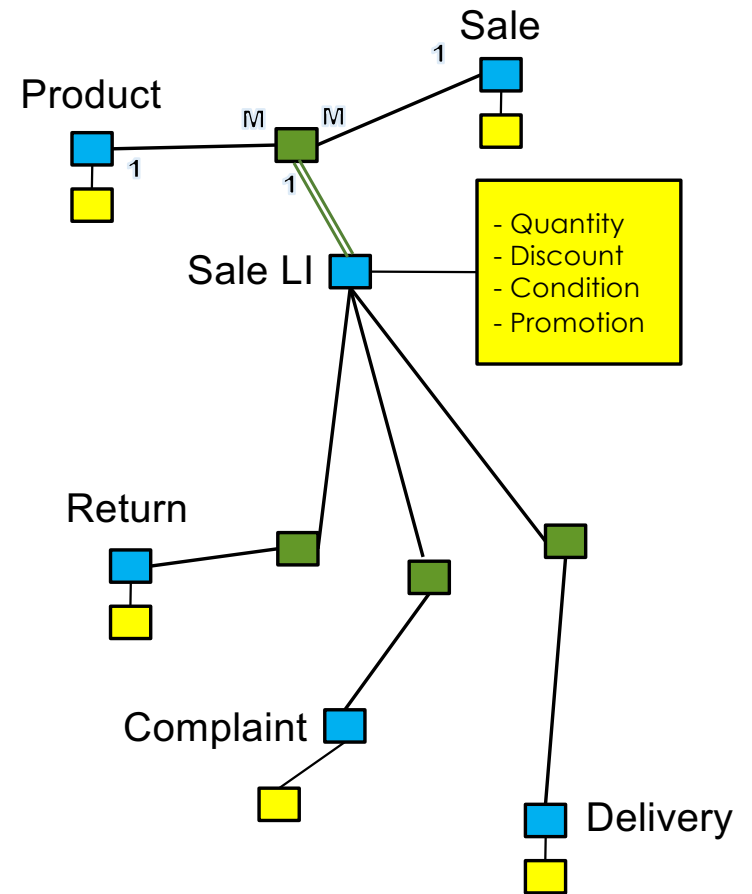
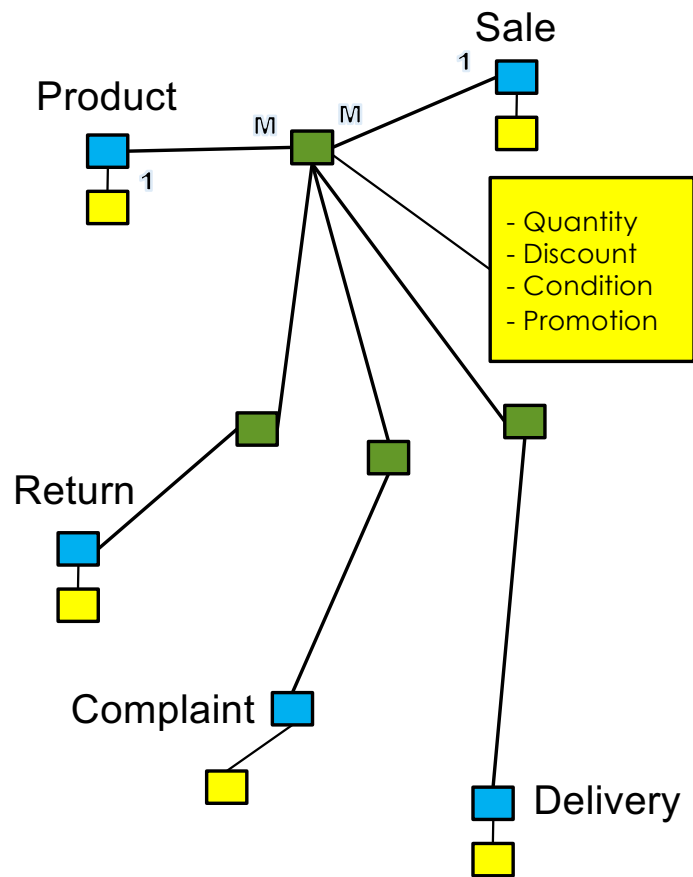


	Event	Person	Place	Thing	Other Concept
Joe's Pizza		✓			
Restaurant		✓			
Rome		✓			
Proof	✓				
Origin					✓
Ingredients			✓		
Pizza			✓		
Made	✓				
local suppliers		✓			
Chef		✓			
Team		✓			
Bake	✓				
Recipes			✓		
Cooks		✓			
Customers		✓			
Delivered	✓				
Eat in					✓
Orders	✓				
Online			✓		
Website			✓		
Employee		✓			
Delivers	✓				
Customer's door				✓	
Delivery round					✓

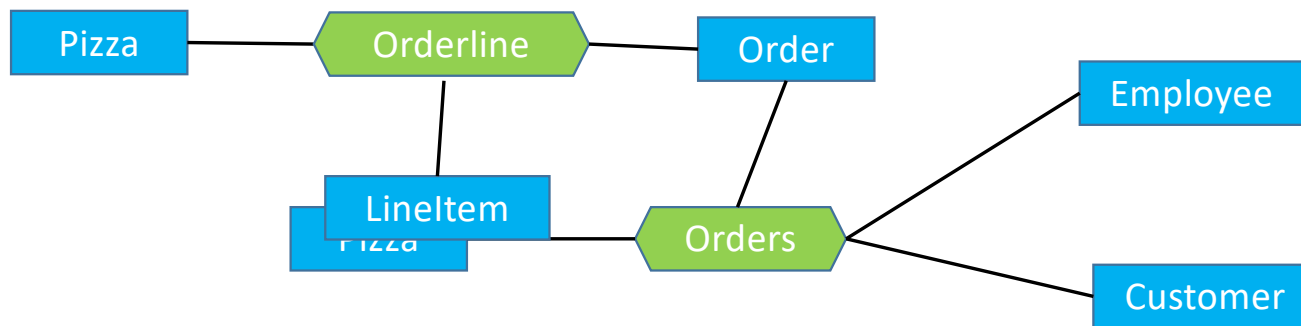


Joe's Pizza – gold plated pizza's (only 1 pizza per order / delivery)

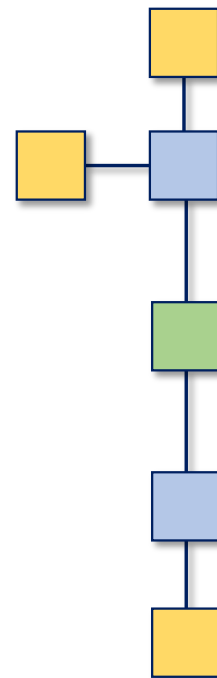




Joe's Pizza – order 20 pizza's (at least 10 different)

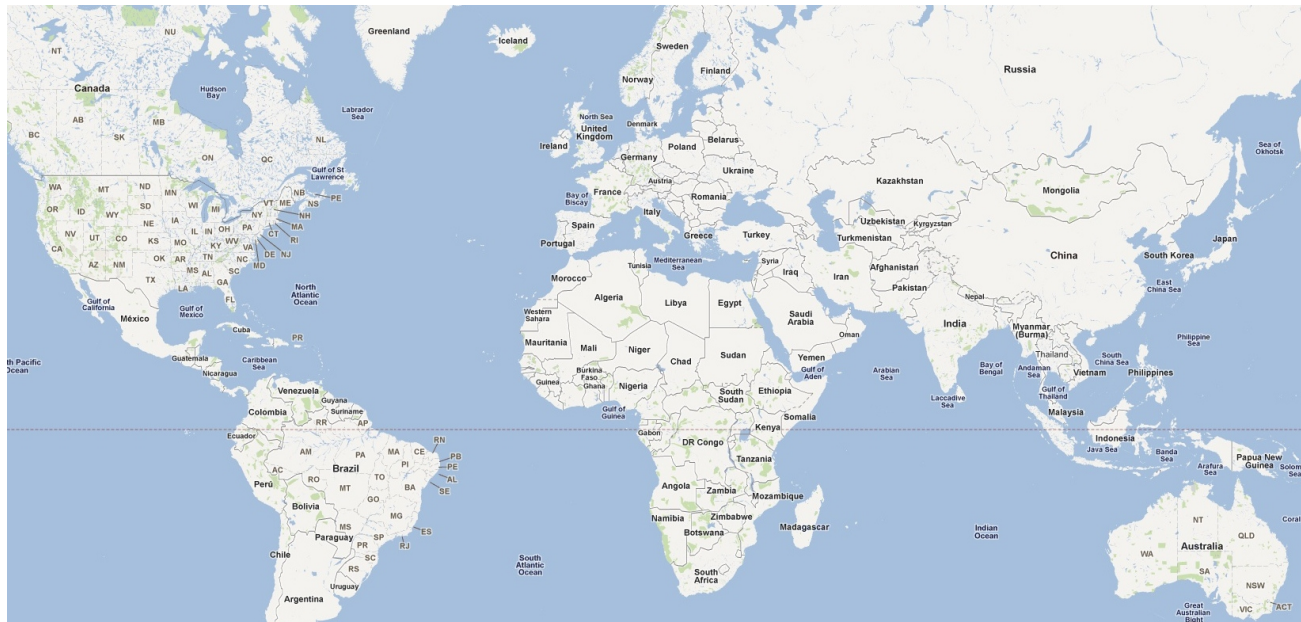


Amount	Pizza	Order	Customer	Empl;oyee
Context on Detail In SAT on Lineltem	4cheese	501	Remco	Hans
	Margaritha	Header		
	Shoarma			
	Napoli			
1	Special	501	Remco	Hans
2	Joe	501	Remco	Hans
1	Hawai	501	Remco	Hans
2	Pepperoni	501	Remco	Hans
Detail			Remco	Hans
			Remco	Hans
			Remco	Hans

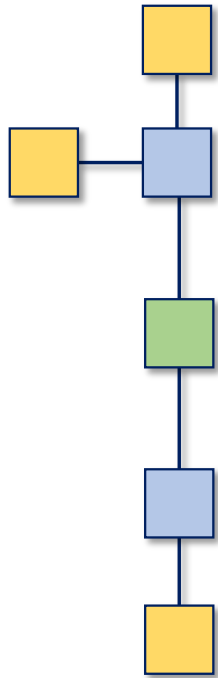


About Data Vault Ensemble

Estimated 1600 + Data Vault based
Data Warehouses around the world



Currently over 1350 + Data Vault CDVDM Certified Professionals



2018

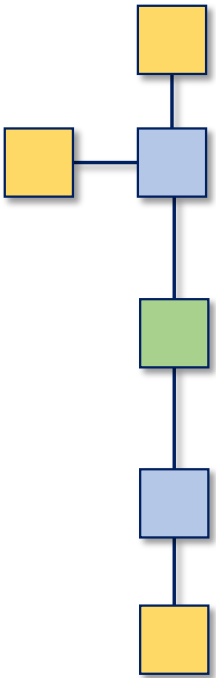
Schedule:

June 12-14th – Data Vault training Dusseldorf

April 24-26th – Data Vault training Hannover

Contact Torsten Glunde or Oliver Cramer for more info

(or mail to Remco@GeneseeAcademy.com)



Links and Information

[Data Vault, Ensemble & ELM Training](#)

www.GeneseeAcademy.com

www.DVStandards.com

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