



Lars Rönnbäck

lars.ronnback@anchormodeling.com
www.anchormodeling.com
[@anchormodeling](https://www.linkedin.com/in/ronnback/)
<https://www.linkedin.com/in/ronnback/>

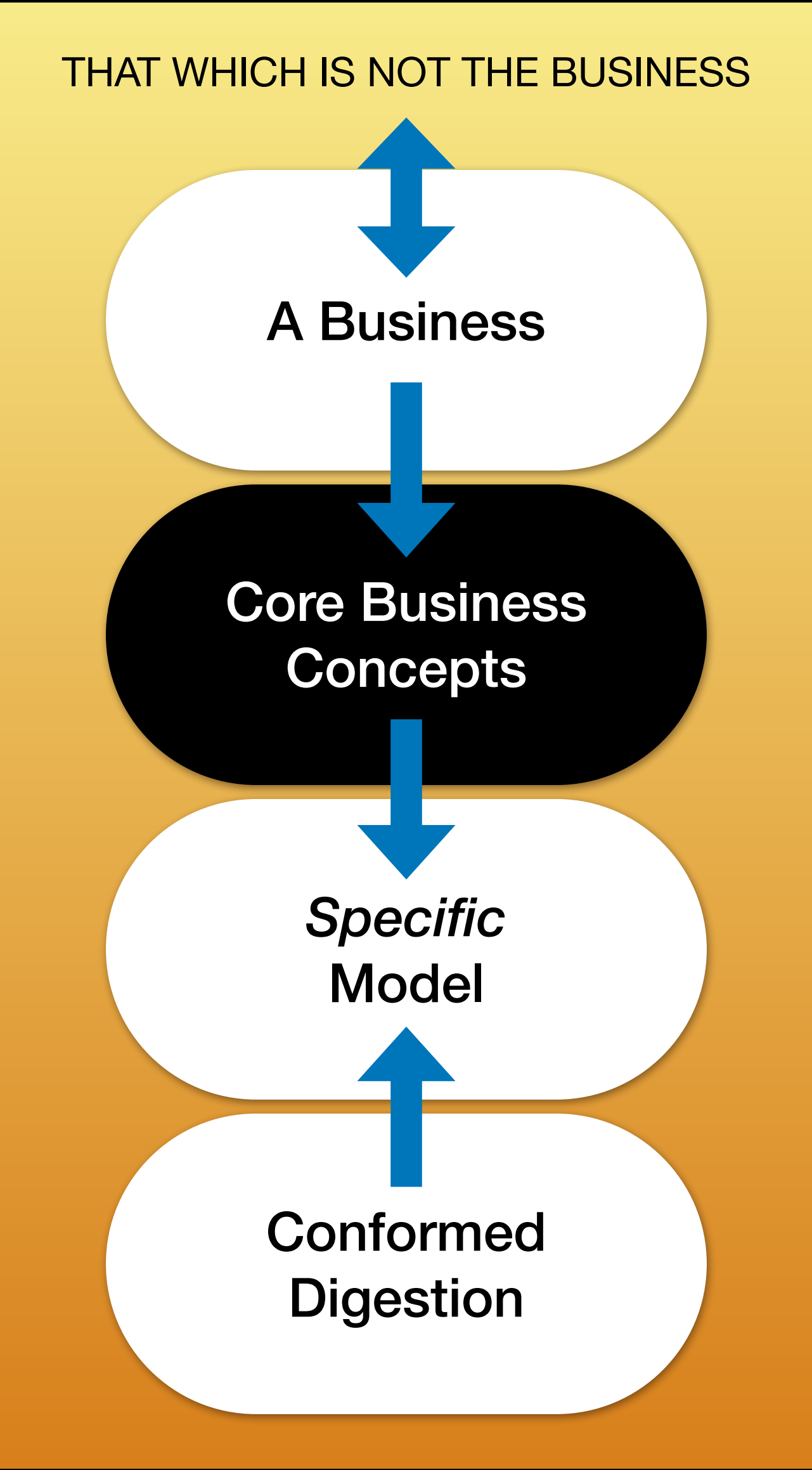


**BOTTOM UP
FOR
HIGH TIME
IT IS**

Ensemble Modeling



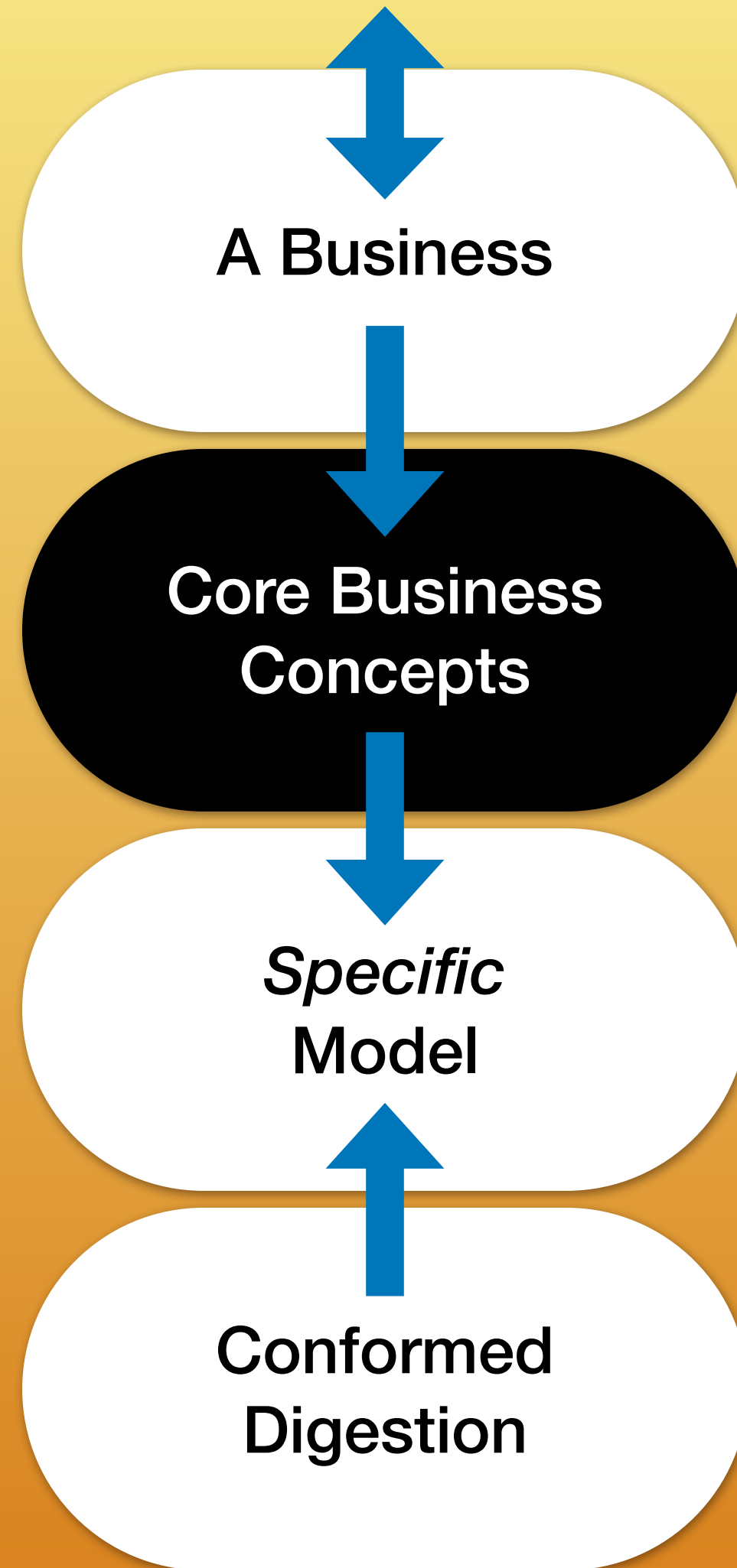
This looks
strangely
familiar.



The keyword here is being inquisitive.



THAT WHICH IS NOT THE BUSINESS



-What types of things do you work with in your business?
-How do these types of things interact?
-How do you know that a given thing is of a certain type?

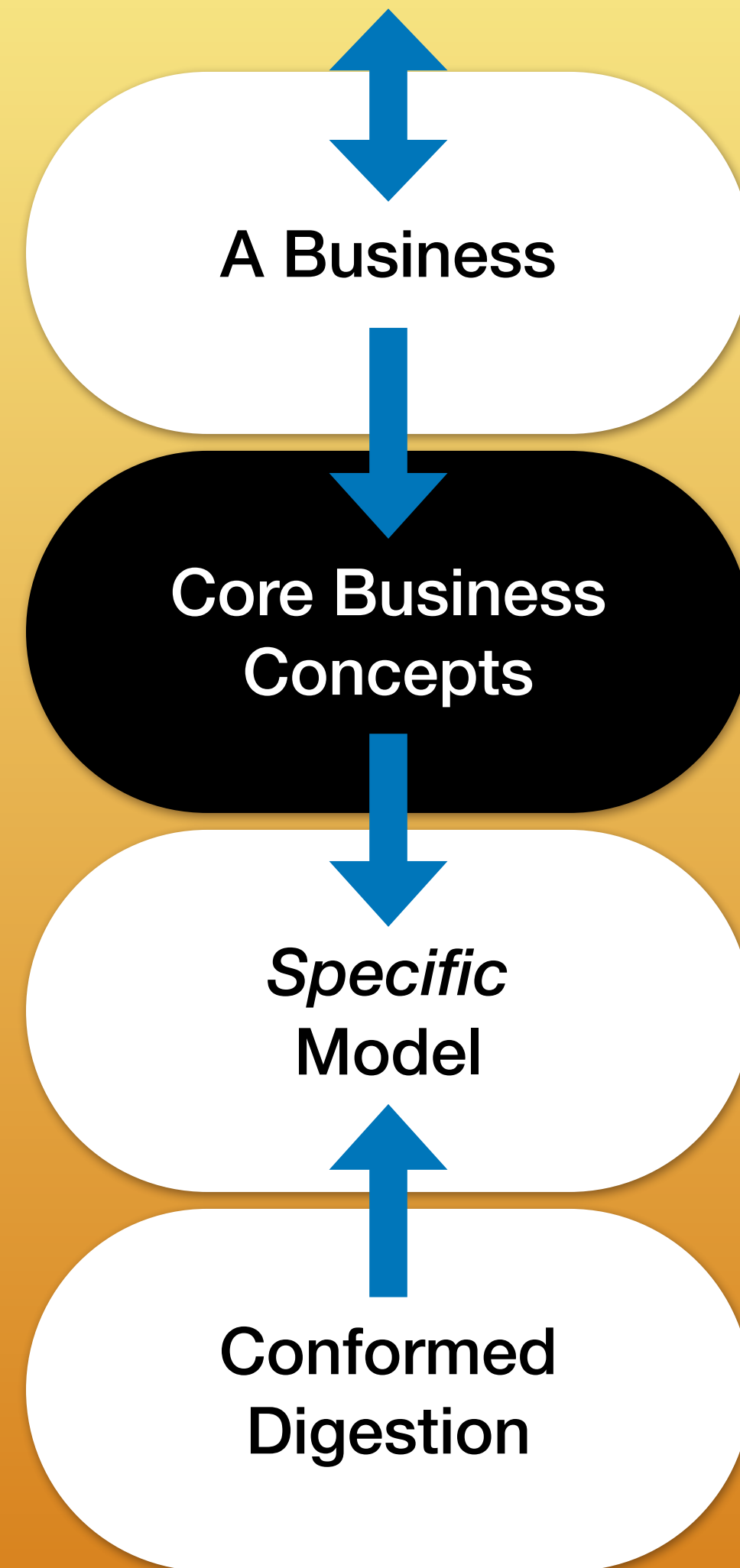


The resulting model will contain constructs with familiar names.



**CUSTOMER
INVOICE
PAYMENT**

THAT WHICH IS NOT THE BUSINESS



Putting things into this model will be like child's play.



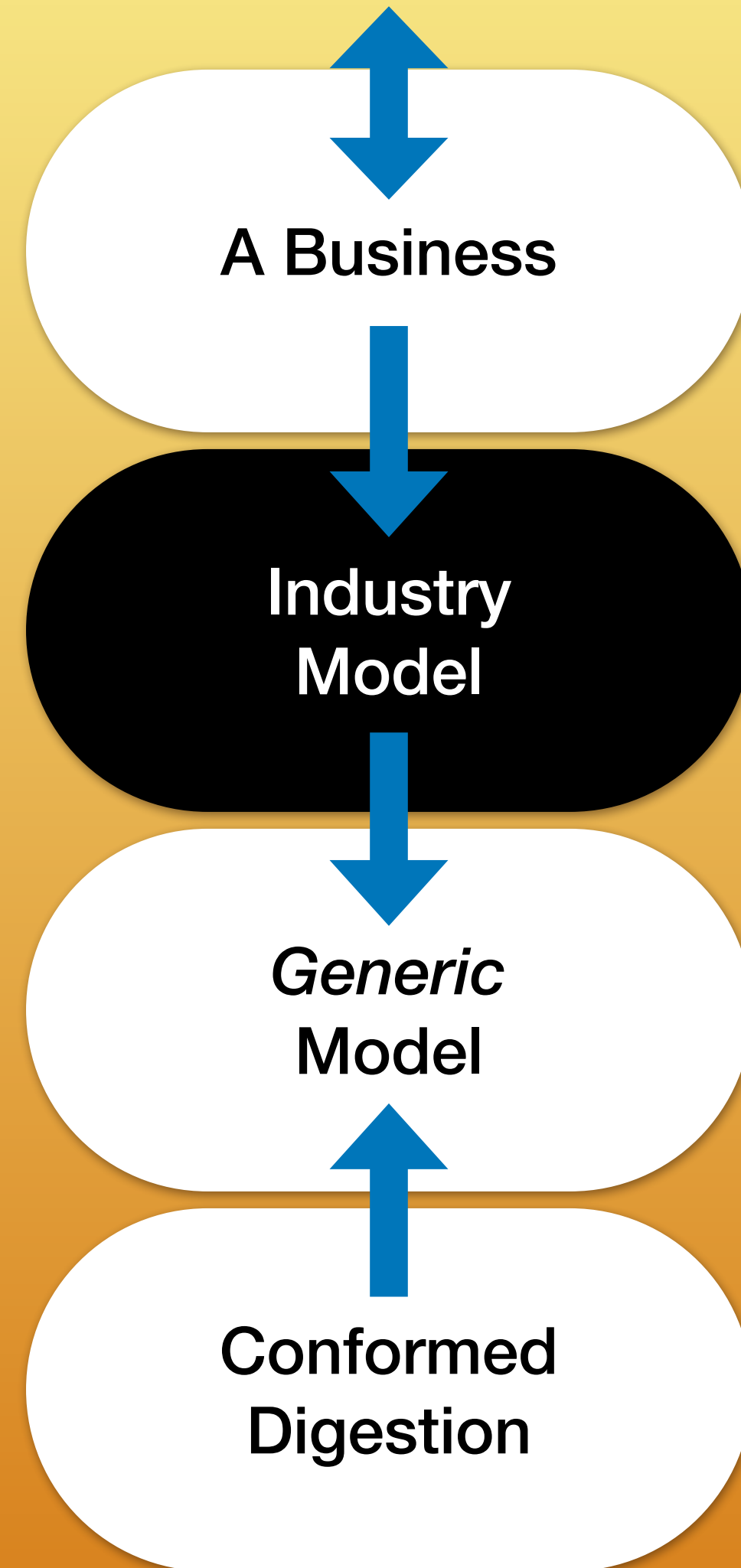
Industry Models



The keyword here is being authoritative. I suppose there is some comfort in that, for some...



THAT WHICH IS NOT THE BUSINESS



-We already know what types of things business like yours work with.
-We also know how they interact.
-All your things belong to one of our types, of course.

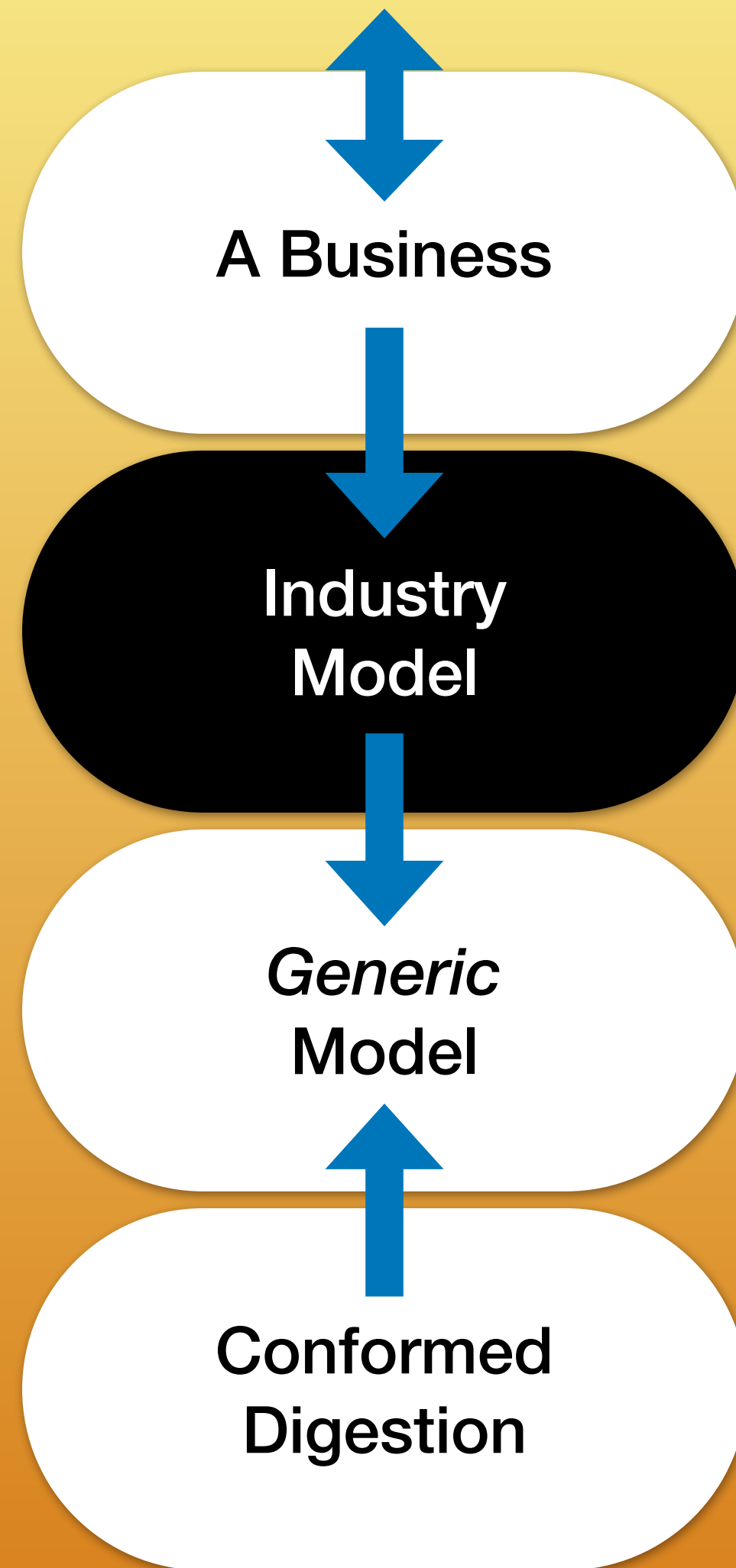


The resulting model will contain constructs with less familiar names.



PARTY INSTRUMENT TRANSACTION

THAT WHICH IS NOT THE BUSINESS



I can still do this. Just give me a who's who and a what's what! And wait.. maybe a when's when and a why's why too.



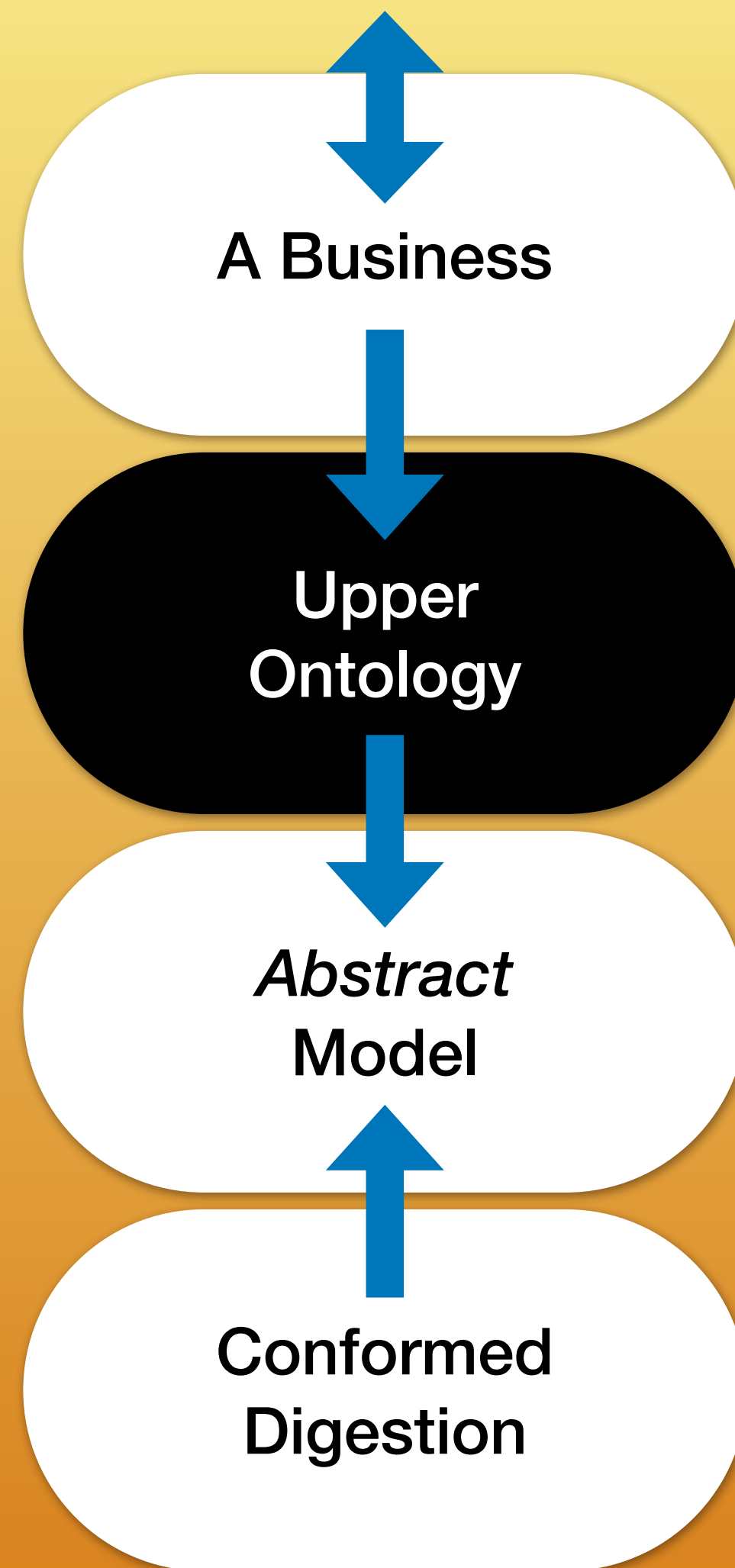
Upper Ontologies



The keyword here is being scientific. At least scientists tend to have a shred of humility.



THAT WHICH IS NOT THE BUSINESS



-We know almost everything, ergo your business too.
-Every possible interaction you can think of is likely covered for.

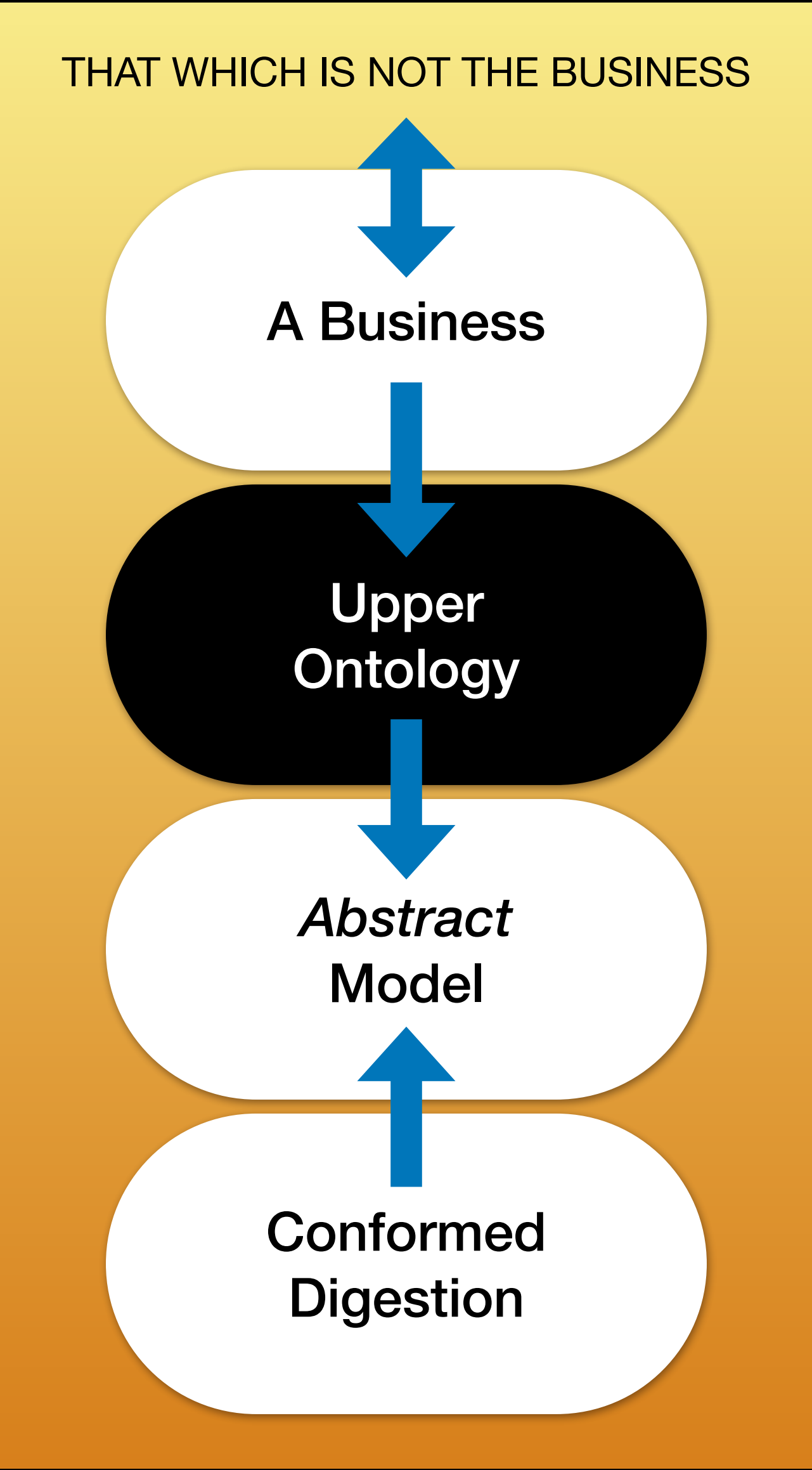
-If you can figure out what your things are, then we have types for them, or are about to add them.



The resulting model will contain constructs with really unfamiliar names.



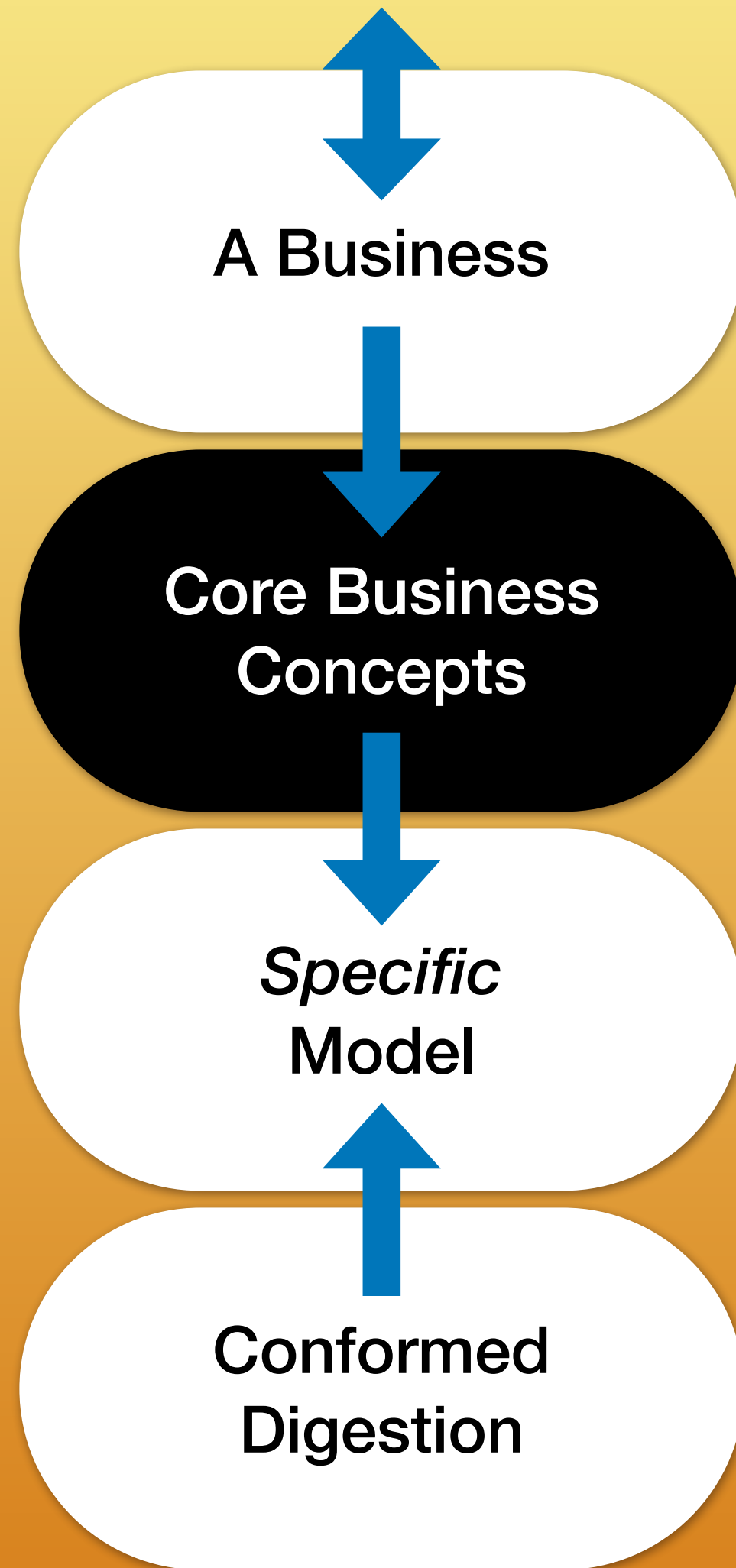
**PERSISTANT
PRESENTIAL
COINCIDENCE**



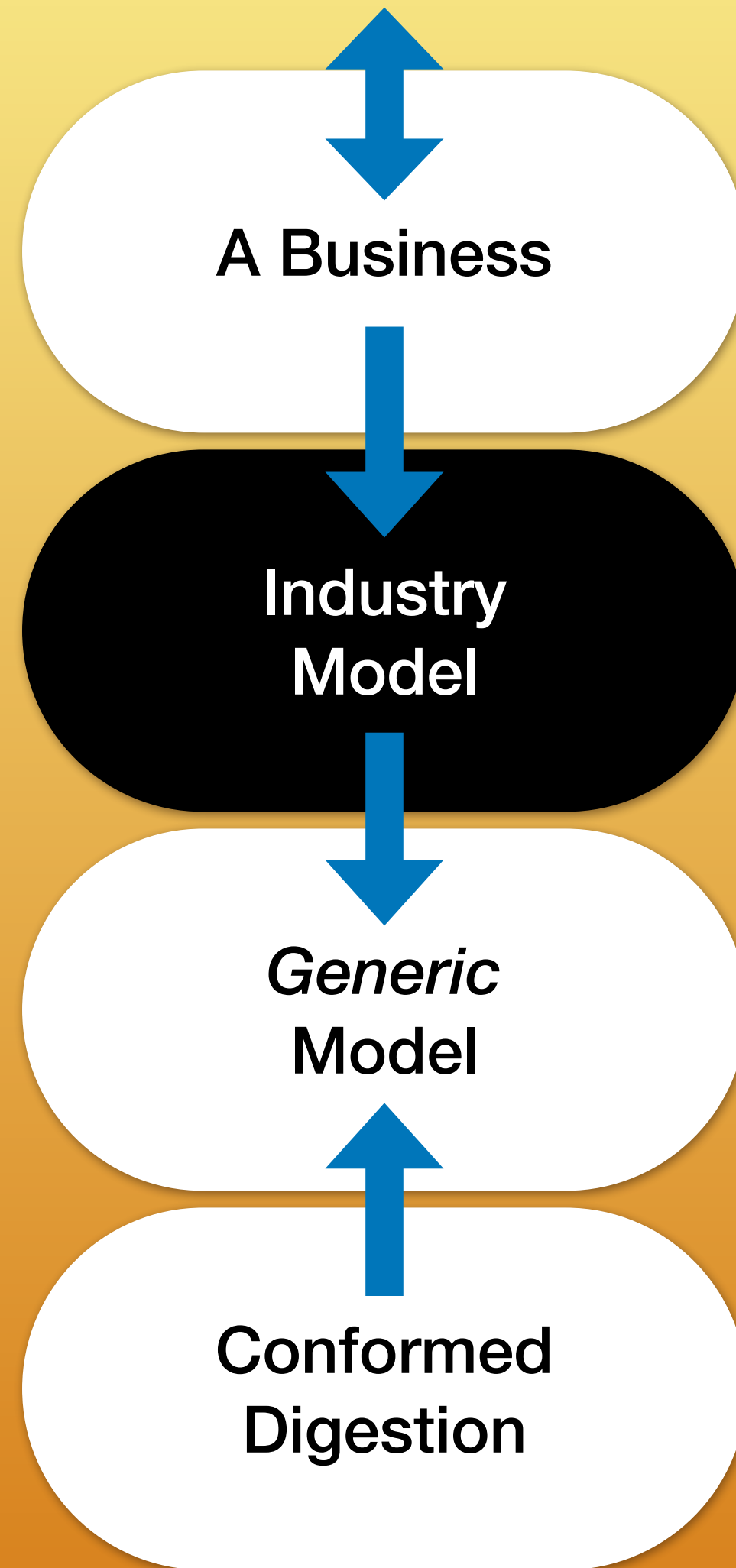
How on earth am I going to get data into that? Even if I learn this, nobody else will understand it...



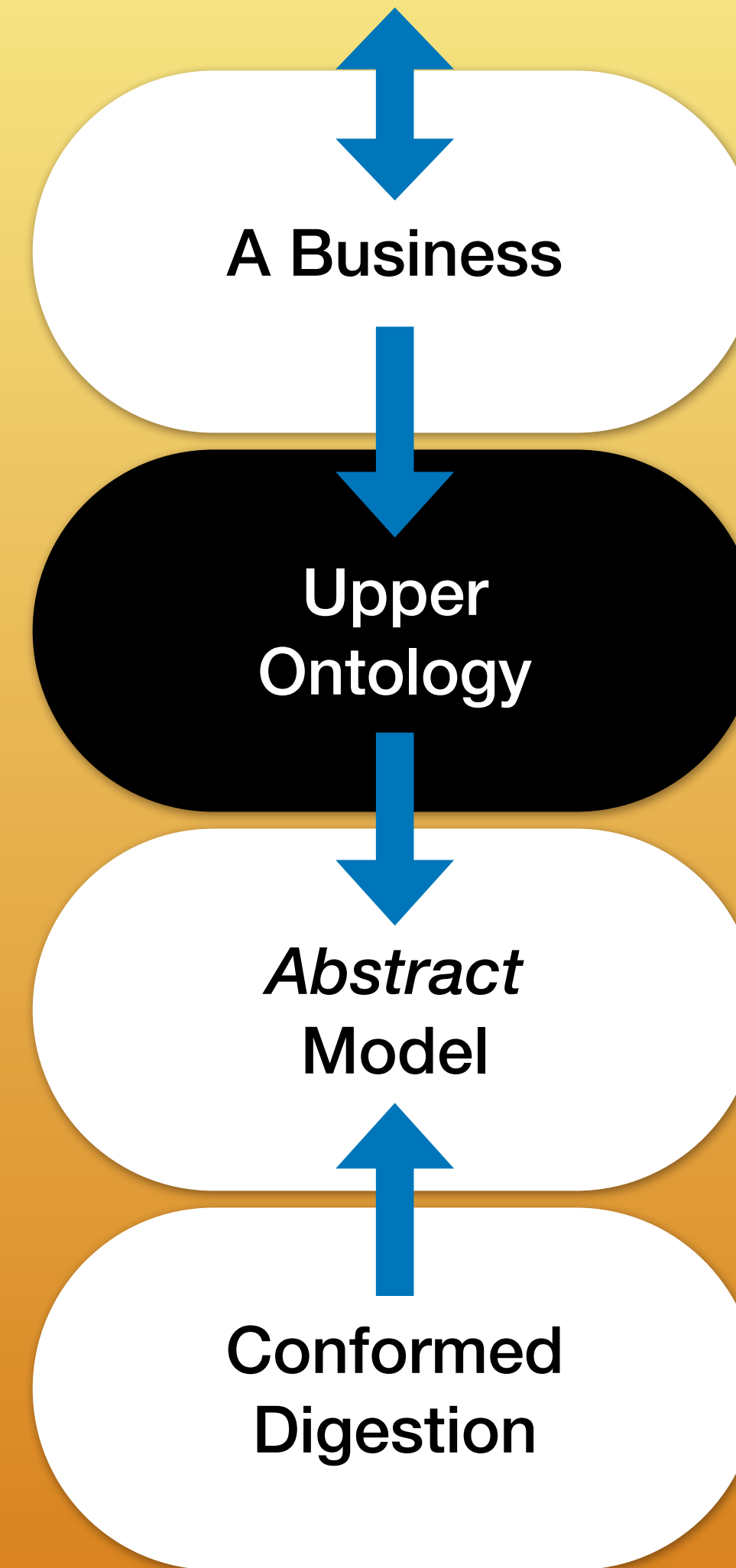
THAT WHICH IS NOT THE BUSINESS



THAT WHICH IS NOT THE BUSINESS



THAT WHICH IS NOT THE BUSINESS



THAT WHICH IS NOT THE BUSINESS

THAT WHICH IS NOT THE BUSINESS

THAT WHICH IS NOT THE BUSINESS

Why are we moving in this direction?

Core Business
Concepts

Specific
Model

Conformed
Digestion

Industry
Model

Generic
Model

Conformed
Digestion

Upper
Ontology

Abstract
Model

Conformed
Digestion

THAT WHICH IS NOT THE BUSINESS

THAT WHICH IS NOT THE BUSINESS

THAT WHICH IS NOT THE BUSINESS

Why are we moving in this direction?

Core Business
Concepts

Industry
Model

Upper
Ontology

Specific
Model

Generic
Model

Abstract
Model

...and not in this direction?

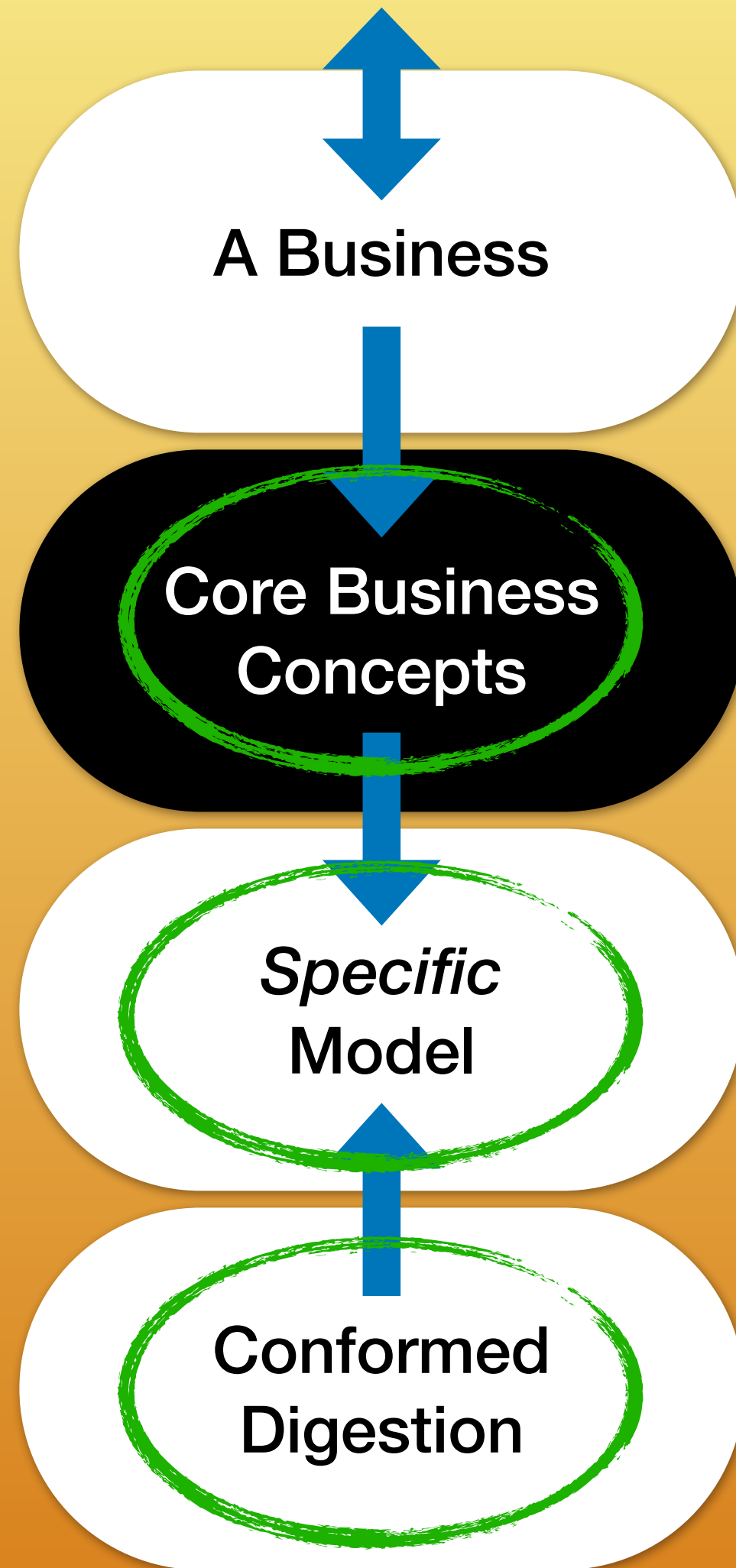
Digestion

Digestion

Digestion

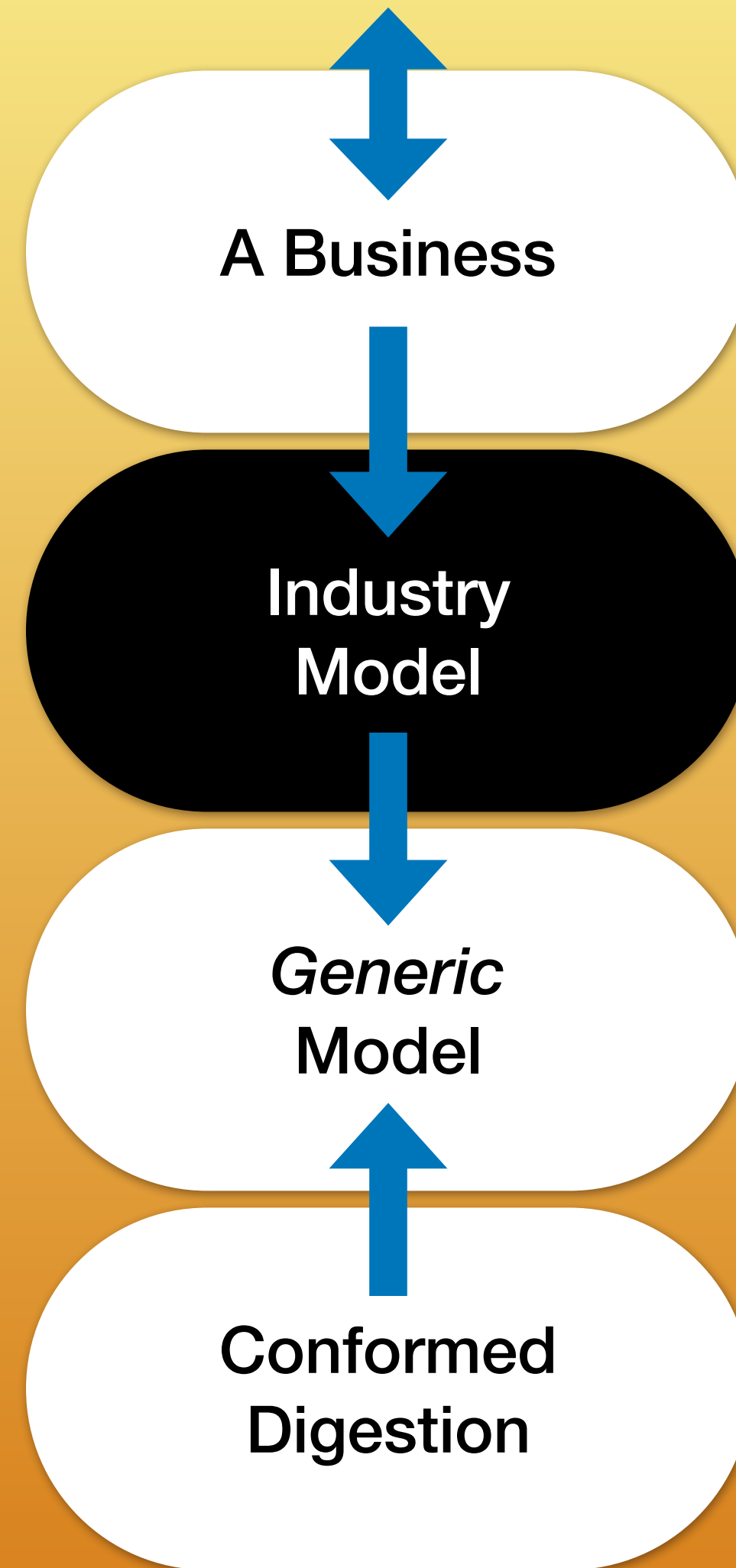
YOUR DAILY OPERATIONS ARE

THAT WHICH IS NOT THE BUSINESS

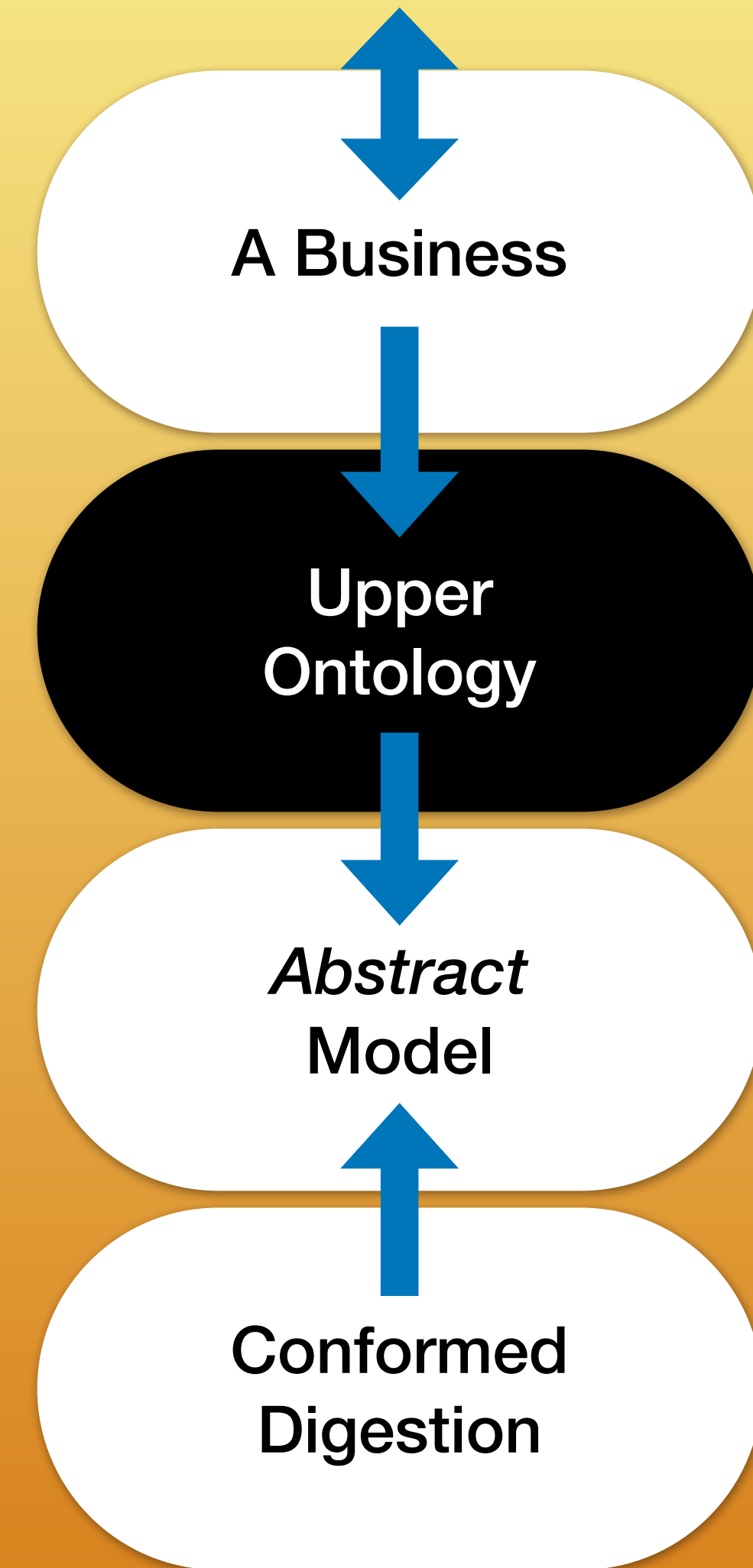


SIMPLE AND FLEXIBLE

THAT WHICH IS NOT THE BUSINESS

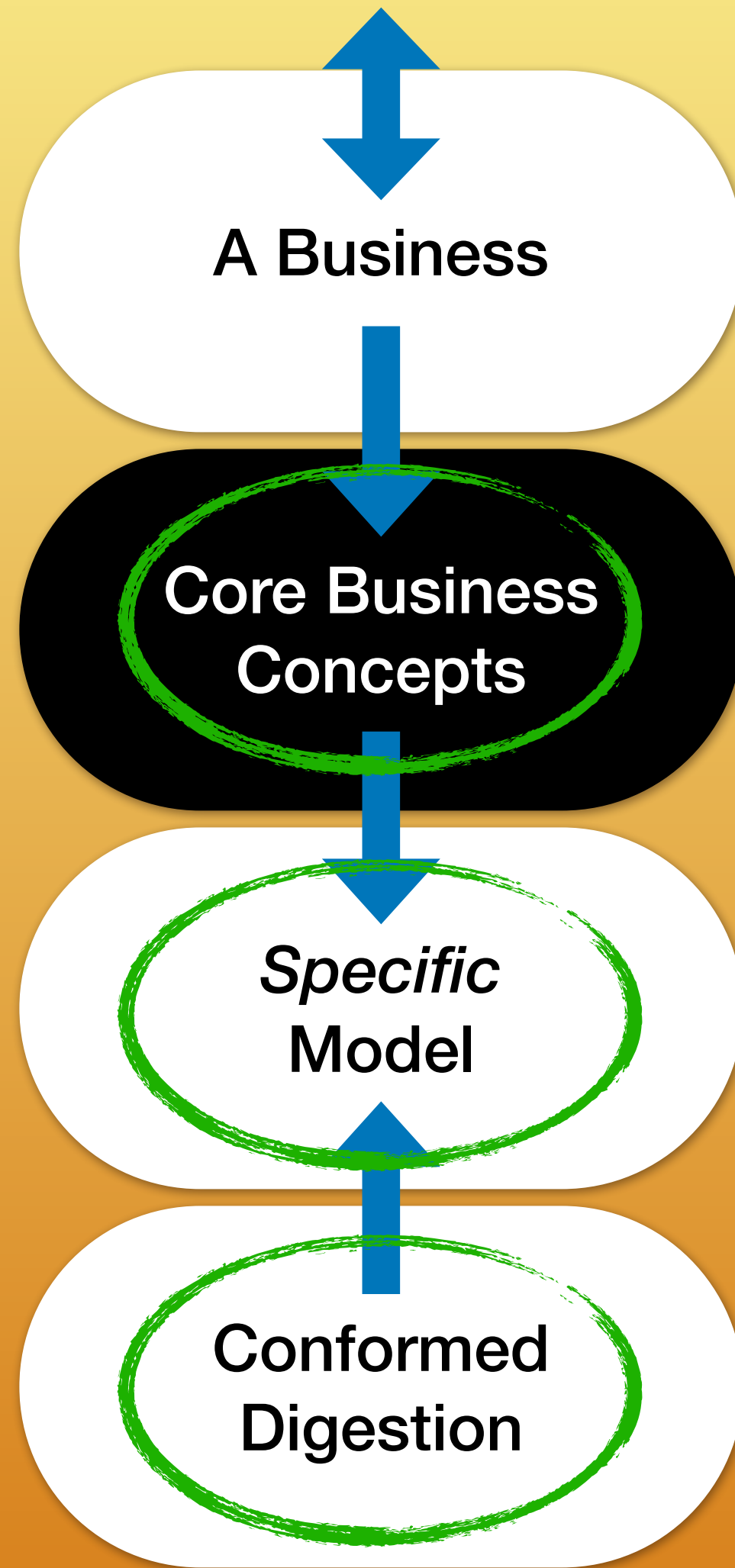


THAT WHICH IS NOT THE BUSINESS



YOUR DAILY OPERATIONS ARE

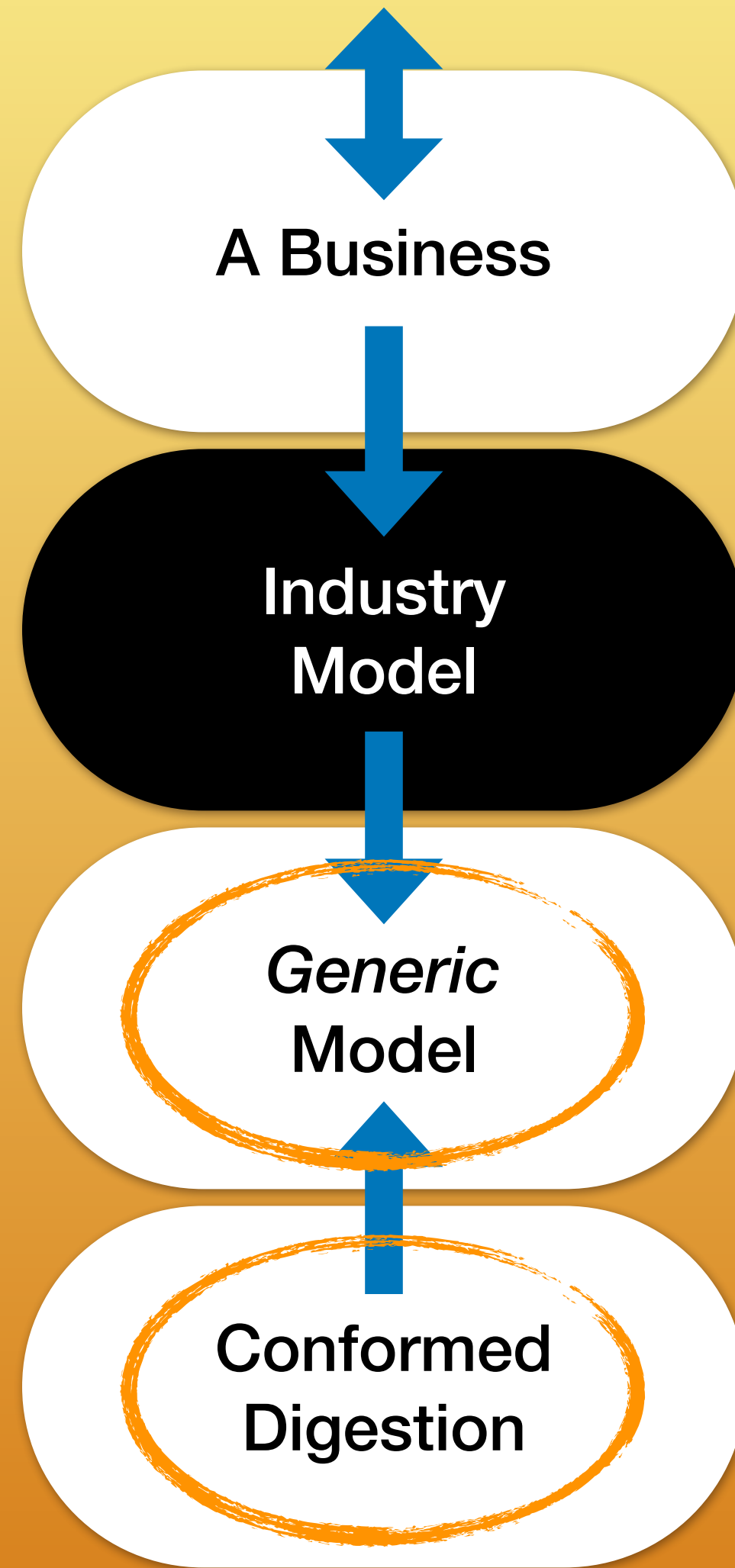
THAT WHICH IS NOT THE BUSINESS



SIMPLE AND FLEXIBLE

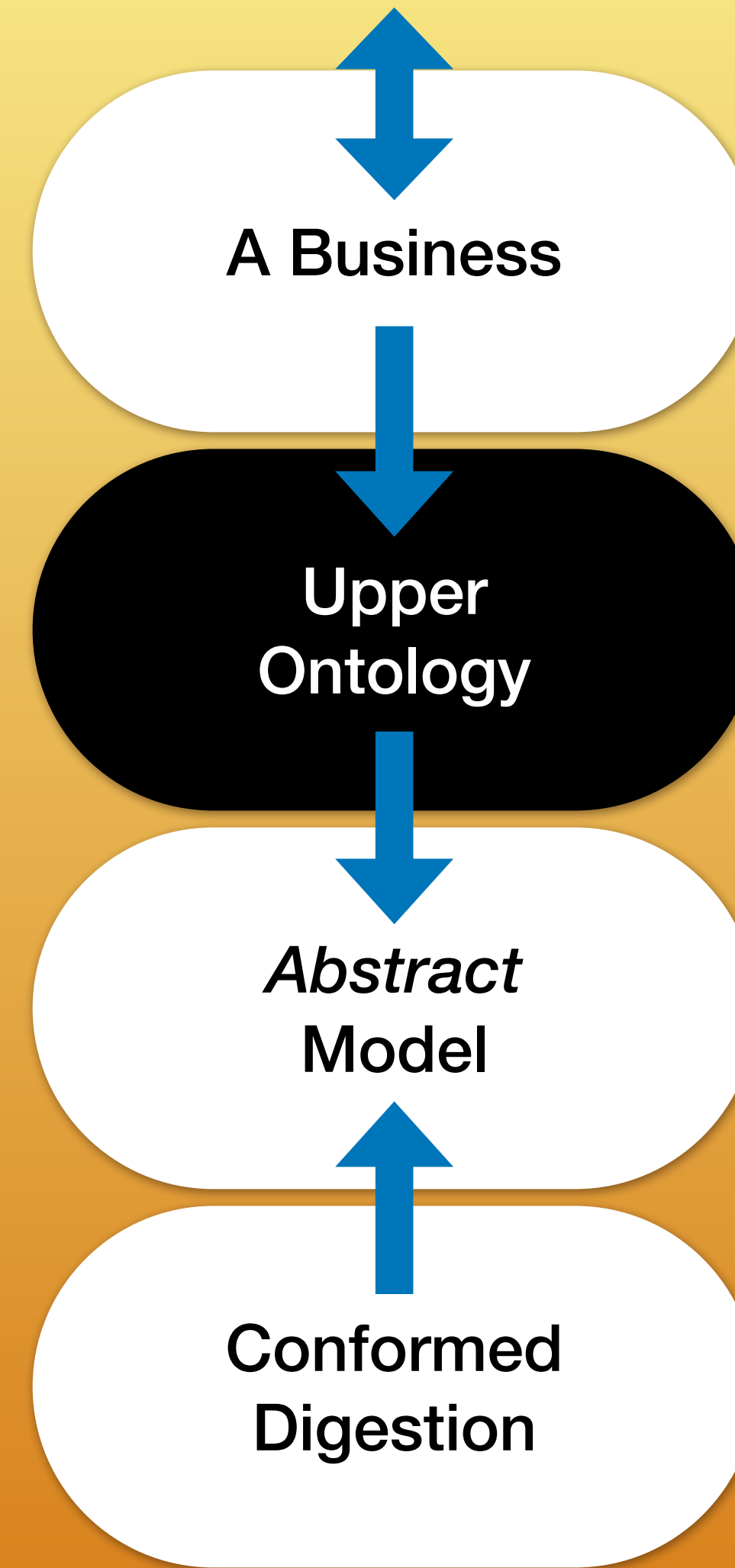
YOUR DAILY OPERATIONS ARE

THAT WHICH IS NOT THE BUSINESS



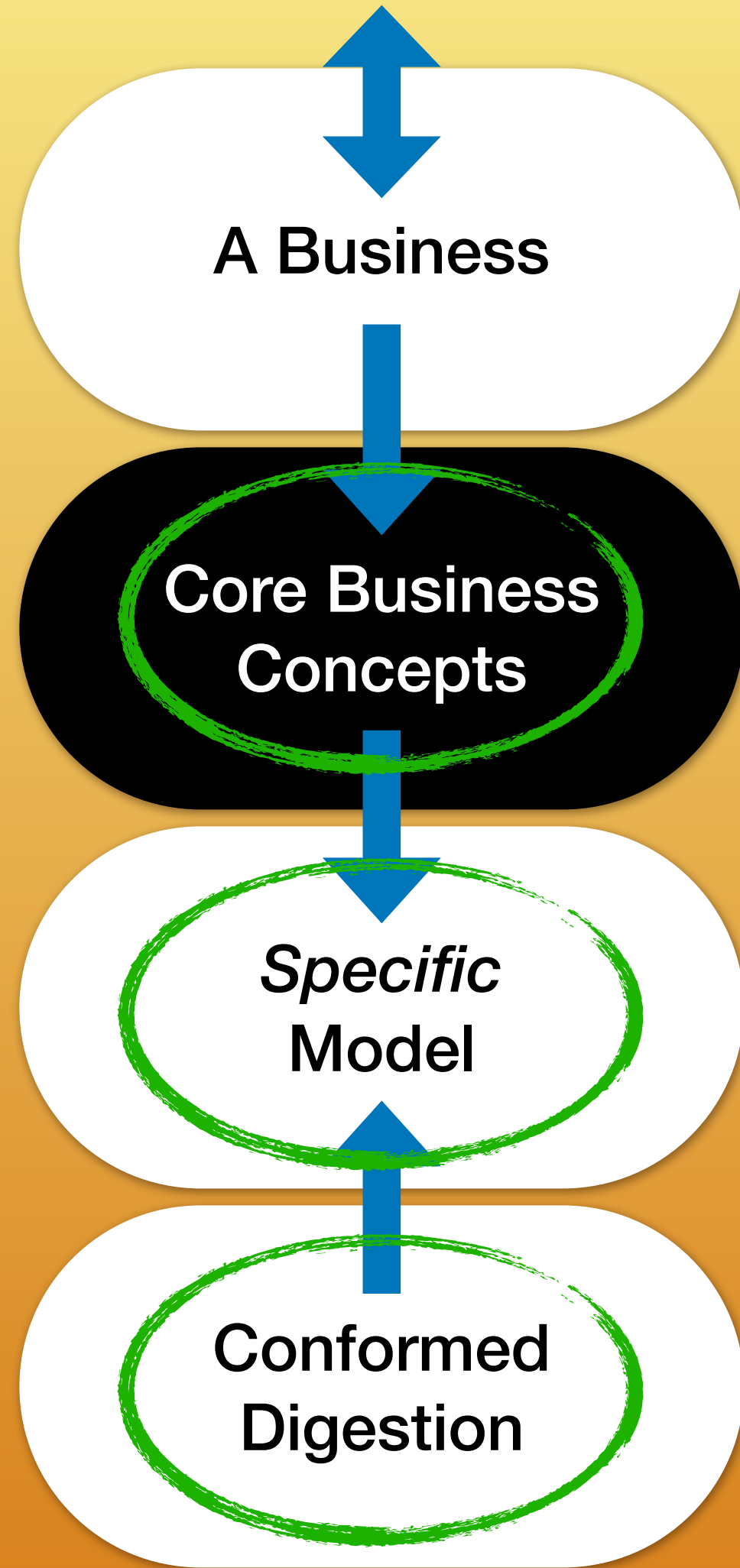
HARDER AND INFLEXIBLE

THAT WHICH IS NOT THE BUSINESS



YOUR DAILY OPERATIONS ARE

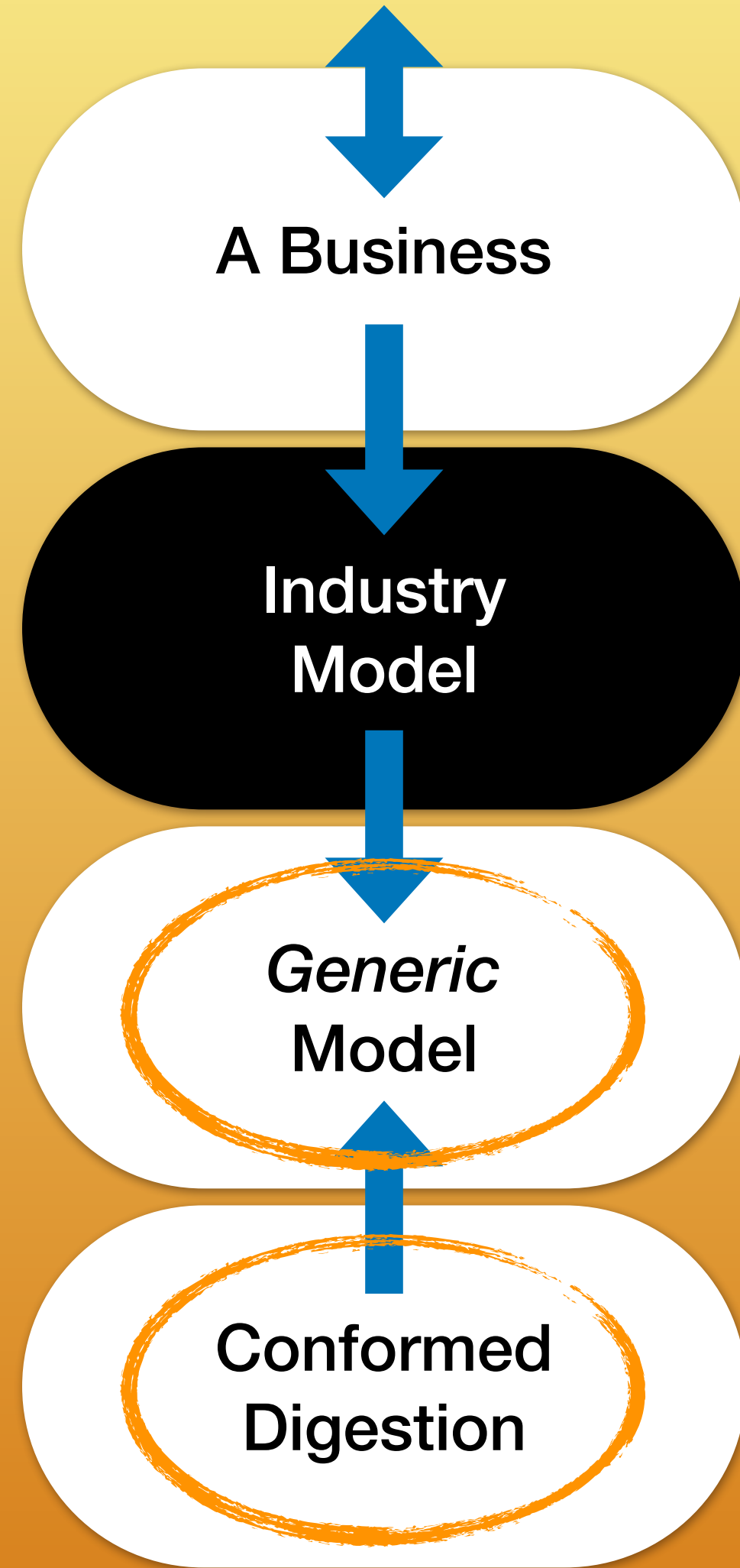
THAT WHICH IS NOT THE BUSINESS



SIMPLE AND FLEXIBLE

YOUR DAILY OPERATIONS ARE

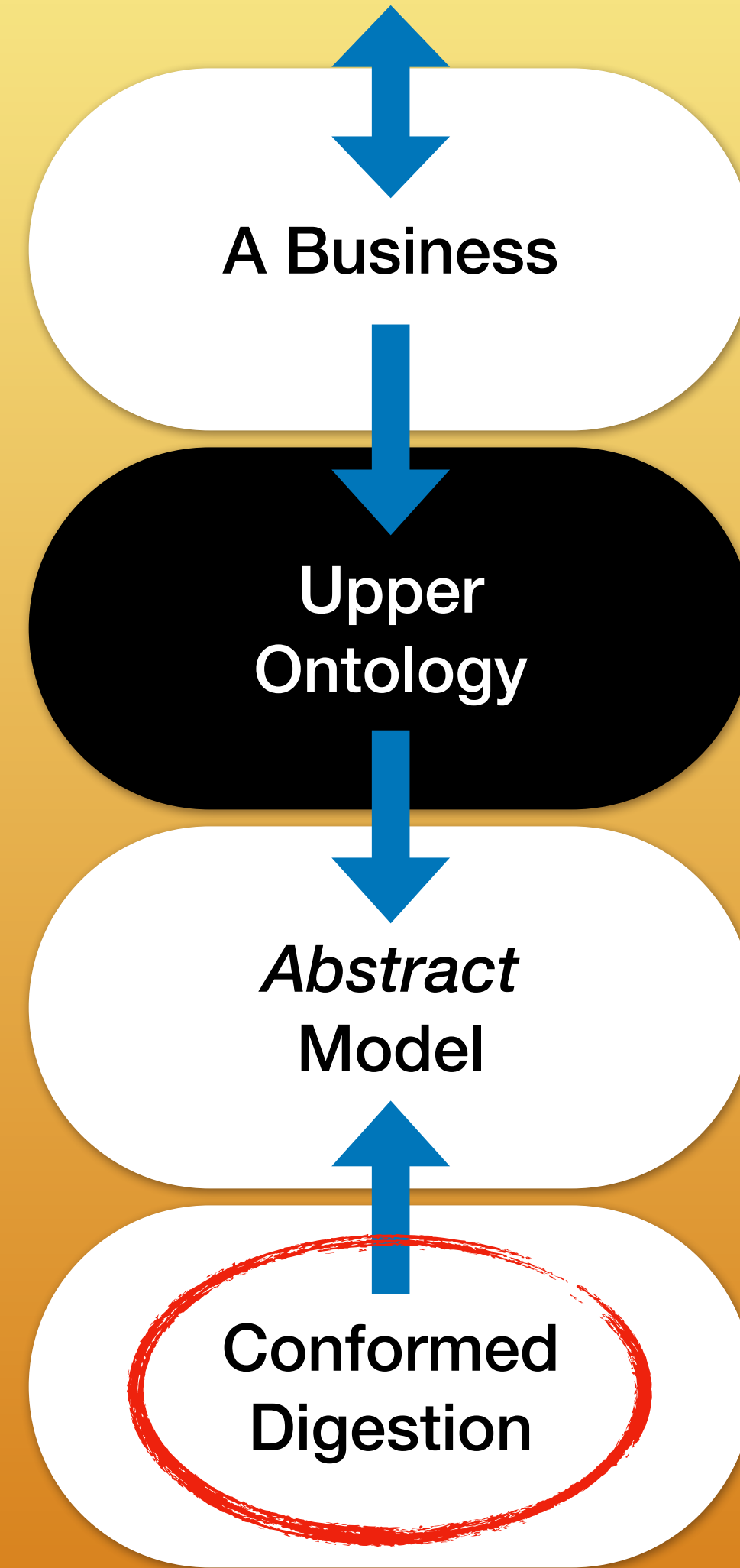
THAT WHICH IS NOT THE BUSINESS



HARDER AND INFLEXIBLE

YOUR DAILY OPERATIONS ARE

THAT WHICH IS NOT THE BUSINESS

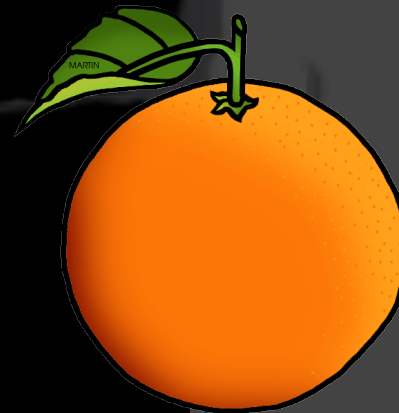


IMPOSSIBLE AND PERMANENT

“The closer to the *objective* and *universal* **top** we come, the farther away from the *subjective* and *local* **reality** of the business we get.”

– A useful insight for data modellers

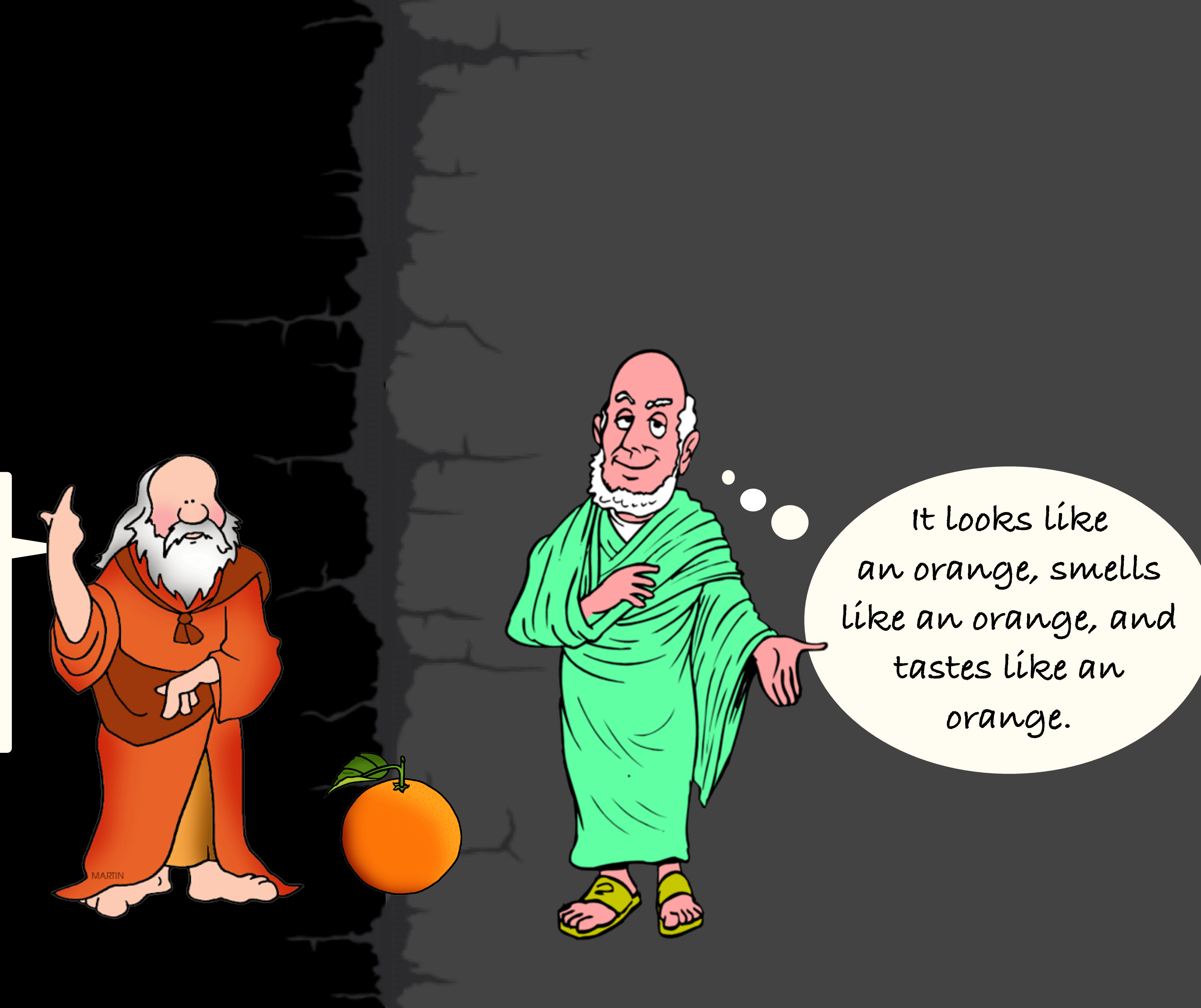
Can you see that thing? It has a shape, a size, a taste, a smell, and a color.



It looks like an orange, smells like an orange, and tastes like an orange.

IDENTIFICATION

It is sufficiently different to be distinguishable from everything else.



Can you see that thing? It has a shape, a size, a taste, a smell, and a color.

It looks like an orange, smells like an orange, and tastes like an orange.

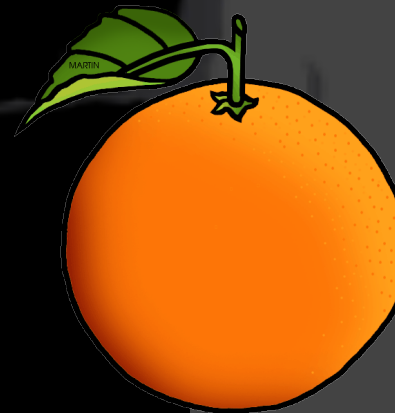
IDENTIFICATION

It is sufficiently different to be distinguishable from everything else.

QUALIFICATION

It has some properties I recognise.

Can you see that thing? It has a shape, a size, a taste, a smell, and a color.



It looks like an orange, smells like an orange, and tastes like an orange.

IDENTIFICATION

It is sufficiently different to be distinguishable from everything else.

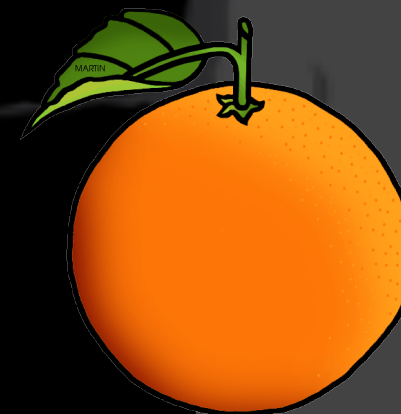
QUALIFICATION

It has some properties I recognise.

EVALUATION

The properties can be evaluated to yield some approximate values.

Can you see that thing? It has a shape, a size, a taste, a smell, and a color.



It looks like an orange, smells like an orange, and tastes like an orange.

IDENTIFICATION

It is sufficiently different to be distinguishable from everything else.

QUALIFICATION

It has some properties I recognise.

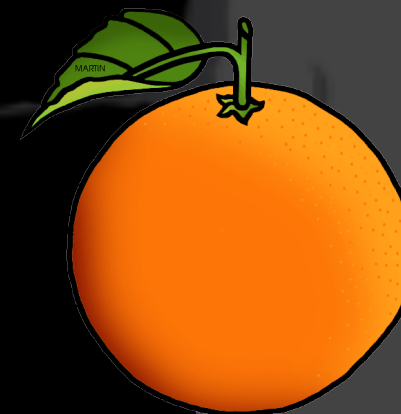
EVALUATION

The properties can be evaluated to yield some approximate values.

CLASSIFICATION

I recognise this set of properties having these distinct values as something I have a name for.

Can you see that thing? It has a shape, a size, a taste, a smell, and a color.



It looks like an orange, smells like an orange, and tastes like an orange.

IDENTIFICATION

It is sufficiently different to be distinguishable from everything else.

QUALIFICATION

It has some properties I recognise.

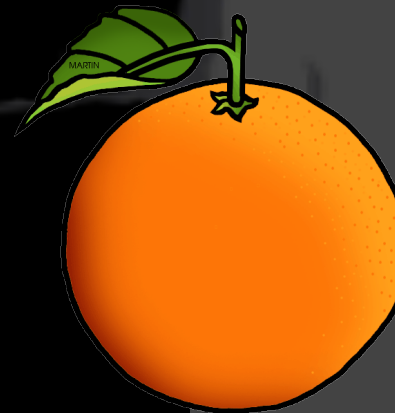
EVALUATION

The properties can be evaluated to yield some approximate values.

CLASSIFICATION

I recognise this set of properties having these distinct values as something I have a name for.

Can you see that thing? It has a shape, a size, a taste, a smell, and a color.



It looks like an orange, smells like an orange, and tastes like an orange.

**OBJECTIVE
UNIVERSAL**

IDENTIFICATION

It is sufficiently different to be distinguishable from everything else.

QUALIFICATION

It has some properties I recognise.

EVALUATION

The properties can be evaluated to yield some approximate values.

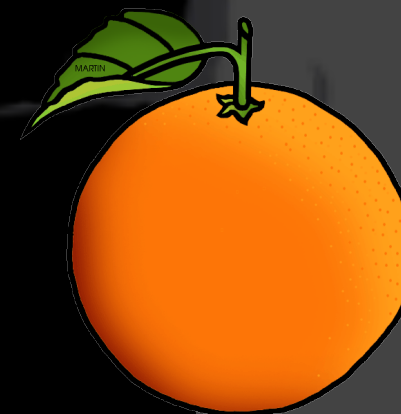
CLASSIFICATION

I recognise this set of properties having these distinct values as something I have a name for.

Can you see that thing? It has a shape, a size, a taste, a smell, and a color.



**OBJECTIVE
UNIVERSAL**



It looks like an orange, smells like an orange, and tastes like an orange.

**SUBJECTIVE
LOCAL**

a.k.a. entities, concepts, forms, kinds

“In *transitional modeling* **classes** are not first class citizens, they are **ephemeral** constructs for which there may be some degree of **consensus**.”

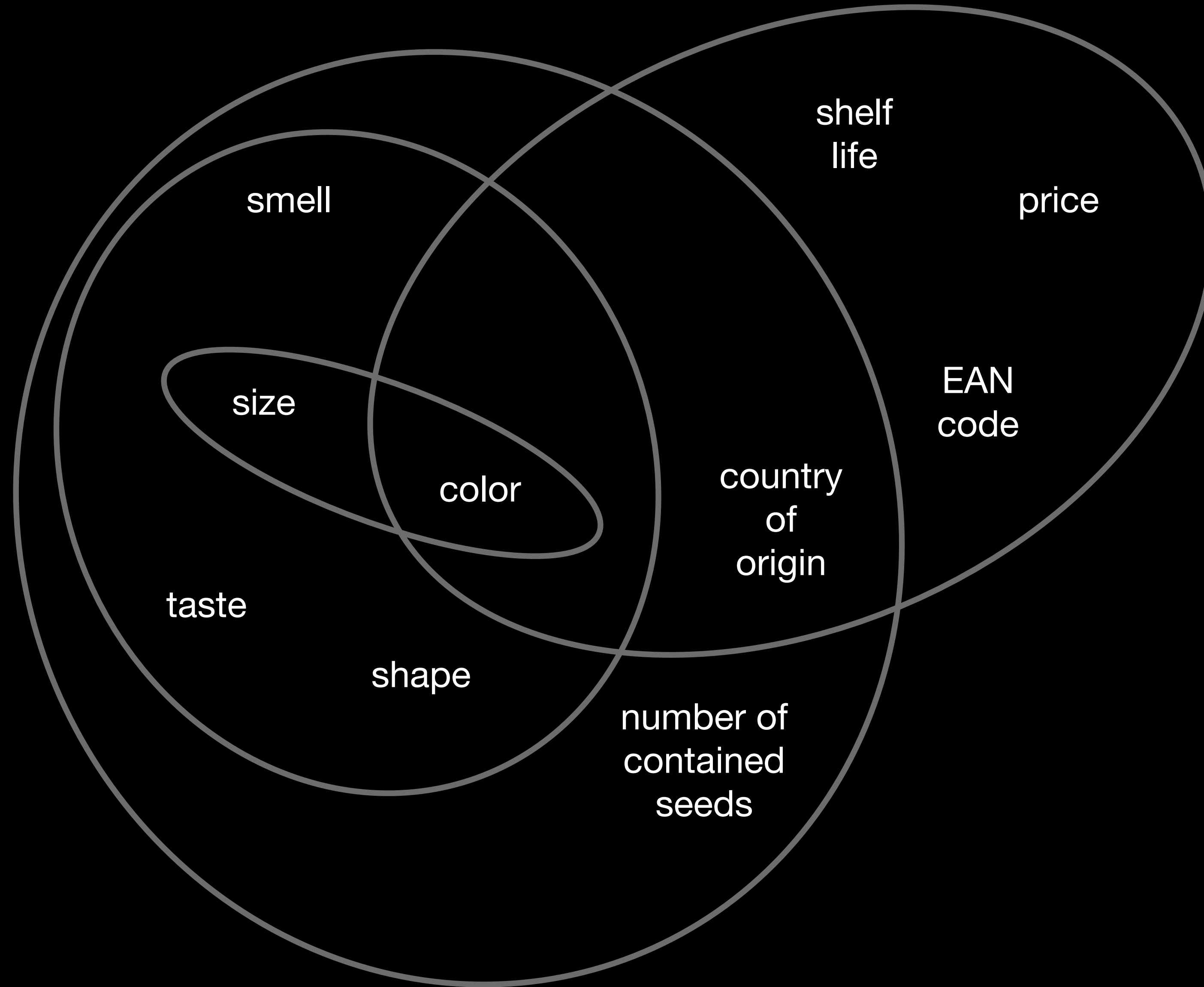
– An unusual thought for data modellers

It's just a bunch of properties.

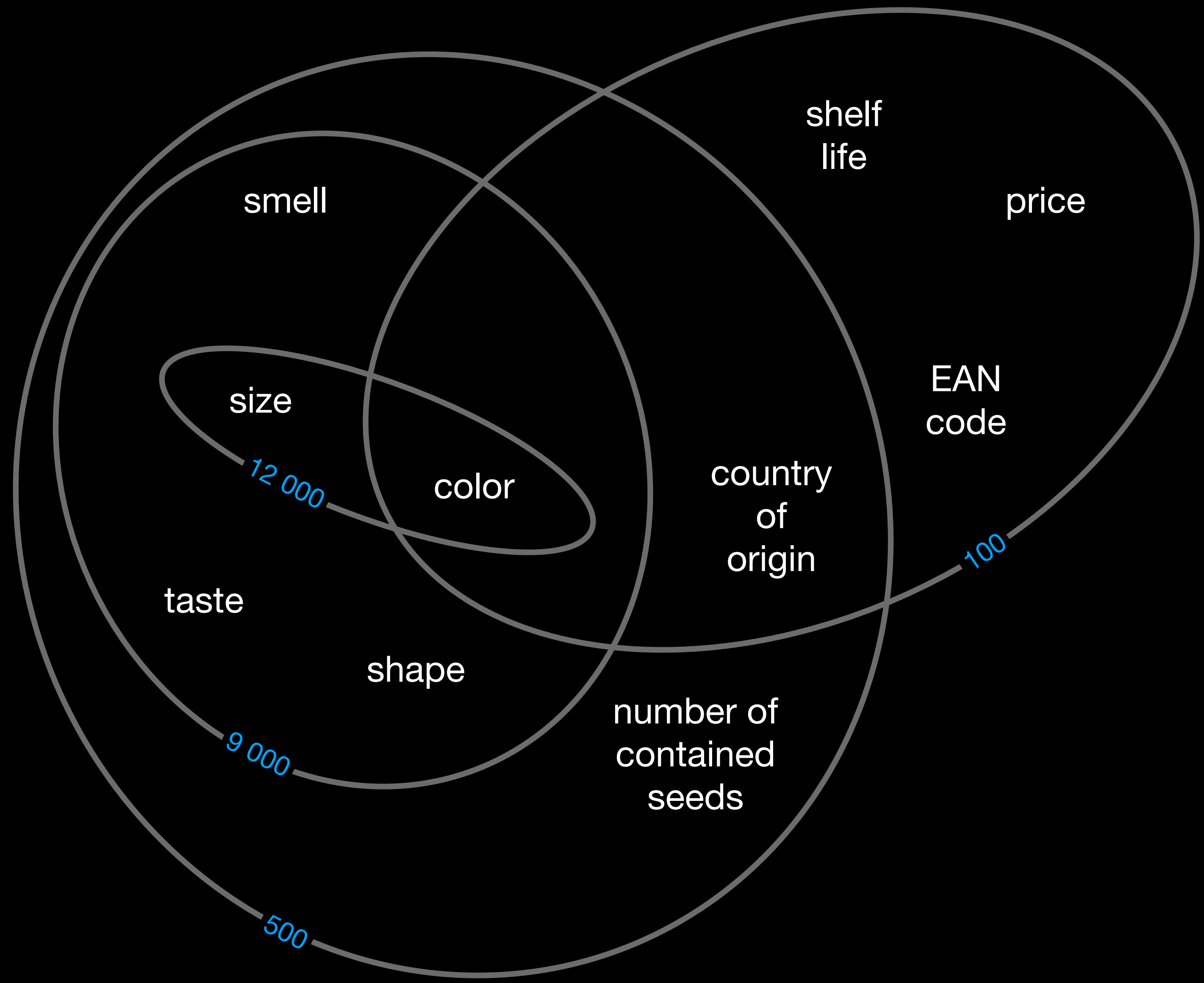


- smell
- size
- taste
- shape
- color
- country of origin
- shelf life
- price
- EAN code
- number of contained seeds

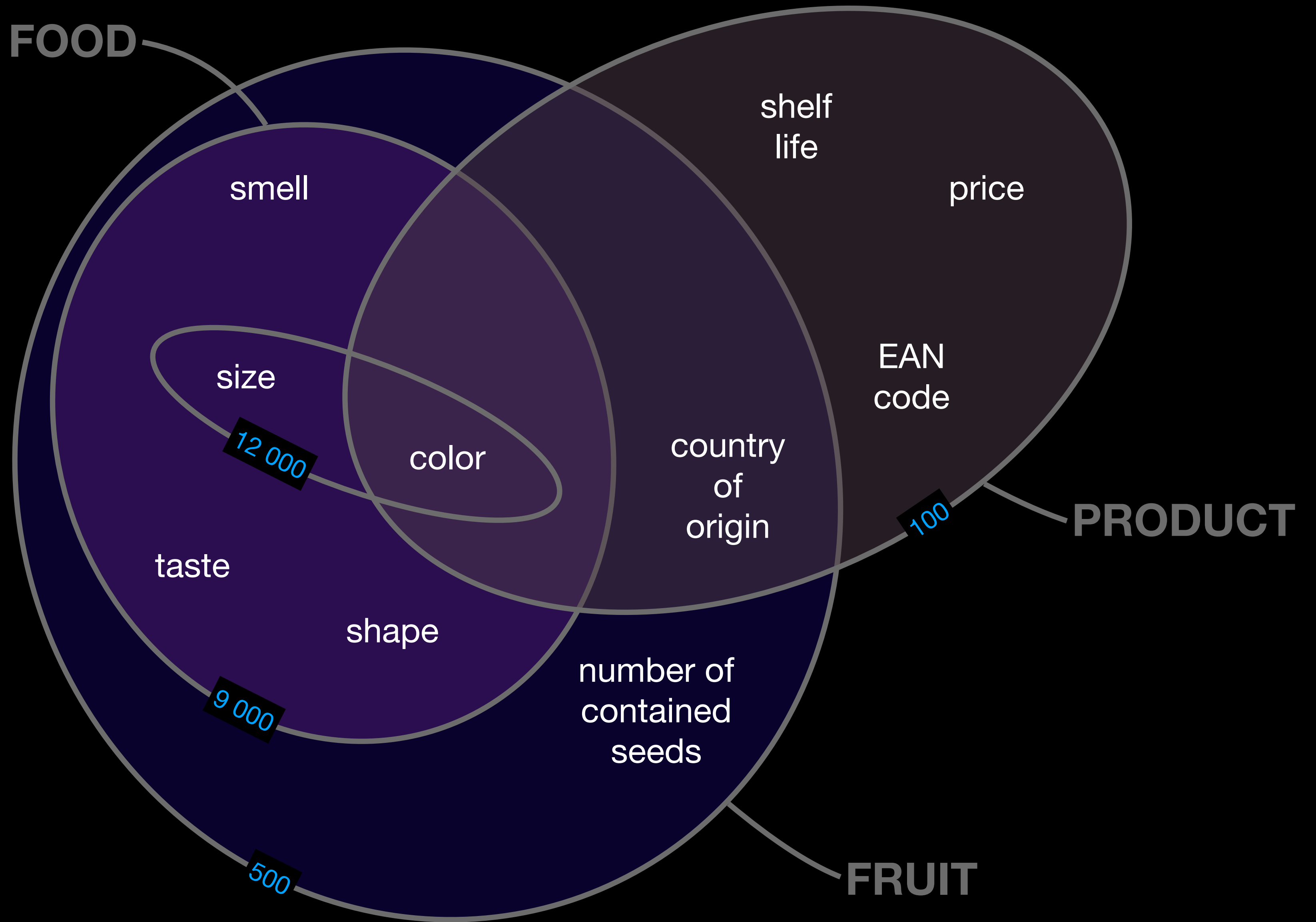
Looks like some properties are shared by different things.



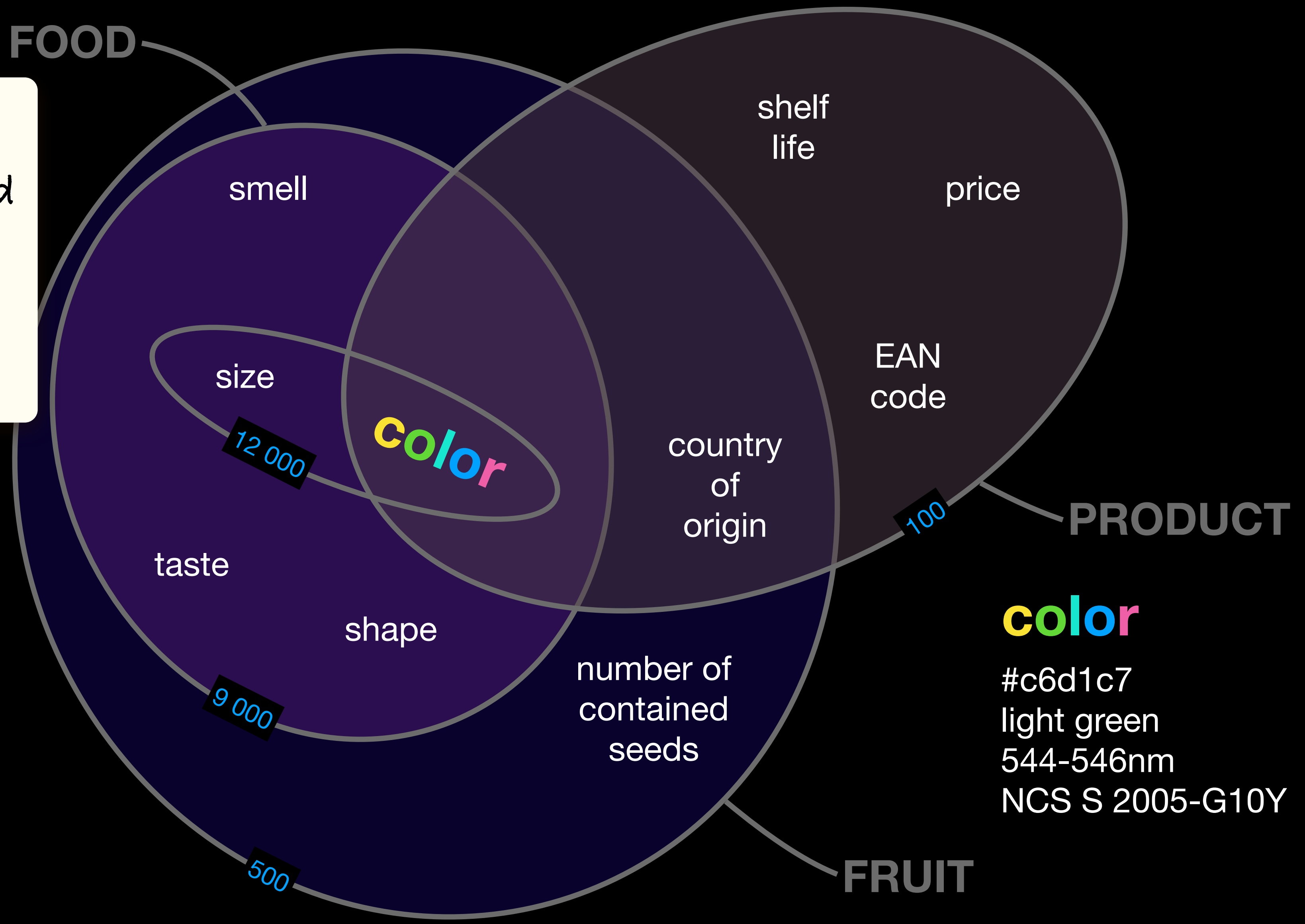
Before I see a lot of these, types makes no sense.



I think this is what I want to call the things.

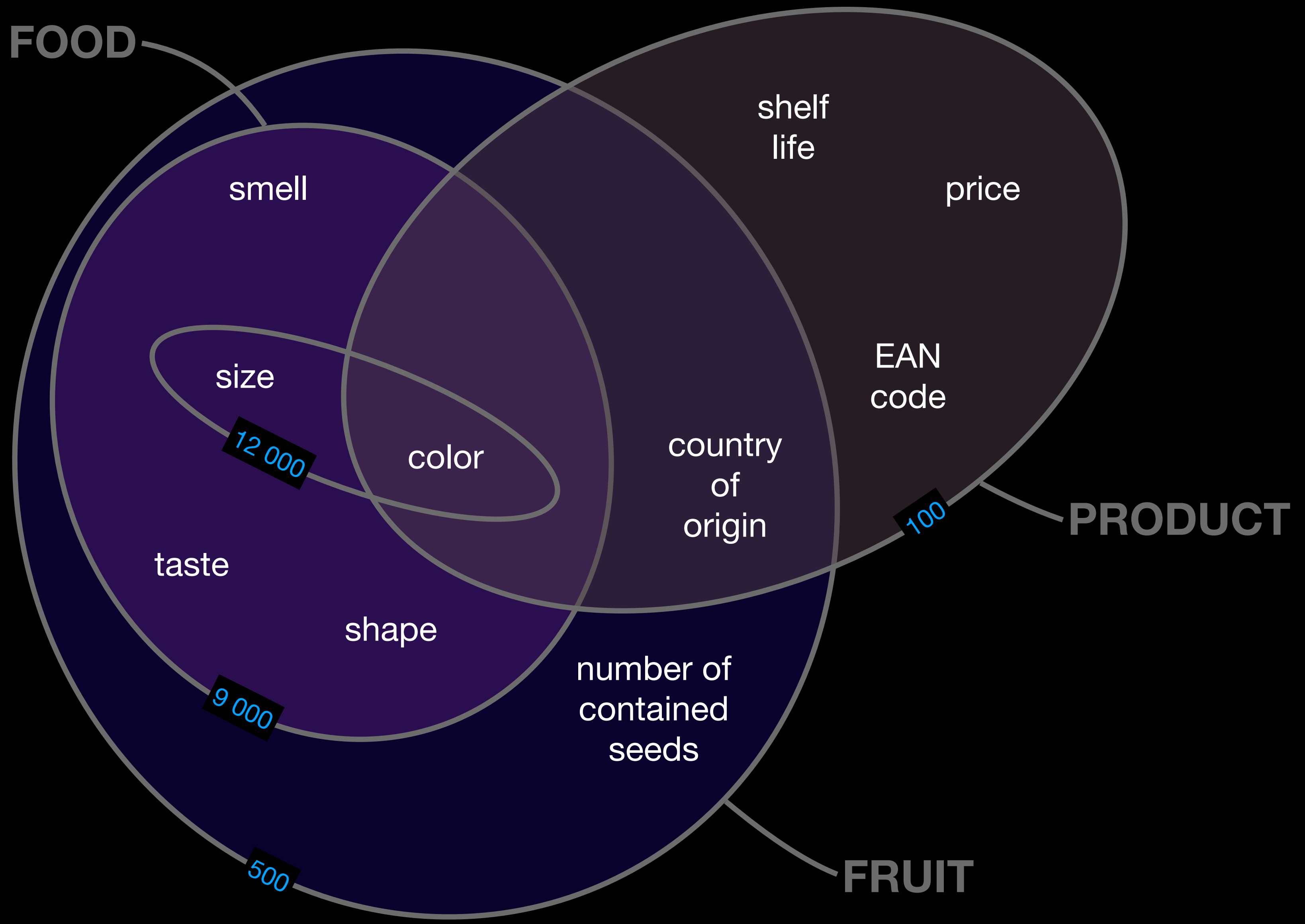


Neat, color is shared among food, fruit and products, regardless of how we express the actual color.



color
#c6d1c7
light green
544-546nm
NCS S 2005-G10Y

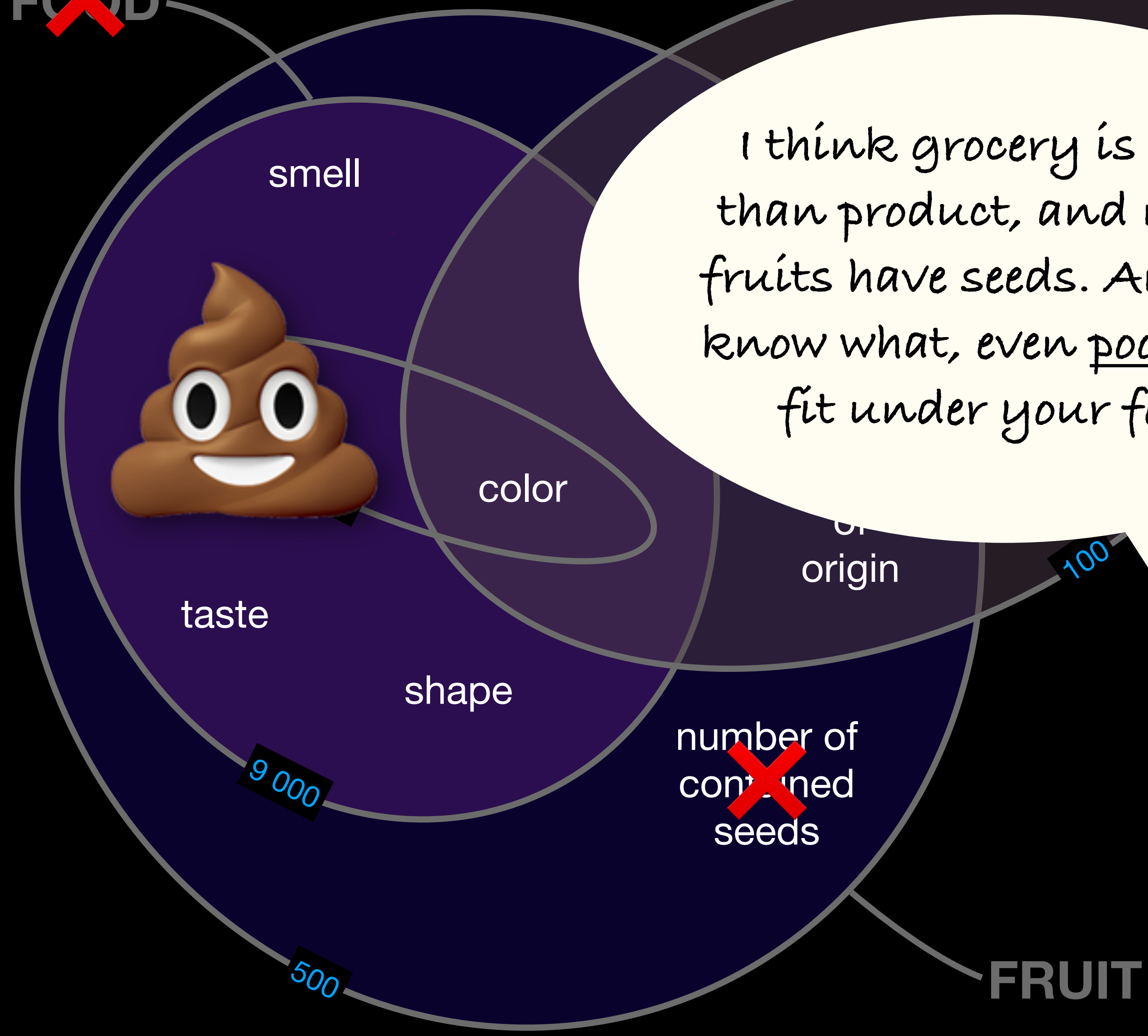
I'm really satisfied with this.



Uh oh...



~~FOOD~~



I think grocery is better than product, and not all fruits have seeds. And you know what, even poo would fit under your food.

grocery
~~PRODUCT~~



FRUIT

“If *properties* are what classifications are based upon, then how do you tell an **apple** from an **orange**?”

– A particular dilemma for data modellers (and Aristotle’s objection against Plato)

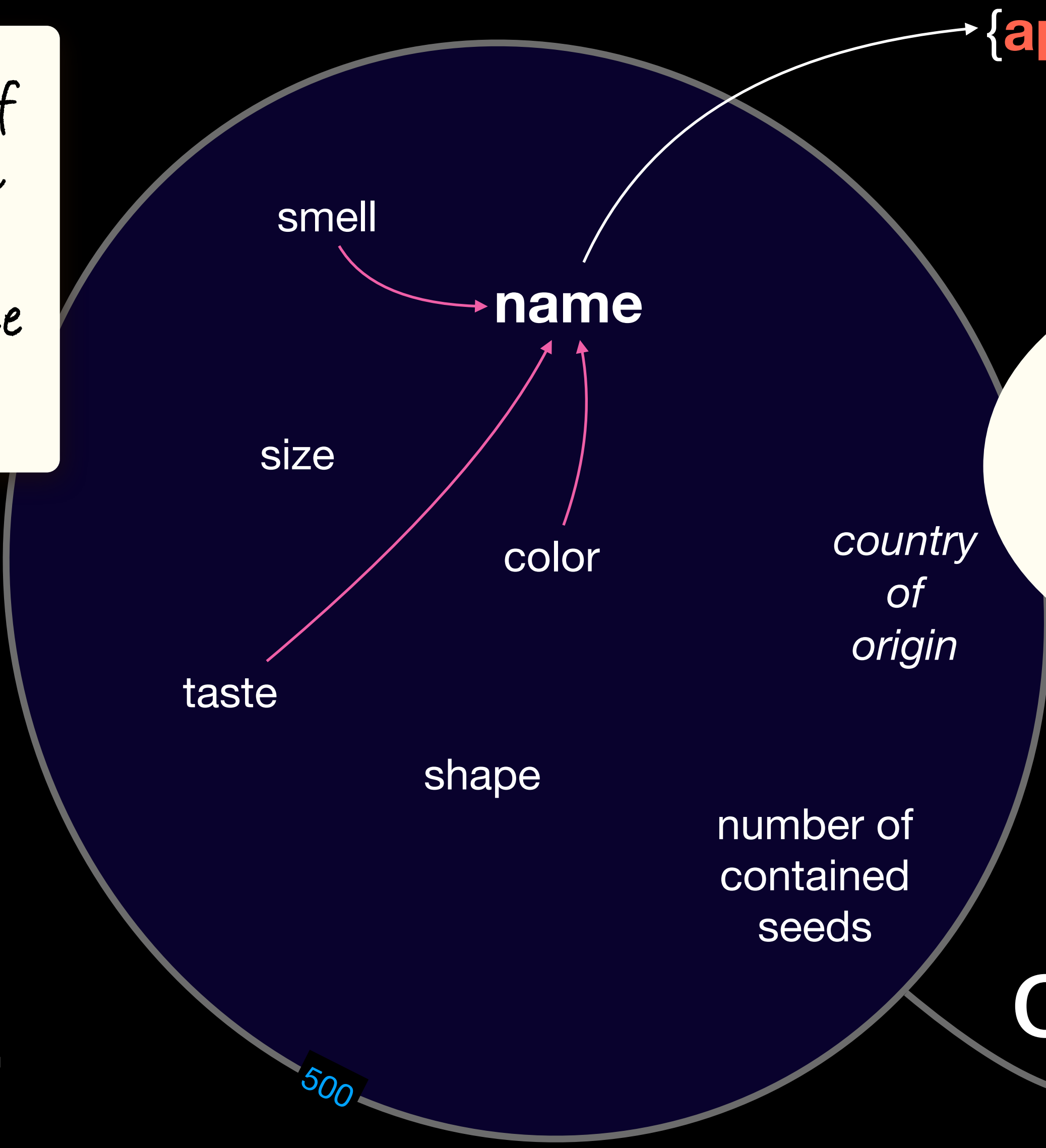
Let's say fruit is just shorthand for this bunch of properties.



Mmm... ok, so anything that comes with these is of the fruit class. Perhaps the country of origin could be optional?



If we add the name of the fruit, then it can only be determined after evaluating some of the properties.



{apple, orange}

TYPE

I think we should call such enumerations types of fruit.

CLASS
FRUIT



“Both **apples** and **oranges** are different *types* of the **FRUIT class**.”

– A clarification for data modellers (and Plato alike)

