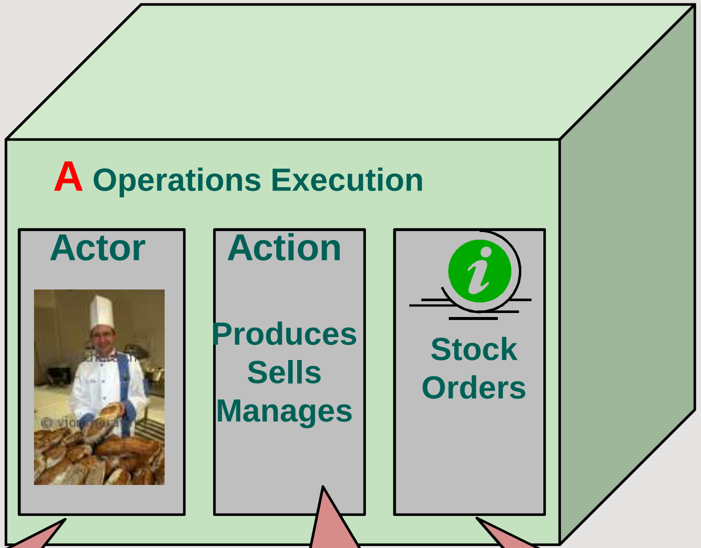
There was once, a Bakery…

The Baker makes and sells his bread just like his father

The Baker learnt his trade from his father, who had learnt it from his grandfather. He makes his bread to the family recipe.



The Shop is run by the Baker and his wife.

The Baker makes his bread himself. His wife sells it. In the evening they « do the till ».

To produce, he manages his stock of flour. She takes the customer orders.

Operations

But it's hard to get new apprentices to work well

To cope with increasing clientele, he has to hire apprentices to produce more good bread and to serve more customers.

Oh Genie, good Genie! I hired apprentices to help me Produce and Sell my bread.
But the bread isn't always of good quality, the orders are often wrongly filled out. I see my apprentices running between the shop and the ovens with no real efficiency.

Should I fire them all and hire new ones?

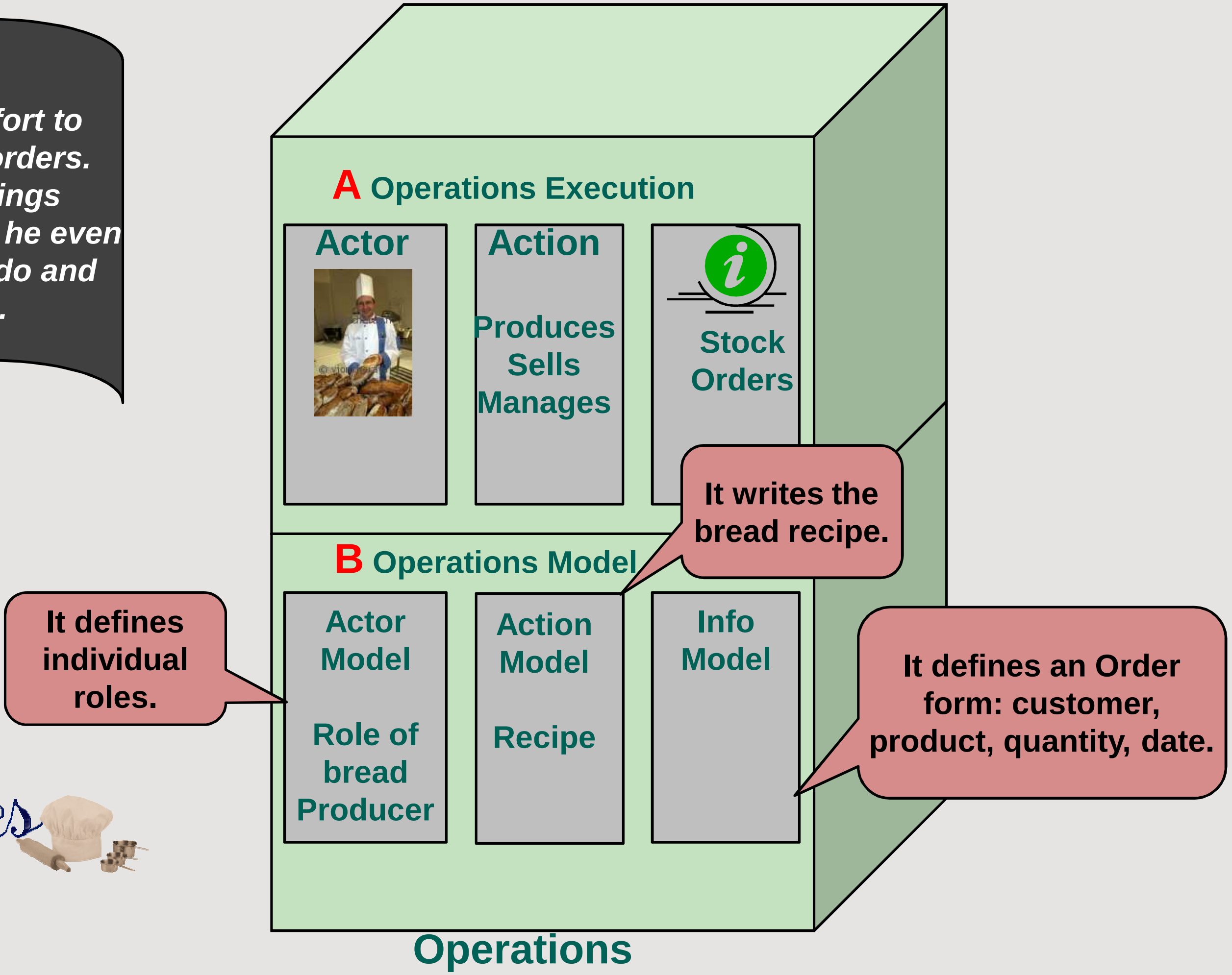
You must formalize your « know-how » if you want your employees to profit from it; take the time to

- *Define each person's role*
- *Write out your recipe*
- *Prepare order forms, so they don't forget to note down the 4 key pieces of information: customer, date, product and quantity.*

Do so and you'll be surprised with the result!

The Baker has to model to enable his apprentices to work

So the Baker made the effort to Model roles, recipes and orders. To his great surprise, things suddenly went much better: he even had less and less work to do and rested on his laurels.



A Operations Execution

Actor

Action

Produces
Sells
Manages

Stock
Orders

B Operations Model

Actor Model

Role of bread Producer

Action Model

Recipe

Info Model

Operations

It writes the bread recipe.

It defines individual roles.

It defines an Order form: customer, product, quantity, date.

But a competitor takes away part of the clientele

One day, another baker sets up shop nearby: he offers organic bread with bacon and with walnuts. Part of the clientele changes bakeries…

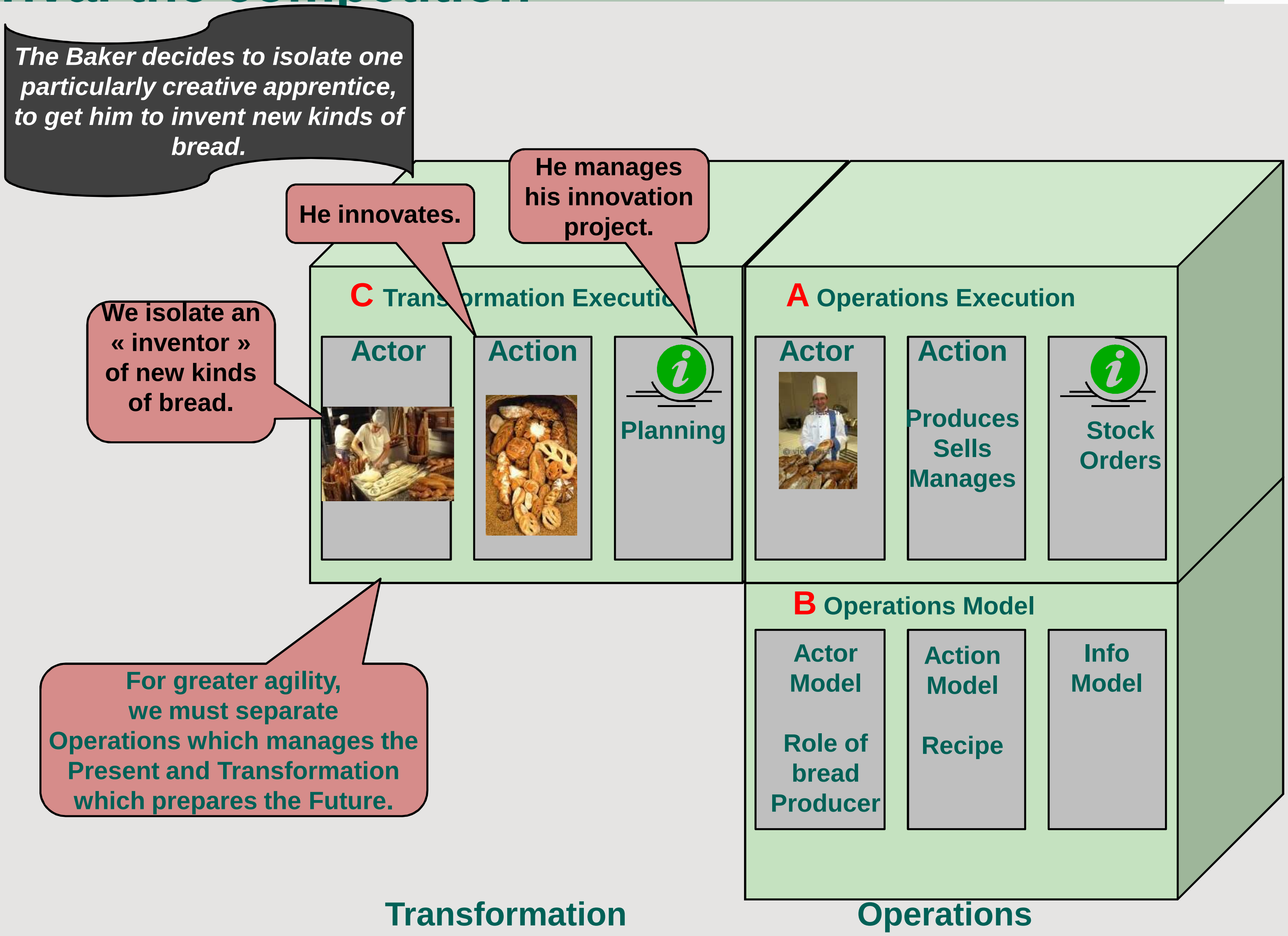
Oh Genie, good Genie! A competitor has just set up nearby: I don't much like his bread, but my customers are leaving me.

Should I blow up his bakery?

What matters is not the bread you like, but the bread your customers like. You can't just blow up your competitor's shop because he managed to make a better bread than yours, you must invent a new bread that pleases customers even more.

Do so and you'll be surprised with the result!

The Baker has to innovate to rival the competition



The Baker decides to isolate one particularly creative apprentice, to get him to invent new kinds of bread.

He innovates.

He manages his innovation project.

We isolate an « inventor » of new kinds of bread.

C Transformation Execution

Actor

Action

Planning

A Operations Execution

Actor

Action

Produces
Sells
Manages

Stock Orders

B Operations Model

Actor Model

Role of bread Producer

Action Model

Recipe

Info Model

For greater agility, we must separate Operations which manages the Present and Transformation which prepares the Future.

Transformation

Operations

But he doesn't know how to reproduce the newly invented bread!

After a series of disastrous attempts, the bread inventor manages to bake an extraordinary bread, but is unable to reproduce it. The inventor is an « artist » who succeeded in creating a one-off bread, like an original work of art.

Oh Genie, good Genie! I did exactly what you said, but it didn't work.

Should I drown my bread inventor in his own dough?

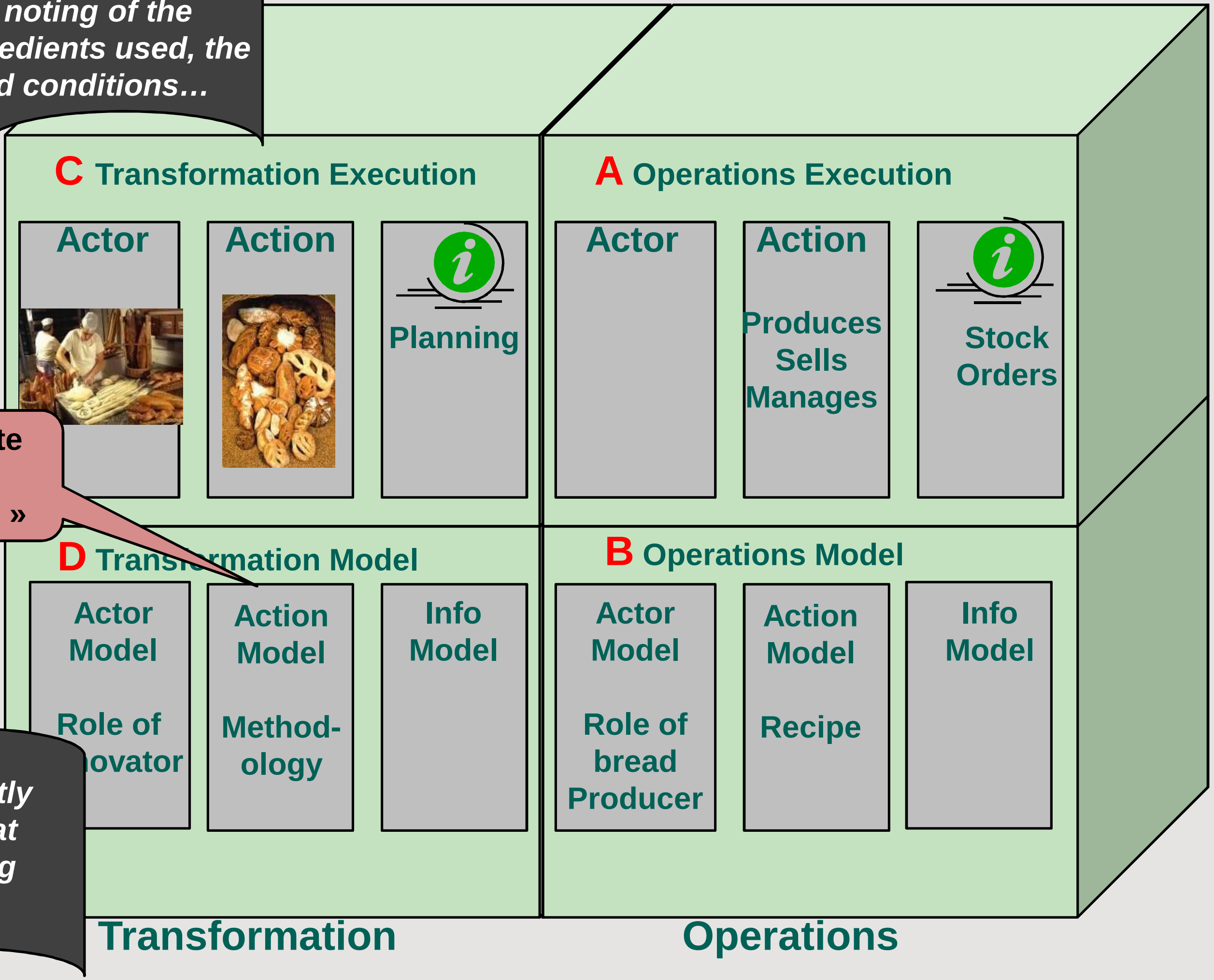
Your inventor did the essential of his task: he managed to invent an original and pleasing bread. You must model not just the Actions executed by your apprentice bakers or trainee salespeople, but also the Transformation Actions.

Do so and you'll be surprised with the result!

The Baker defines the innovation methodology

CEISAR

The Baker models the Transformation Process: it requires the meticulous noting of the proportions of ingredients used, the cooking time and conditions…



Execution
in the real world

The Model
(Doc. and Software)

C Transformation Execution

Actor	Action	Planning

A Operations Execution

Actor	Action	
	Produces Sells Manages	Stock Orders

D Transformation Model

Actor Model	Action Model	Info Model
Role of Innovator	Method-ology	

B Operations Model

Actor Model	Action Model	Info Model
Role of bread Producer	Recipe	

Transformation

Operations

How to innovate is formalized: « methodology »

The new bread is perfectly reproducible. It's a great success: they're turning customers away!

But he can’t manage growth

Oh Genie, good Genie!
Business is booming, but I can’t satisfy
all the customers queuing up
in front of my shop.

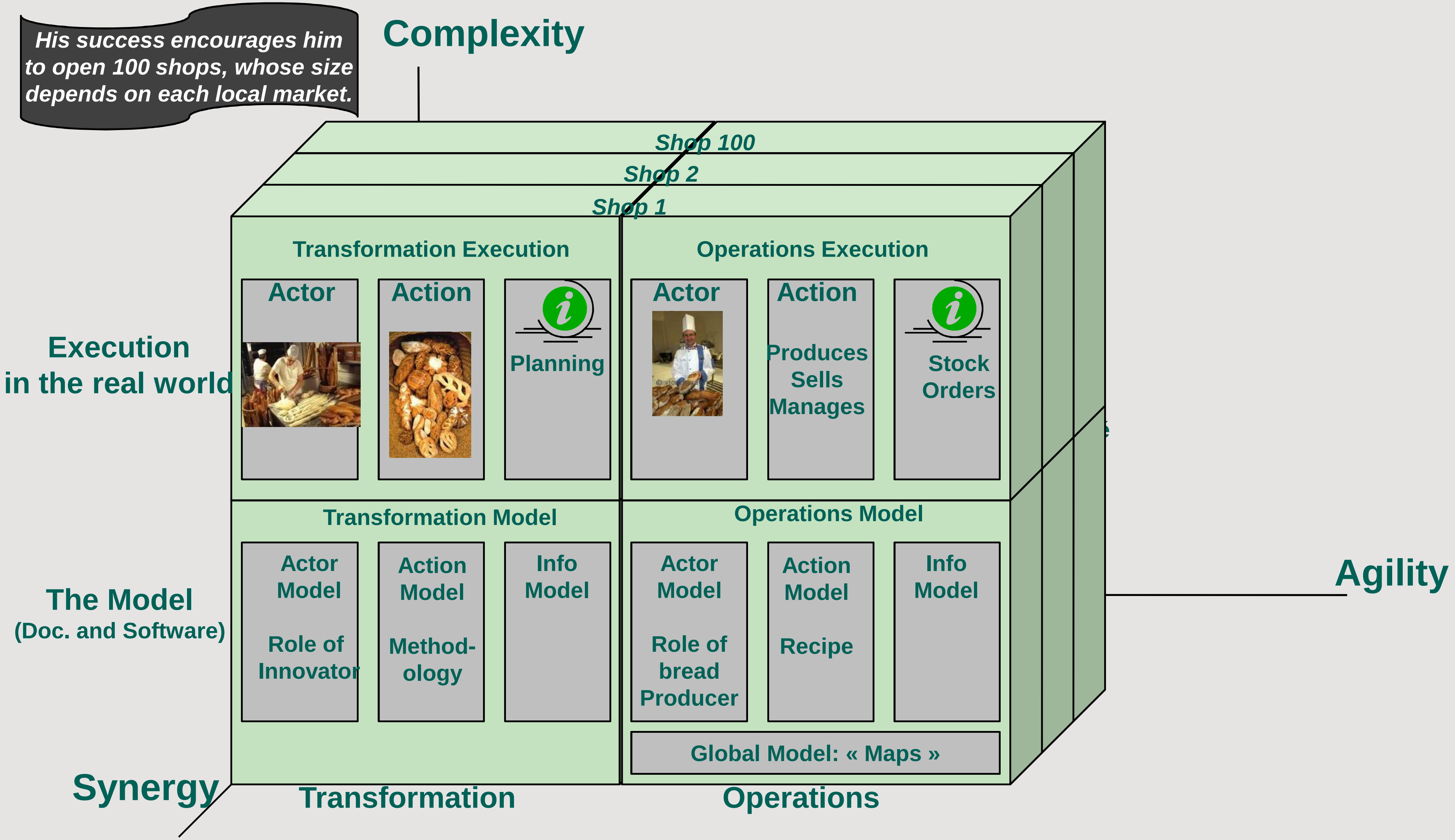
Should I chase them away
with a flame thrower?

You can’t complain about too much custom!
As you succeeded in modelling the functioning
of your bakery, why not open other shops?
Your customers will relocate
of their own accord.

Do so and you’ll be surprised with the result!

The Baker opens 100 shops

His success encourages him to open 100 shops, whose size depends on each local market.



Complexity

Shop 100

Shop 2

Shop 1

Execution
in the real world

Transformation Execution

Actor

Action

Planning

Operations Execution

Actor

Action

Produces
Sells
Manages

Stock
Orders

The Model
(Doc. and Software)

Transformation Model

Actor
Model

Role of
Innovator

Action
Model

Method-
ology

Info
Model

Operations Model

Actor
Model

Role of
bread
Producer

Action
Model

Recipe

Info
Model

Global Model: « Maps »

Agility

Synergy

Transformation

Operations

But the customers can’t find the same bread in every shop

Each outlet reinvents its own special bread: customers are more loyal to their shop than to the bakery chain.

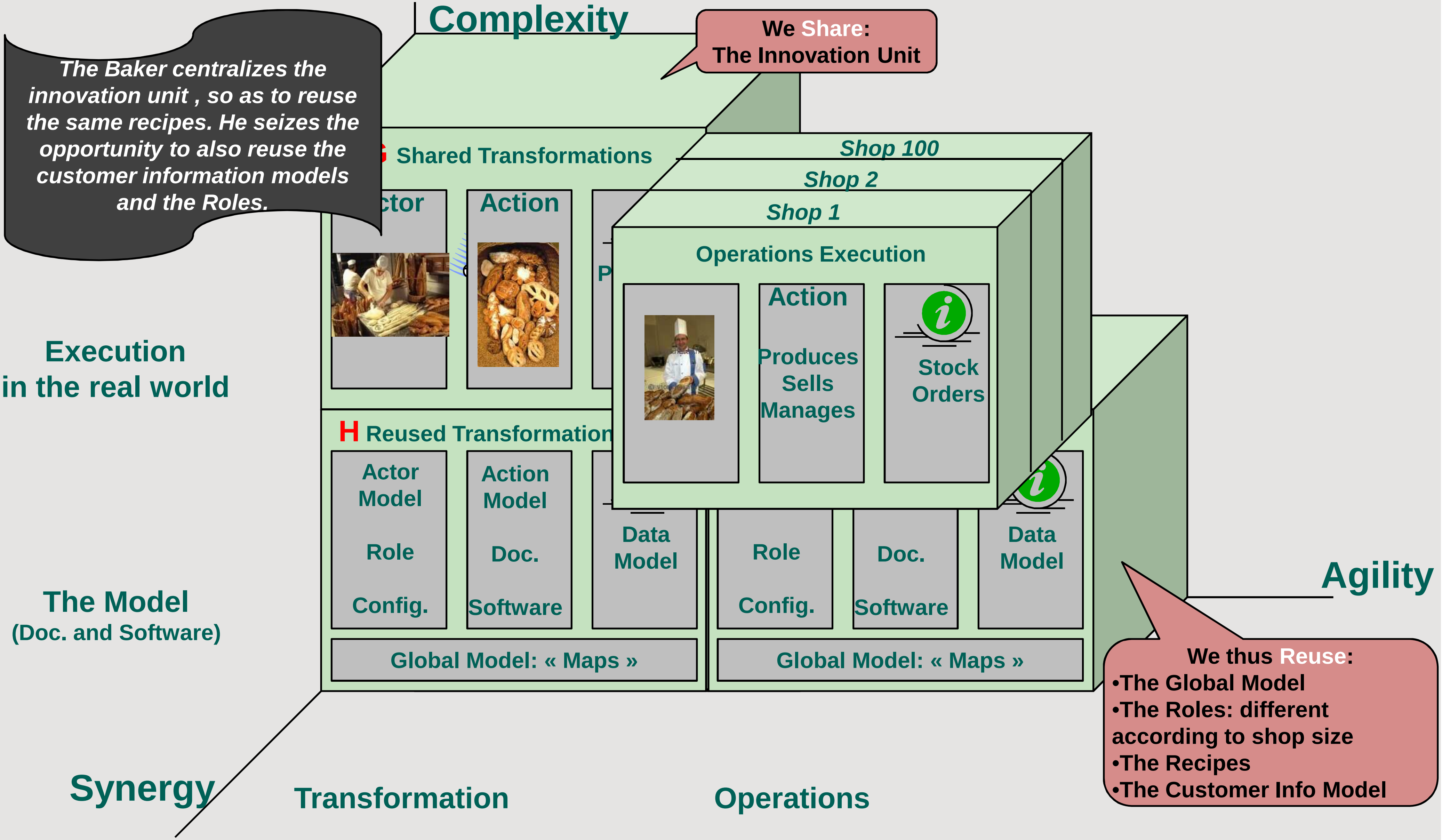
Oh Genie, good Genie!
I get letters from my customers who complain that I don’t supply them similar products from one shop to the next.

Should I centralize my bread Production?

Customers want to find the product they like as they move around. Don’t centralize bread Production, just centralize innovation, so as to have but a single recipe.

Do so and you’ll be surprised with the result!

The Baker centralizes the Innovation Unit:
All shops reuse the same recipes



The Baker centralizes the innovation unit , so as to reuse the same recipes. He seizes the opportunity to also reuse the customer information models and the Roles.

Complexity

We Share: The Innovation Unit

Shared Transformations

ctor

Action

P

Shop 100

Shop 2

Shop 1

Operations Execution

Action

Produces
Sells
Manages

Stock
Orders

Execution in the real world

H Reused Transformation

Actor Model

Role

Config.

Action Model

Doc.

Software

Data Model

Role

Config.

Doc.

Software

Data Model

Global Model: « Maps »

Global Model: « Maps »

The Model (Doc. and Software)

Agility

We thus Reuse:
- The Global Model
- The Roles: different according to shop size
- The Recipes
- The Customer Info Model

Synergy

Transformation

Operations

But the products are still different because the ingredients are different

However, the quality of the flour ordered by each is not homogenous: the recipes are the same but the ingredients are not.

Oh Genie, good Genie!
I'm still getting letters of complaint from my customers.

Should I refuse those that are unhappy access to my shops?

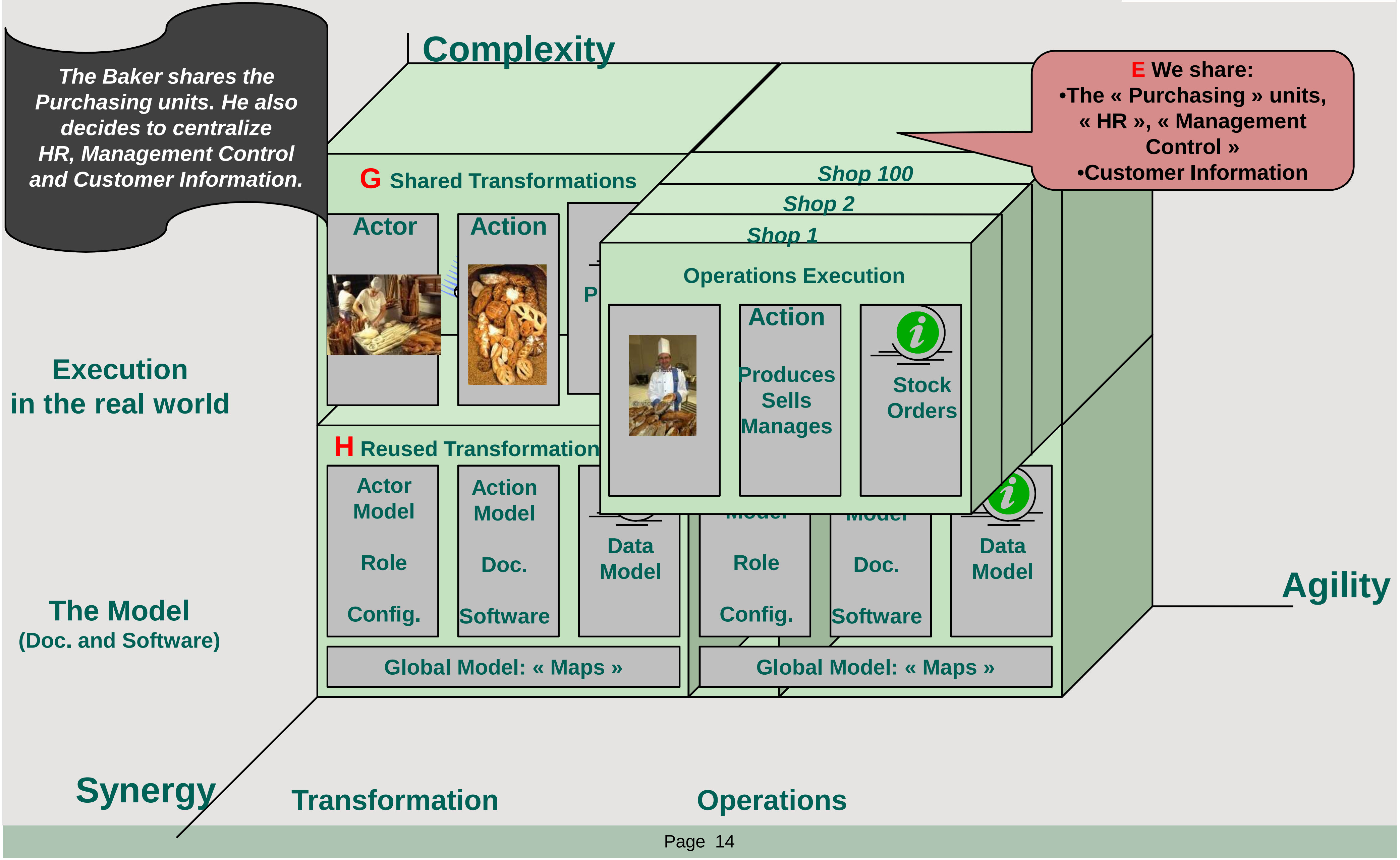
It's not enough to simply use the right recipe, the ingredients also have to be identical.
Why not centralize the « Purchasing » unit?

Do so and you'll be surprised with the result!

The Baker centralizes the support activities: HR, purchasing, management control...

The Baker shares the Purchasing units. He also decides to centralize HR, Management Control and Customer Information.

E We share:
- The « Purchasing » units, « HR », « Management Control »
- Customer Information



But managing the whole becomes complex

However, the administrative workload grows:
how to automate?

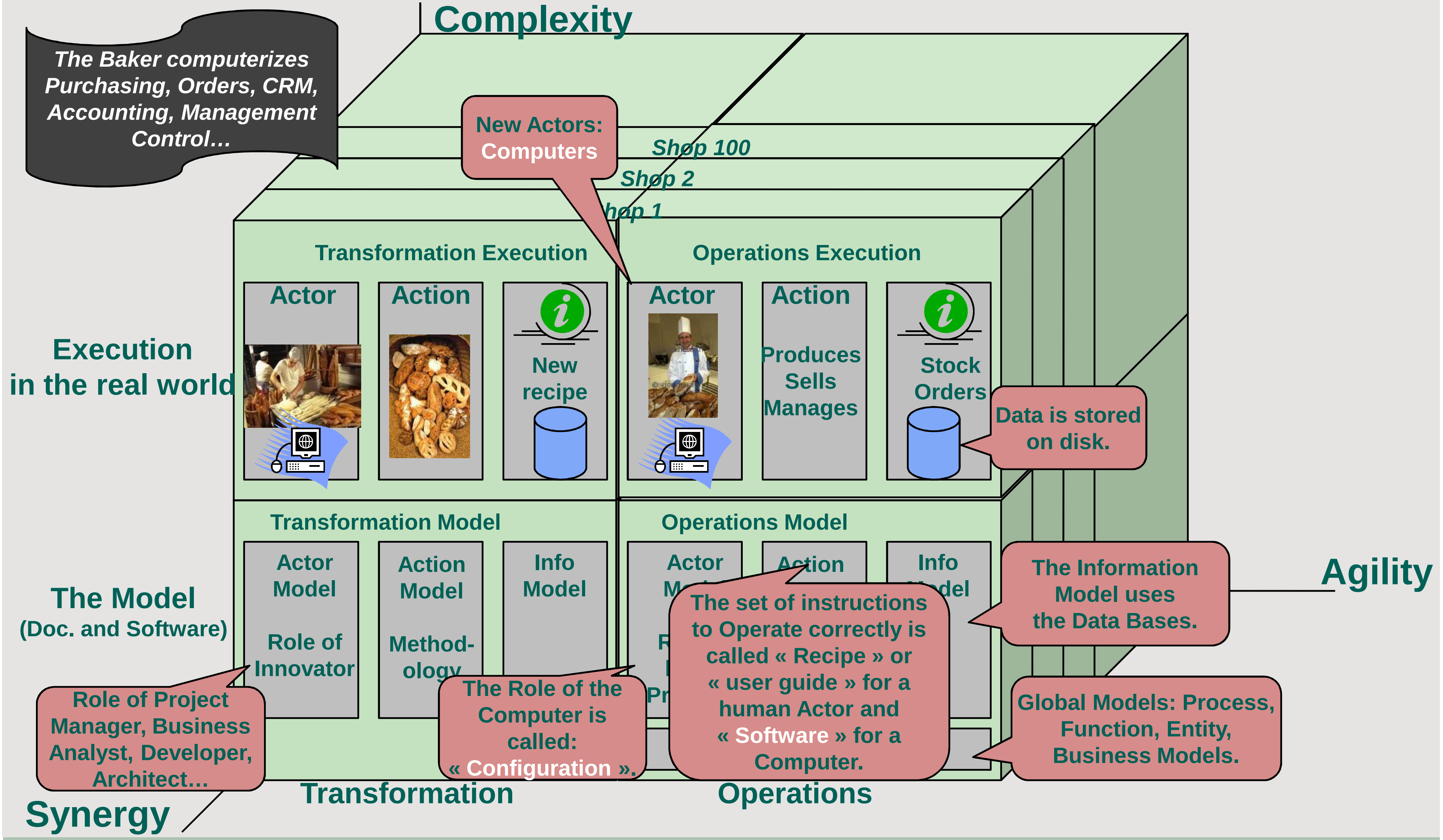
Oh Genie, good Genie!
I spend my time filling out papers and holding meetings.
How can I lighten my workload?

Should I shred all these documents?

The IT tool won't invent new bread for you, but it can make the functioning of your Enterprise less onerous and more reliable.
Why not avail of it?

Do so and you'll be surprised with the result!

Computerization: same representation!



The Baker computerizes Purchasing, Orders, CRM, Accounting, Management Control…

New Actors: Computers

Data is stored on disk.

The Information Model uses the Data Bases.

Global Models: Process, Function, Entity, Business Models.

The set of instructions to Operate correctly is called « Recipe » or « user guide » for a human Actor and « Software » for a Computer.

The Role of the Computer is called: « Configuration ».

Role of Project Manager, Business Analyst, Developer, Architect…

But the Solutions are heterogeneous

However, he has great difficulty in using all these heterogeneous Solutions.

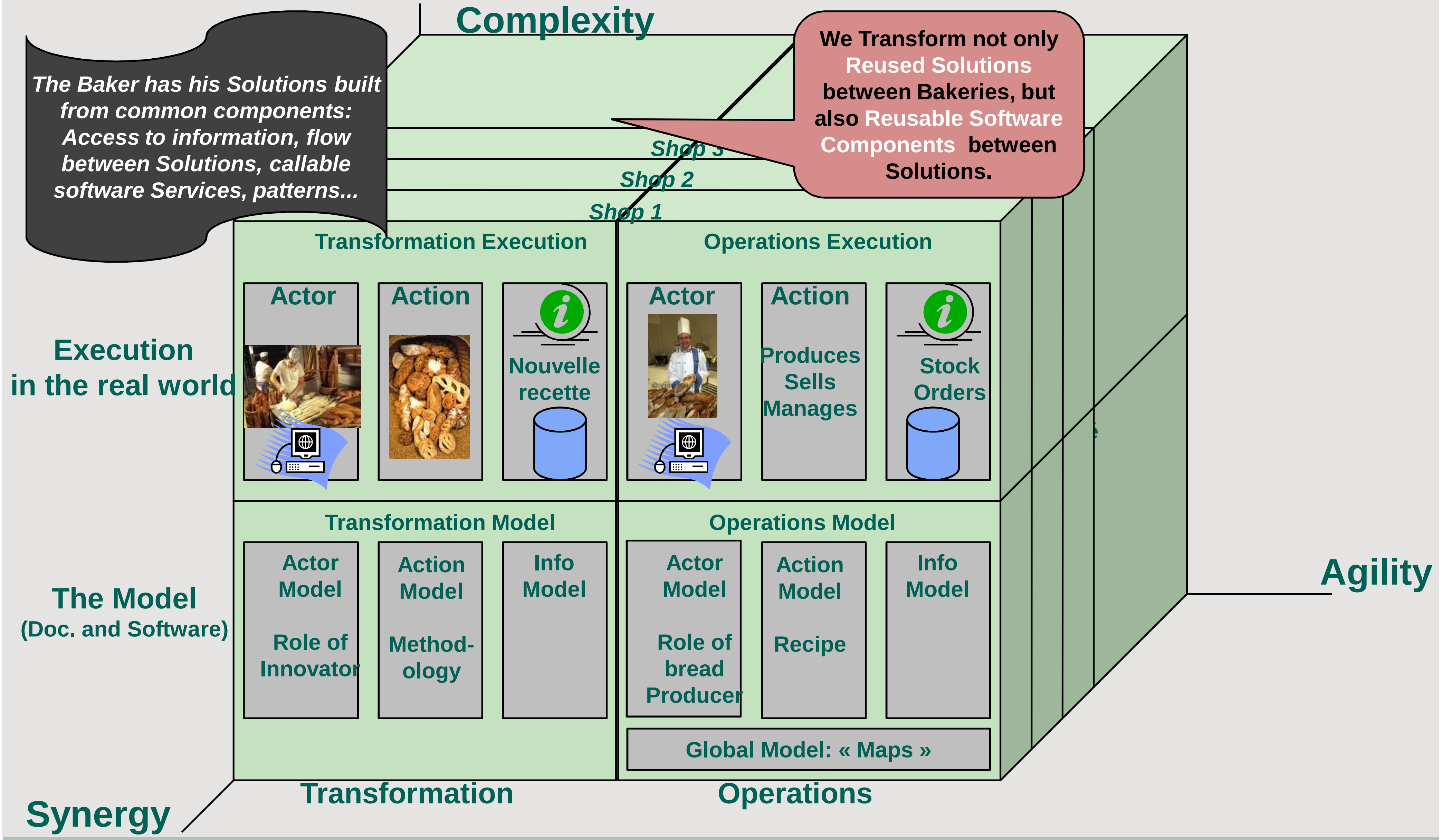
Oh Genie, good Genie!
I have to re-enter the same information, go from one ergonomics to another, remember 12 different passwords and the whole is weakened every time I ask for the slightest modification!

Should I have my entire IT staff shot?

You'd also have to shoot their replacements… for as long as you don't « Reuse »: just like you reuse the same pastry and the same cream to make your cream puffs and chocolate éclairs, you must use the same software components for your different Solutions.

Do so and you'll be surprised with the result!

Reuse



Complexity

The Baker has his Solutions built from common components: Access to information, flow between Solutions, callable software Services, patterns...

We Transform not only Reused Solutions between Bakeries, but also Reusable Software Components between Solutions.

Shop 3

Shop 2

Shop 1

Execution
in the real world

Transformation Execution

Actor

Action

Nouvelle recette

Operations Execution

Actor

Action

Produces
Sells
Manages

Stock
Orders

The Model
(Doc. and Software)

Transformation Model

Actor Model

Role of Innovator

Action Model

Method-ology

Info Model

Operations Model

Actor Model

Role of bread Producer

Action Model

Recipe

Info Model

Global Model: « Maps »

Transformation

Operations

Agility

Synergy

But Transformations are still too slow

or

*Everything is simpler,
all is more coherent,
but Transformation
is still too slow!*

*Oh Genie, good Genie!
I'd like much more agility from these incompetents in Project Management and IT:
Should I bomb the IT centre?*

You can carry out some Transformations by parametering, or the use of rule engines, or workflow engines...

Have you already asked your IT teams for this?

Do so and you'll be surprised with the result!

Unknowingly, the Baker has become an Entreprise Architect...

Sharing of Resources

Model

Actors

Transformation

Actions

Model Reuse

Information

*You’re a good Baker,
but do you realize that you’ve
also become an excellent
Enterprise Architect?*

The Baker’s 7 messages

1. **A simple Definition of Enterprise Architecture: the art of bringing together Actors, Actions and Information to make an Enterprise work.**

2. **It is not enough to Operate: we must also Transform!**

3. **A discipline that is accessible to all.**

4. **In particular, it must help resolve the 3 key challenges for Enterprises - how to:**
   - Master **Complexity** through Modelling
   - Favour **Agility by separating** Operations and Transformation
   - Guide **Synergy** by sharing Resources and by reusing Models

5. **Business and IT should not be antagonistic, but associated to build appropriate Solutions.**

6. **Agility is achieved if there is strong Reuse of Components and if parametering and rule engines are employed.**

7. **The approach is the same whether IT is used or not.**