

Use the Process!

Or how Entity Life Cycles can help define the data

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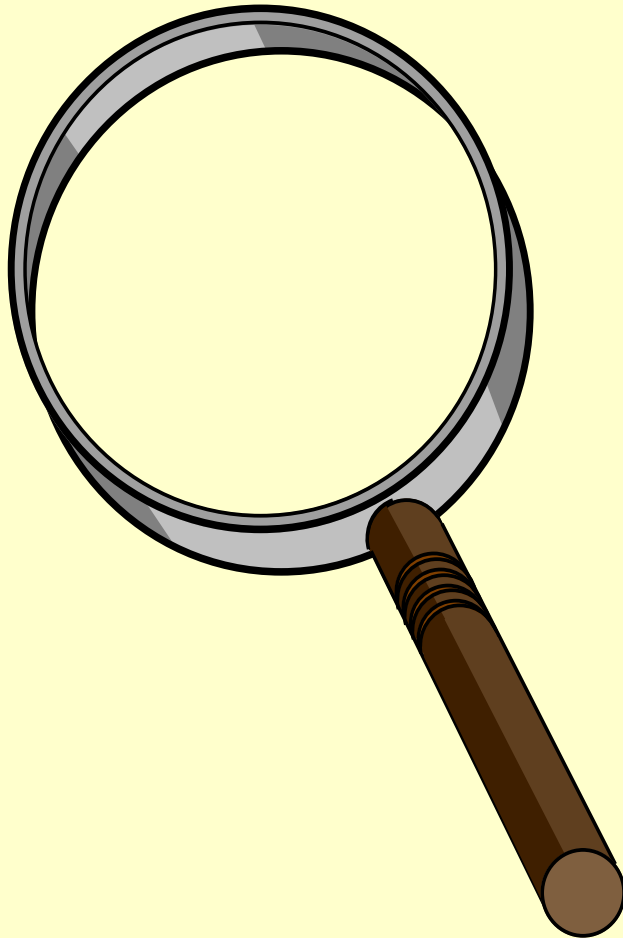
DAMA Symposium and Wilshire Meta-Data Conference

Orlando, 2005

Agenda

- Making friends and influencing people
- An Entity Life Cycle?
- A real example
- Useful things
- The scary stuff
- Summary
- Questions?

The situation...



What's going on?

- New application
- Major changes
- Documentation
- Corporate Data Map

You have to go and talk.

To *PEOPLE!*

Talking to people

- Entice them into a meeting
- Get between them and the door
- Smile, to win their trust
- Ask “So, tell me about your data”
- Watch their eyes glaze over and the look of panic appear on their faces
- Hear about the existing screens and reports

Alternatively...

- Go and see them (or entice them into a meeting room - but they may get nervous)
- Ask them about the things they know
- Start with processes
- Keep it simple
- Don't lecture!
- Respect their expertise

The Entity Life Cycle

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Develop an Entity Life Cycle

- Also called 'Entity Life History'
- Record what happens to the entity from first contact to deletion
- Show what processes (or applications) affect and use the entity
- Flowchart, state diagram, text, storyboard...

Every story needs...

- A beginning, a middle and an end
- Start with three questions:
 - How do we first encounter <thing>
 - What happens next?
 - How does it die?

Where does it fit?

- Links process and data
- Cross references with the Logical Data Model
- Feeds in to
 - CRUD Matrix
 - Data Flow Diagrams
- After the first one, the rest tend to overlap!

How long does it take?

It depends...

- 5 - 10 minutes
- 2 - 3 hours
- 6 interviews, up to an hour each

Example

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Example - Flight Booking

Based on recent experience:

- Quotation
- Booking
- Confirmation
- Ticketing
- Amendment
- Flight

Example - Flight Booking

QUOTATION

BOOKING

CONFIRMATION

TICKETING

AMENDMENT

FLIGHT

Example - Flight Booking

<u>QUOTATION</u>	<u>BOOKING</u>	<u>CONFIRMATION</u>	<u>TICKETING</u>	<u>AMENDMENT</u>	<u>FLIGHT</u>
Stage: 1	2	3	4	5	6

So far, so little?

- Look at each stage
- How do we distinguish between stages?
- What happens at each stage?

Example - Flight Booking

<u>QUOTATION</u>	<u>BOOKING</u>	<u>CONFIRMATION</u>	<u>TICKETING</u>	<u>AMENDMENT</u>	<u>FLIGHT</u>
Stage: 1	2	3	4	5	6
Request	Check availability	Passenger details	Ticket type	New details – new quotation?	Passenger list
Search and offer	Options?	Check list	Production	Reconfirmation	Check in
	Book	Payment	Delivery	New tickets?	Boarding
				Cost? Refund?	Baggage

Example - Flight Booking

<u>QUOTATION</u>	<u>BOOKING</u>	<u>CONFIRMATION</u>	<u>TICKETING</u>	<u>AMENDMENT</u>	<u>FLIGHT</u>
Stage: 1	2	3	4	5	6
Request: Type From/To Direct flights? Dates Class How many? Airline?	Check availability Options? Book	Passenger details Check: Passports Insurance Special requests Payment	Ticket type Production Delivery	New details – new quotation? Reconfirmation New tickets? Cost? Refund?	Passenger list Check in Boarding Baggage
Search and offer: - Airline? - Fare					

Look closer - Quotation

- Type of ticket - single, return, round-the-world...
- Direct flights only? What about multi-leg trips?
- From/To Airports - for every leg!
- Dates: Departure and arrival date and time
- Class: Outbound and inbound
- How many? - How many adults, children, infants
- Airline? Preferred, options?
- Fare - not fixed until booked!

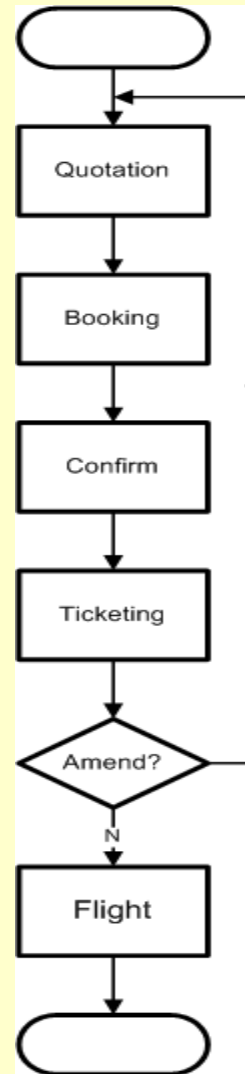
Look closer - Quotation

What do these terms mean?

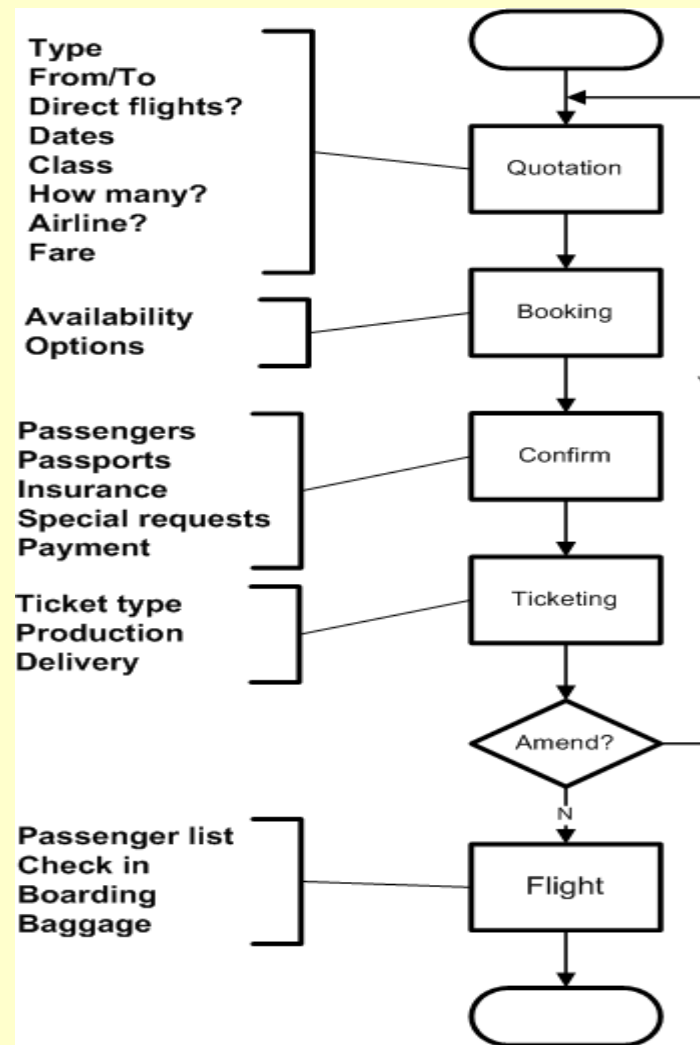
- Definitions
- Usage
- Examples
- Rules

All the usual suspects!

Turn it into a picture



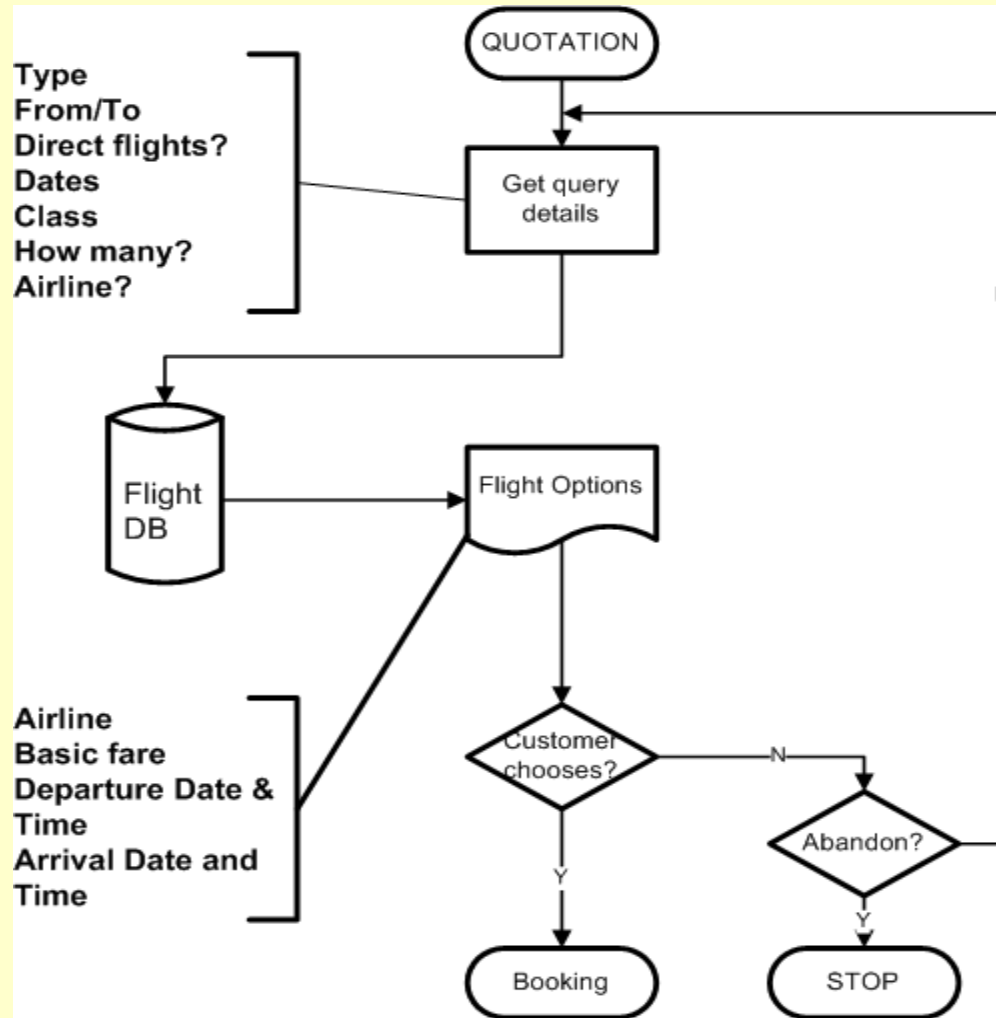
Turn it into a picture



Now it is safe to talk about data

- For each point on the diagram, ask:
 - “What do you need to know to do this?”
 - Write the answers on the diagram.
 - There will be duplication!

The bigger picture



And now what?

And now get normalised...

Remember

Encourage them to tell you everything they can think of, even if it seems (to them, or you) too trivial to care about.

Is that all there is?



Now it gets thrown away?

So now what?

Now, you have a set of scenarios, which are useful things for:

- Specifying the application
- Defining the process
- Testing the logical model
 - And the physical model
 - And the database design
- Testing the application
- Writing the user guide

More people!

Luckily, we don't do all this ourselves - we go and talk to the Business Analysts, System Designers, Testers, Technical Authors, DBAs...



Useful things

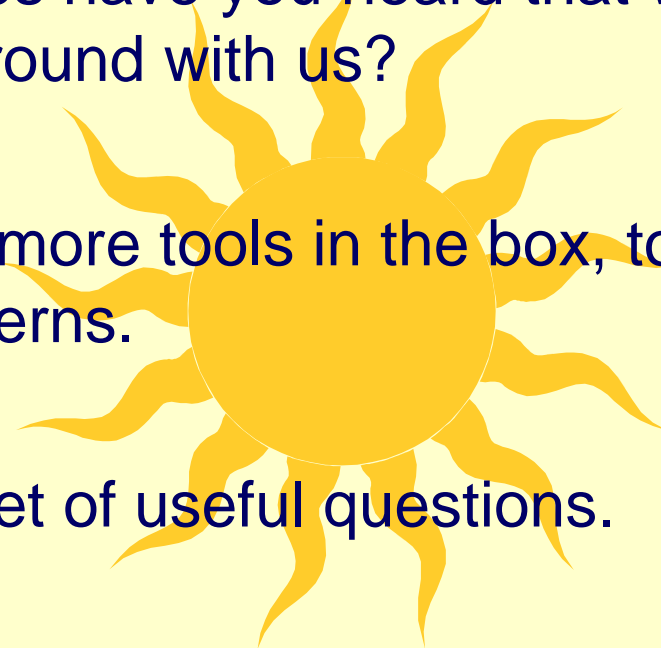
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It's not just about patterns

How many times have you heard that we all carry a set of patterns around with us?

We have a few more tools in the box, to help us work out what patterns.

We all have a set of useful questions.



Useful questions:

- How do you first encounter...
- What happens next?
- What are the stages?
- What can go wrong?
- What do you need to know here?
- What would make your life easier?
- Is there anything else?

How do you first encounter?



Find out about:

- Dataflows
- Interfaces
- External contacts
- More people

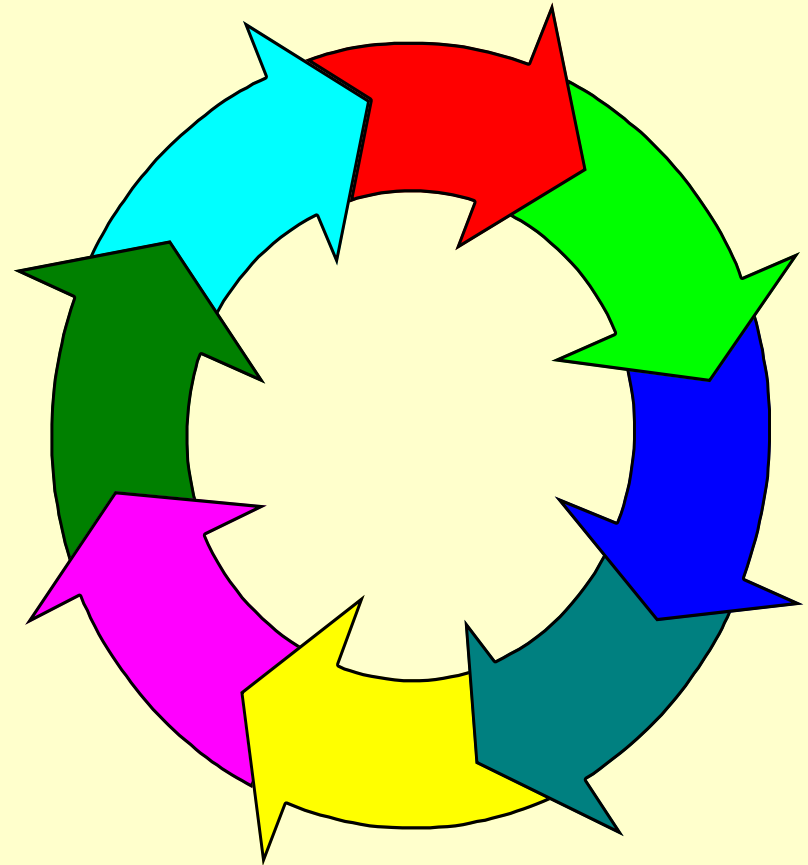
What happens next?

- Save this one for when they stop talking, or get way off the point.
- There is a good chance that they will be coming out with a mixture of processes, actions, candidate entities and attributes and 'local fixes'.
- Don't try to sort it out while they are talking - just record it all.

What are the stages?

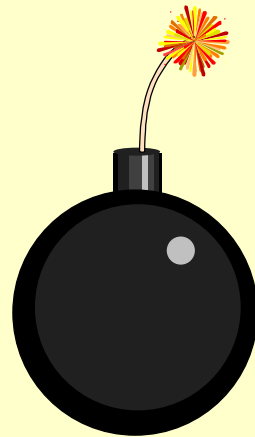
Now you sort it out and:

- Get the processes lined up.
- Get some of the data matched.
- Spot gaps.
- Number the stages. 1, 2, 2a, 2b, 3...



What can go wrong?

- Go through each stage.
- Identify the branches, loops and failures that can happen.
- What is the worst that can happen?



What do you need to know here?



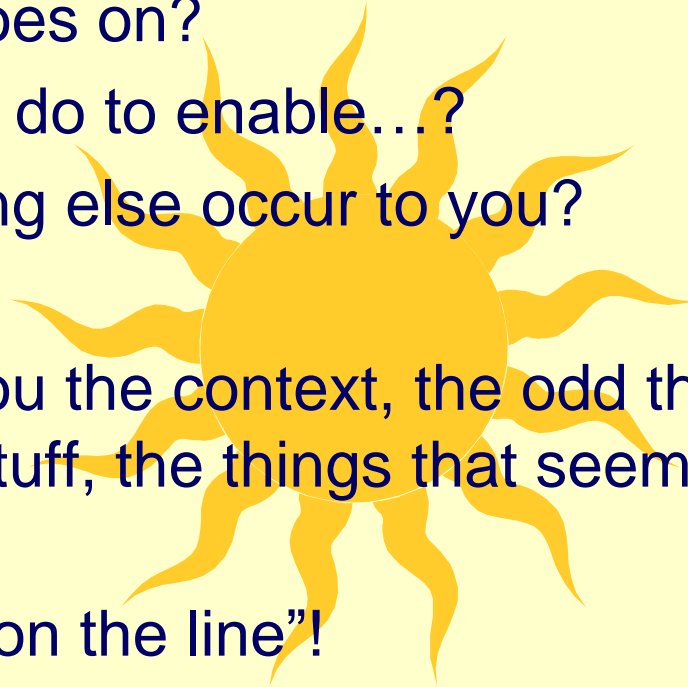
- Finally - data!
- Probably a mixture of candidate entities and attributes.
- A variation: 'What do you need to know about...'

What would make your life easier?

- Be careful - they might tell you!
- This one can get you away from hearing all about the existing system
- It can reveal the real requirements
 - or open up the politics
- This is where a single, determined person or group can hijack the whole project

Is there anything else?

- What else goes on?
- What do you do to enable...?
- Does anything else occur to you?
- This gives you the context, the odd thoughts, the occasional stuff, the things that seemed too trivial to mention.
- The “leaves on the line”!



Scary things

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Avoid the scary stuff

- No Data Management jargon.
- Same goes for DBAish.
- Remember that business people probably don't speak Java!

Avoid the scary stuff

Do you speak Accountant?



Words to avoid

1. Entity
2. Attribute
3. Relationship
4. Cardinality
5. Life History
6. Supertype (and Subtype)
7. Diagram
8. Model
9. Architecture
10. Object

The scariest words:

Trust me

Summary

- Listen, don't lecture
- Use whatever works
- Take time
- Get enough detail
- Words, pictures, colours
- Work together

Entity Life Cycles

Questions?

Contact Information

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