

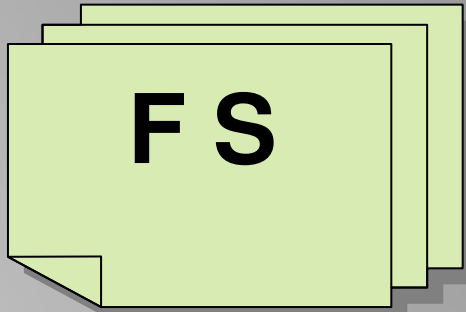
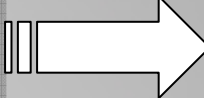
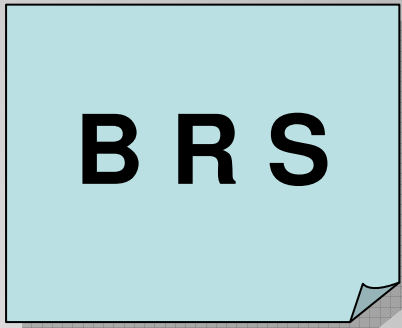
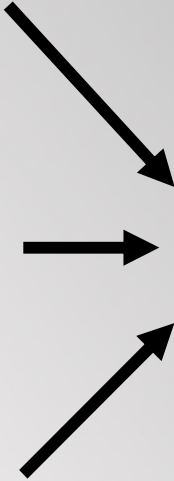
# **Dimensions of Change:** capturing the critical aspects of the proposal

Ann Smith MACS



# The Task

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Quality Assurance

Quality Assurance



# Learning Objectives

- Identify the critical aspects of business requirements that must be documented
- Describe steps for documenting the requirements
- Discuss how these requirements can be integrated into technical documentation after analysis



# Constraints

Communication

Content

Context



# Constraints on Communication

- Credibility of the parties
- Channels available to the parties
- Processing limitations
- Managing memory
- Viewpoint of the parties



# Credibility

- If trust and professional rapport are not built first, communication will be constrained.
- Predictability—whether of content, of word choice, of conclusion—will assist in building credibility



# Channels

- People are active
- Sensations outweigh abstract concepts
- Mostly, people use 2-dimensional vision
- The senses become habituated to constant input
- People conserve effort & energy.



# Processing

- $7 \pm 2$
- Sort or group first.
- Positives, (not negatives).
- Emotions





# Memory

- Procedural Memory
- Reference Memory
- Episodic Memory



# Viewpoint

- Frames of reference
- What does it mean for me?



# Constraints on Content

- It is not possible to synchronise with externalities.
- For the change project, this means anything outside the scope boundary.
- **Three** requirements for a graphical modelling tool flow from this.



# Constraints on Content

- The scope boundary must be clear
- Persistent datastores are required to reconstruct the unsynchronised transactions



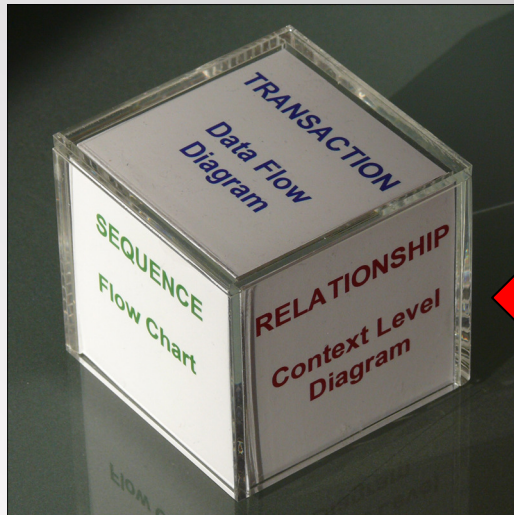
# Constraints on Content

- The scope boundary must be clear
- Persistent datastores are required to reconstruct the unsynchronised transactions
- All synchronised and unsynchronised activities within the scope must be documented



# The Relationship Dimension

- To clarify the scope boundary, the tool is the Context Level Diagram



# Context Level Diagram

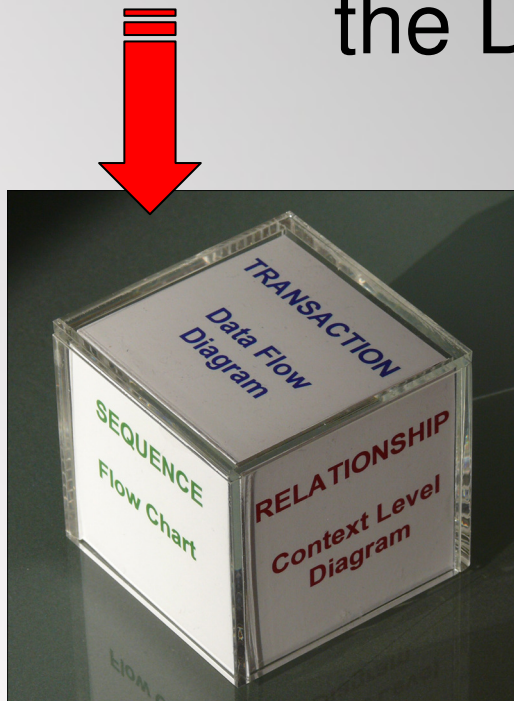
- Shows the key interfaces
- Documents the scope of the project in system terms
- Identifies the boundary of the function and data under analysis
- Provides a single agreed base from which to undertake further analysis





# The Transaction Dimension

- To show persistent information, the tool is the Dataflow Diagram





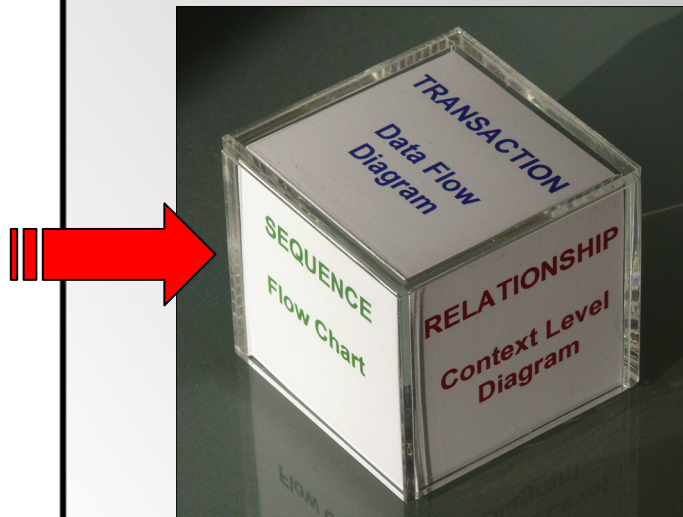
# Dataflow Diagram

- Shows movement in Space
- Dissects the activity into business-meaningful “chunks”
- Links these un-synchronised processes
- Identifies the persistent stores
- Documents the essential information needs to be met



# The Sequence Dimension

- To show synchronised activity, the tool is the Flow Chart



# Flow Chart

- Shows sequence in Time
- Documents the synchronised steps within each asynchronous process
- Clarifies the business decision points and their associated information needs



# Different viewpoints

- Business Analysis has often focused on these procedural dimensions...

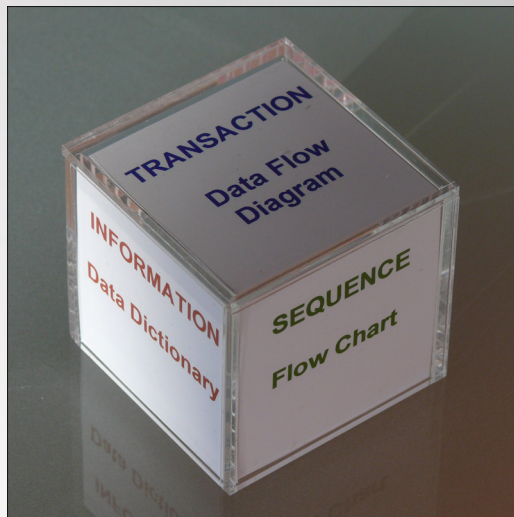


*Flip the cube, and a different viewpoint emerges*



# Operational interests

- ...Operational staff have a different focus,



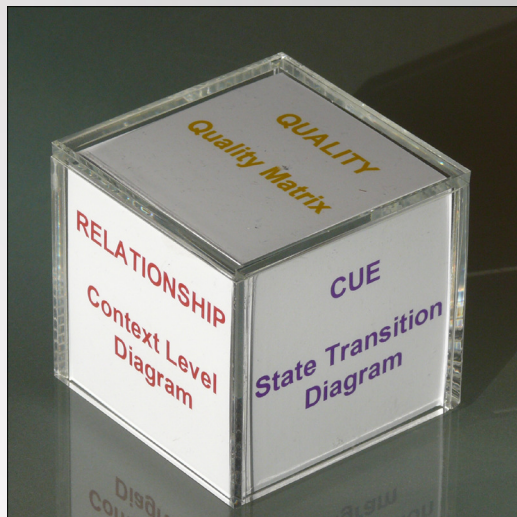
*Flip the cube, and again  
a different viewpoint  
emerges*





# Corporate interests

- ...Sponsors and management have a perspective of their own



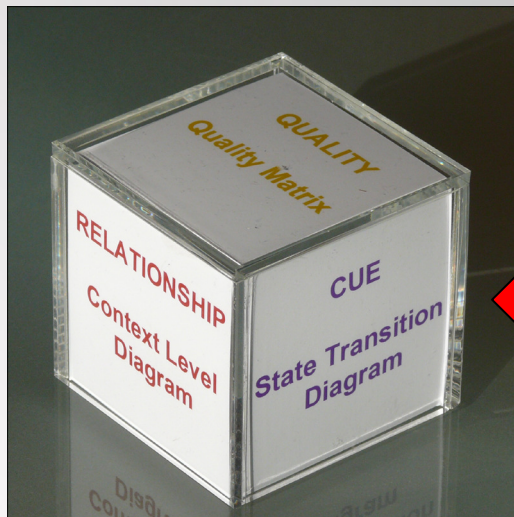
*We need to document  
WHO & HOW WELL  
then*

*WHEN, WHERE,  
WHAT & HOW*



# The Cues Dimension

- To document the business cues, the tool is the State Transition Diagram



# State Transition Diagram

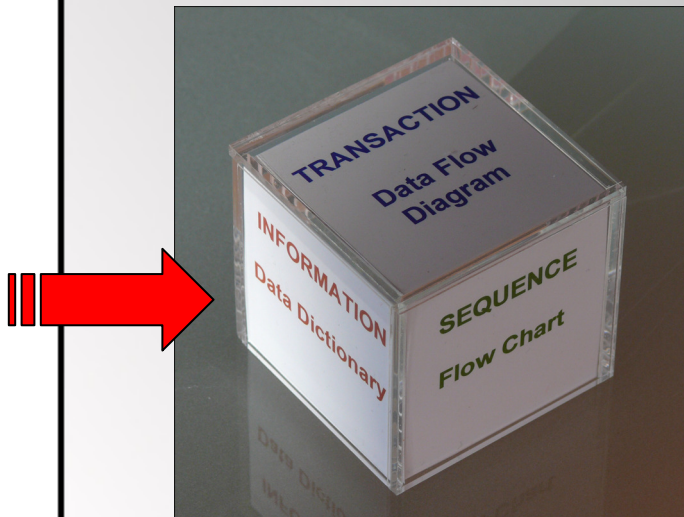
- Shows the events that drive the activity
- Formalises the controls on each asynchronous process
- Clarifies the business cues, customer calls, regulatory and reporting requirements, interruptions, conditions, and triggers that constrain the activity





# The Information Dimension

- To document information needs, the tool is the Data Dictionary



# Data Dictionary

- Shows the information needed to drive the business decisions
- Documents the language of the business
- Defines the attributes of every store, whether:
  - An internal representation of an external reality, or
  - A persistent record of a transaction



# Constraints from Context

- Not implementation-dependent
- Supports re-use
- Focuses effort on the key issue: WHO will be able to do WHAT, WHEN & WHERE differently after the project



# Getting Started

- Dissect the business activity on clearly identified dimensions
- Define in elements of "black or white"
- Document with non-textual modeling tools
- Decompose into smaller elements if there are more than ten items
- Cross-reference the dimensions



# Quality Assurance

Little

&

Often



# Conclusion

- Content is what matters: maximise time spent communicating with stakeholders
- Formatting and presenting is important only in achieving transfer of content: minimise time spent alone drawing.
- The big gains in efficiency will come from improving communication skills & tools, not drawing tools.



# Conclusion

For analysing and documenting the possibilities of a change project, pick a simple tool set that:

- Documents all the relevant elements without ambiguity, and
- Interferes as little as possible with stakeholder communication.



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