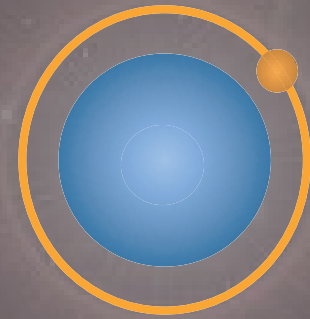
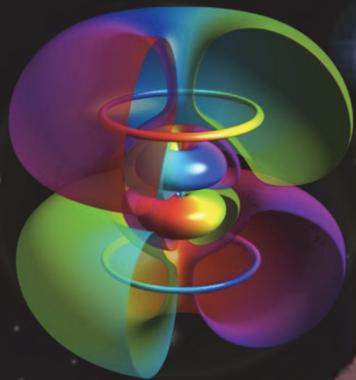
The background is a vibrant digital illustration of outer space. On the left, a large, textured planet in shades of orange and red dominates the upper half. In the upper right, a bright sun with a white core and a glowing orange ring is visible. Below the sun, a smaller blue planet is partially obscured by a black, irregular shape that resembles a black hole or a deep space anomaly. The bottom of the image shows the curved horizon of a blue planet with white cloud patterns. The overall scene is set against a dark, star-filled background.

Braving the New World

Managing Information Assets in Cyberspace

Kenneth Thibodeau, Director
Center for Advanced Systems & Technology
National Archives & Records Administration
U.S.

Knowledge Space for Managing Records



Knowledge Space

- Datum
 - An element of information that identifies or characterizes a thing
- Information
 - A regular correspondence between or among things
- Knowledge
 - Human awareness of information
 - May extend to understanding
 - *May be implicit or explicit*
- “*Perspective*”
 - A framework in which data, information and knowledge are construed



**Perspectives on
records &
records management**

**Key
Themes**

**What difference does it
make when records are
in digital form?**

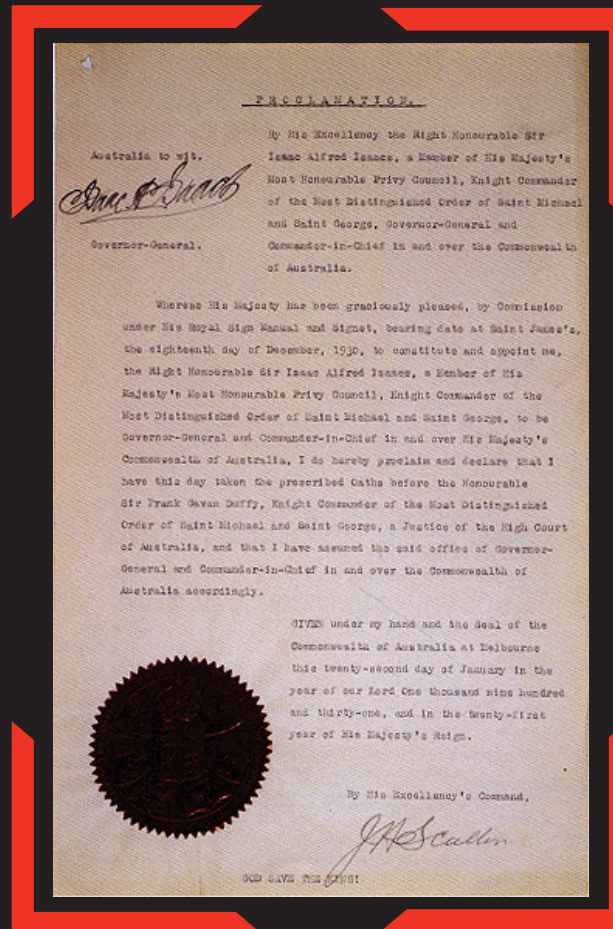


Perspectives on Records and Records Management

Theme♪



Prevalent Notion of a Record



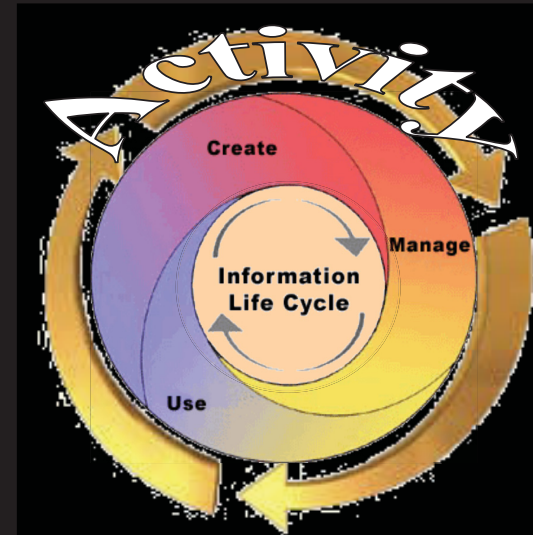


Traditional Record Keeping





Perspectives on Records



Normative

- “Information created, received, and maintained as evidence and information by an organisation or person, in pursuance of legal obligations or in the transaction of business.”

• ISO 15489

Organic

- “An information object that an actor produces or acquires in its activity and keeps on the belief that the object is likely to have value to the actor in the future.”

❖ K. Thibodeau

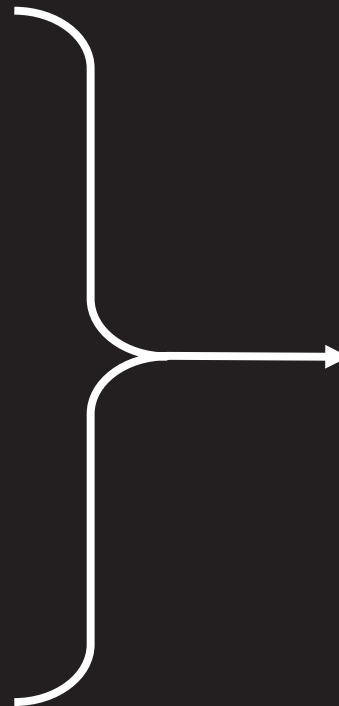


Normative Perspective on the Function of a Record

Action

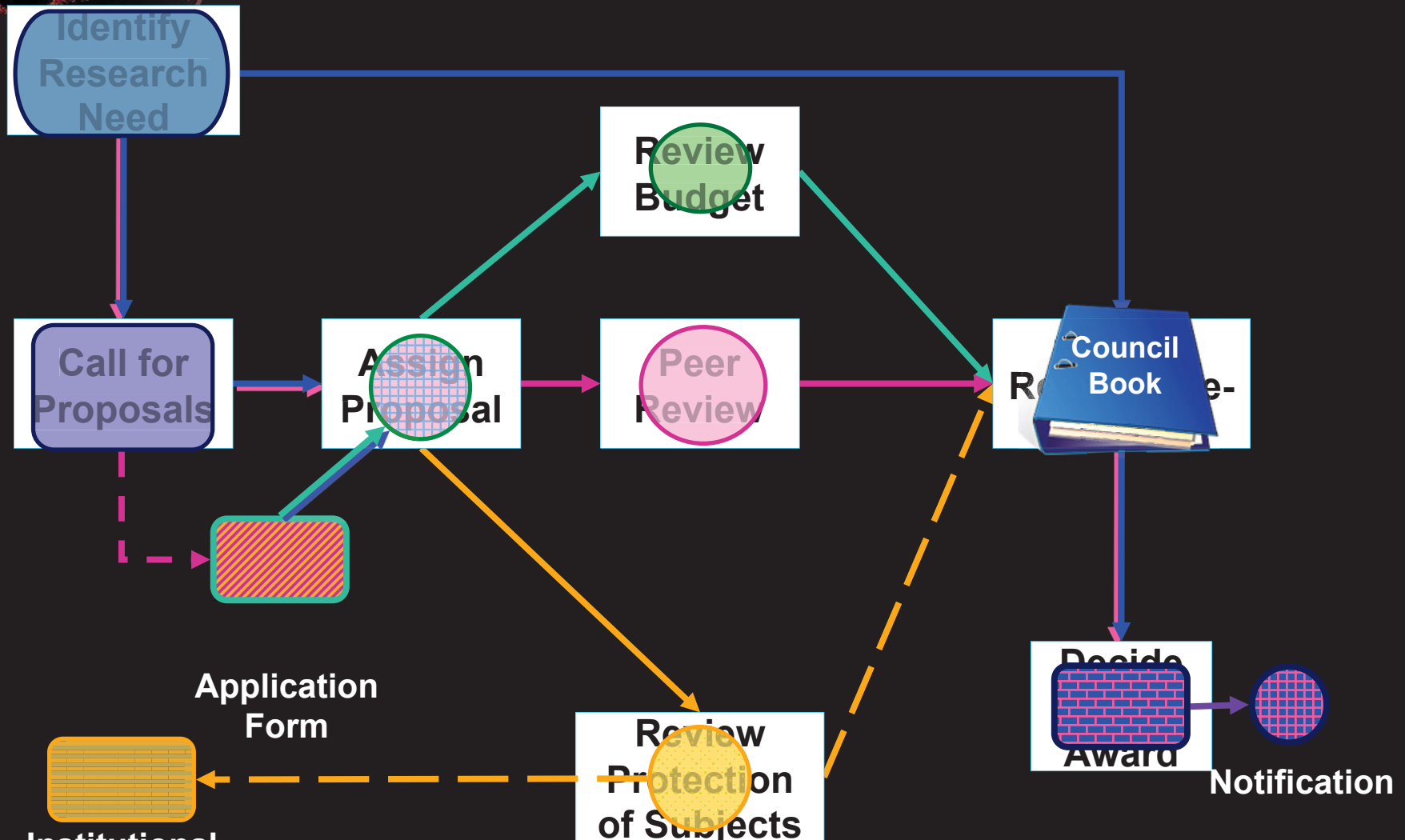
Event

State of Affairs



Record as Evidence

Organic Perspective on the Functions of Records



Processing of Grant Application for Biomedical Research



Normative v. Organic Records Management

- Static orientation towards the past
- Emphasis on evidence as if absolute
 - Subsequent use as evidence may be independent of the purpose for which the record was kept.
- Focus on conformance
 - Does it satisfy criteria for “recordness?”

- Action Oriented
 - Instrument or byproduct of activity
- Emphasis on actor’s operational needs
 - What do I know now that I will need to know in the future?
- Organic value proposition
 - How can you maximize its value to the record creator?



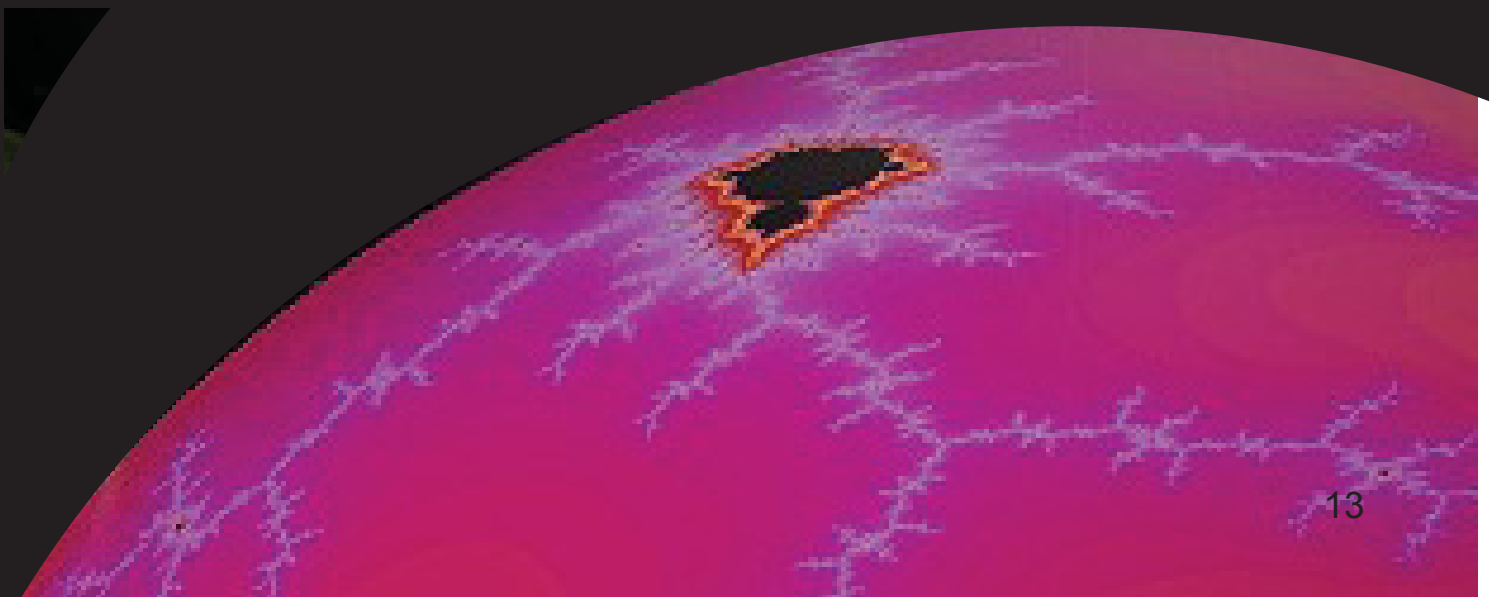
Best Evidence?



Theme 2

***What difference does it make
if records are in digital form?***

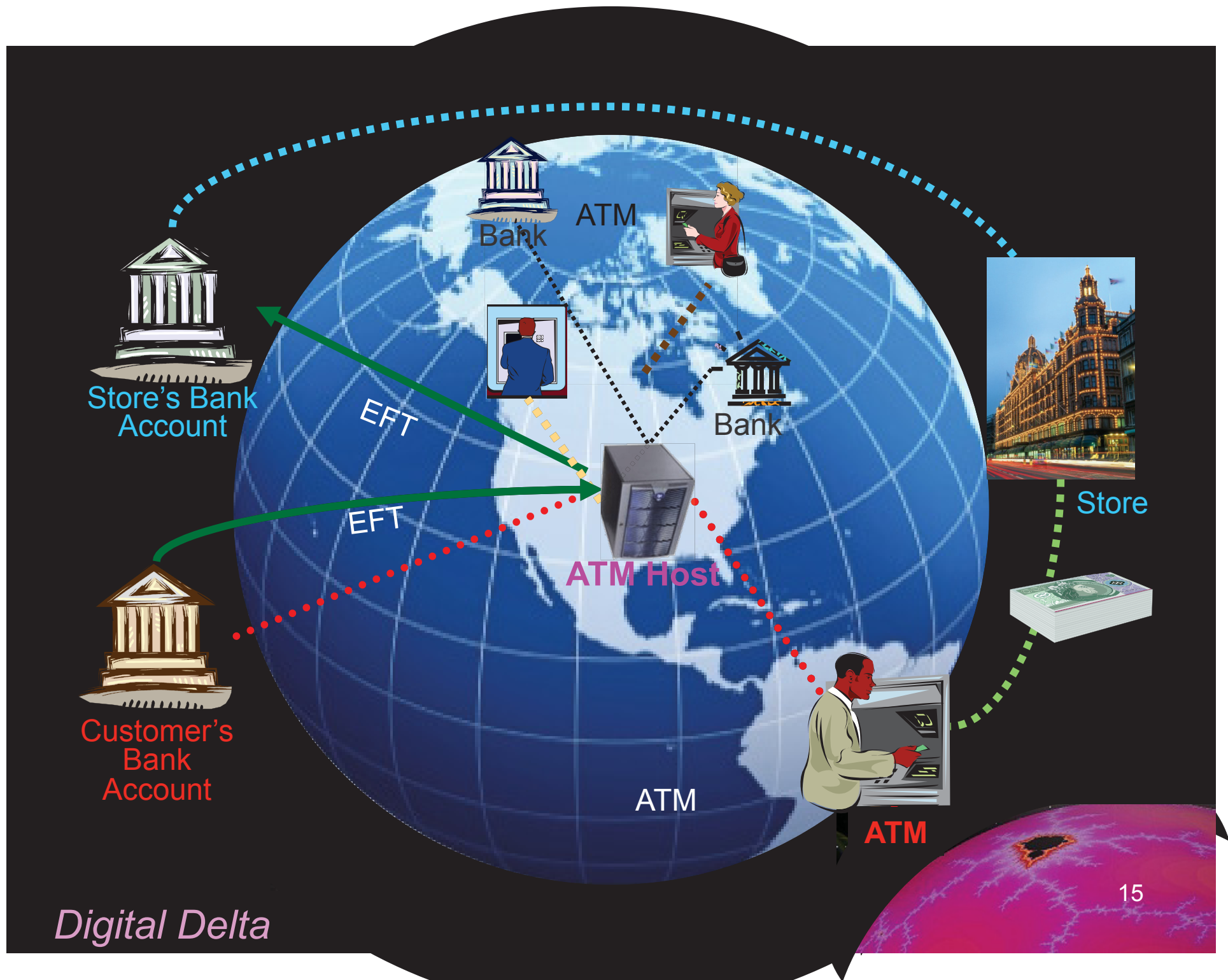
The Digital Delta



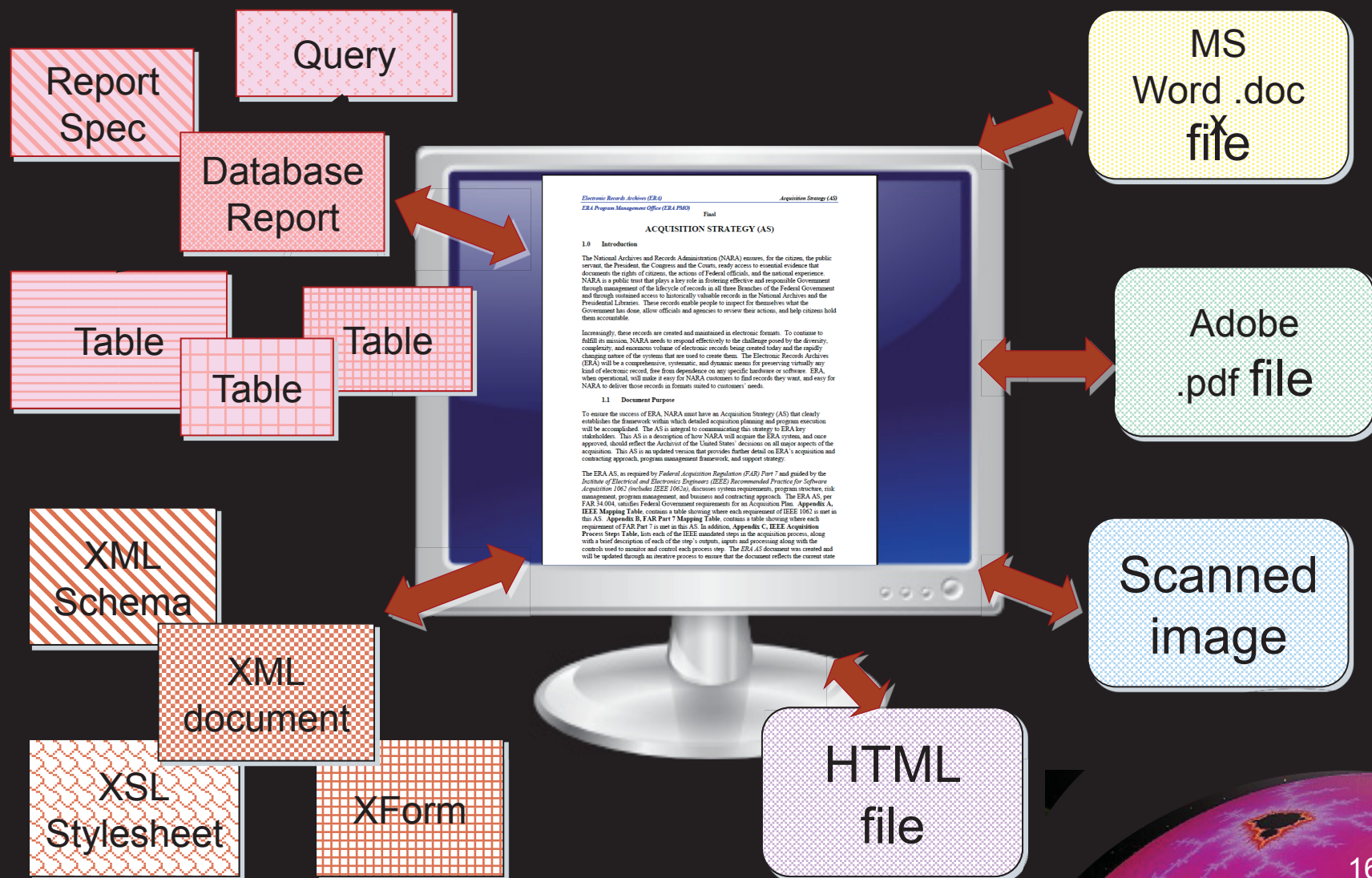
Electronic Records Are Different

Many of the most common types of electronic records are ones that no one expects to see again in the forms in which they were created.

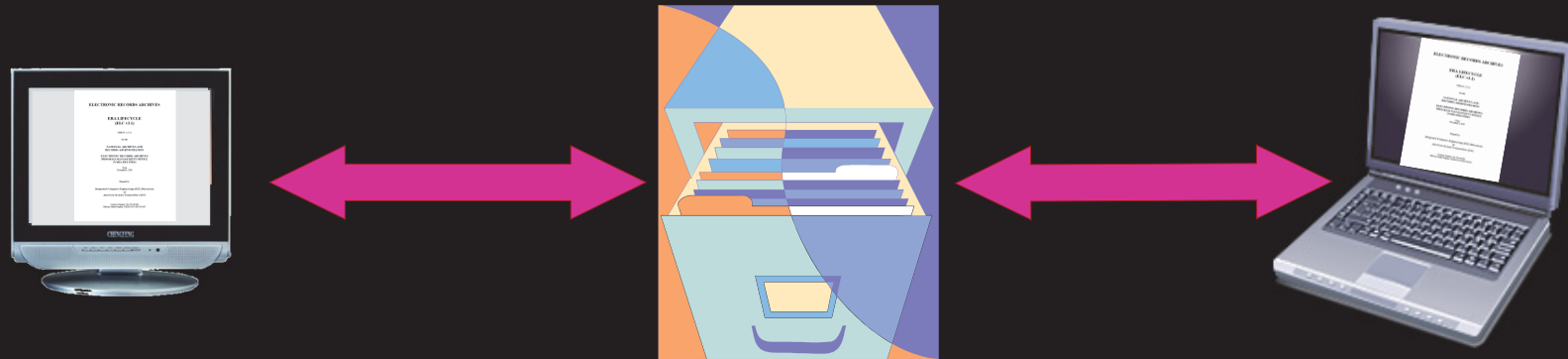
Name one type.



Record: Representation v. Encoding

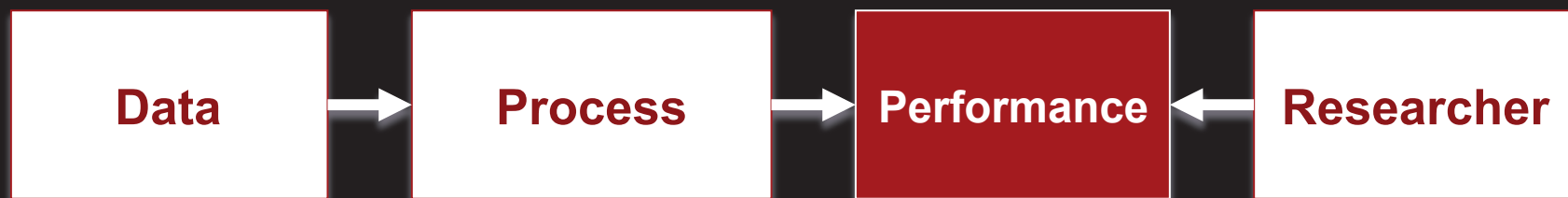


Virtual Filing System for Electronic Records



- An electronic record keeping system is not simply a digital space where records may be stored and retrieved.
- Keeping electronic records requires storage, AND
 - Processing from display format to storage format and back.
 - Processing to organize and manage the records
 - Transformation in physical inscription on media
 - Probable transformation in how the data are encoded.

Australian Performance Model of 'Electronic Record'



“digital records are fundamentally performances and not objects”

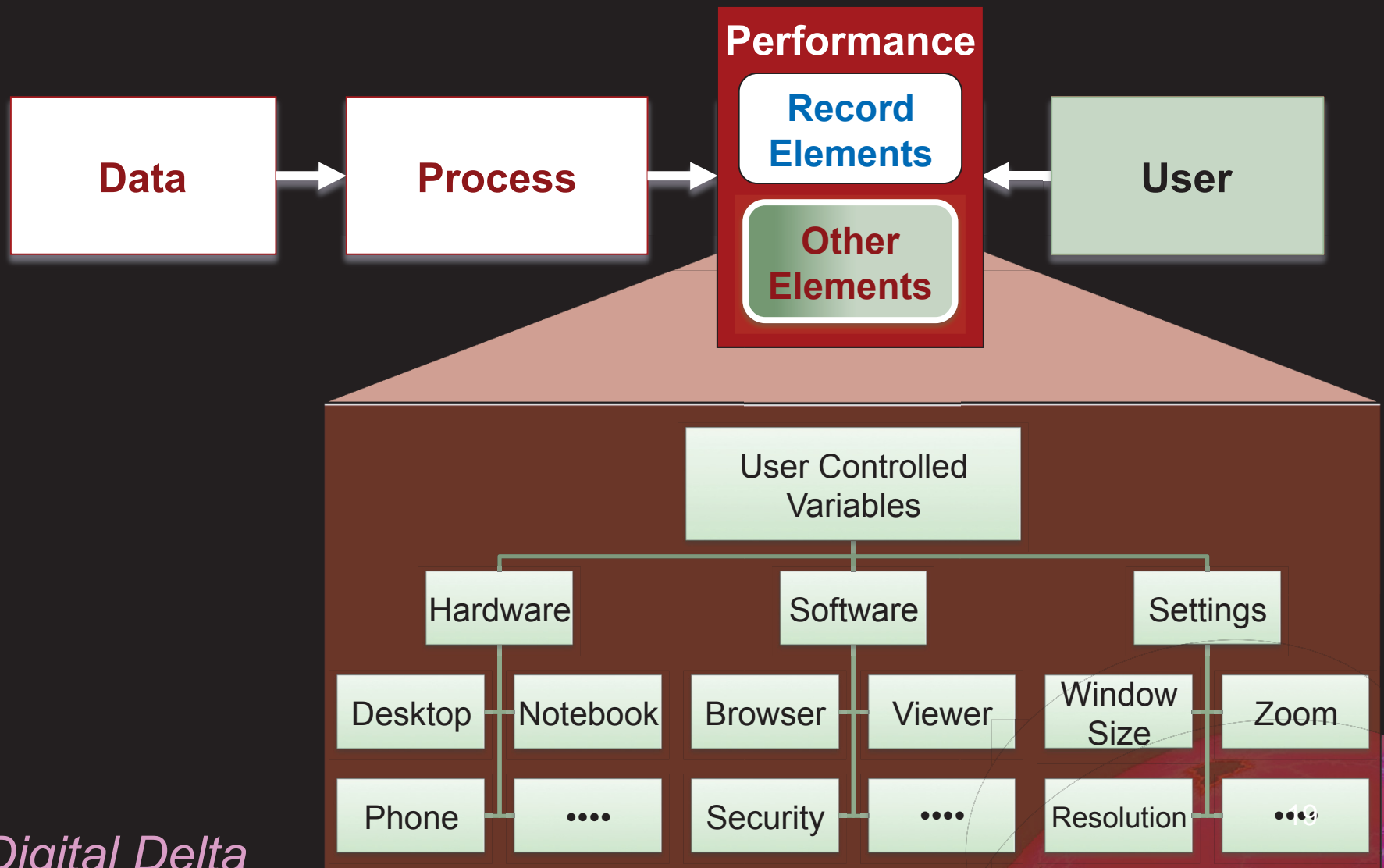
i.e., what is presented to a user is not simply something retrieved from a record keeping system, but the result of processing stored data.

Performance Model – Source and Process Components

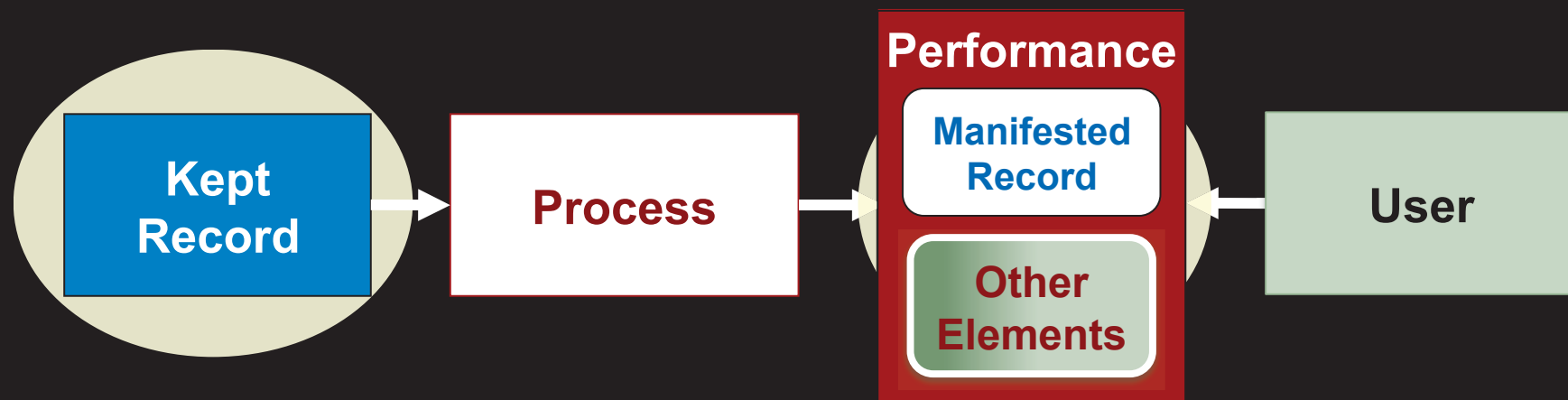
Helen Heslop, Simon Davis, Andrew Wilson. An Approach to the Preservation of Digital Records. *National Archives of Australia*.
December 2002

Digital Delta

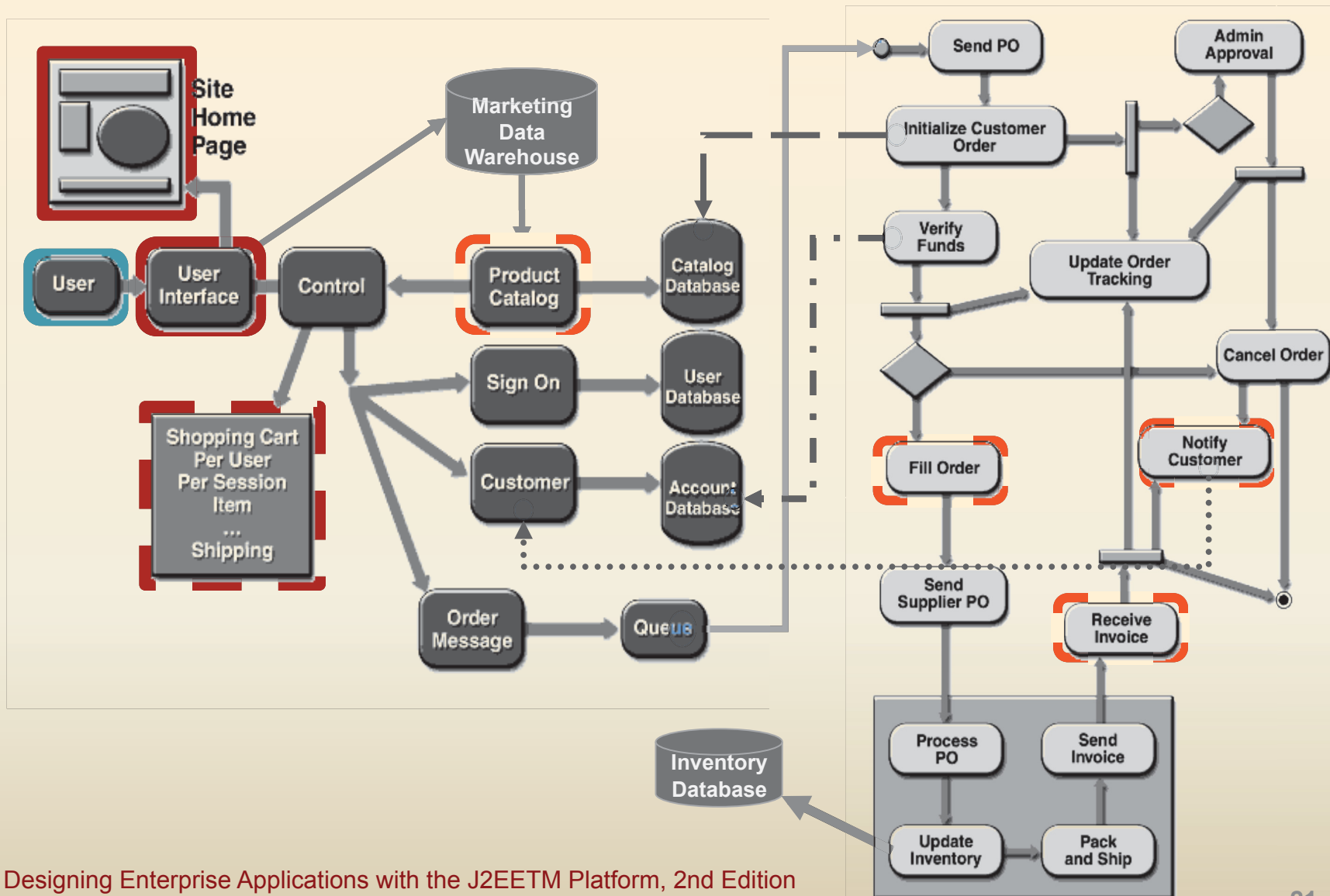
Modified Performance Model of 'Electronic Record'



Duranti-Thibodeau Model of 'Electronic Record'



Information Assets in an Online Sales Application



Online Sales Application Performance

Amazon.com: Online Shopping for Electronics, Apparel, Computers, Books, DVDs & more - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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Trade-In Store
Selling on Amazon List items for free and sell to millions.

Features & Services
+ Selling with Amazon
+ Amazon Exclusives
+ Partner Services
+ For Businesses
+ For Developers

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Bioshock 2 for Xbox 360

Panasonic VIERA S1 Series TC-L32S1 32..."
\$799.95 \$439.95

FLO TV Personal Television PTV 350
\$249.99 \$199.99

God of War III for PLAYSTATION 3
\$59.99 \$56.99

Online Sales Application Performance

Amazon.com Shopping Cart - Microsoft Internet Explorer

Amazon.com: The Stuff of Thought: Language as a Window into Human Na...

File Edit View History Bookmarks Tools Help

http://www.amazon.com/Stuff-Thought-Language-Wi

Comcast Search

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NEW YORK TIMES BESTSELLER

STEVEN PINKER

THE STUFF OF THOUGHT

LANGUAGE AS A WINDOW INTO HUMAN NATURE

by [Steven Pinker](#) (Author) "On September 11, 2001, at 8:46 A.M., a hijacked airliner crashed into the north tower of the World Trade Center in New York..." ([more](#))

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Amazon.com - Order 105-6161334-1073052

Order Placed: December 4, 2007
Amazon.com order number 105-6161334-1073052
Order Status: Shipped

Shipping estimate: February 26, 2008
1 package via USPS

Shipping Address: Kenneth Thibodeau, 9211 Wilson Lane, Bethesda, MD 20814, United States

Item Ordered: 1 of 1: Stuff of Thought (Paperback)

Price: \$11.95

Shipping & Handling: \$3.99

Total Subtotal: \$15.94

Total before Tax: \$15.94

Tax: \$0.00

Total for this shipment: \$15.94

Shipping estimate: December 16, 2007
1 package via USPS

Shipping Address: 1 of 1: Stuff of Thought (Paperback)

Price: \$11.95

Shipping & Handling: \$3.99

Total Subtotal: \$15.94

Total before Tax: \$15.94

Tax: \$0.00

Total for this shipment: \$15.94

Payment Information

Payment method: Amazon.com Gift Card

Shipping Address: Kenneth Thibodeau, 9211 Wilson Lane, Bethesda, MD 20814, United States

Grand Total: \$29.31

Vendor Views

Customer Account Overview

Contacts Employees Unfilled External Order Req More

Cust ID	Account #	Title	First Name	Last Name	Company	City	Phone	Ext.	Cell Phone	Fax	Email
1	10291001	Shipping Rec	STELLA	ROBERTS	PHILmonty						
2	10291002		Acacia	Jacobs	MO O'Brien Inc.		(999) 999-9999	3367			
3	10291003		Acacia	Sanz	BC Carr Inc.						
4	10291004		Acacia	Seoular	CB Bowling Inc.						
5	10291005		Acacia	Garbaldi	SL Luma Inc.						
6	10291006		Acacia	Garbaldi	SL Luma Inc.						
7	10291007		Acacia	Garbaldi	SL Luma Inc.						
8	10291008		Acacia	Garbaldi	SL Luma Inc.						
9	10291009		Acacia	Garbaldi	SL Luma Inc.						
10	10291010		Acacia	Garbaldi	SL Luma Inc.						
11	10291011		Acacia	Garbaldi	SL Luma Inc.						
12	10291012		Acacia	Garbaldi	SL Luma Inc.						
13	10291013		Acacia	Garbaldi	SL Luma Inc.						
14	10291014		Acacia	Garbaldi	SL Luma Inc.						
15	10291015		Acacia	Garbaldi	SL Luma Inc.						

Payment Details

PHILmonty

Order Open for Update

ID	Item	Product Name	Serial	Unit \$	Cur \$	Discontinued Discount %
10	40	GC-8178 MODERN LAPTOP	5703648	\$89.87	\$89.87	No 0.00%

Order Date: 12/25/2007 09:27 AM
Shipped Date: 03/07/2008
Req. Date: 03/07/2008

Order Totals

Sub Total	\$89.87
Sales Tax	\$1.34
Discount	\$0.00
Handling Charge	\$0.00
Freight Charge	\$0.10
Order Total	\$91.31
Total Weight	4

Ship this Order | Print Shipping Invoice

Shipping Address Information

America O Callaghan with RN Hulce Inc

123 R. St.

95010

CA

888-555-3434

anglin.net

Online Sales System

Manifested Record Types

Performance

Manifested Record

Other

In Process Record



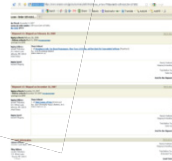
- Record created over more than one user session, often involving more than one action or transaction. Open to additional data on subsequent actions
- *Example: Account*

Generated Record



- New Record finalized in current user session
- Saved in new or modified Kept Record(s) capable of reproducing the essence of the Generated Record
- *Example: New Order*

Reproduced Record



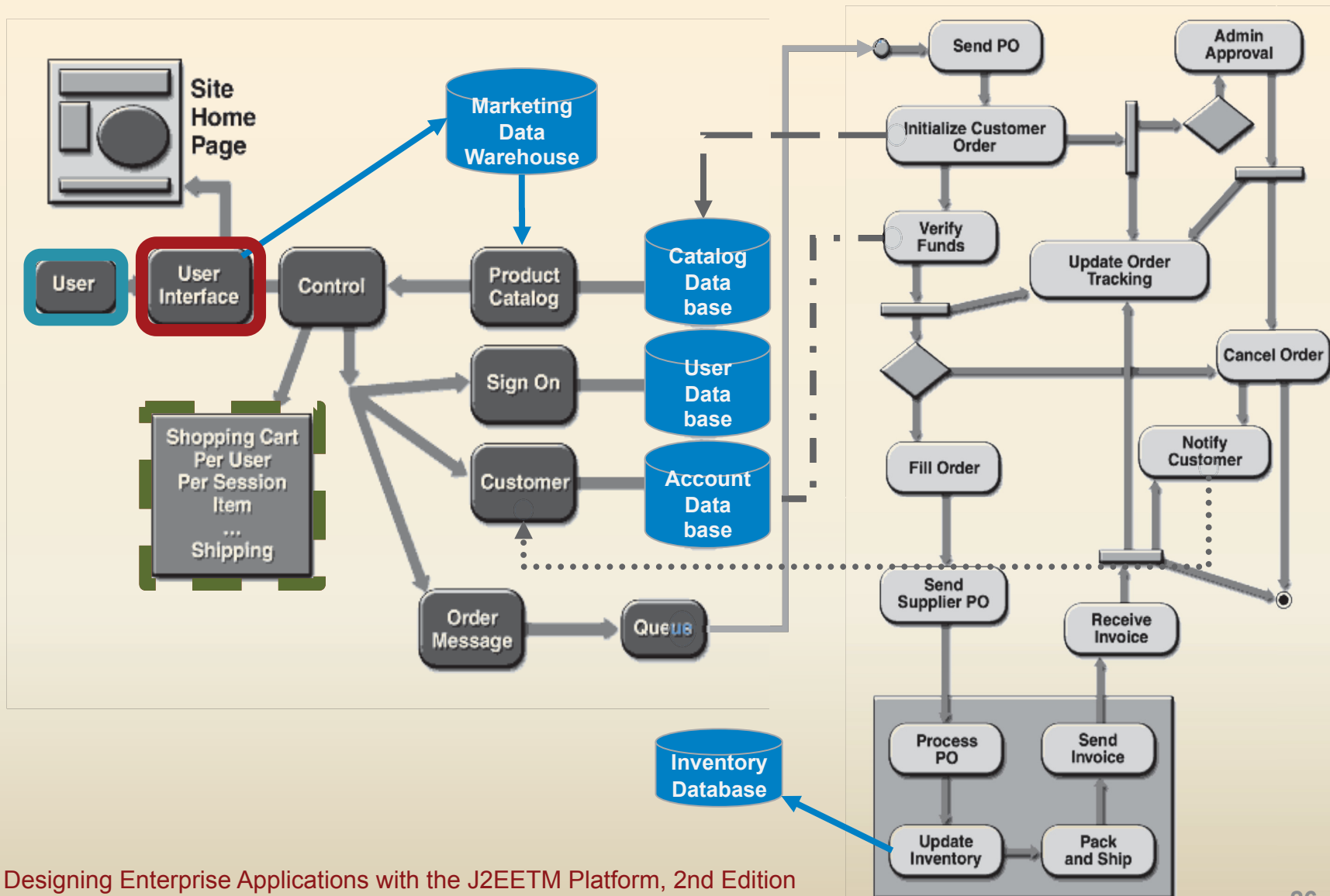
- Previously created record derived from Kept Record(s) with no user addition or alteration
- *Example: Previous Order*

Derived Record



- Presentation derived from Kept Record(s) that does not correspond to a record previously made or acquired in the system
- *Example: Shipment Manifest*

Kept Records in an Online Sales Application



Composition Data

- Select Content Data
- Determine Form for presentation
- Identify applicable rules

Content Data

- Data from Kept Record(s)
- External Data
- User Input

Manifested Record

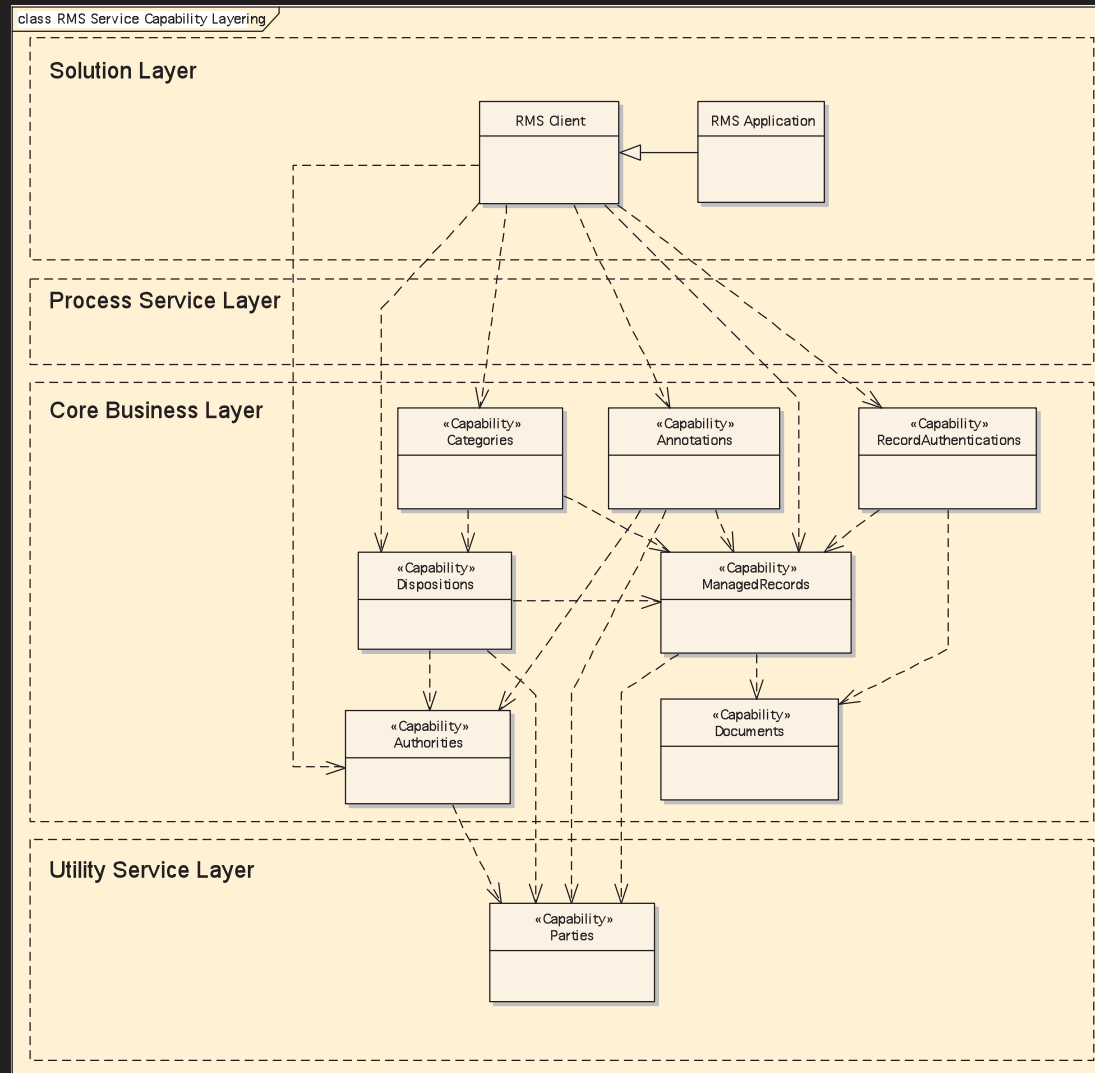
- Specify how Content Data is presented

Form Data

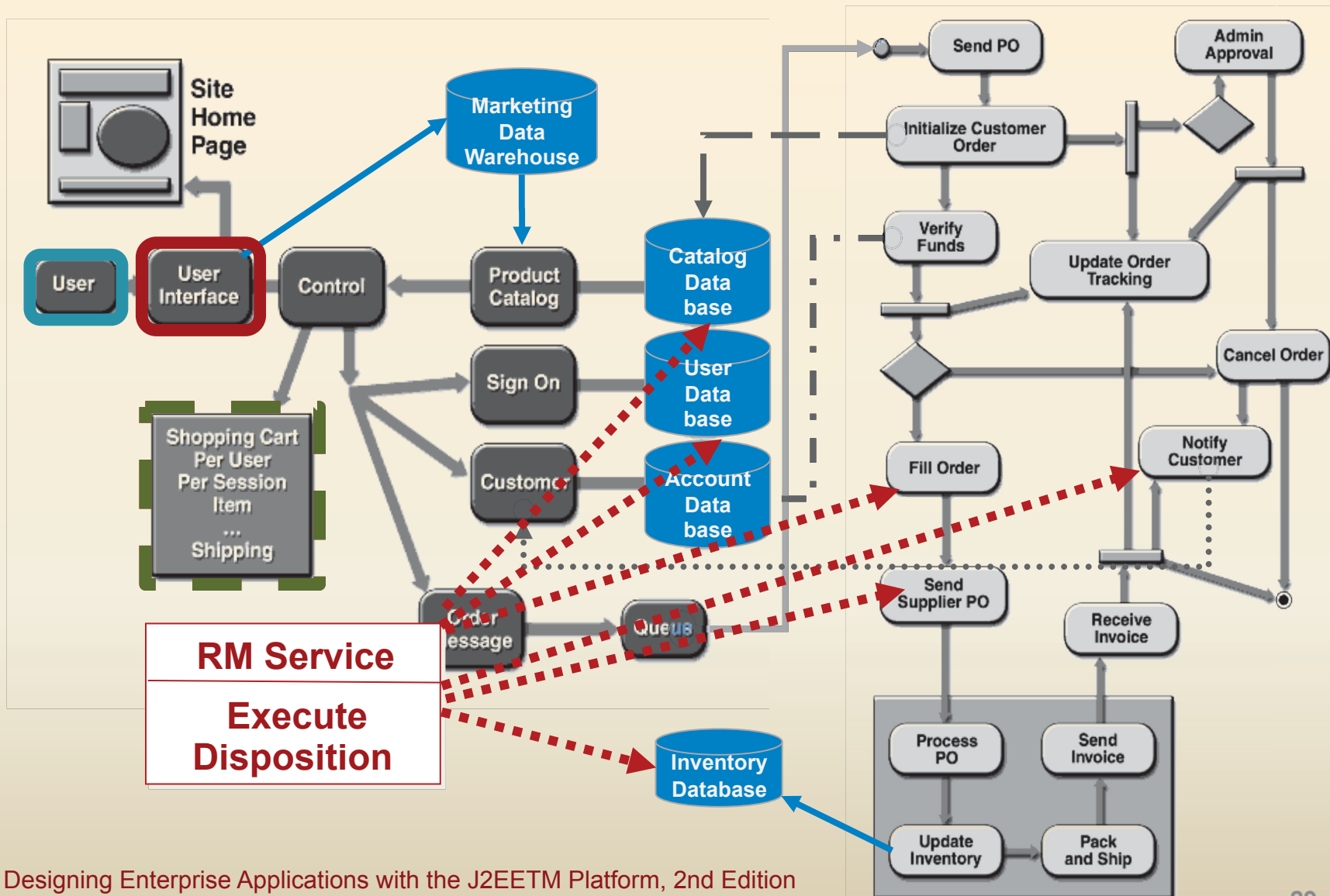
- Control access to content
- Associate record with action
- Link record to other records
- Determine what action may be taken on a record by whom

Rules

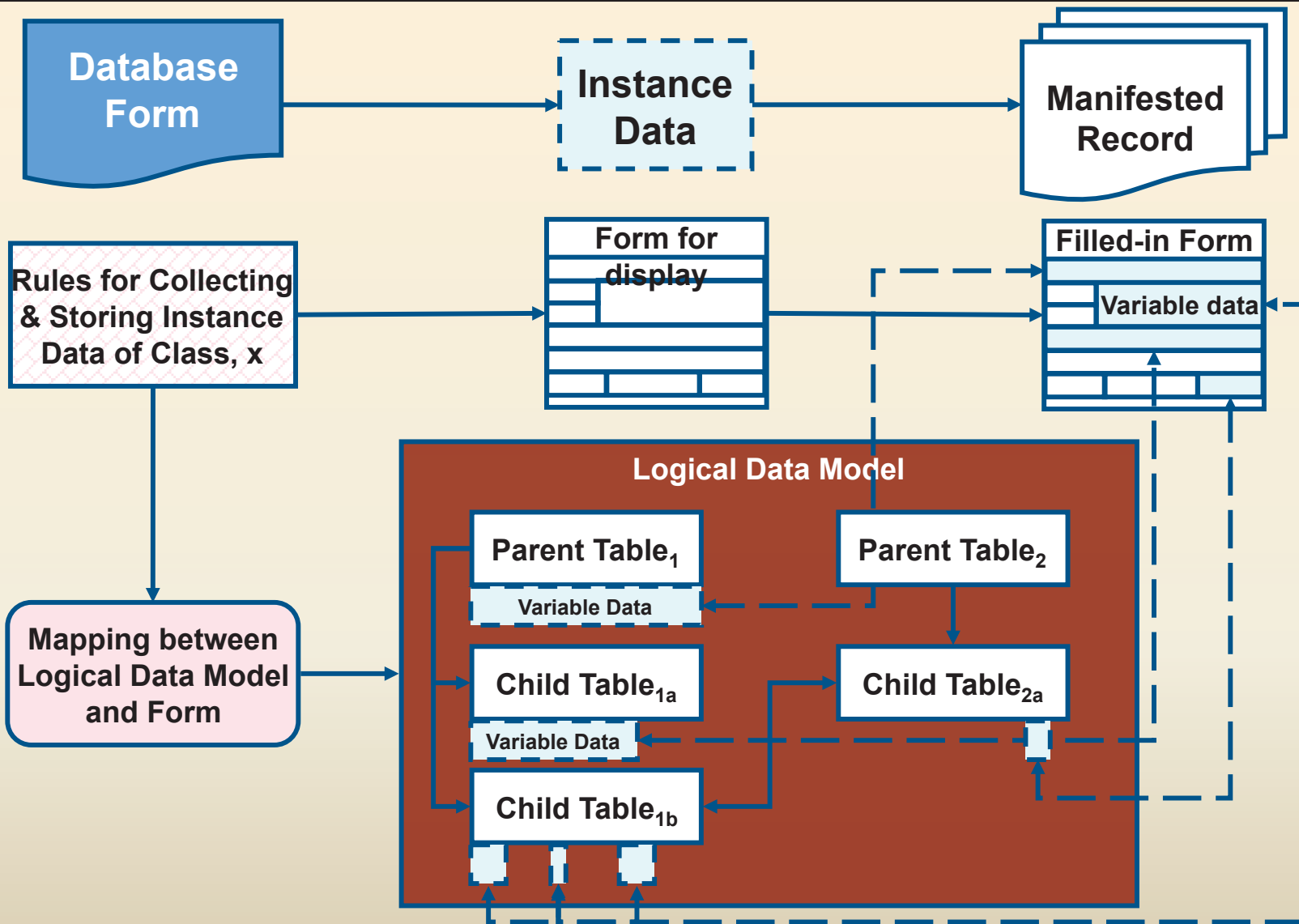
Object Management Group Records Management Services Specification (2009)



Kept Records in an Online Sales Application



Production of Manifested Record from a Database



Information Assets in an Online Sales Application

Pseudo-Document 'PseuDoc'

Shopping Cart

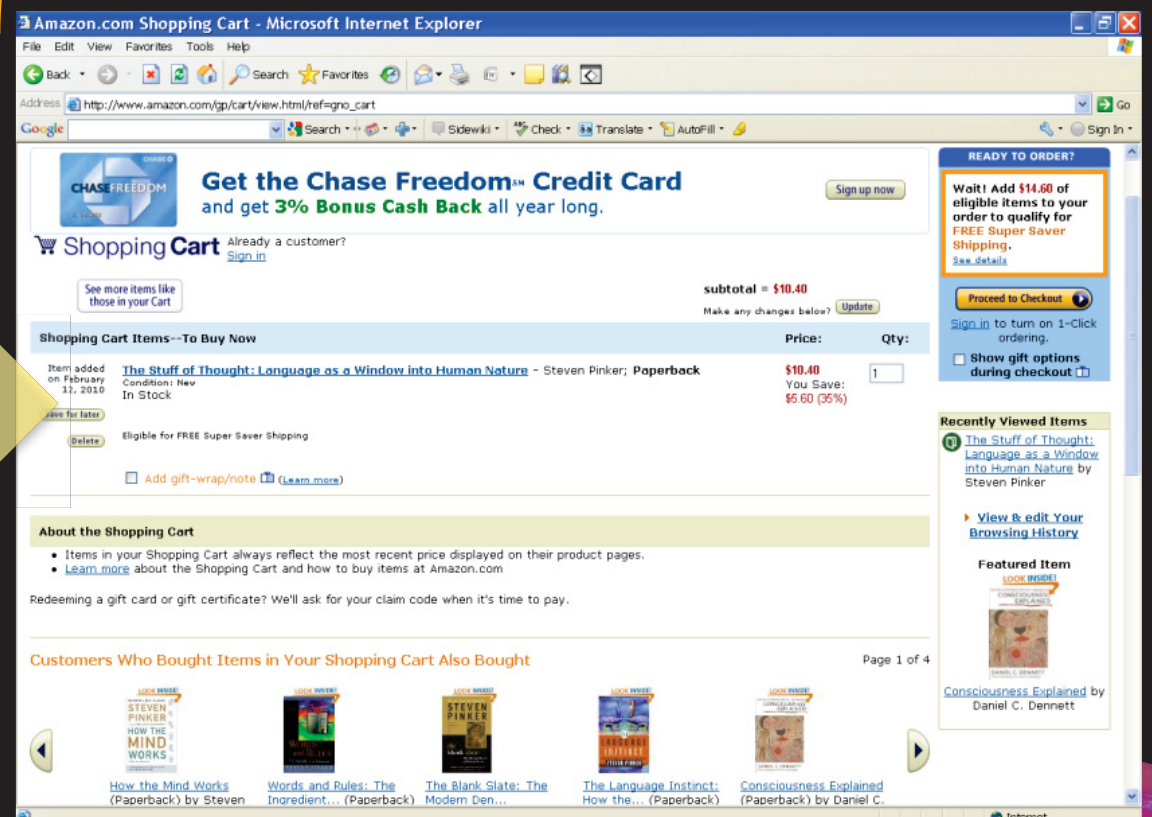
Data about
Selected Items

Data about
Suggested Items

Controlled
Elements of
Form

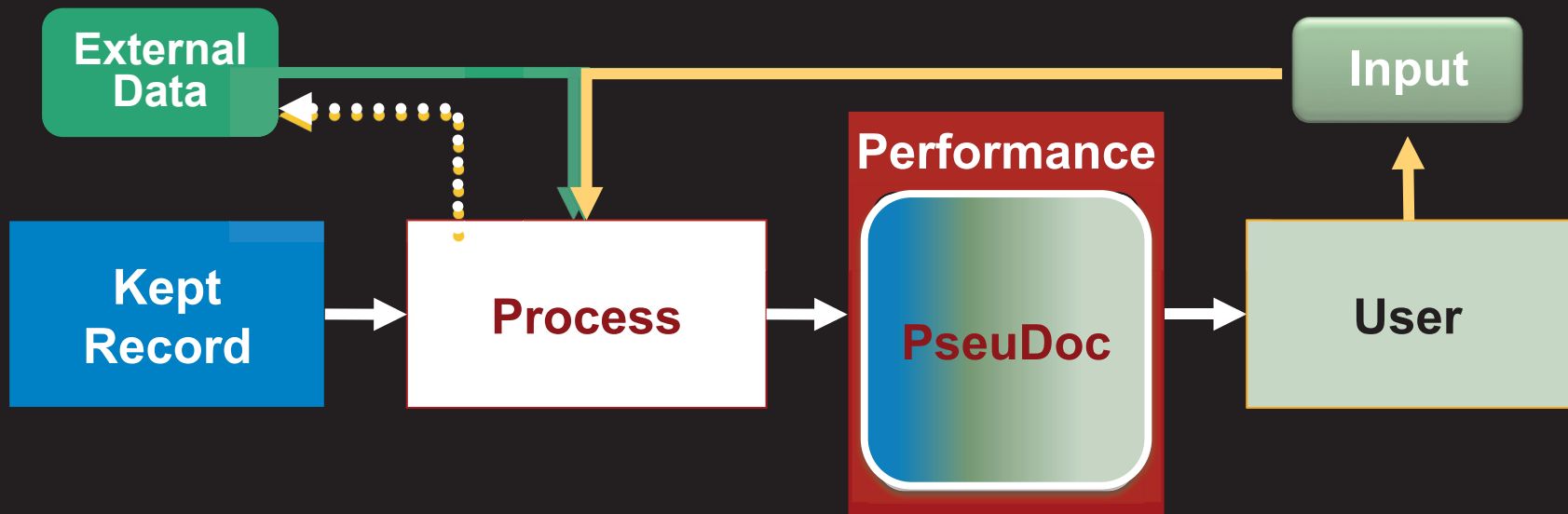
User Selected
Items & Data
about Items

User Determined
Elements of
Form



Shopping Cart View

D/T Model of Production of a PseuDoc



While a PseuDoc is not a persistent document, it may manifest a Kept Record, or parts of a Kept Record, or a combination of (parts of) Kept Records.

PseuDocs may be used in the generation of new records.

Does Records Management responsibility extend to such PseuDocs?

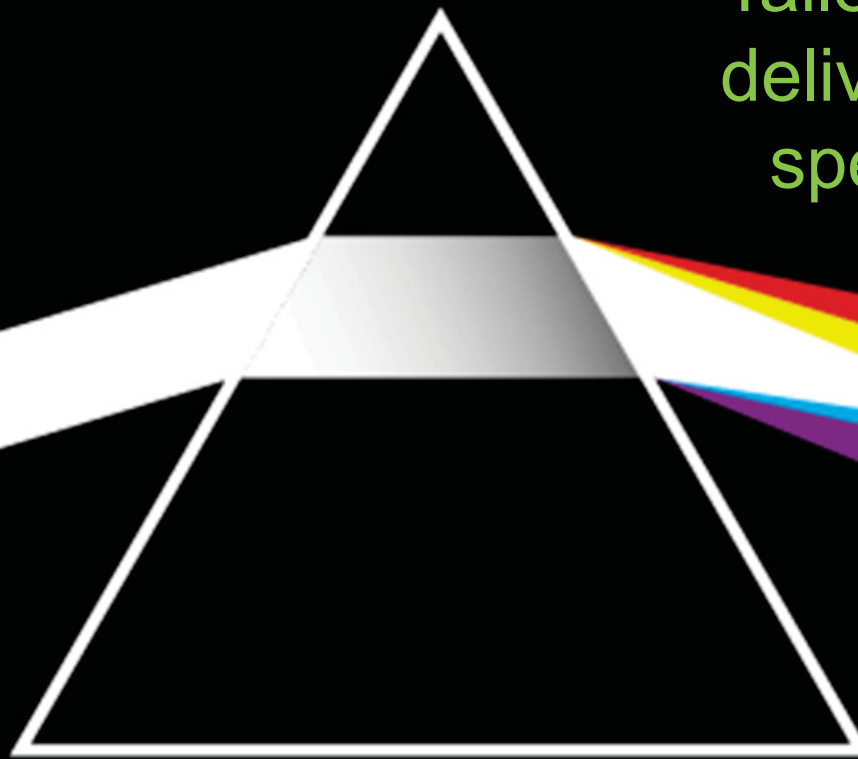
Spectrum of Record Expression

Hard Copy

Exactly as
originally
presented

Digital

Tailor information
delivered to meet
specific needs



Digital Information Technology

Digital Record *Keeping*

Select relevant
information from
any Kept Records

Tailor information
delivered to meet
specific needs

Optimally to
meet business
need

Digital Information Technology

Digital Delta



Shop

HOME

By AGE

By THEME

By CATEGORY

By CATALOG

SEARCH

WISH LIST

ORDER STATUS



0 items in my cart
CHECKOUT



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What's New

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STAR
WARS
Millennium
Eclipse™



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For LEGO Shop
emails!





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PRIVACY

CHANGE REGION



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Sign In



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NEW



DESIGN by ME

Goodbye Factory! Welcome Design by ME!

To match our highly improved experience, it was time to freshen up our looks, and take on a new name... one that will represent better what we are and deliver.



Upgrading to LEGO Digital Designer 3

With improvements on every level, and new functions as grouping, hiding, LEGO Digital Designer makes you feel in charge like never before.

NEW



New Box Designer

With our new Box Designer, you will enjoy creating the ultimate home for your model. Decorate with our library graphics, and perfect your design using the tools.

NEW



A unique Building Guide

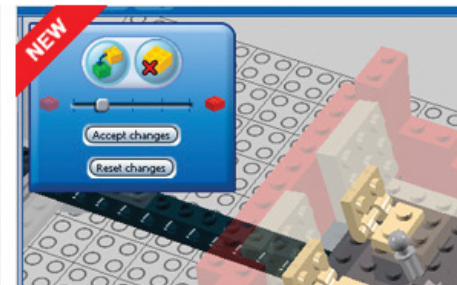
If you prefer handheld instructions; we will generate & include your own unique Building Guide... showing all the steps needed to make your model.



Better Performance

After optimized and clever programming, LDD 3.0 shows off muscle as well as stamina, handling bigger models with no hesitation.

NEW



New Missing Brick Replacement

We have listened to your requests, and are happy to offer a quick and easy way of replacing old, unavailable bricks.

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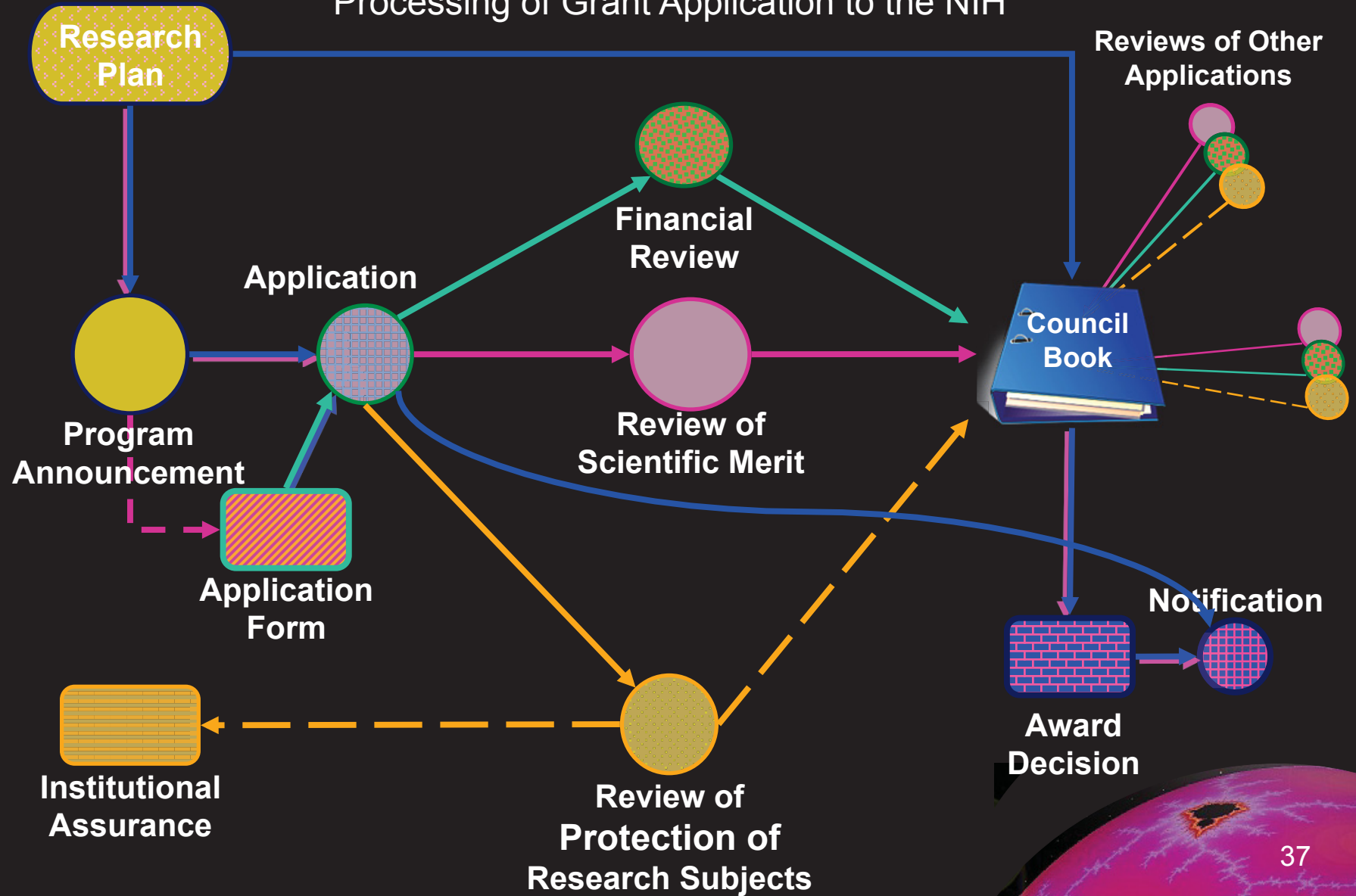
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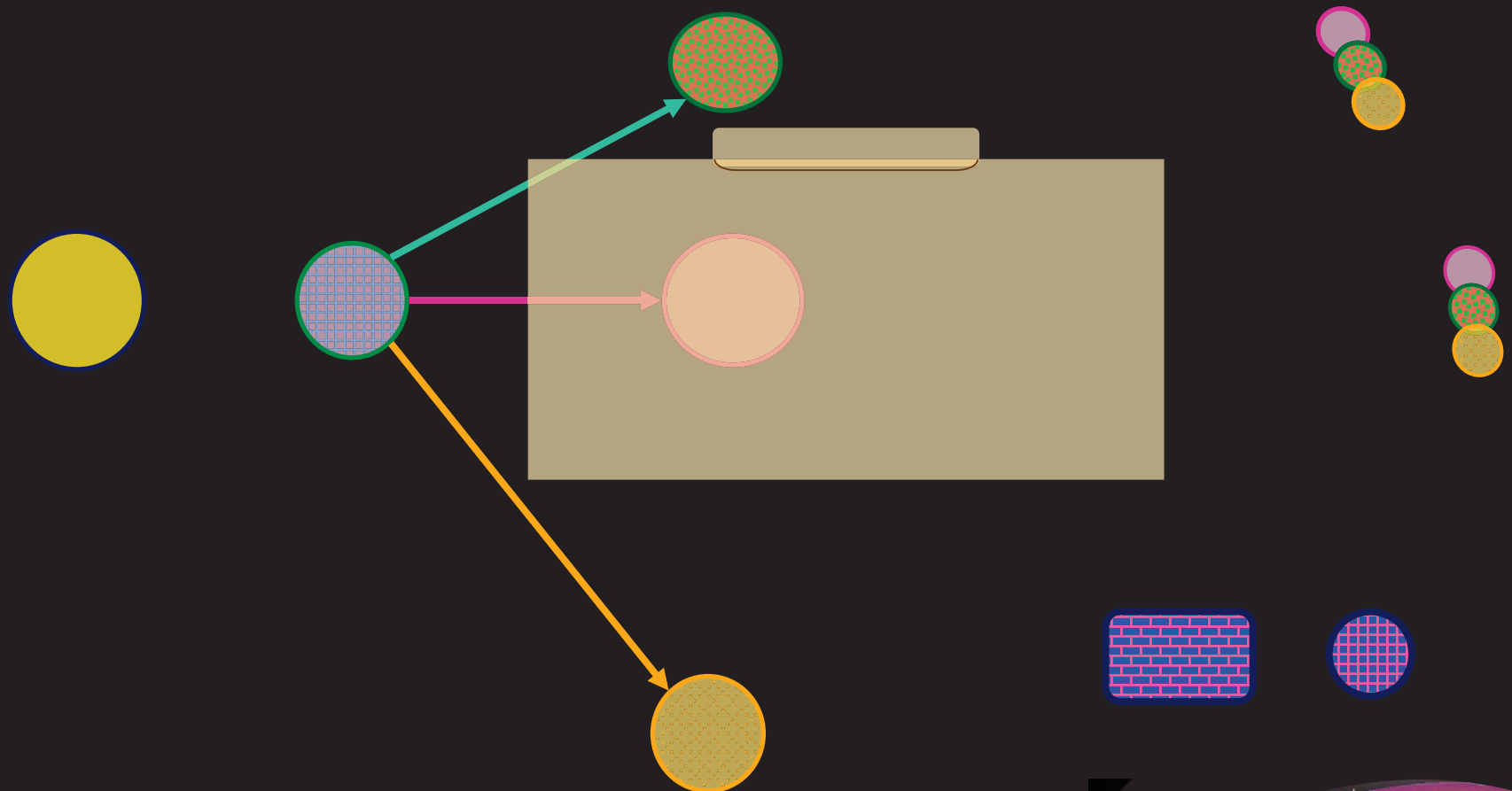
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Archival Links

Processing of Grant Application to the NIH

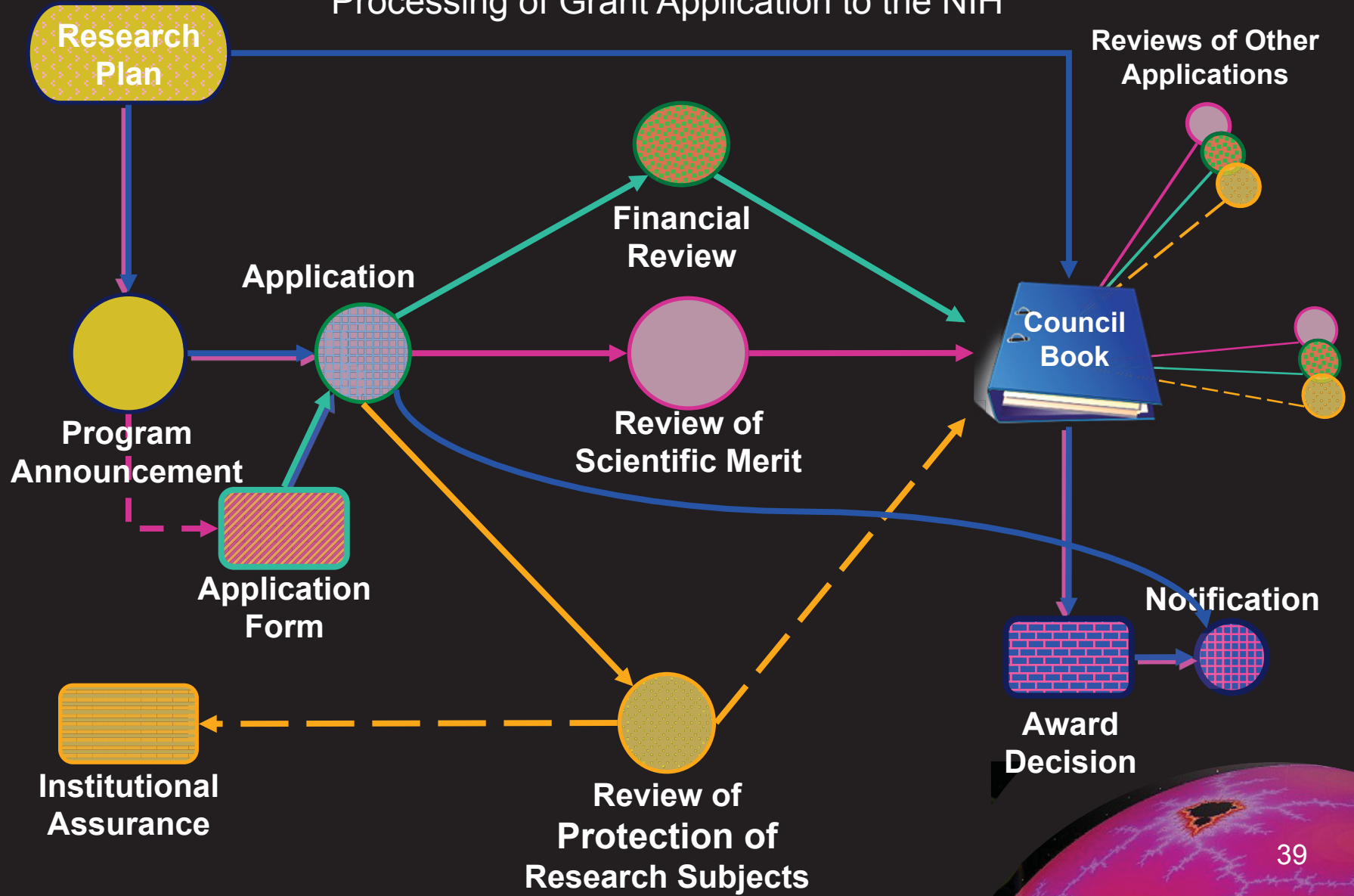


Case File



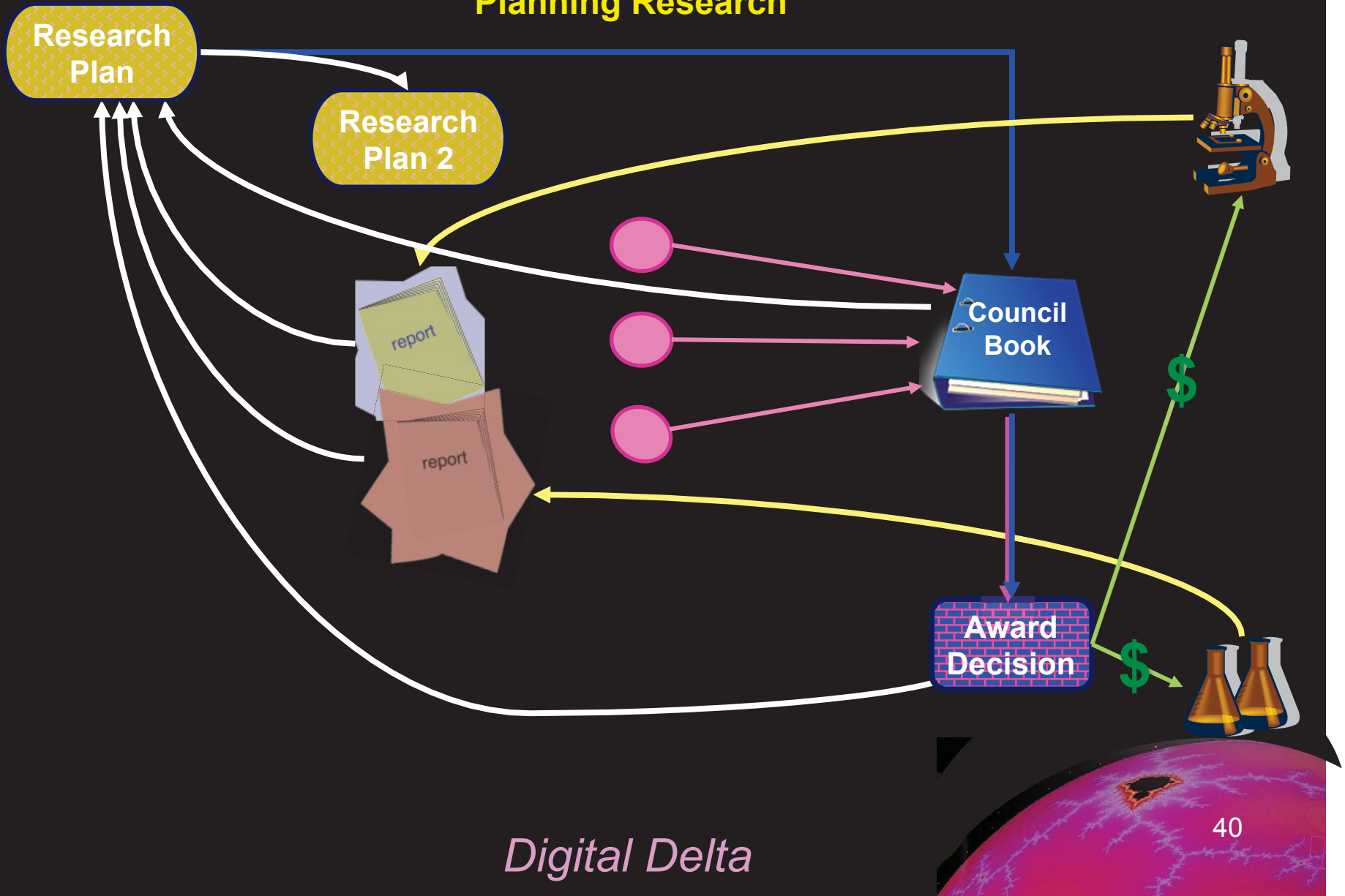
Archival Links

Processing of Grant Application to the NIH



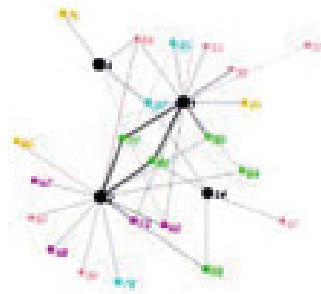
Archival Links

Planning Research

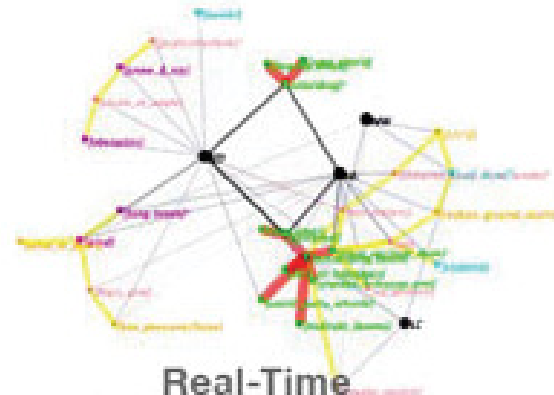




Possibilities for Managing Links



Real-Time
Actor-Discourse
Network



Real-Time
Actor-Discourse +
Semantic Network

Digital Delta

Possibility of managing records not only on the basis of where they are placed or how they are categorized, but also **where they go**, **who uses them** **for what purposes**, and **what they mean**!



Cumulative
Actor-Discourse
Network



Cumulative
Semantic Network

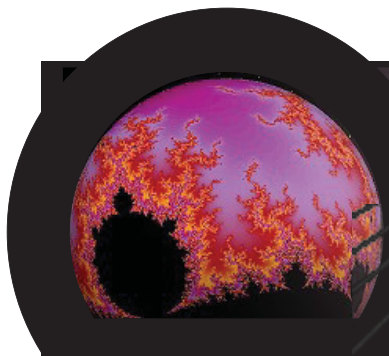


Web 2.0



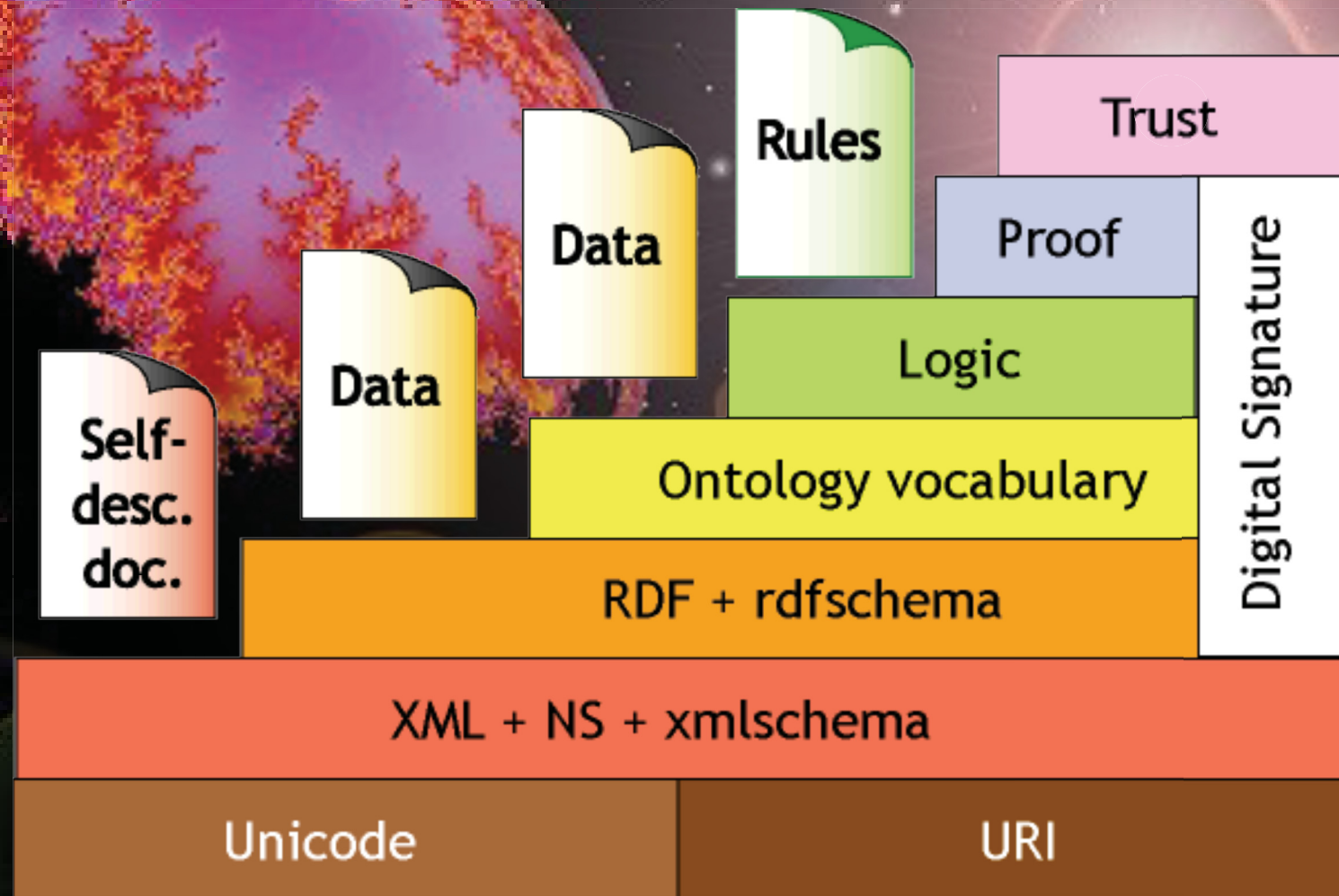
It's about the links!
ad hoc

http://apps.facebook.com/_nexus_/



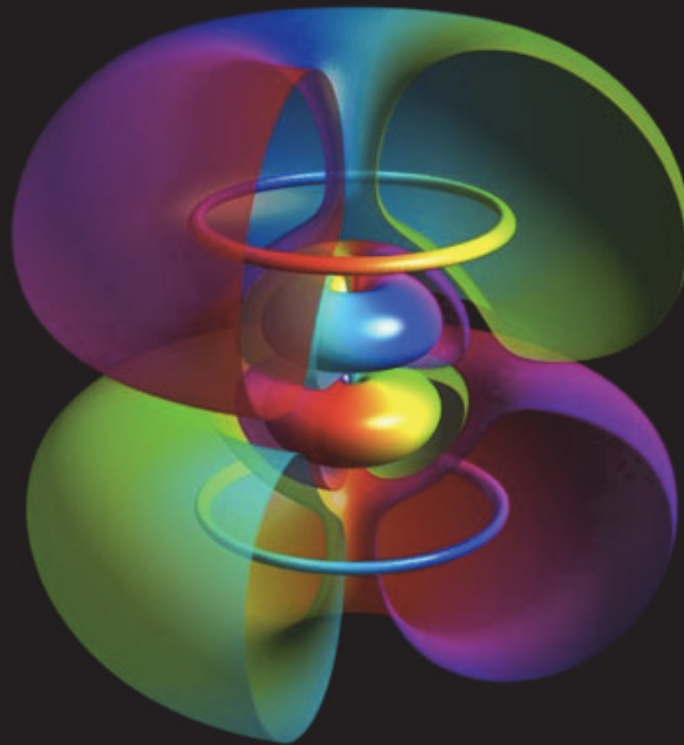
Web 3.0

It's about the links!
semantic



Sir Tim Berners-Lee's Schematic
of the Semantic Web (Web 3.0)

Be Open to New Ways of Thinking



About Records & Managing Records



Thank You.



“Perspective”

The color of the sky

Your mood

Blue

The need to reboot
a computer

Someone or something
belonging or favorable to the
Democratic Party in the U.S.

