

Developing a Metadata Element Set or Application Profile for a Portal of Smart Phones (Tasks #1 to #10 template)

This example project is for a collection of smart phones made by different producers, with different sizes, operation systems, versions, release time, etc. Treat the items of the collection as the primary resources (i.e., the smart phones themselves, not the possession history, apps, covers, of the phones).

Stage I. Analyzing and Understanding the Collection

Step 1. Examine the resources to be described.

Examine as many instances as possible in order to know the common characteristics of these information-bearing objects.

Step 2. Draft the desired elements.

Consider smart phones as a kind of intellectual work, similar to cars. Think, discuss, and write your notes.

This is a draft note:

Desired Element (use lowercase letters)	Explanation and note	Example
Example: creator	An entity primarily responsible for making the content of the resource	Apple Inc.

Stage II. Developing the Element Set/Application Profile for the collection

Step 3. Communicate about the functional requirements.

Ask questions: What types of users might we serve? (This may require us to develop personas first.) What do we want to do with this collection? For example,

We would like users to be able to:

Search by: (e.g., version, price ...)

Browse by: (e.g., color, size ...)

View by: (e.g., function, feature ...)

We would like to be able to:

Link together: (e.g., records from the same producer)

Link to: (e.g., the operation system's information)

Filter by: (e.g., date of release ...)

Step 4. Design a domain model

Discuss and illustrate: What kinds of THINGS (entities) will our metadata describe? What are the relationships between these THINGS? For example:

- Should we model the general properties of smart phones in one layer, and those of specific instances in another layer?
- Should the data about producers be repeatedly described in detail with each phone instance or should they be managed as a separate kind of *thing*?
- If so, what are their relationships?
- What properties does each of these entities have?

Step 5. Identify desired metadata elements for the collection.

Discuss and write down: What elements (i.e., metadata terms) will we need to define?

Use the following templates to [hand]write:

TEMPLATE OF STEPS (Using smart phones as objects to be described)

Developing a Metadata Application Profile
Step 5. Identify desired metadata elements for the collection

Desired Element	Explanation and Description of the Element (This will be the element definition and will be included in the final schema)	Example (The examples may be included in the best practice guide, either in this document or in a separate guideline.)	Implementation (Mandatory /Optional? Repeatable?) M, O, R.
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Example:
producer

An entity primarily responsible for making the content of the resource

Smith, John
Samsung Group

M, R.

Developing a Metadata Application Profile
Step 6. Make decisions regarding value spaces

Element Name (The element defined by the last task)	Value controlled? (Yes and How, No)	How to control? (A pre-defined list of terms; Name of an existing vocabulary/scheme, rules, best practice guide, etc.)
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Example:

creator	Yes, name authority	LC Name Authority/Accumulated local name authority
(or): creator	Yes, rule	For Person: Last, M. First For Organization: Smaller unit, Larger unit
size	Yes, controlled list	[My] Size List: small, regular, plus ...

TEMPLATE OF STEPS (Using smart phones as objects to be described)

Developing a Metadata Application Profile

Step 7. Find existing elements from other namespaces to re-use them.
 (Revisit desired element list; decide on “borrowing” or “creating”. List for each element one of the following choices.)

Element Name (The element defined by the last task)	Matched VocabularyA Element (The preliminary source schema)	Matched VocabularyB Element (The secondary source schema, when nothing can be found in SchemaA.)	Un-matched Element (If none can be borrowed from SchemaA or SchemaB, this element will be created and claimed under your own presumed namespace.)
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Example:

<u>identifier</u>	<u>dc:identifier</u>		
<u>title</u>	<u>dc:title</u>		
<u>creator</u>	<u>dc: creator</u>		
<u>measurement</u>		<u>vra:measurement</u>	
<u>size</u>			<u>ksu:size</u>

Developing a Metadata Application Profile
Step 8. Write a specification for the complete element set

Stage III.

Preparing the Specification

Write a complete specification for your element set or application profile.

With all elements finalized (borrowed or created), now sort out a list of all the elements.

You may use the spreadsheet or WORD for the whole specification.

Start a new sheet that includes:

Element name

-- Each element should have the prefix showing the namespace, e.g., *dc:type*

Element label

Element [http] URI

Definition -- Keep the original definition for a borrowed element. You may add a revised definition tailored to your project.

Implementation (Mandatory /Optional? Repeatable?)

Comment

Value Space Control —[This can be merged with Comment.] Different element may have different best practice rules and value space control, such as: (1) give a predefined list of terms (2) list the title of an existing value vocabulary, or (3) lay out the syntax rules (e.g., for names, for dates, etc.).

TEMPLATE OF STEPS (Using smart phones as objects to be described)

Examples:

1. Example from DC: <http://dublincore.org/documents/dces/>

Term Name: type

URI: <http://purl.org/dc/elements/1.1/type>

Label: Type

Definition: The nature or genre of the resource.

Comment: Recommended best practice is to use a controlled vocabulary such as the DCMI Type Vocabulary [DCMITYPE]. To describe the file format, physical medium, or dimensions of the resource, use the Format element.

References: [DCMITYPE] <http://dublincore.org/documents/dcmi-type-vocabulary/>

2. Example from VRA Core: http://www.loc.gov/standards/vracore/VRA_Core4_Element_Description.pdf

CULTURAL CONTEXT

Description: The name of the culture, people (ethnonym), or adjectival form of a country name from which a Work, Collection, or Image originates, or the cultural context with which the Work, Collection, or Image has been associated.

Data Values: ULAN Editorial Guidelines Chapter 4.7 Appendix G, *Nationalities and Places*, AAT, LCSH

VRA Core 2.0: W15 Nationality/Culture

VRA Core 3.0: Culture

CDWA: Creation-Culture

Dublin Core: COVERAGE

CCO: Part TWO: Chapter 4: *Stylistic and Chronological Information*

Not Required; Repeatable



crosswalking



Other constraints

Task 9 is not included in this template.

Developing a Metadata Application Profile
Step 10. Write a specification for the complete element set

Write a specification for the element set for smart phones following the examples from the specification of DCMES or NKOS AP

Include these major parts in the specification:

1. Add a title, the creator (your names), date of this specification, a short description of your coverage and purpose of this element set/application profile.
2. In the main body of your specification, you should have everything you did in Step #8.

Follow the examples from the specification of DCMES: <http://dublincore.org/documents/dces/>

or

Consult these AP's specifications: <http://nkos.slis.kent.edu/nkos-ap.html>

Tasks 11, and 12 are not included in this template.