

Design Studio Archives Knowledge Organization System

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Introduction

The goal of this project is to create a Knowledge Organization System (KOS) for a Greeting Card Company Studio archive so that designers are able to find source artwork and previous designs. This is no small task--Greeting Card Company has been in operation for nearly 100 years and has at least partial archives from the entire period, and today the company employs hundreds of designers and produces thousands of products. There is no question that without an inclusive, accurate, and easy-to-use archive, designers are unable to build on each others ideas and a great deal of work is being duplicated. Also, intellectual property needs to be properly managed and licensed artwork needs to be tracked and protected from accidental misuse.

Currently, all archives are stored in protective containers in the Studio, shelved by year. In addition a vast number of digital files have been compiled on the Studio's serves and CD and tape backups. This project does not address the physical process of collection and digitization, but instead offers a road map to how items will be classified as they are entered into the system. This KOS also provides a framework for the database and the ultimate user interface.

Below is an analysis of the users and groups, followed by a description of the overall structure of the KOS. After that is a description of each facet, followed by pick lists, synonym rings, and taxonomies for each where applicable.

Users

In this analysis three distinct user groups were identified: Archivists, Designers, and Management/Administration. Archivists include the companies current information professionals as well as the interns and temp workers who will be doing the digitization and data entry under their supervision. The KOS has been set up under the assumption that most data entry personnel will be able to properly classify perhaps 80 to 90 percent of all items within each facet, forwarding the rest to more skilled information professionals. The professionals include skilled librarians, art historians, and other researchers who should be adequately prepared to train data entry personnel and classify more difficult items.

The designer group includes artists and graphic designers of varying skill and experience. Nearly all, however, have completed at least a two-year program and the majority have completed a four-year college degree. Taxonomies were developed with this level of expertise in mind. Designers were surveyed and a wide range of thinking about art objects and designs were found. The facets below were designed to cover virtually every way in which a designer might want to look for a piece.

Management and administration also have specific needs. It is for them primarily that the Designer entity described below as well as most facets dealing with licensing and sales have been created.

Organization

The archive needs to be broken down into four different logical entities: Art Elements (such as clip art, photographs, sculptures, etc.), Products (such as individual greeting cards, e-cards, etc.), Digital Files, and Designers. Each entity will have a number of associated facets which roughly correspond to the fields in the database and will allow multiple methods of search and organization.

The entity relationships will be defined in the database so that searches will cascade upward. For

example, some searching for art elements will be able to find those done by a specific AG department, because Art Elements are related to products which are related to Designers, who have the Department/Team facet. All of this is relatively simple to do with SQL and can be hidden in the interface to make searching easier.

Each facet has an associated type, whether that be a simple constraint on an open text field, a pick list, or a taxonomy. Where lists and taxonomies have been developed the list's page number is noted as well.

Overview: Entities and Facets

Products

Facet Name / Description	Field Type
Designer Designer's name—this would be controlled vocab based on the company's employment records.	Pick list of all designers ever employed (links to designer table below)
Year	Constrained to valid years
Serial Number	Constrained to valid serial numbers
Final Product Sales	Constrained to numbers with two decimal places
Height, Width, Depth	Constrained to numbers, in cm
Weight	Constrained to numbers, in grams
Color Format	Pick List (page 8)
Product Type	Pick List (page 9)
Holiday/Occasion	Pick List , (page 10-11)
Intention	Pick List , (page 12)
Personality	Pick List , (page 13)
Campaign Products tend to be introduced as part of a campaign, like "Art of Healing," "Turning Leaf® Vineyards," "Show You Care," etc.	Pick List of all current and former campaigns, organized alphabetically.

Facet Name / Description	Field Type
Target Audience 	Pick List of all targeted groups from marketing department, ordered alphabetically (African Americans, Women, Pacific Islanders, etc.)
Target Age Group 	Pick List of age groups used by marketing department, ordered age.
Target Religion 	Pick List , (page 14)
Language 	Pick List , (page 15-16)
Giver 	Pick List of target gift/card giver from marketing department (Brother, Son, Boss, etc.), ordered alphabetically.
Receiver 	Pick List of target gift/card giver from marketing department (Brother, Son, Boss, etc.), ordered alphabetically.
Descriptors This field must allow multiple values so that one product can have several descriptors.	Unconstrained use of terms describing the purpose and content of the card, (Love, faith, ohrwurm, etc.)

Art Element

Art elements represent the individual pieces that make up a particular card or other product. A card with a picture of a cardinal and a drawing of some ribbon, for example, would have two separate art elements.

Facet Name / Description	Field Type
Products It is important to allow multiple values in this field, so that any one art element can be associated with more than one product.	Pick List of all Products Entered into the database (probably by serial number).
Medium	Simple Taxonomy , (page 17-18)
Style	Simple Taxonomy , (page 19-20)
Content Object	Taxonomy , (page 21-22)
Content Subject	Pick List of controlled names (“Abraham Lincoln,” “Micheal Jackson,” “Leonardo da Vinci,” etc.), licensed from http://www.marquiswhoswho.com/ or something similar.
Licensed Artist	Pick List of Licensed artists from AG legal department (“Gary Patterson,” “Nickelback,” “Gary Larson,” etc.), if applicable.
Public Domain Artist	Pick List of controlled names (“Van Gogh,” “Beethoven,” etc.), if applicable, licensed from http://www.marquiswhoswho.com/ or something similar.
Licensed Property	Pick List of Licensed Properties from AG legal department (“Mickey Mouse,” “Pokemon,” “Garfield,” etc.), if applicable.
Public Domain Property	“Starry Night,” “The Scream,” etc., if applicable.

Digital File

All items and products will be stored in the archive in at least one digital form. Because one item may have several digital representations, digital files are a separate entity with its own associated facets.

Facet Name / Description	Field Type
Art Element	Pick List of all entered art objects, by some sort of index number.
File Type	Pick List (page 23)
Height, Width, Depth	Constrained to numbers
Resolution	Constrained to numbers
Color Depth	Constrained to numbers
Graphic Format	Pick List (page 24)

Designer

Facet Name / Description	Field Type
Name	Pick List derived from employment records. Users would also be able to do a text search, but vocabulary would be controlled by an Authority File built from employment records
Office/Location/Branch	Pick List of Greeting Card Company locations, with searcher's current location listed first.
Division/Team	Pick List or Taxonomy of Greeting Card Company divisions/teams, with searcher's current division listed first.
The specific group the creator works in.	
Skills	Basic Taxonomy , same as Art Element >> Medium above.
It is important to allow multiple values in this field, so that any one designer can be associated with several skills	
Language	Pick List , (page 15-16)

Product > Color Format

Pick List, ordered by color complexity:

Monotone	black and white – b&w – lineart – line art – 1-bit – one-color – 1 color
Grayscale	contone – continuous tone – gray – gray scale – black and white photograph
2-color spot	two-color – duotone – spot color
3-color spot	three-color – tritone
RGB	monitor - screen
4-color spot	
CMYK	4-color process- four-color – process – full-color – color photograph
Hexachrome	six-color – 6-color spot

Product > Product Type

Pick List, with card and e-card at the top, the rest ordered alphabetically:

Card	
E-Card	
Air Freshener	Candle
Album/Frame	Scrapbook – Picture Frame – Photo Album
Calendar	Datebook
Keepsake	Figurine – Statue – Sculpture – Doll
Mug	Cup
Ornament	Christmas Tree Ornament
Packaging	Box – Wrapping Paper – Gift Wrap
Personal Item	Clothing – Jewelry – Money Holder -
Stationary	Paper – Pad – Note – Pen – Pencil – Sketchbook – Diary – Journal - Invitations
Other	

Product > Holiday/Occasion

Pick List, grouped by holiday type then ordered alphabetically. Include additional holidays as needed. See <http://www.armchair.com/info/holidays.html>.

US Government Holidays-----	
--Christmas Day	X-mas
--Columbus Day	
--Election Day	
--Independence Day	July 4 th – July Fourth – Fourth of July - 4 th of July
--Labor Day	
--Martin Luther King Day	Martin Luther King Junior, MLK, MLK Day
--Memorial Day	
--New Year's Day	New Year – January First – New Years
--Presidents' Day	Washington's birthday – Lincoln's birthday
--Thanksgiving Day	
--Veterans Day	
Other US Holidays-----	
--April Fool's Day	April First – April 1 st
--Boss's Day	
--Earth day	
--Father's Day	Dad's Day
--Flag Day	
--Grandparent's Day	Grandmother's Day – Grandfather's Day – Grandma's Day – Grandpa's Day
--Groundhog Day	
--Halloween	All Hallows Eve
--Loyalty Day	
--Mole Day	
--Mother's Day	Mom's Day
--Mother-in-Law's Day	
--Perihelion	
--Programmer's day	
--Secretary's Day	
--Sweetest Day	
--Valentine's Day	February 14th
Non-US Holidays-----	
--Boxing Day	
--Worker's Day or May Day	May Day
Christian Holidays-----	
--All Saints Day	
--Ascension Day	
--Assumption Day	
--Christmas Day	
--Corpus Christi	

--Easter	
--Good Friday	
--Holy Thursday	
--Pentecost	
--Whitsun	
Jewish Holidays-----	
--Hannukah	
--Passover	
--Purim	
--Rosh Hashanah	
--Shavuot	
--Sukkot	
--Tisha B'Av	
--Tu B'shevat	
--Yom HaShoah	
--Yom Ha'atzma'ut	
--Yom Kippur	
Muslim Holidays-----	
--Eid	
--Ramadan	
Other Religious Holidays-----	
--Rama-Lilas	
Other Occasions-----	
-- Birthday	
-- Anniversary	
-- Funeral	
Other	

Product > Intention

Pick List, ordered alphabetically:

Congratulations	best wishes, compliments, felicitations, good wishes, good work
Get Well	bounce back, convalesce, get better, heal, look up, mend, perk up, pick up, pull through, rally, recover, regain health
Good Luck	big break, blessing, fortunateness, godsend, karma, kismet, Lady Luck, mazel tov, prosperity, serendipity, success, triumph, victory, win, windfall
Just Because	spur of the moment, no reason
Sympathy	affinity, commiseration, compassion, concord, congeniality, connection, correspondence, empathy, feelings, fellow feeling, harmony, heart, kindness, kindness, sensitivity, understanding, warmheartedness, warmth
Thank You	acknowledgment, grateful, indebted, obligated, obliged, bless, praise, appreciation, courtesy, gratitude
You're Welcome	reply
Other	

Product > Personality

Pick List, ordered alphabetically

Business	affairs, commercialism, industry, labor, manufacturing, professional, occupational, employment
Contemporary	abreast, au courant, contempo, current, in fashion, just out, latest, mod, new, newfangled, now, present, present-day, recent, red-hot, todayish, topical, ultramodern, up-to-date
Humorous	amusing, boffo, camp, campy, comic, comical, droll, entertaining, facetious, farcical, for grins, hilarious, jocose, jocular, jokey, joshing, laughable, ludicrous, merry, playful, pleasant, priceless, ribald, screaming, side-splitting, waggish, whimsical, witty
Religious	believing, born again, churchgoing, churchly, clerical, devotional, devout, ecclesiastical, faithful, God, god-fearing, godly, holy, ministerial, orthodox, pietistic, pious, pontifical, prayerful, priestly, reverent, sacred, sacrosanct, saintly, scriptural, sectarian, spiritual, theistic, theological
Traditional	acceptable, classic, classical, common, conventional, customary, established, folk, historic, long-established, old, rooted, time-honored
Other	

Product > Target Religion

Pick List, ordered alphabetically:

Agnosticism
Animism
Atheism
Baha'i Faith
Buddhism
Catholicism
Christianity
Confucianism
Eastern Orthodoxy
Hinduism
Humanism
Islam
Judaism
Neopaganism
Protestantism
Rastafarianism
Restorationism
Shinto
Taoism
Unitarian Universalism
Other

Product > Language

Pick List, first four ordered by U.S. Popularity, rest alphabetically (foreign spellings will also be added to synonyms).

English	
Spanish	
French	
German	
Amharic	
Arabic	
Armenian	
Bengali	
Cajun	
Chinese	
Croatian	
Czech	
Danish	
Dutch	
Finnish	
Formosan	
French creole	
Greek	
Gujarathi	
Hebrew	
Hindi	Urdu
Hungarian	
Ilocano	
Italian	
Japanese	
Korean	
Kru	
Lithuanian	
Malayalam	
Miao	Hmong
Mon-khmer	Cambodian
Navaho	
Norwegian	
Panjabi	
Pennsylvania dutch	
Persian	
Polish	

Portuguese	Brazilian
Rumanian	
Russian	
Samoan	
Serbocroatian	
Slovak	
Swedish	
Syriac	
Tagalog	
Thai	Laotian
Turkish	
Ukrainian	
Vietnamese	
Yiddish	
Other	

Art Element > Medium

Basic Taxonomy, alphabetically:

Digital

--Digital 2d

--Digital 3d

--Other

Drawing

--By Tool

--Charcoal and Conte Crayon

--Pastel

--Pens

--Stencil

--Wax Crayon

--By Style

--Contour Drawing

--Gesture Drawing

--Line

--Other

Multimedia

--Batik

--Collage

--Collograph

--Other

Painting

--Acrylic

--Albumen Print

--Canvas

--Distemper

--Dry Brushing

--Dye Transfer

--Egg Tempura

--Encaustic

--Fresco

--Impasto

--Oil Paint

--Tempera

--Watercolour

--Other

Photography/Printmaking

--Lithograph

--Silver print

--Color print

--Other

Sculpture

--Ceramics

--Earthenware

--Mobile

--Paper Maché

--Porcelain

--Raku

--Stoneware

--Terra cotta

--Other

Other

Art Element > Medium

Basic Taxonomy, alphabetically:

01.00.00	Digital
01.01.00	--Digital 2d
01.02.00	--Digital 3d
01.99.00	--Other
02.00.00	Drawing
02.01.00	--By Tool
02.01.01	--Charcoal and Conte Crayon
02.01.02	--Pastel
02.01.03	--Pens
02.01.04	--Stencil
02.00.05	--Wax Crayon
02.02.00	--By Style
02.02.01	--Contour Drawing
02.02.02	--Gesture Drawing
02.02.03	--Line
02.99.00	--Other
03.00.00	Multimedia
03.01.00	--Batik
03.02.00	--Collage
03.03.00	--Collograph
03.04.00	--Other
04.00.00	Painting
04.01.00	--Acrylic
04.02.00	--Albumen Print
04.03.00	--Canvas
04.04.00	--Distemper
04.05.00	--Dry Brushing
04.06.00	--Dye Transfer
04.07.00	--Egg Tempura
04.08.00	--Encaustic
04.09.00	--Fresco
04.10.00	--Impasto
04.11.00	--Oil Paint
04.12.00	--Tempera
04.13.00	--Watercolour
04.99.00	--Other
05.00.00	Photography/Printmaking
05.01.00	--Lithograph
05.02.00	--Silver print
05.03.00	--Color print
05.99.00	--Other
06.00.00	Sculpture
06.01.00	--Ceramics
06.02.00	--Earthenware
06.03.00	--Mobile
06.04.00	--Paper Maché
06.05.00	--Porcelain
06.06.00	--Raku
06.07.00	--Stoneware
06.08.00	--Terra cotta
06.99.00	--Other
99.00.00	Other

Art Element > Style

Simple Taxonomy, ordered by time then alphabetically:

Pre-Historic

Ancient

--African

--American

--Egyptian

--Far-Eastern

--Greek

--Middle-Eastern

--Roman

--Other

Medieval

--European

--Islamic

--Far-Eastern

--Other

Renaissance

--Classicism

--High

--Italian

--Mannerism

--Northern European

--Baroque

--Other

18th Century

--Neoclassicism

--Rococo

--Other

19th Century

--Art Nouveau

--Impressionism

--Naturalism

--Neoclassicism

--Post-Impressionism

--Romanticism

--Realism

--Symbolism

--Other

20th Century

--Abstract

--Abstract Expressionism

--Art Deco

--Dadaism

--Expressionism

--Folk Art

--Futurism

--Graffiti Art

--Surrealism

--Les Fauves

--Minimalism

--Op art

--Photorealism

--Pop Art

--Other

Other

Art Element > Style

Simple Taxonomy, ordered by time then alphabetically:

01.00	Pre-Historic
02.00	Ancient
02.01	--African
02.02	--American
02.03	--Egyptian
02.04	--Far-Eastern
02.05	--Greek
02.06	--Middle-Eastern
02.07	--Roman
02.99	--Other
03.00	Medieval
03.01	--European
03.02	--Islamic
03.03	--Far-Eastern
03.99	--Other
04.00	Renaissance
04.01	--Classicism
04.02	--High
04.03	--Italian
04.04	--Mannerism
04.05	--Northern European
04.06	--Baroque
04.99	--Other
05.00	18 th Century
05.01	--Neoclassicism
05.02	--Rococo
05.99	--Other
06.00	19 th Century
06.01	--Art Nouveau
06.02	--Impressionism
06.03	--Naturalism
06.04	--Neoclassicism
06.05	--Post-Impressionism
06.06	--Romanticism
06.07	--Realism
06.08	--Symbolism
06.99	--Other
07.00	20 th Century
07.01	--Abstract
07.02	--Abstract Expressionism
07.03	--Art Deco
07.04	--Dadaism
07.05	--Expressionism
07.06	--Folk Art
07.07	--Futurism
07.08	--Graffiti Art
07.09	--Surrealism
07.10	--Les Fauves
07.11	--Minimalism
07.12	--Op art
07.13	--Photorealism
07.14	--Pop Art
07.15	--Other
99.00	Other

Art Element > Content Object

Taxonomy

Person

- Specific Person
- Abstract Person
 - Profession
 - [List of professions]
 - Relative
 - [Mother, son, daughter, etc.]
 - Other

Place

- Specific Place
 - Country
 - [List of countries]
 - City
 - [List of major cities]
 - Attraction
 - [List of major attractions]
- Abstract Place
 - Indoors
 - Home
 - Office
 - Public Place
 - Other
 - Outdoors
 - Mountains
 - Desert
 - Plains
 - Hills
 - Swamp
 - Ocean
 - Tundra
 - Other

Thing

- Living
 - Animal
 - Plant
- Nonliving
 - Decorative Item
 - [Ribbon, painting, abstract sculpture, wreath, etc.]
 - Functional Item
 - [Teacup, handgun, stove, etc.]

Idea

- Emotion
 - Visual
 - [List of emotions]
 - Text
 - [List of emotions]
- Fact
 - Visual
 - Text
- Other

Art Element > Content Object

Taxonomy

1.0.0.0000	Person
1.1.0.0000	--Specific Person
1.2.0.0000	--Abstract Person
1.2.1.0000	--Profession
1.2.1.0001+	--[List of professions]
1.2.2.0000	--Relative
1.2.2.0001+	--[Mother, son, daughter, etc.]
1.2.9.0000	--Other
2.0.0.0000	Place
2.1.0.0000	--Specific Place
2.1.1.0000	--Country
2.1.1.0001+	--[List of countries]
2.1.2.0000	--City
2.1.2.0001+	--[List of major cities]
2.1.3.0000	--Attraction
2.1.3.0001+	--[List of major attractions]
2.2.0.0000	--Abstract Place
2.2.1.0000	--Indoors
2.2.1.0001	--Home
2.2.1.0002	--Office
2.2.1.0003	--Public Place
2.2.1.9999	--Other
2.2.2.0000	--Outdoors
2.2.2.0001	--Mountains
2.2.2.0002	--Desert
2.2.2.0003	--Plains
2.2.2.0004	--Hills
2.2.2.0005	--Swamp
2.2.2.0006	--Ocean
2.2.2.0007	--Tundra
2.2.2.9999	--Other
3.0.0.0000	Thing
3.1.0.0000	--Living
3.1.1.0000	--Animal
3.1.1.0001+	--[List of animals]
3.1.2.0000	--Plant
3.1.2.0001+	--[List of plants]
3.2.0.0000	--Nonliving
3.2.1.0000	--Decorative Item
3.2.1.0001+	--[Ribbon, painting, abstract sculpture, wreath, etc.]
3.2.2.0000	--Functional Item
3.2.2.0001+	--[Teacup, handgun, stove, etc.]
4.0.0.0000	Idea
4.1.0.0000	--Emotion
4.1.1.0000	--Visual
4.1.1.0001	--[List of emotions]
4.1.2.0000	--Text
4.1.2.0001+	--[List of emotions]
4.2.0.0000	--Fact
4.2.1.0000	--Visual
4.2.2.0000	--Text
4.9.0.0000	--Other

Digital File > File Type

Pick List of archival image formats, in alphabetical order:

AI	Adobe Illustrator
EPS	Encapsulated Postscript
GIF	Graphics Interchange Format
JPG	JPEG, Joint Photographic Expert Group
PDF	Portable Document Format
PICT	Mac Picture
PNG	Portable Network Graphic
PS	Postscript
PSD	Photoshop Document, Adobe Photoshop
RAW	
TIFF	
Other	

Digital File > Graphic Format

Pick List:

Raster
Vector

Sample 1

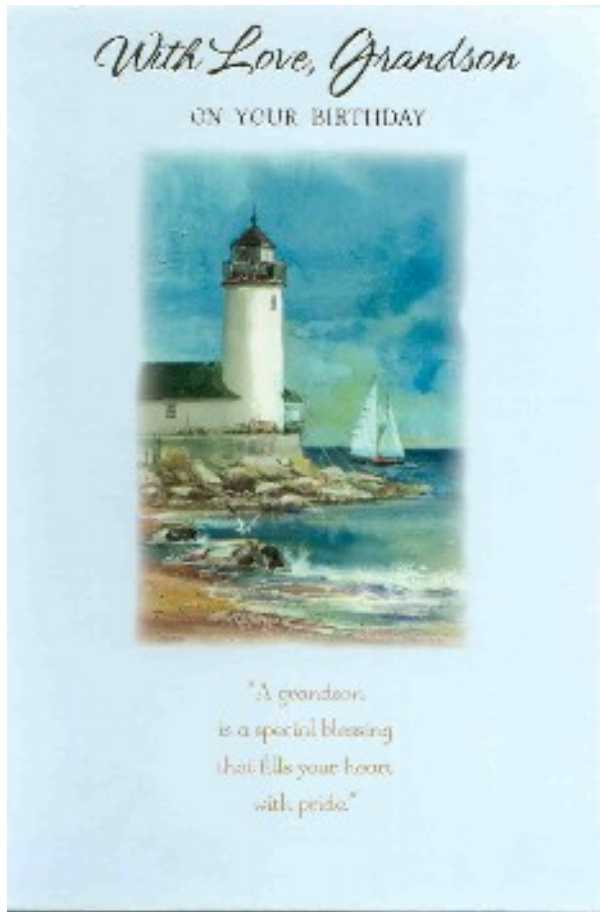


Facet Name	Value
Designer	Sampleman, John Q.
Year	2003
Serial Number	5029770216256
Final Product Sales	\$24,580.00
Height, Width, Depth	30x18x.01cm
Weight	1g
Color Format	CMYK
Product Type	Card
Holiday/Occasion	--Christmas Day
Intention	Just Because
Personality	Contemporary
Campaign	"Deluxe"
Target Audience	None
Target Age Group	Young Professionals
Target Religion	Christianity
Language	English
Giver	Friend
Receiver	Friend
Descriptors	

Art Element

Facet Name	Value
Products	5029770216256
Medium	01.01.00 -- Digital 2d
Style	06.07 --Realism
Content Object	1.2.9.0000 -- Person / Abstract Person / Other
Content Subject	
Licensed Artist	
Public Domain Artist	
Licensed Property	
Public Domain Property	

Sample 2



Facet Name	Value
Designer	Fake, Julia R.
Year	2001
Serial Number	50300047300098
Final Product Sales	\$14,340.00
Height, Width, Depth	31x15x.01cm
Weight	1g
Color Format	CMYK
Product Type	Card
Holiday/Occasion	Birthday
Intention	Thank You
Personality	Tra
Campaign	
Target Audience	None
Target Age Group	None
Target Religion	Christianity
Language	English
Giver	Grandparent
Receiver	Grandson
Descriptors	

Art Element

Facet Name	Value
Products	50300047300098
Medium	04.11.00 -- Oil Paint
Style	07.14 -- Pop Art
Content Object	2.2.2.0006 -- Place / Abstract Place / Ocean
Content Subject	
Licensed Artist	Chiara
Public Domain Artist	
Licensed Property	
Public Domain Property	