INFORMATION DESIGN

ACADEMIC POSTER & PRESENTATION EDITION

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AGENDA

Design Principles

Design Techniques

Poster Design

Presentation Design

AGENDA

Design Principles

Design Techniques

Poster Design

Presentation Design

WHAT IS GOOD DESIGN?

DESIGN PRINCIPLES

- Simplicity
- Effectiveness
- Usefulness
- Transition
- Contrast
- Harmony
- Minimalism
- Interestingness
- Eye pleasing
- ...

Line

Shape

Direction

Texture

Type

Size

DESIGN PRINCIPLES

Balance

Rhythm

Proportion

Emphasis

Continuance

Unity

Closure

Similarity

Proximity

Alignment

Derived from McClurg-Genevese's the principles of design
(http://www.digital-web.com/articles/principles_of_design/)

DESIGN PRINCIPLES

MILLER'S MAGIC NUMBER

7 ± 2

chunks

SIMILARITY & PROXIMITY

DESIGN PRINCIPLES

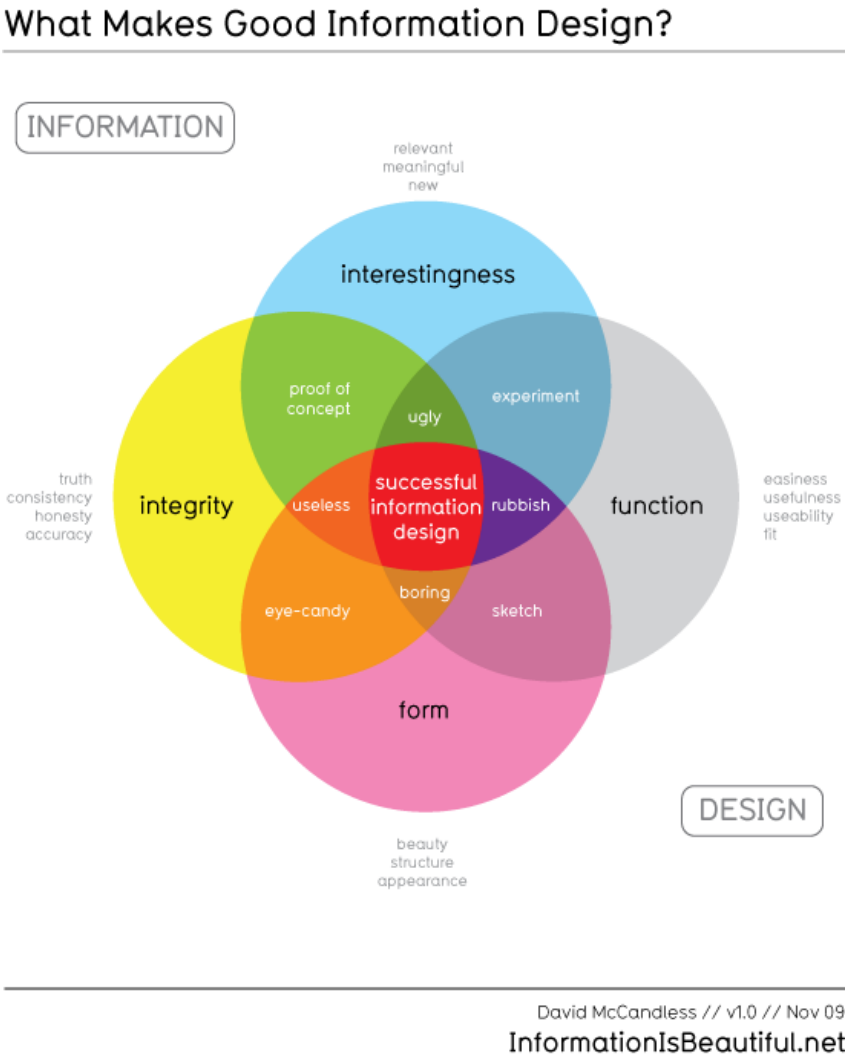
6472928371

(647) 292-8371

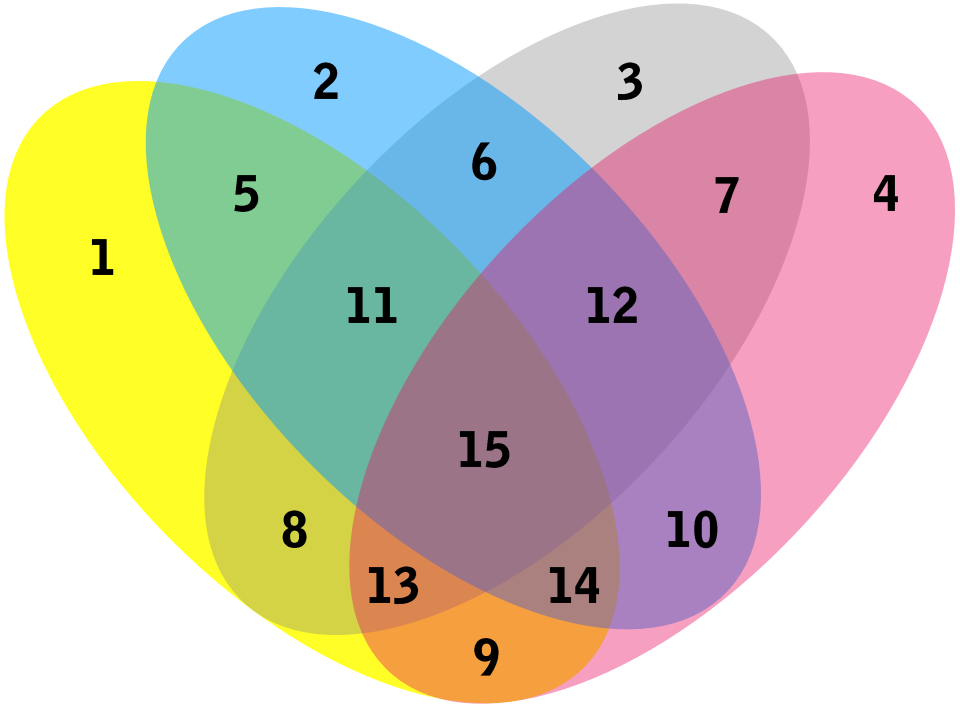
Community speaker at Wat Yang Kloi Kluea
Phichit, Thailand

SIMILARITY & PROXIMITY

DESIGN PRINCIPLES



DESIGN PRINCIPLES



Credit: Madelaine Gogol
http://research.stowers-institute.org/mcm/venny4.png

DESIGN CRITIQUE

AGENDA

Design Principles

Design Techniques

Poster Design

Presentation Design

AGENDA

Design Principles

Design Techniques

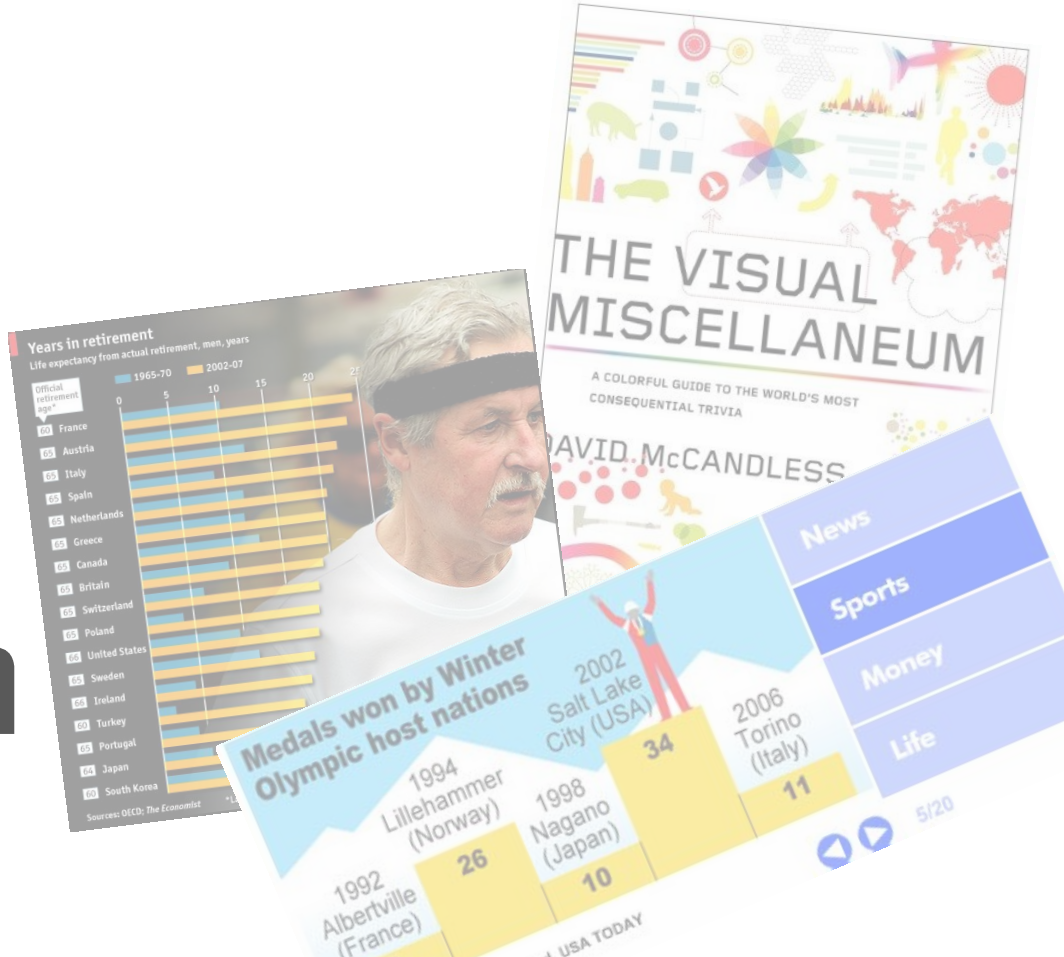
Poster Design

Presentation Design

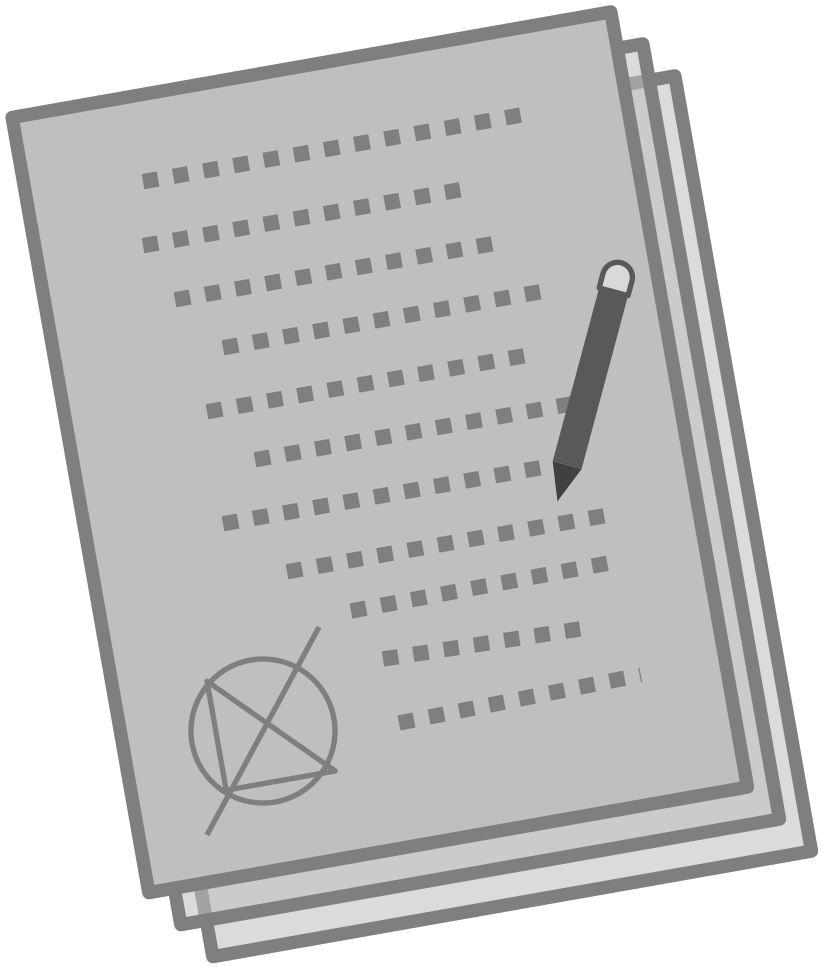
DESIGN TIPS

Finding

inspiration



DESIGN TIPS



Take notes

DESIGN TIPS

Design

≠

Decoration

DESIGN TIPS

Do not reinvent the wheel

DESIGN TIPS

Pay attention to details

PLAY

DESIGN TECHNIQUES

TOOLS

LAYOUT

COLOR

TEXT

TABLE & CHART

IMAGE

TRANSPARENCY

DESIGN TECHNIQUES

Presentation Design	Publication Design	Image Processing	Vector
MS PowerPoint	Adobe InDesign	Adobe Photoshop	Adobe Illustrator
	LaTex	photoshop.com	Inkscape
		GIMP	

TOOLS

BREAKING POWERPOINT COGNITION TRAP

DESIGN TECHNIQUES

Ready-made templates

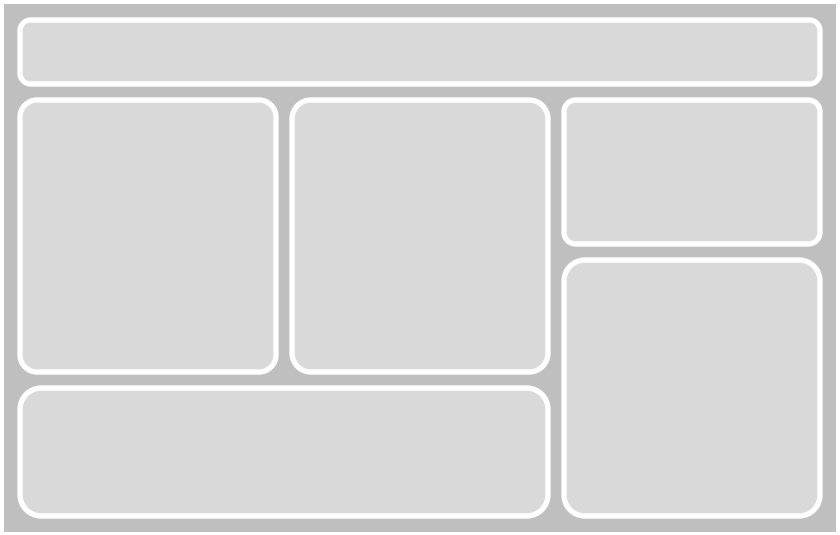
Low resolutions

Presenter-oriented

(not content-oriented, not audience-oriented)

(Tufte, 2006, p.157)

DESIGN TECHNIQUES



Separation

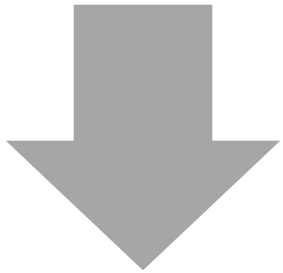
Reading orientation

Organization

DESIGN TECHNIQUES

How many sections?

How big will they be?



Proportion

LAYOUT

DESIGN TECHNIQUES

Paper folding
Drawing
(by hands or computer)

LAYOUT

DESIGN TECHNIQUES

Grid

Line

Alignment

Shape

Gradient

Layer

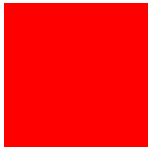
Space/margin

DESIGN TECHNIQUES

To label
(color as noun)

To measure
(color as quantity)

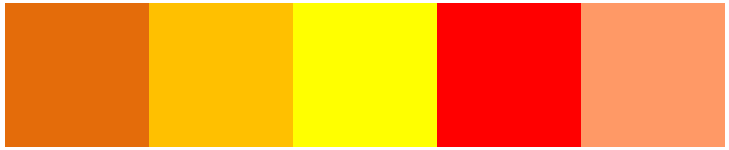
To represent or imitate reality
(color as representation)



To enliven or decorate
(color as beauty)

(Tufte, 1990)

DESIGN TECHNIQUES



Color Palette

Pantone™

{ Palette Generator
http://www.degraeve.com/color-palette/ }

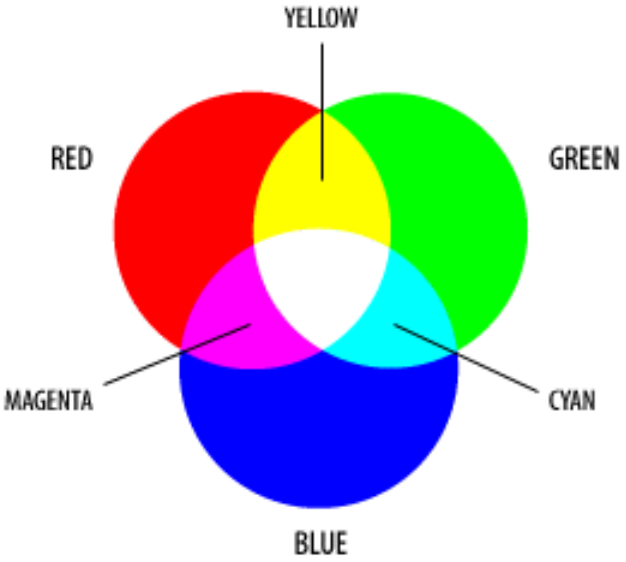
DESIGN TECHNIQUES

(Macandless, 2009)

COLOR PALETTE

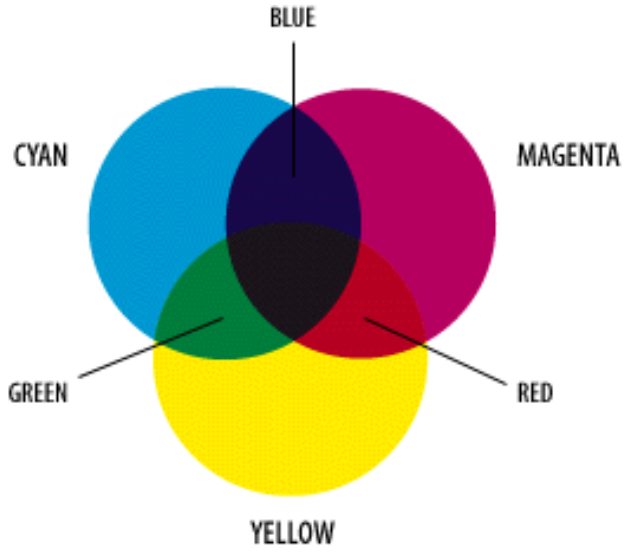
COLOR

DESIGN TECHNIQUES



RGB

#FFFFFF



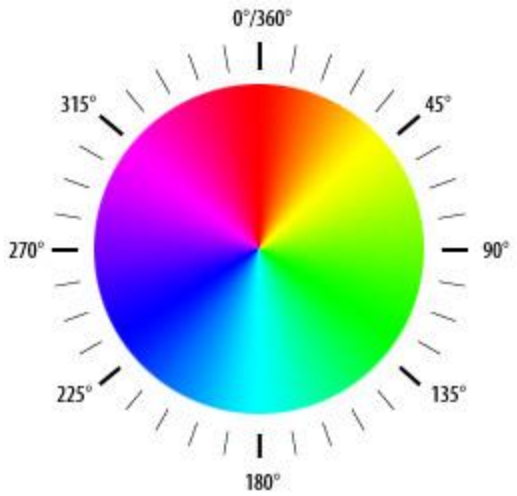
CMYK

Images from http://dba.med.sc.edu/price/irf/Adobe_tg/models/rgbcmy.html

SYSTEM

COLOR

DESIGN TECHNIQUES



Hue

Saturation

Lightness

Images from http://dba.med.sc.edu/price/irf/Adobe_tg/models/hsb.html

HSL SYSTEM

COLOR

DESIGN TECHNIQUES

Gradient

COLOR

DESIGN TECHNIQUES

The power of gray

COLOR

DESIGN TIPS

Background

First or Last?

COLOR

DESIGN TECHNIQUES

Data Reduction

- Emphasis
- Closure
- Transition
- Unity

- Keyword
- Highlight
- Bullet
- Word cloud

http://www.smashingmagazine.com/2007/11/07/tag-clouds-gallery-examples-and-good-practices/

TEXT

DESIGN TECHNIQUES

Typeface

Font size

Font color

UPPERCASE/lowercase

Bold, *italic*, underline

Unity

Consistency

Difference
(two step)

Portability

TYPOGRAPHY

TEXT

DESIGN TECHNIQUES

North Carolina

North Carolina

North Carolina

North Carolina

TYPOGRAPHY / TYPEFACE

TEXT

DESIGN TECHNIQUES

What kind of chart should I use?

DESIGN TECHNIQUES

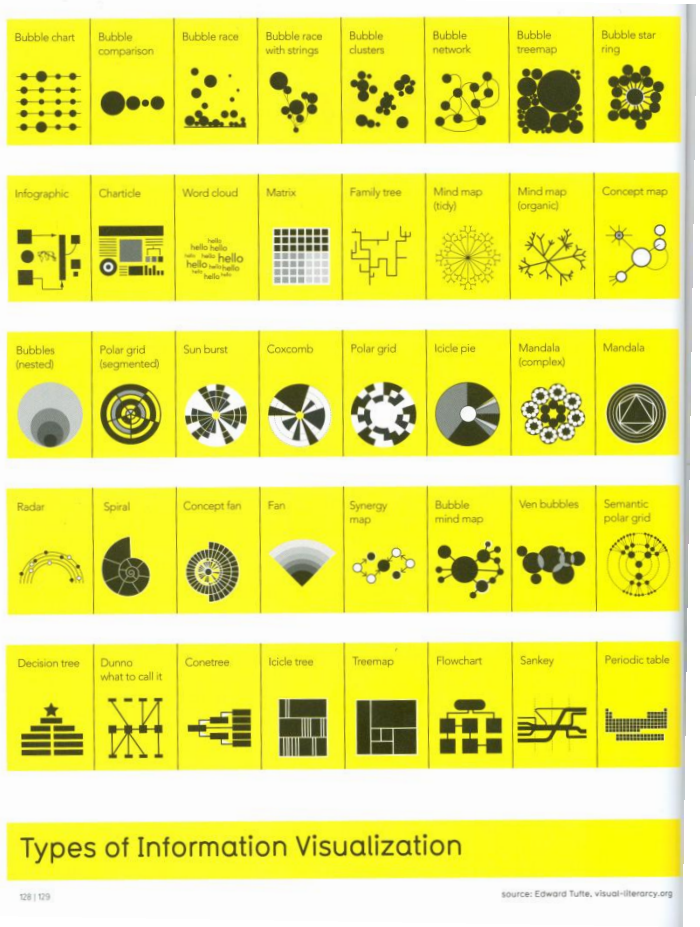
Text

Grid

Participant	Before	After
A	12	23
B	15	30
C	12	34
Total	39	87

TABLE

DESIGN TECHNIQUES

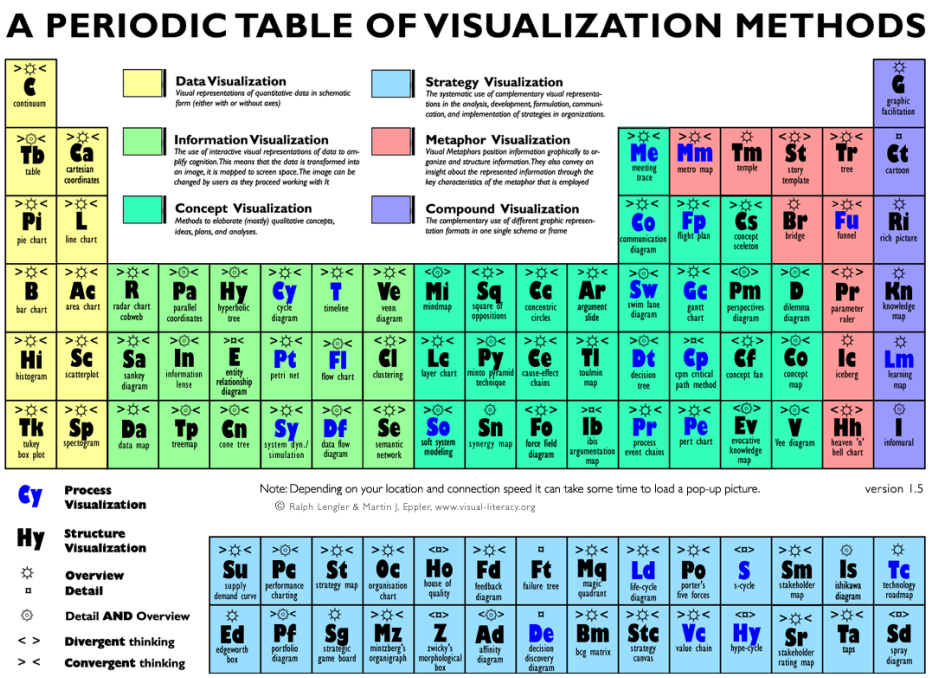


Tufte's index

(Macandless, 2009)

CHART

DESIGN TECHNIQUES



(http://www.visual-literacy.org/periodic_table/periodic_table.html)

CHART

DESIGN TECHNIQUES

Info Design Pattern

(http://interface.fh-potsdam.de/infodesignpatterns/patterns.php)

CHART

DESIGN TECHNIQUES

Number of variable

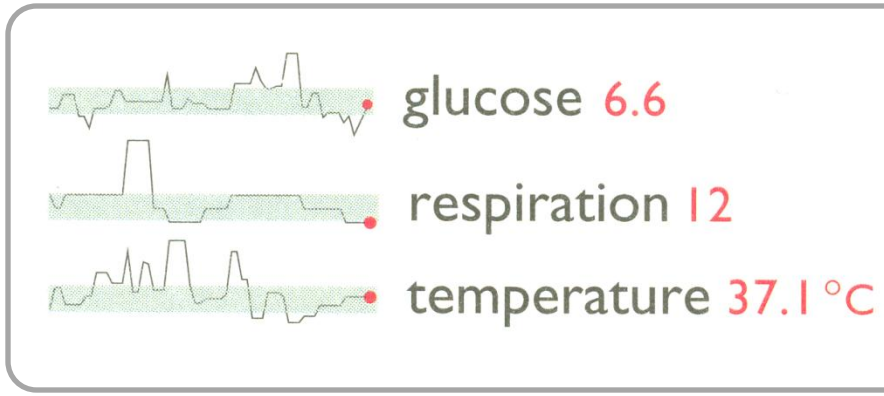
Type of variable

Type of value

Dimension of analysis

SPECIFICATION CHART

DESIGN TECHNIQUES



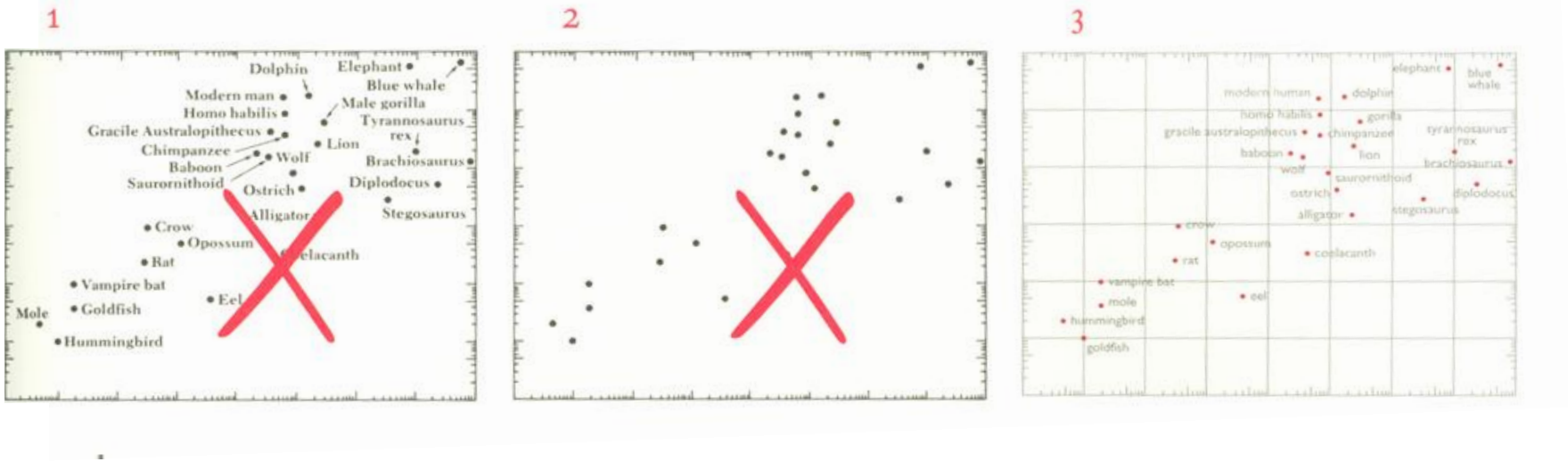
Sparkline

(Tufte, 2006, p.47)

CONTEXT

CHART

DESIGN TECHNIQUES



Cluster

(Tufte, 2006, p.121)

CONTEXT

CHART

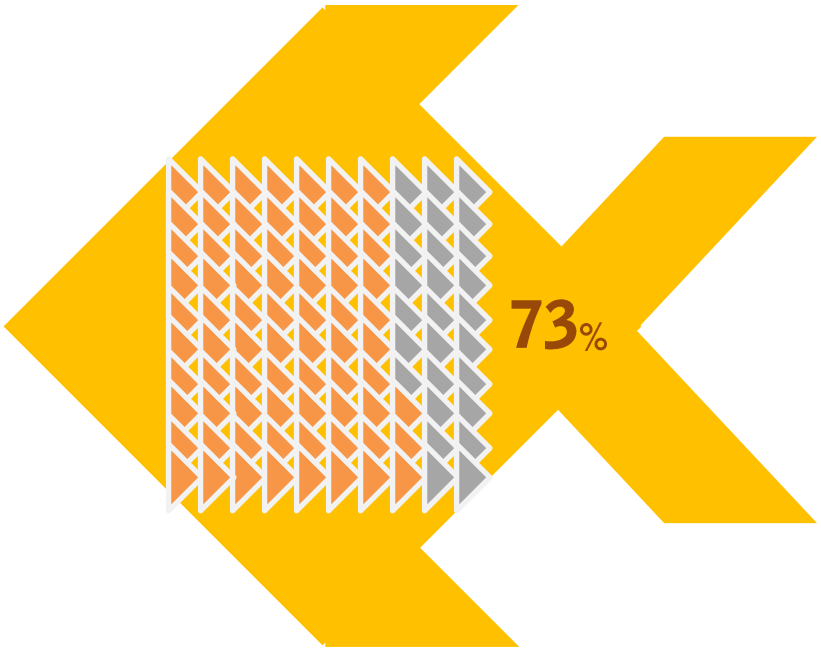
DESIGN TECHNIQUES

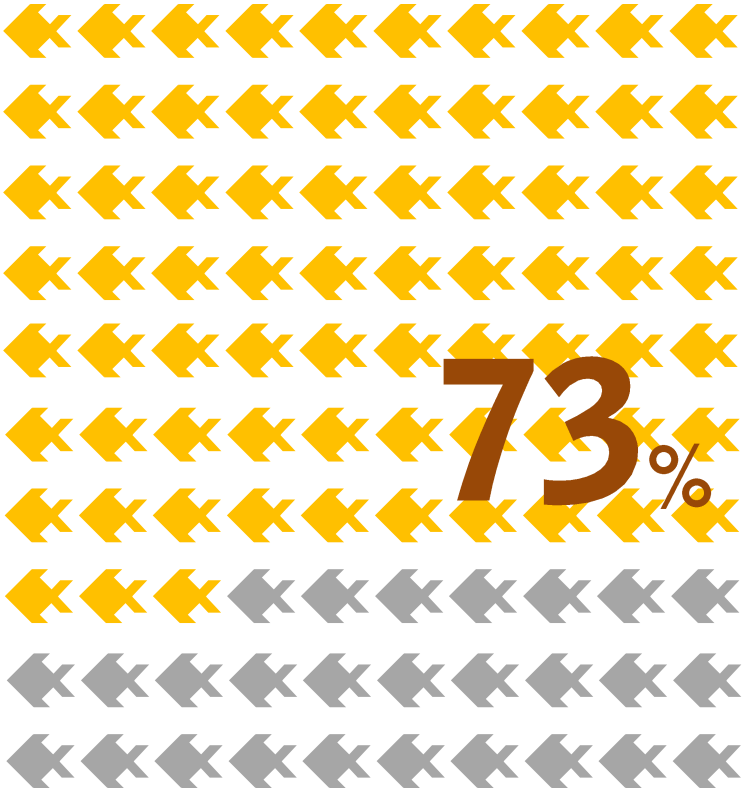
http://www.newsmap.jp

COLOR

CHART

DESIGN TECHNIQUES





MACRO VS. MICRO CHART

DESIGN TECHNIQUES

Topic	None	--	--	Half	--	--	All
The student's research (n=97)	0	0	1	14	16	42	24
Research in the field (n=96)	0	6	23	29	15	17	6
The student's classwork (n=95)							
The major people, schools, publicatior in the field							
Upcoming conferences (n=96)							
The student's post-graduation job opportunities (n=97)							
Your research (n=97)							
How to prepare presentations and publications							
How to be a							
How to write							
University re (n=97)							
Administrati							
The student'							
Your persona							

Topic	Advisor Responses		Advisee Responses		Absolute difference between Yes %
	No	Yes	No	Yes	
Advisor's personal life	3 (4%)	78 (96%)	8 (13%)	54 (87%)	9
Advisee's personal life	4 (5%)	78 (95%)	10 (16%)	53 (84%)	9
Upcoming conferences	4 (5%)	78 (95%)	14 (23%)	47 (77%)	18
Advisor's research	5 (6%)	75 (94%)	13 (21%)	49 (79%)	15
			6 (10%)	57 (90%)	0
			10 (17%)	50 (83%)	7
			13 (21%)	49 (79%)	10
			17 (27%)	45 (73%)	16
			20 (33%)	40 (67%)	21
			21 (35%)	39 (65%)	22
			8 (13%)	54 (87%)	0
			13 (21%)	49 (79%)	7
			18 (30%)	43 (70%)	9
			31 (51%)	30 (49%)	24

Topic	None	--	--	Half	--	--	All
Your research (n=69)	0	2	3	21	9	21	13
Research in the field (n=69)	3	18	14	19	3	11	1
The major people, schools, publications, etc. in the field (n=69)	9	12	19	8	11	5	5
Your post graduation job opportunities (n=69)	6	14	14	13	9	5	8
Your advisor's research (n=68)	12	17	14	12	3	7	3
Your classwork (n=69)	10	19	15	13	4	4	4
Your personal life (n=67)	12	23	13	11	1	5	2
Upcoming conferences (n=68)	13	23	13	12	2	4	1
Your advisor's personal life (n=68)	16	27	11	7	1	3	3
University resources available to you (n=69)	20	27	11	6	1	3	1
Administrative tasks (n=69)	19	19	18	9	2	2	0
How to prepare presentations and publications (n=69)	23	17	12	5	4	5	3
How to be a successful teacher (n=69)	25	16	12	10	3	0	3
How to write a grant proposal (n=69)	39	14	8	2	3	3	0

Cassidy Sugimoto (2009)
Mentoring, collaboration, & interdisciplinarity: An evaluation of the scholarly development of Library and Information Science doctoral students

DIMENSION

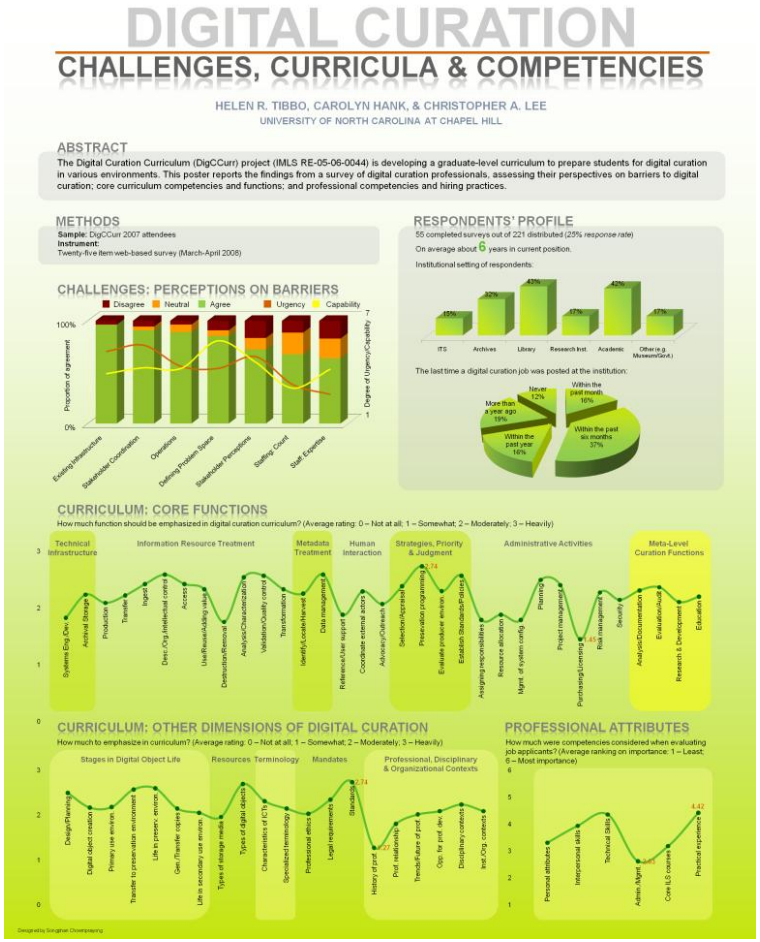
CHART

Results

Topics of conversation

Mentoring: Cultivation

DESIGN TECHNIQUES



DIGITAL CURATION

CHALLENGES, CURRICULA & COMPETENCIES

HELEN R. TIBBO, CAROLYN HANK, & CHRISTOPHER A. LEE

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

ABSTRACT

The Digital Curation Curriculum (DigCCurr) project (IMLS RE-05-06-0044) is developing a graduate-level curriculum to prepare students for digital curation in various environments. This poster reports the findings from a survey of digital curation professionals, assessing their perspectives on barriers to digital curation; core curriculum competencies and functions; and professional competencies and hiring practices.

METHODS

Sample: DigCCurr 2007 attendees
Instrument:
Twenty-five item web-based survey (March-April 2008)

RESPONDENTS' PROFILE

55 completed surveys out of 221 distributed (25% *response rate*)

On average about 6 years in current position.

Institutional setting of respondents:

ITS 15% · Archives 22% · Library 33% · Research Inst. 17% · Academic 32% · Other (e.g. Museum/Gov't.) 17%

The last time a digital curation job was posted at the institution:

Never 12% · Within the past month 10% · More than a year ago 19% · Within the past six months 37% · Within the past year 16%

CHALLENGES: PERCEPTIONS ON BARRIERS

Disagree · Neutral · Agree · Urgency · Capability

Proportion of agreement: 100%, 0%

Degree of Urgency/Capability: 7, 1

Existing Infrastructure · Stakeholder Coordination · Operations · Defining Problem Space · Stakeholder Perceptions · Staffing: Count · Staff: Expertise

CURRICULUM: CORE FUNCTIONS

How much function should be emphasized in digital curation curriculum? (Average rating: 0 – Not at all; 1 – Somewhat; 2 – Moderately; 3 – Heavily)

Technical Infrastructure · Information Resource Treatment · Metadata Treatment · Human Interaction · Strategies, Priority & Judgment · Administrative Activities · Meta-Level Curation Functions

Systems Eng. Dev. · Archival Storage · Production · Transfer · Ingest · Desc./Org. Intellectual content · Access · Use/Reuse/Adding value · Destruction/Removal · Analysis/Characterization · Validation/Quality control · Transformation · Identify/Locate/Harvest · Data management · Reference/User support · Coordinate external actors · Advocacy/Outreach · Selection/Appraisal · Preservation programming 2.74 · Evaluate produce environ. · Establish Standards/Policies · Assigning responsibilities · Resource allocation · Mgmt. of system config. · Planning · Project management · Purchasing/Licensing 1.45 · Risk management · Security · Analysis/Documentation · Evaluation/Audit · Research & Development · Education

CURRICULUM: OTHER DIMENSIONS OF DIGITAL CURATION

How much to emphasize in curriculum? (Average rating: 0 – Not at all; 1 – Somewhat; 2 – Moderately; 3 – Heavily)

Stages in Digital Object Life · Resources · Terminology · Mandates · Professional, Disciplinary & Organizational Contexts

Design/Planning · Digital object creation · Primary use environ. · Transfer to preservation environment · Life in preserv. environ. · Gen./Transfer copies · Life in secondary use environ. · Types of storage media · Types of digital objects · Characteristics of ICTs · Specialized terminology · Professional ethics · Legal requirements · Standards 2.74 · History of prof. 2.27 · Prof. relationships · Trends/Future of prof. · Opp. for prof. dev. · Disciplinary contexts · Inst./Org. contexts

PROFESSIONAL ATTRIBUTES

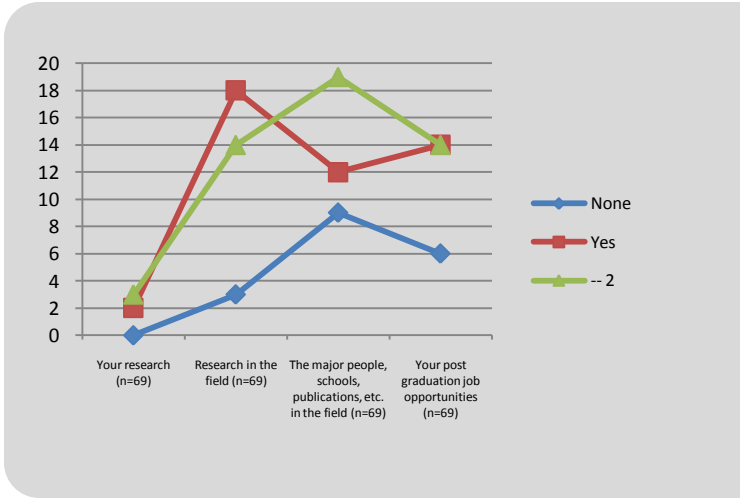
How much were competencies considered when evaluating job applicants? (Average ranking on importance: 1 – Least; 6 – Most importance)

Personal attributes · Interpersonal skills · Technical Skills · Admin. Mgmt. 3.41 · Core LIS courses · Practical experience 4.42

DIMENSION CHART

DESIGN TECHNIQUES

MS Office Online tools Manual

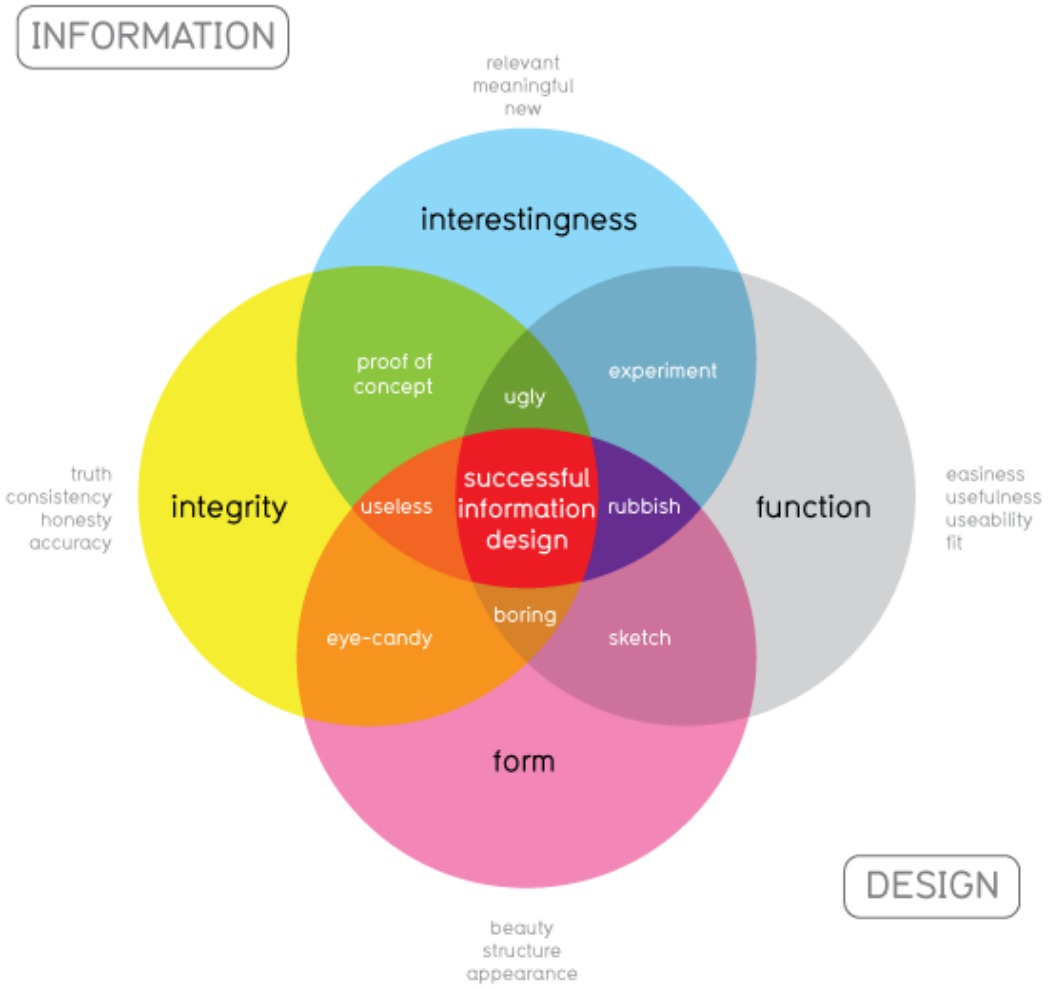


TOOLS

CHART

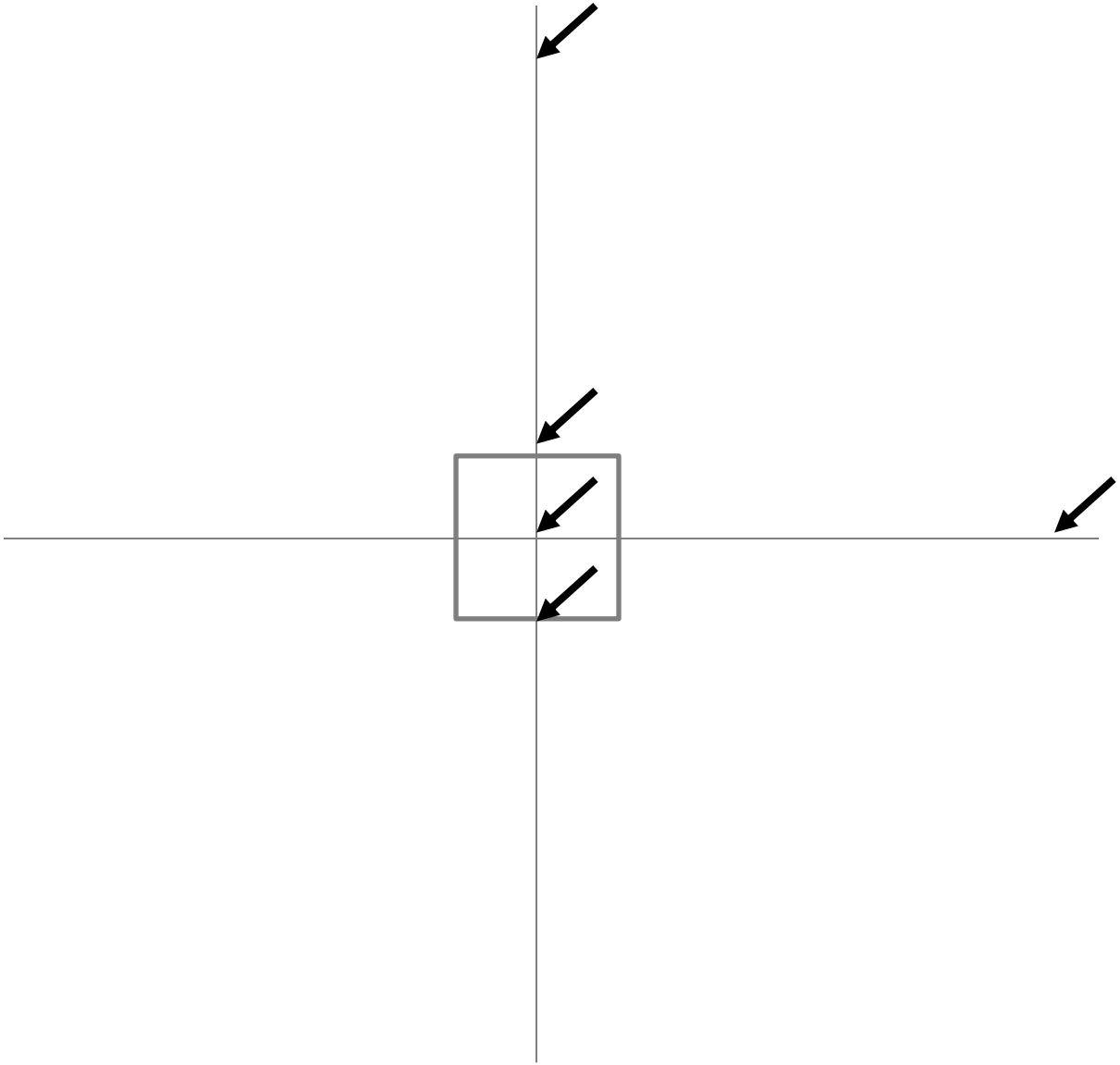
Demystify the illusion

What Makes Good Information Design?



David McCandless // v1.0 // Nov 09
InformationIsBeautiful.net

1



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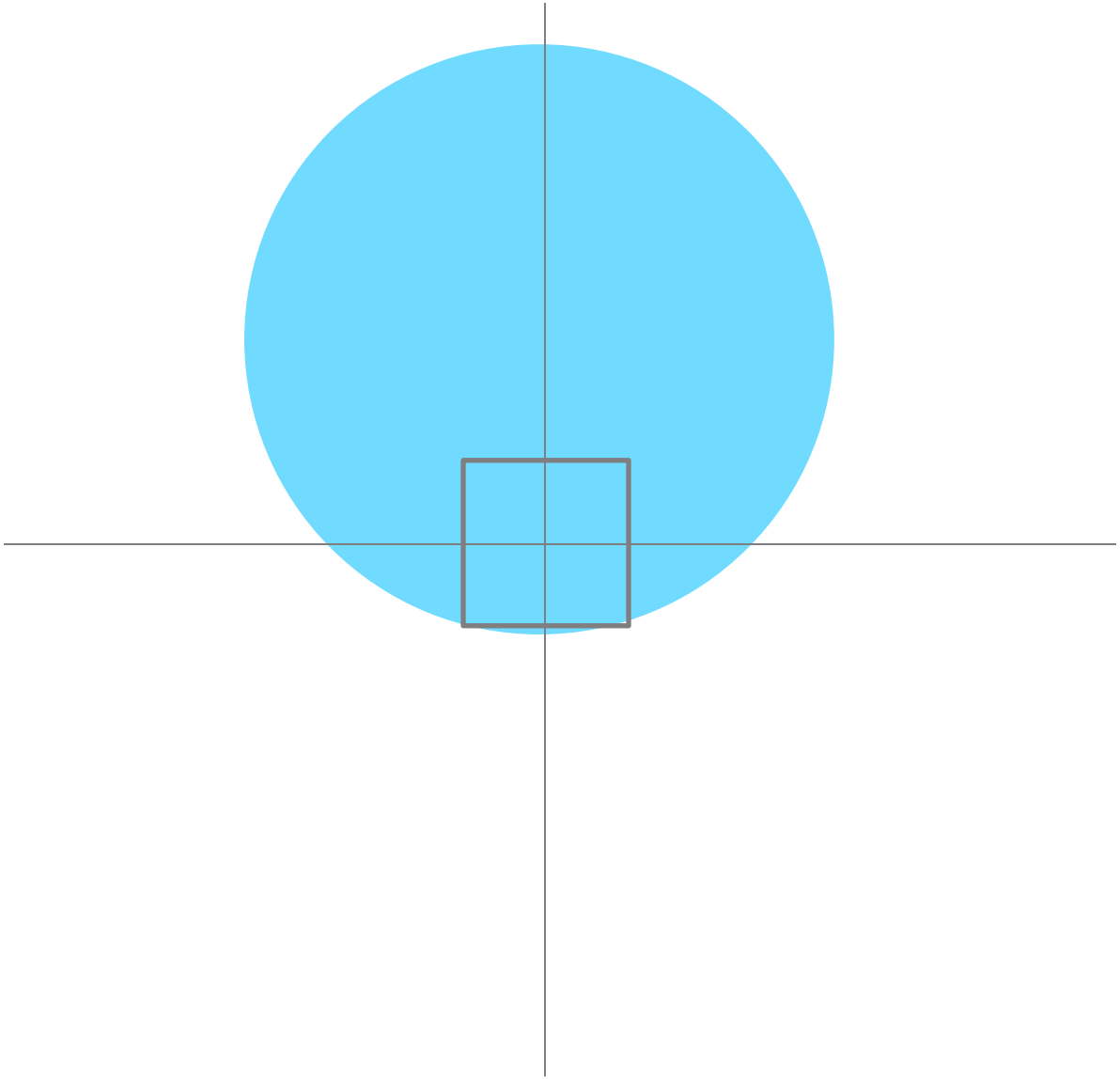

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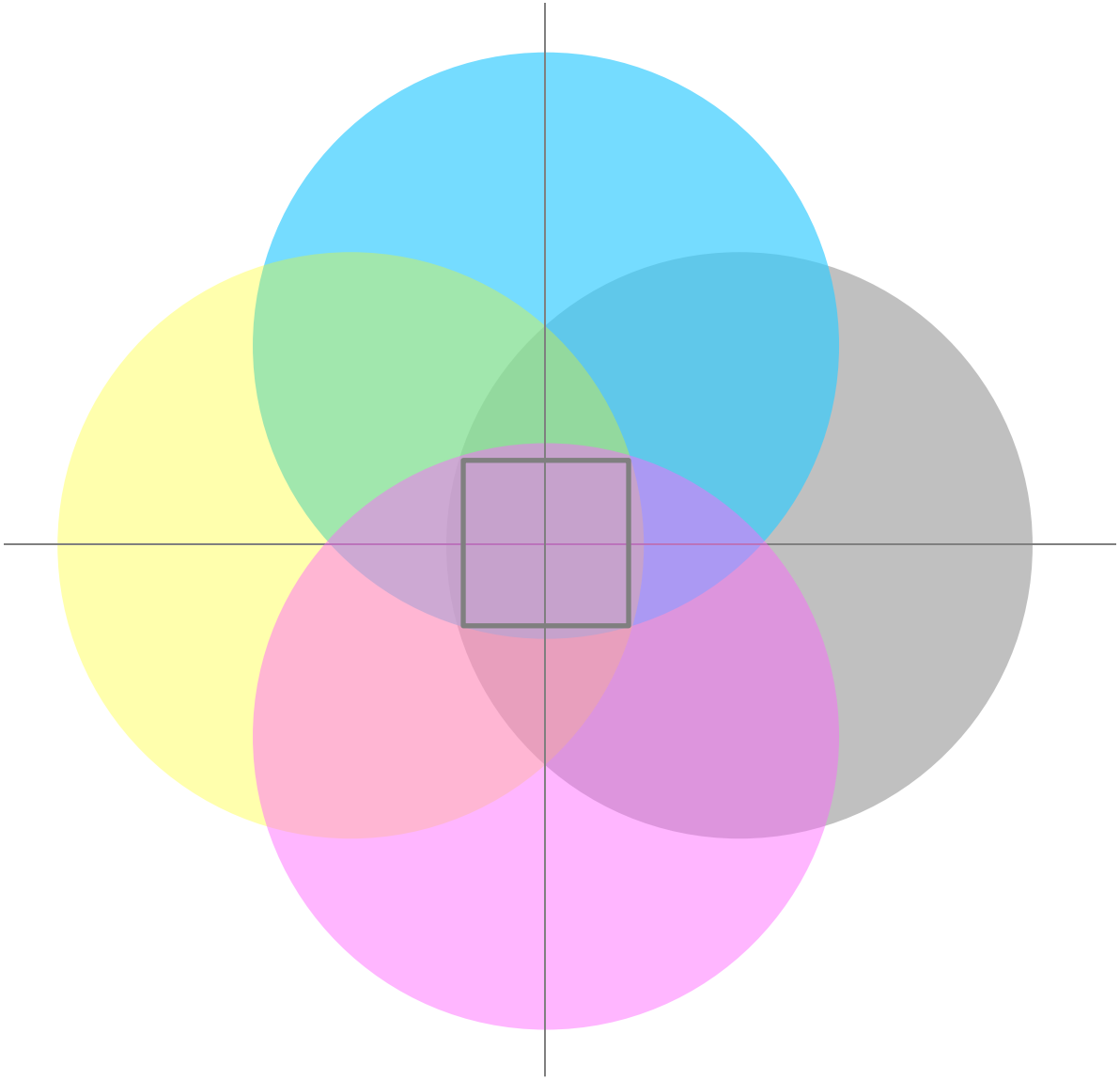
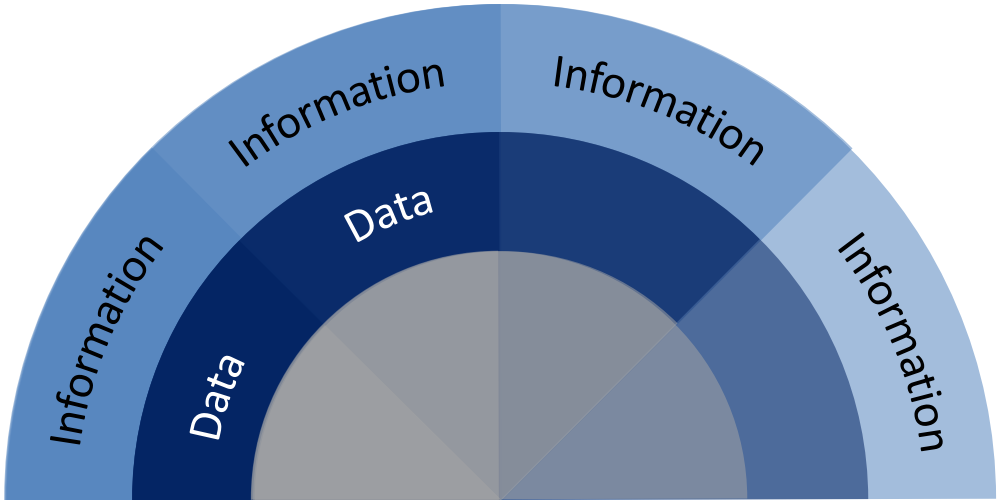


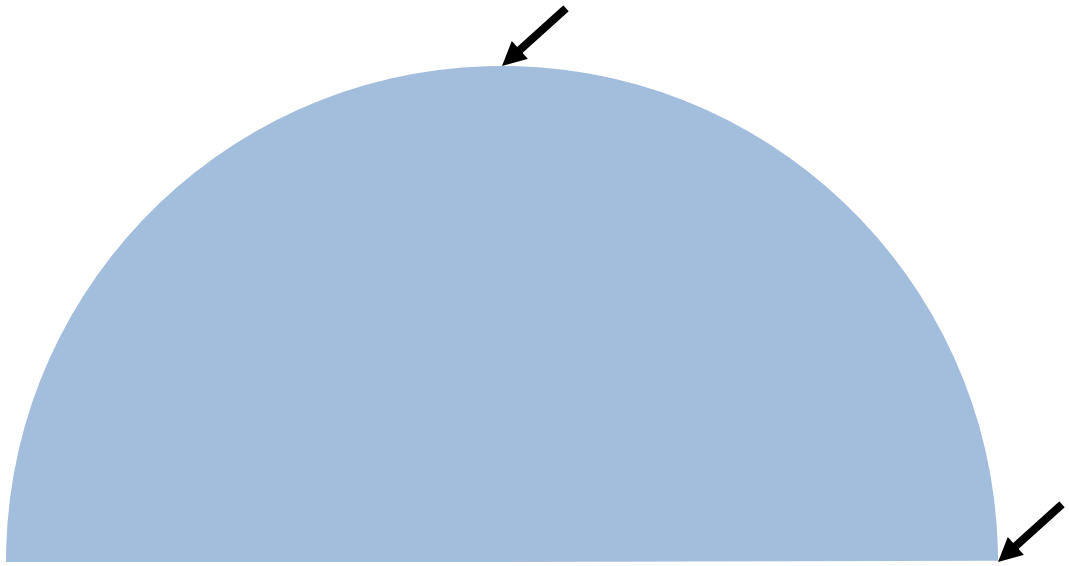
DESIGN TECHNIQUES

COLOR PALETTE

COLOR


Information
Information
Information
Information
Data
Data

1



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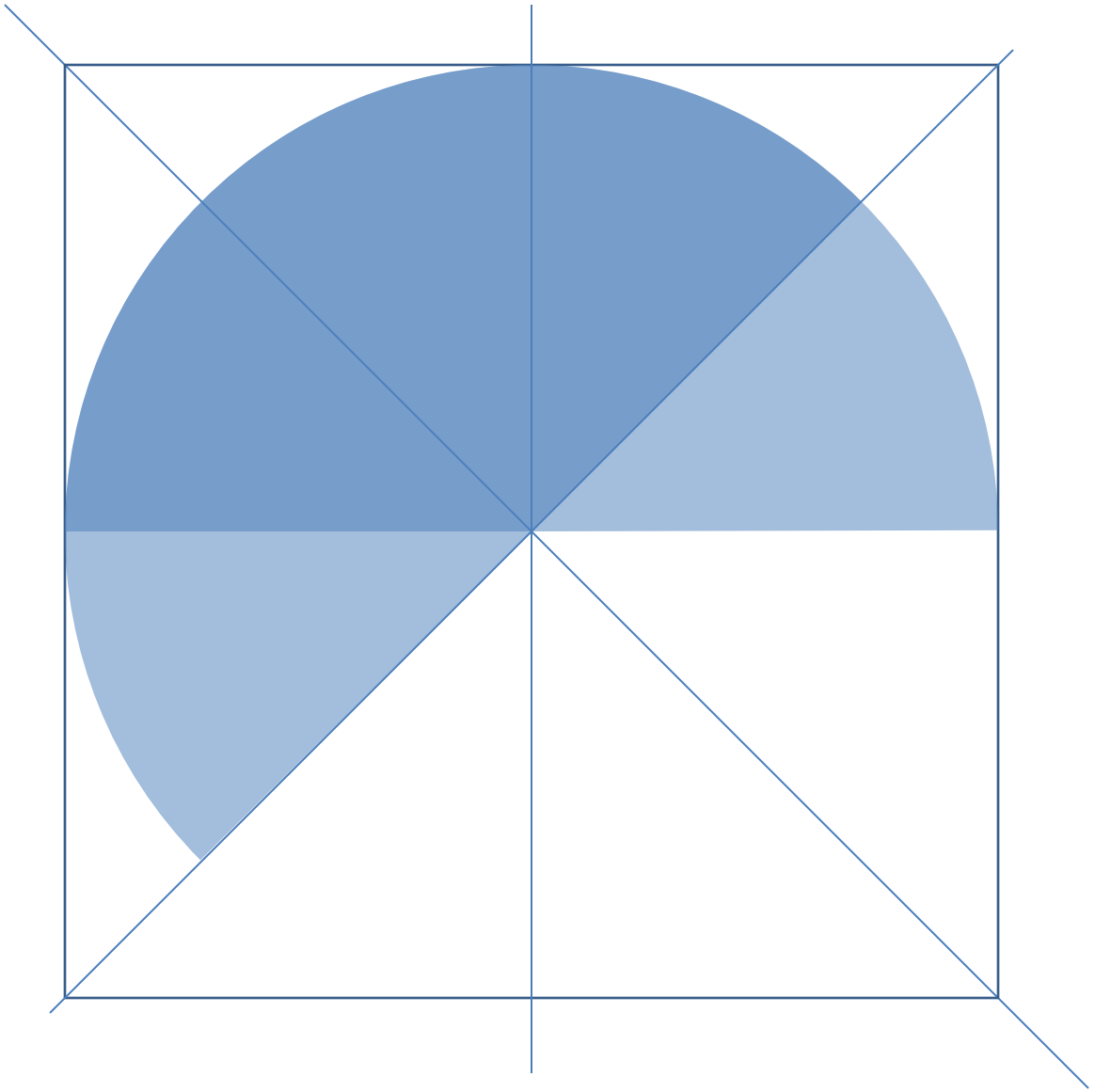

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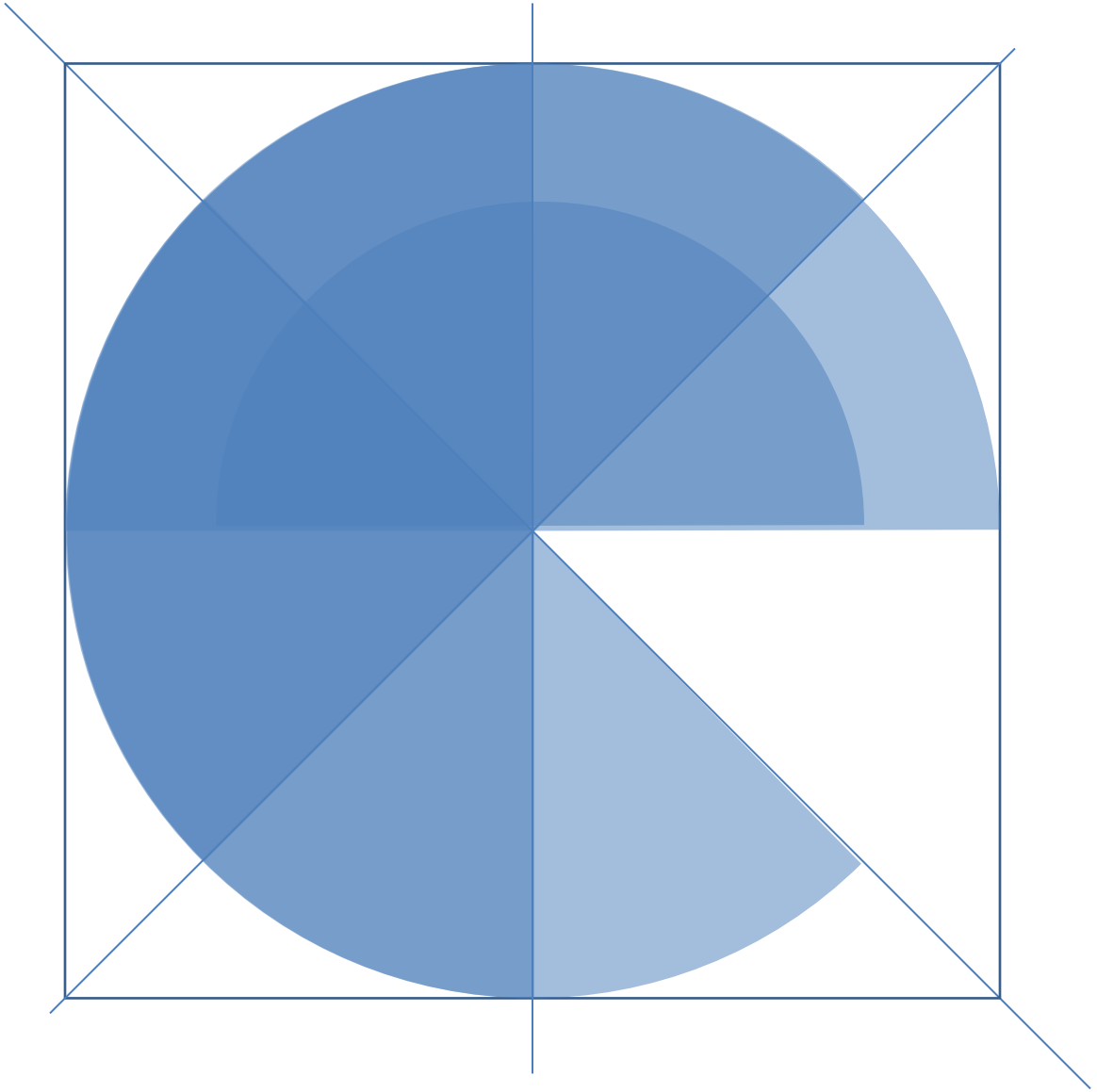

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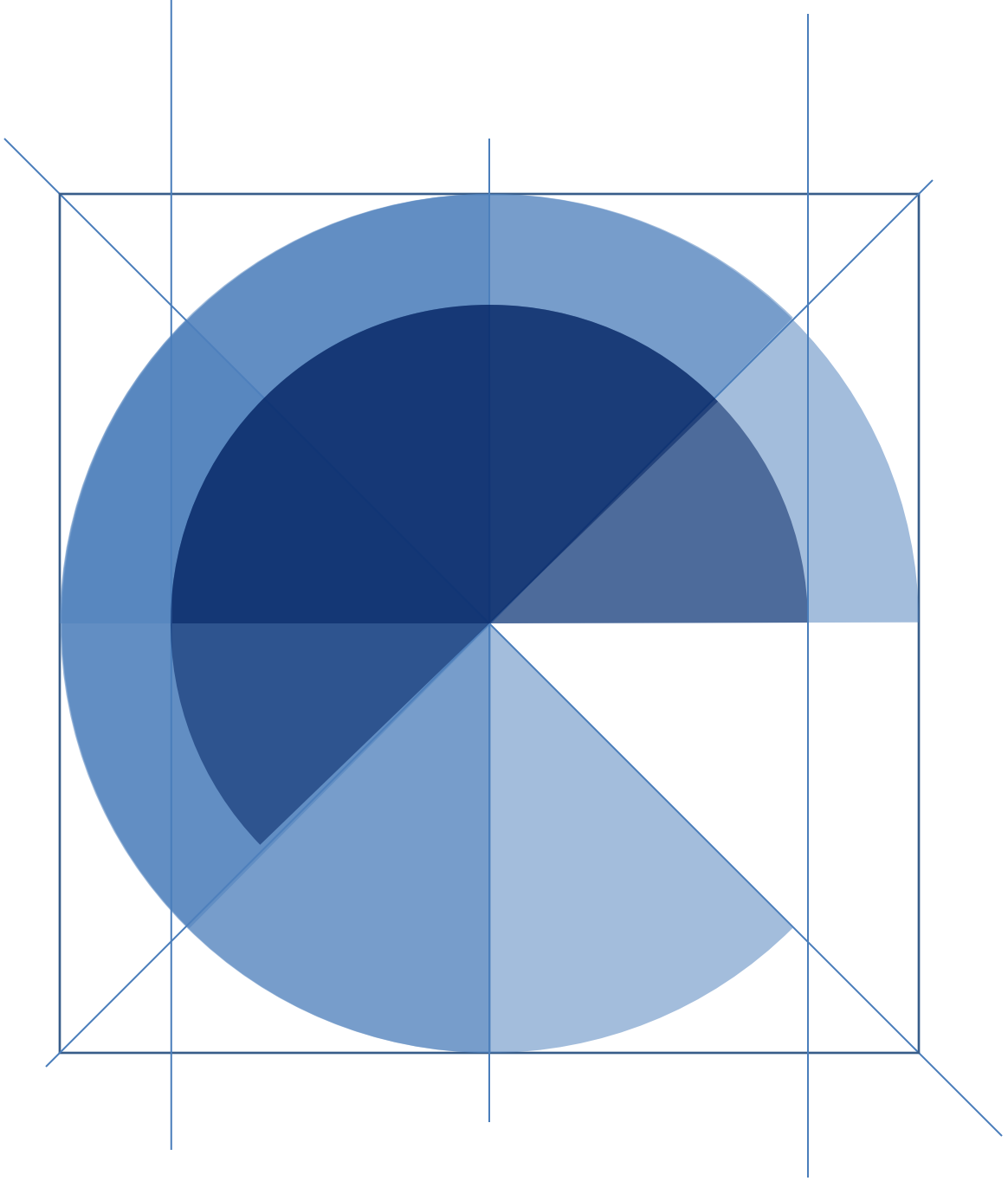

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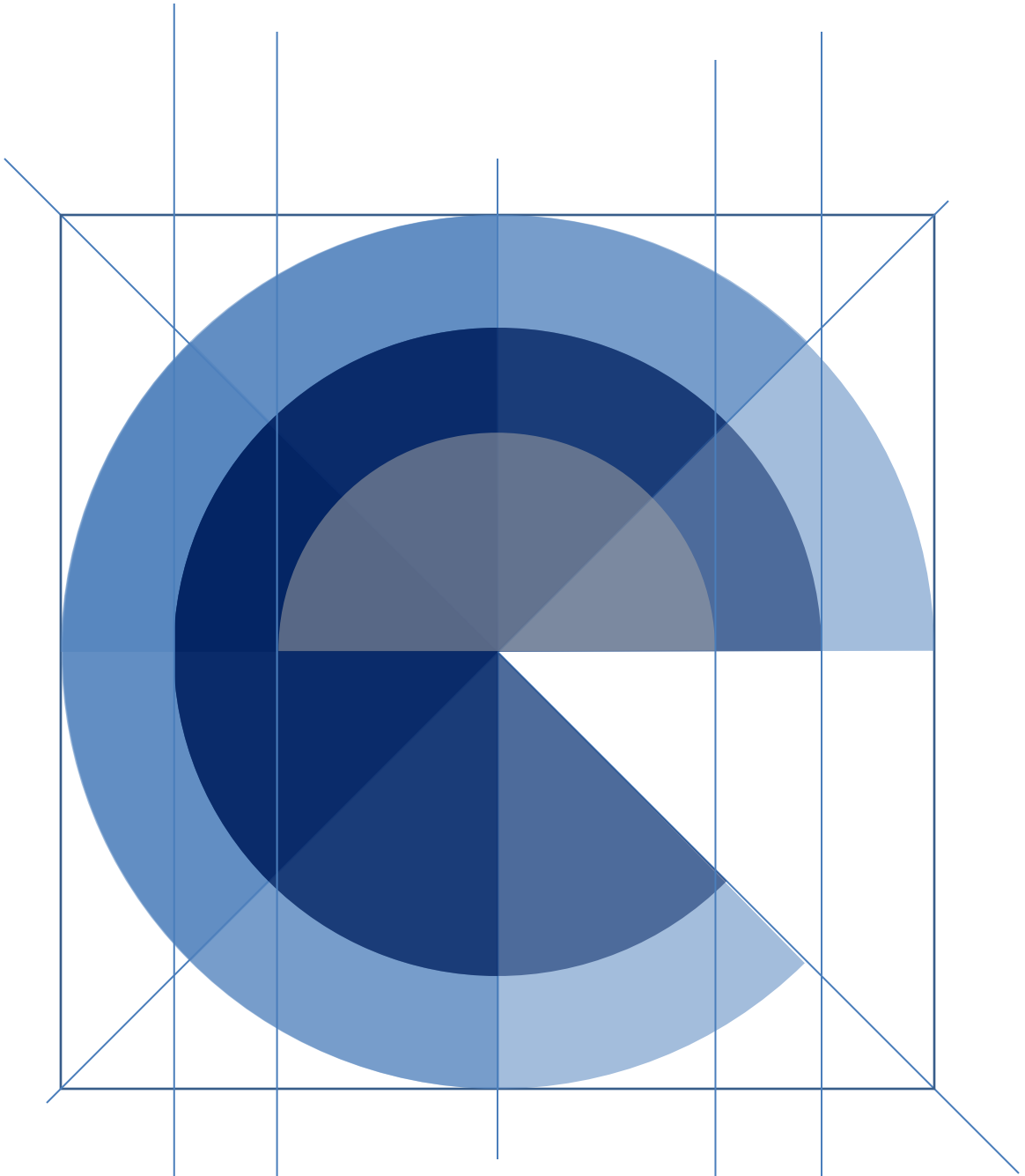

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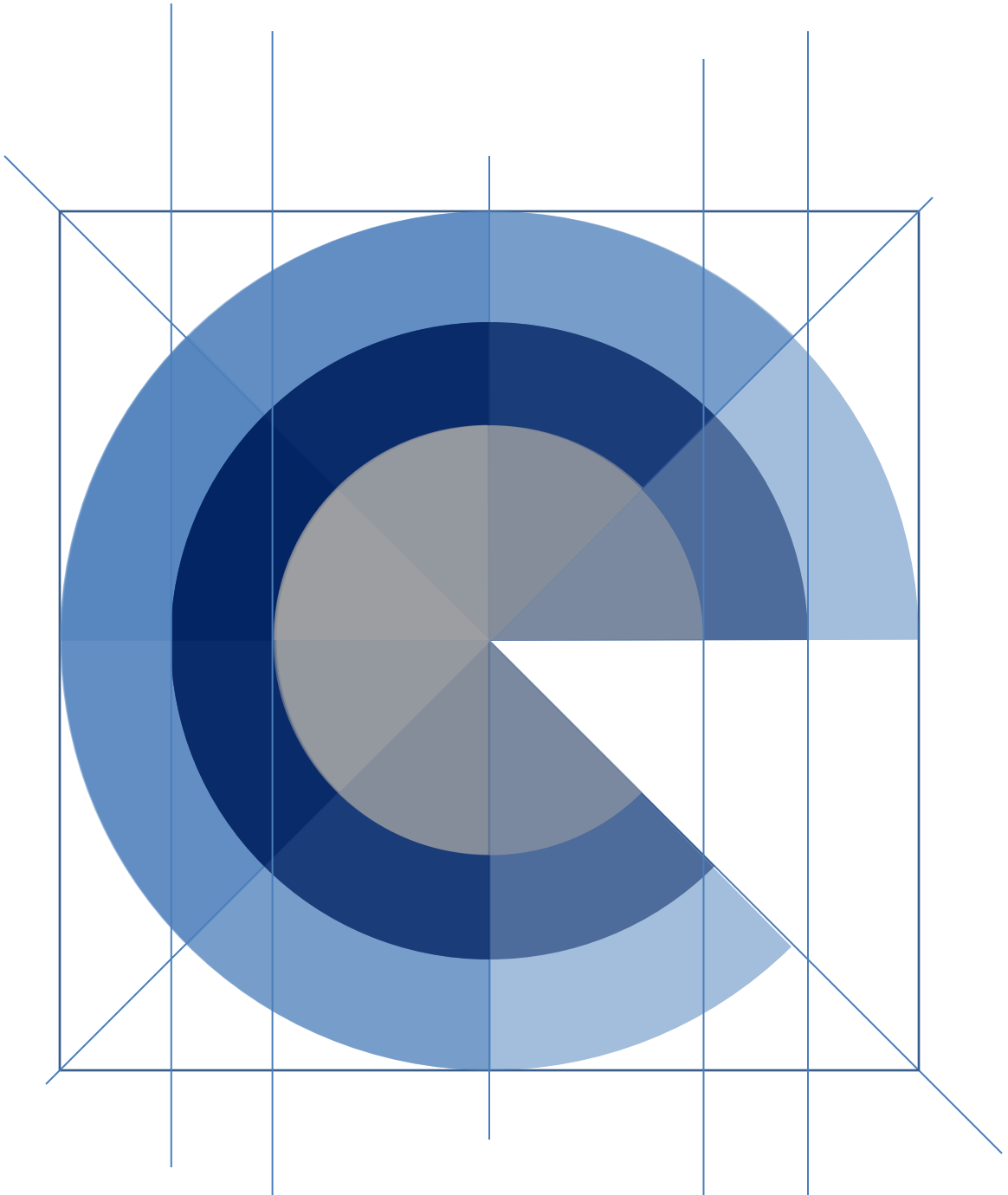

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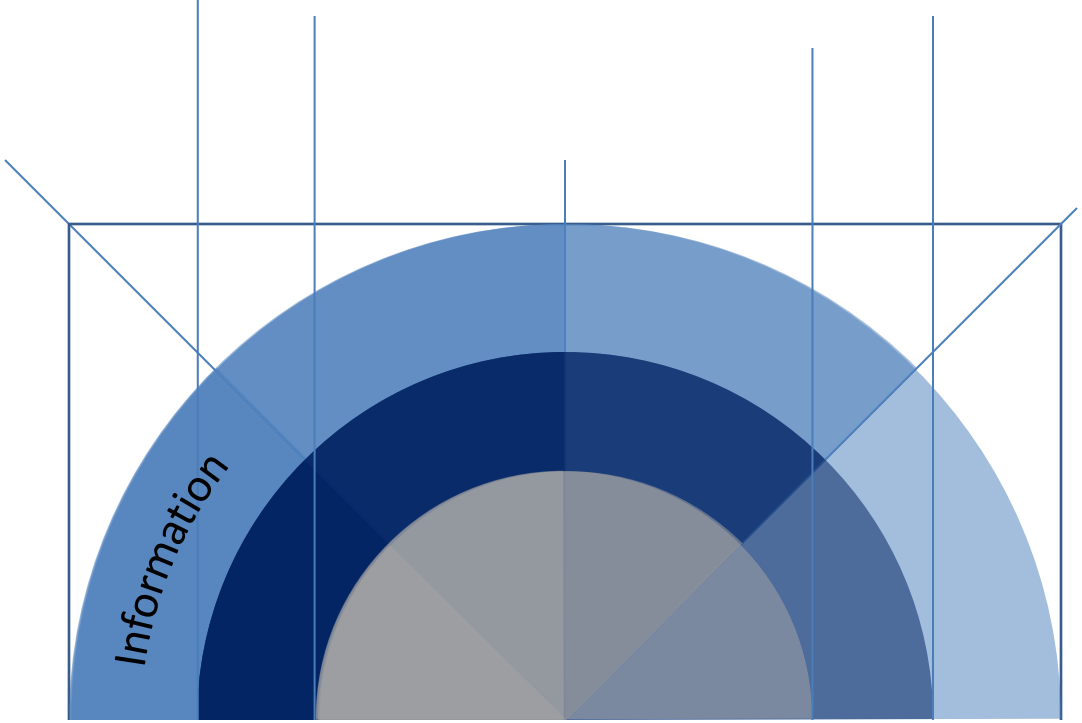
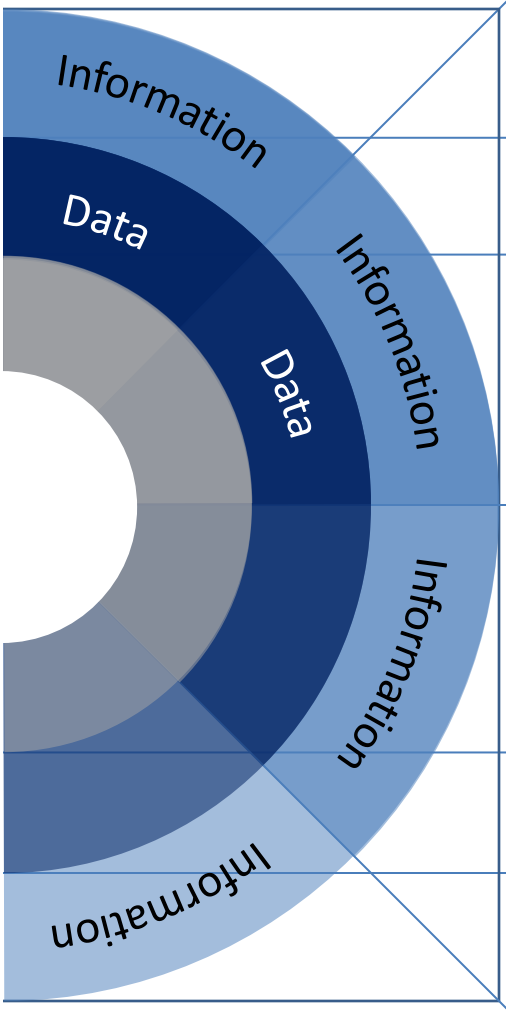
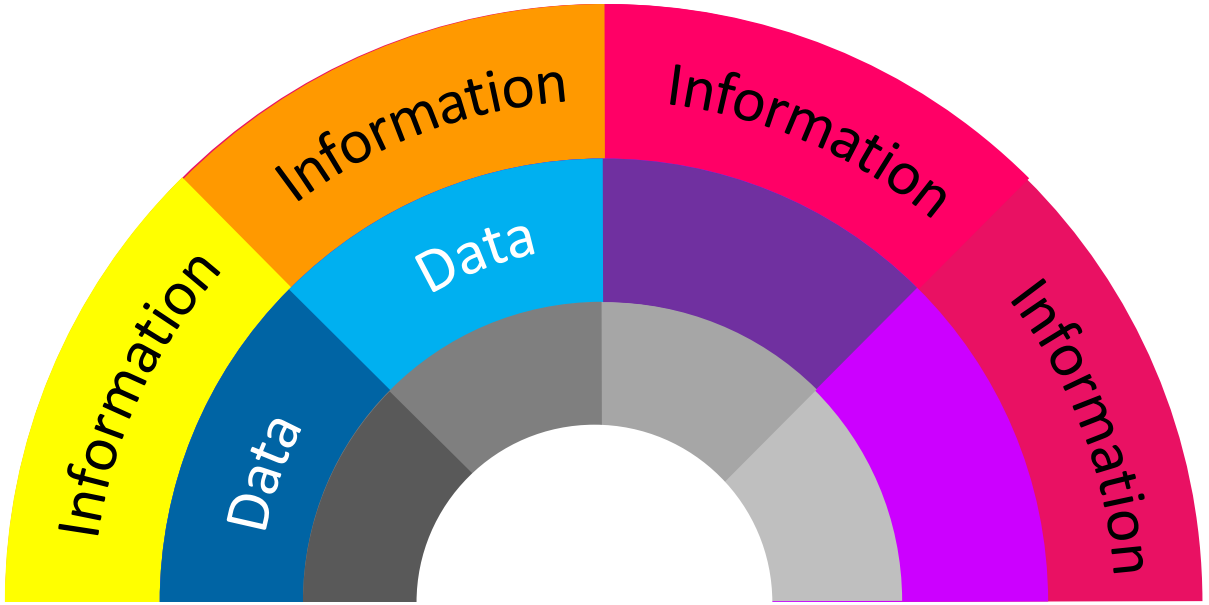



Information
Data
Data
Information
Information
Information

9

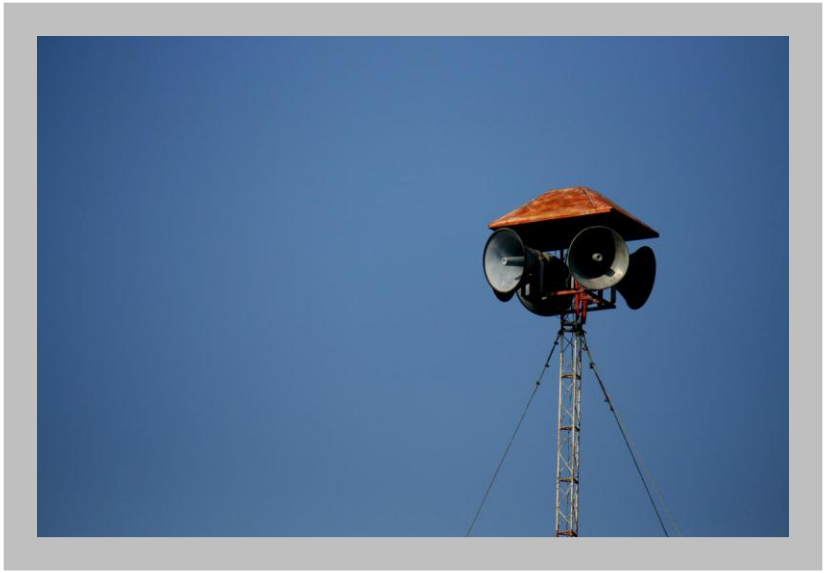

Information
Information
Information
Data
Data
Information

DESIGN TECHNIQUES

Resolution
Unity
Usefulness
Interestingness
Transition
Closure
Dominance
Color

IMAGE

DESIGN TECHNIQUES



CONTINUATION & CLOSURE IMAGE

DESIGN TECHNIQUES

Macro

Tele

EMPHASIS

IMAGE

DESIGN TECHNIQUES

COLOR

IMAGE

DESIGN TECHNIQUES

Working with

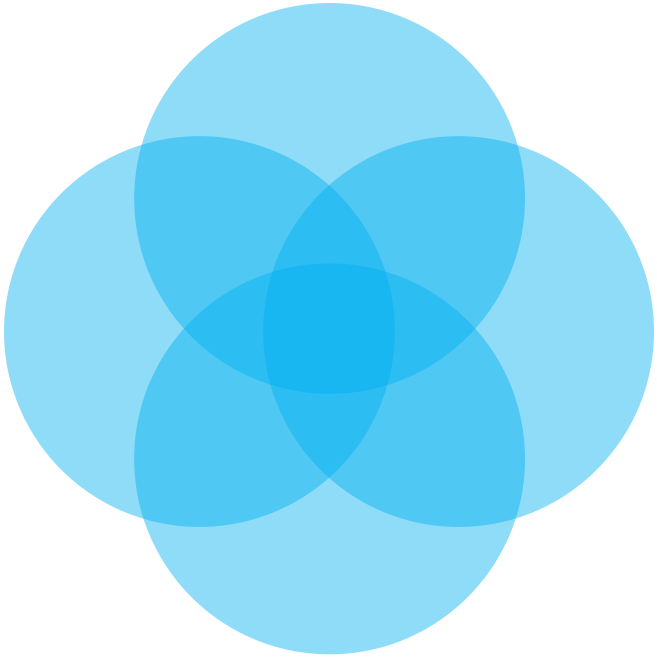
vector

IMAGE

DESIGN TECHNIQUES

Beware of mixing photo and vector!

DESIGN TECHNIQUES



Transparency Tool

SHAPE

TRANSPARENCY

DESIGN TECHNIQUES

PHOTO

TRANSPARENCY

AGENDA

Design Principles

Design Techniques

Poster Design

Presentation Design

AGENDA

Design Principles

Design Techniques

Poster Design

Presentation Design

POSTER DESIGN

1. Paper size
2. Layout

SETUP

POSTER DESIGN

File format

Color calibration

Transparency

Photos

PRINTING ISSUES

AGENDA

Design Principles

Design Techniques

Poster Design

Presentation Design

AGENDA

Design Principles

Design Techniques

Poster Design

Presentation Design

PRESENTATION DESIGN

How many slides?

Idea & Time

PRESENTATION DESIGN

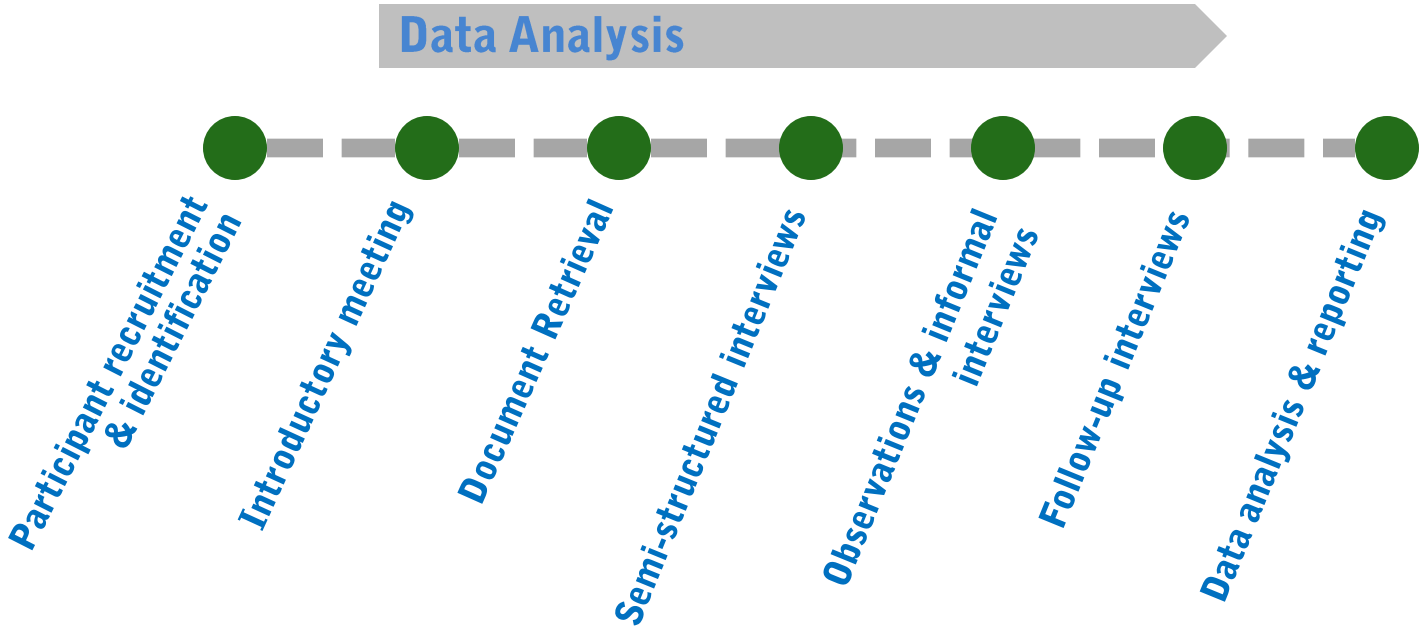
Line-by-line

Idea-by-idea

Slide-by-slide

Context

STUDY PROTOCOL



Dana Hanson-Baldauf (2009)
Exploration of the Everyday Life Information Practices, Needs, and Challenges of Young Adult with Intellectual Disabilities

STUDY PROTOCOL

Data Analysis

Participant recruitment & identification

Recruitment:

- Seek participants from previous study
- Contact Chapel Hill-Carrboro Public Schools
- Other: Chapel Hill-Carrboro Special Olympics, ARC, Residential Services Inc., Orange-Person-Chatham Group Homes

Identification:

- Criterion based – age and communication ability

Introductory meeting

Purpose:

- Share study details, participant commitment, and compensation for time
- Obtain informed consent
- Obtain permission to access formal and informal documents
- Rapport building

Document Retrieval

Type:

- Formal documents (IEPs, habilitation plans, vocational plans, behavioral modification plans)
- Informal documents (journals/diaries, calendars, homework, computer transaction logs)

STUDY PROTOCOL

Data Analysis

Semi-structured interviews

Schedule:

- Approximately one hour per participant

Interviewees:

- Primary research participant
- Parent(s)/Care Provider
- Other: Special education teacher, employer, case manager

Data collection method:

- Digital recording device and hand notes

Observations & informal interviews

Schedule:

- Two 4-5 hour weekday sessions
- Two 4-5 hour weekend sessions

Data collection method:

- Field notes
- Digital recording device

Follow-up interviews

Schedule:

- Approximately one hour per participant

Interviewees:

- Primary research participant
- If necessary: Parent(s)/Care Provider, special education teacher, employer,and/or case manager

Data collection method:

- Digital recording device and hand notes

STUDY PROTOCOL

Data analysis & reporting

Process:

- Transcription
- Content analysis
- Open/axial/selective coding

PRESENTATION DESIGN

Interactive publication

Be well-prepared and professional

Test run