



Composing tables for Universal Accessibility

Good and bad ways to create tables

Table

- Arrangement of data in rows and columns, or possibly in a more complex structure.

Wikipedia

Readable table

- If the table is not planned in a readable form to begin with, the typographer can render it readable only by redesigning it from scratch.
Robert Bringhurst, The Elements of Typographic Style

The diagram shows a table with a complex, non-readable layout. It consists of 4 rows and 6 columns. The top-left cell contains a diagonal line. The top-right cell is shaded gray. The bottom-left cell is shaded gray. The table is designed to be unreadable, illustrating the need for redesign.

Accessible table

- Tables are regular when the number of logical cells is equal in each row after accounting for rowspan and colspan attributes
- While PDF/UA-1 does not prohibit irregular tables, irregular tables are almost always a strong indicator of improper table structure.

Matterhorn Protocol

Fake tables (part 1)

- Tables used as layout tools



Caution! Be careful when you remove the shelf supports.

Fake tables (part 2)

- Tables that are actually lists

REAL
WORLD
EXAMPLES!

4.2 – The organization

- 1 Shall determine the interested parties that are relevant to the QMS
- 2 Shall determine the requirements of these interested parties that are relevant to the QMS
- 3 Shall monitor information about these interested parties
- 4 Shall review information about these interested parties
- 5 Shall monitor their relevant requirements...
- 6 Shall review their relevant requirements

Nightmare tables

- Tables that takes a few minutes to be read



AZIONI DI CONFORMITA'		ORGANIZZAZIONI AUDITATE DALLO STESSO ORGANISMO (A)		OMogeneita'		ORGANIZZAZIONI DELLO STESSO SETTORE		EQUITA'									
								ORGANIZZAZIONI CON CARATTERISTICHE (X) SIMILI / CONCORRENTI									
								STABILITA'				STABILITA'					
								ORGANIZZAZIONE A - AUDIT PROGRAMME 1				ORGANIZZAZIONE B - AUDIT PROGRAMME 1					
								CONCORDANZA		CONCORDANZA		CONCORDANZA		CONCORDANZA			
								AUDIT 1		AUDIT 2		AUDIT 1		AUDIT 2			
								CONGRUENZA	CONGRUENZA	CONGRUENZA	CONGRUENZA	CONGRUENZA	CONGRUENZA	CONGRUENZA	CONGRUENZA		
								AUDITOR 1	AUDITOR 2	AUDITOR 1	AUDITOR 2	AUDITOR 1	AUDITOR 2	AUDITOR 1	AUDITOR 2		
								CONFORMITA'	CONFORMITA'	CONFORMITA'	CONFORMITA'	CONFORMITA'	CONFORMITA'	CONFORMITA'	CONFORMITA'		
								▼	▼	▼	▼	▼	▼	▼	▼		
rilevi	rilevi	rilevi	rilevi	rilevi	rilevi	rilevi	rilevi										
1	2	...	1	2	...	1	2	...	1	2	...	1	2	...	1	2	...
AZIONI DI CONFORMITA'		ORGANIZZAZIONI AUDITATE DALLO STESSO ORGANISMO (A)		OMogeneita'		ORGANIZZAZIONI DELLO STESSO SETTORE		EQUITA'									
								ORGANIZZAZIONI CON CARATTERISTICHE (Y) SIMILI / CONCORRENTI									
								STABILITA'				STABILITA'					
								ORGANIZZAZIONE A - AUDIT PROGRAMME 1				ORGANIZZAZIONE B - AUDIT PROGRAMME 1					
								CONCORDANZA		CONCORDANZA		CONCORDANZA		CONCORDANZA			
								AUDIT 1		AUDIT 2		AUDIT 1		AUDIT 2			
								CONGRUENZA	CONGRUENZA	CONGRUENZA	CONGRUENZA	CONGRUENZA	CONGRUENZA	CONGRUENZA	CONGRUENZA		
								AUDITOR 1	AUDITOR 2	AUDITOR 1	AUDITOR 2	AUDITOR 1	AUDITOR 2	AUDITOR 1	AUDITOR 2		
								CONFORMITA'	CONFORMITA'	CONFORMITA'	CONFORMITA'	CONFORMITA'	CONFORMITA'	CONFORMITA'	CONFORMITA'		
								▼	▼	▼	▼	▼	▼	▼	▼		
rilevi	rilevi	rilevi	rilevi	rilevi	rilevi	rilevi	rilevi										

Rule of thumb

- A good table can be described over the phone
- An accessible table can be read starting from any of its cell
- Repeating things is not bad

Common mistakes

OctoberPDFest ONLINE

- Ask the reader to guess the context
- Empty cells

REAL
WORLD
EXAMPLES!

Problem	Possible cause	Remedy
You cannot activate or operate the hob.	The hob is not connected to an electrical supply or it is connected incorrectly.	Check if the hob is correctly connected to the electrical supply. Refer to the connection diagram.
	The fuse is blown.	Make sure that the fuse is the cause of the malfunction. If the fuse is blown again and again, contact a qualified electrician.
	You do not set the heat setting for 10 seconds.	Activate the hob again and set the heat setting in less than 10 seconds.
	You touched 2 or more sensor fields at the same time.	Touch only one sensor field.
	Pause operates.	Refer to "Daily use".
	There is water or fat stains on the control panel.	Clean the control panel.
An acoustic signal sounds and the hob deactivates. An acoustic signal sounds when the hob is deactiva-	You put something on one or more sensor fields.	Remove the object from the sensor fields.

Common mistakes

- Missing headers

Water	To dispense chilled water, press Water indicator turns on.
Lock (Dispenser panel / Dispenser lever)	To prevent the use of the dispenser panel, press and hold Water dispenser lever, press and hold Water . If you press and hold the button again, the dispenser lock will be deactivated. When dispenser lock is on, the indicator on the dispenser panel is pressed or the NOTE The Lock on the dispenser panel does not lock the main panel. To lock the main panel, press and hold the Lock on the main panel.



Common mistakes

- Overloaded headers



Sample	Mean value pH	Standard deviation s_r	Coefficient of variation $C_{V,r} (\%)$	Repeatability limit r
Copy paper	10,0	0,02	0,21	0,06
Paperboard	8,7	0,06	0,64	0,17
Bleached pulp	5,2	0,03	0,50	0,08
Unbleached pulp	8,0	0,04	0,54	0,11

Common mistakes

■ Tetris

Category	Item	Description
Monitoring	Fridge temperature	Displays the desired temperature setting of the fridge.
	Freezer temperature	Displays the current temperature of the freezer.
	Diagnosis	Detects abnormal operations of the refrigerator.
	Energy monitoring	Checks the accumulated power consumption of the refrigerator for the last 180 days.
Alarms	Abnormally high temperature	This alarm is triggered when the fridge or the freezer has abnormally high temperatures.
	Door opening	This alarm is triggered if the fridge door or the freezer drawer is open for a specific time.
	Water filter replacement	This alarm reminds you that the water filter must be replaced.
Inside Image		You can view the inside of the refrigerator and can see if you need to replace food items.
Family Hub App Link		You can connect to the App Store and download the Refrigerator app.



Best practice

- Talk with content creators before drafting
- Don't group cells (in case, repeat the content)
- Measurement units goes into cells, not into headers
- Read the table starting from a random cell: does it work? (it shall)
- Format lists as lists, not as tables

Good tables

- Use headers
- Use both infographic and typography
- Explicitate empty cells

ART. NO	PROD. NO	WEIGHT	WIND SHIELDS	SAUCE PANS	FRY PAN	BURNER	KETTLE
150253	25-3HA	895 g	HA	HA	NS	SB	—
157253	25-3HA/GB	980 g	HA	HA	NS	GB	—

Good tables

- Repeat content if needed

Nome indice colore	Numero indice colore	Numero CAS	Limite
Blu disperso 1	64500	2475-45-8	Limite d'azione
Blu disperso 3	61505	2475-46-9	Limite d'azione
Blu disperso 106	111935	12223-01-7	Limite d'azione
Blu disperso 124	111938	61951-51-7	Limite d'azione
Giallo disperso 3	11855	2832-40-8	Limite d'azione
Arancio disperso 3	11855	730-40-5	Limite d'azione
Arancio disperso 37/76/59	11132	12223-33-5	Limite d'azione
Rosso disperso 1	11110	2872-52-8	Limite d'azione
Giallo solvente 1	11000	60-09-3	Limite d'azione
Giallo solvente 2	11020	60-11-7	Limite d'azione
Giallo solvente 3	11160	97-56-3	Limite d'azione
Rosso base 9	42500	569-61-9	Limite d'azione
Violetto base 1	42535	8004-87-3	Limite d'azione
Violetto base 3	42555	548-62-9	Limite d'azione
Rosso acido 26	16150	3761-53-3	Limite d'azione
Violetto acido 49	42640	1694-09-3	Limite d'azione

Good tables

- Columns provide informations



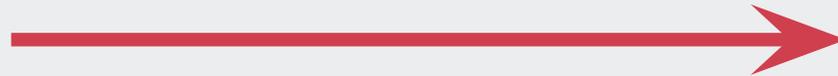
Limite
Limite d'azione

Good tables

- Rows provide informations

Nome indice colore	Numero indice colore	Numero CAS	Limite
--------------------	----------------------	------------	--------

Arancio disperso 3	11855	730-40-5	Limite d'azione
--------------------	-------	----------	-----------------



- Disassemble, use regular paragraphs



<Artifact>



<P>

Caution! Be careful when you remove the shelf supports.

- Transform to list

4.2 – The organization	
1	Shall determine the intere
2	Shall determine the requi
3	Shall monitor informatio
4	Shall review information
5	Shall monitor their releva
6	Shall review their relevan



<H3>

4.2 – The organization

1. Shall determine the interested

2. Shall determine the requireme

3. Shall monitor informations

4. Shall review informations

MadeToTag

OctoberPDFest ONLINE

- Plug-in for InDesign
- Tagged, accessible PDF
- PDF/UA



Tagged PDF
Accessible PDF



Tagged PDF
Accessible PDF



MadeToTag

Making Content Accessible

PDF/UA creation tools



Tagged PDF
Accessible PDF

+

MadeToTag

Making Content Accessible

PDF/UA creation tools

=

PDF/UA

MadeToTag

- Intuitive guided UI
- Efficient workflow

1

2

3

4

5

6

7

Task 1: Define and review export tags

Previous Instructions... Next

Status

Paragraph styles in use:	6
Paragraph styles with export tag:	1
Paragraph styles used for lists:	1
Paragraph styles without export tags:	5
Unused Paragraph styles:	2

Go to text without export tag:

Export tag for current text:

Style name:

PDF export tag:

EPUB/HTML export tag:

Reduce structure to predefined types

Highlight export tags by color

Locate potential problems

Locate hard returns

Use MadeToTag shortcut set

Task 2: Structure content into articles

Previous Instructions... Next

Status

Number of stories and images:	49
... linked to an article:	21
... not in any article:	28
... stories:	5
... images:	23
Frames in more than one article:	0

Go to next frame not yet in any article

Linked to: Leggi l'opera

Link frame to:

Show frames:

Preview:

Locate potential problems

Locate hard returns

Use MadeToTag shortcut set

Task 3: Alternate text

Previous Instructions... Next

Status

Number of non-text frames:	31
Frames with images or graphics:	7
Frames lack alternate text:	0
Frames already have alternate text:	7
Frames are artwork not containing graphics:	24

Go to next frame without alternate text

Current art... La scultura arcaica

Go to next frame without alternate text

Mano della Dama di Auxerre

Apply

Show overview

Locate potential problems

Locate hard returns

Use MadeToTag shortcut set

Task 4: Review Document Metadata

Previous Instructions... Next

Document title:

La scultura arcaica

Author:

Lorem ipsum

Description:

La scultura arcaica

Keywords:

lorem; ipsum; dolor; sit; amet

Copyright notice:

2018 Lorem ipsum

Website:

www.loremipsum.it

Apply

More

Locate potential problems

Locate hard returns

Use MadeToTag shortcut set

Task 5: Language

Previous Instructions... Next

Primary language

Italian 100.00 % 2777

Further languages

(no entry) 0 % 0

(no entry) 0 % 0

Other languages 0 % 0

Language for text selection

(no entry)

Locate potential problems

Locate hard returns

Use MadeToTag shortcut set

Task 6: Table Structure

Previous Instructions... Next

Status

Tables in articles:	0
- in stories:	0
- in anchored frames:	0
Tables outside of articles:	0

Navigate to Tables

Configure table headers

Use iDesign defined column headers

Quick Headers - Number of row and column headers

Smart Headers

Activate Smart Headers edit mode

Table is a 'layout table'

Highlight table cells

Locate potential problems

Locate hard returns

Use MadeToTag shortcut set

Task 7: Create Tagged PDF File

Previous Instructions... Next

Pages: All Range:

Spreads

Optimize anchored frames

Optimize Table Of Contents

PDF/UA-1 PDF/UA-1 & PDF/A-2a

Link footnotes

View PDF after exporting

Image Handling

Compression: JPEG (Lossy)

JPEG Quality: Medium

Resolution (ppi): 150 (72-300)

Optimize form fields

Front doc. Book

Create PDF

pdfengine version 10.2.0.510

Locate potential problems

Locate hard returns

Use MadeToTag shortcut set

- Powerful tools

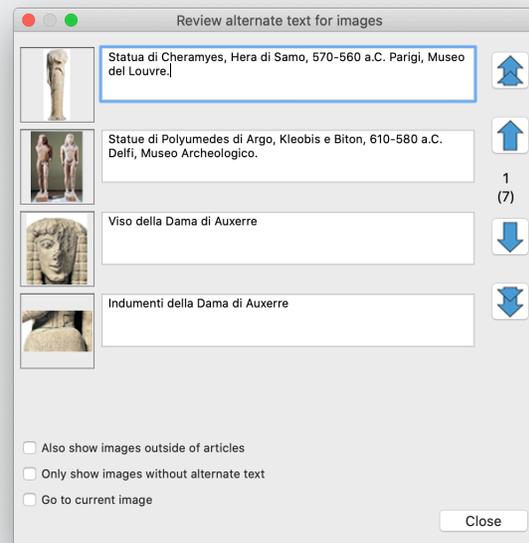
Configure table headers

- Use InDesign defined column headers Reset table
- Quick Headers – Number of row and column headers

- Smart Headers
 - Activate Smart Headers edit mode
- Table is a 'layout table'

■ Powerful tools

- ✓ Locate hard returns
- Locate faux hyphens
- Locate images without alternate text
- Locate objects not assigned to any article
- Locate paragraph styles without role
- Locate uses of basic paragraph style
- Locate empty paragraphs
- Locate faux bullet lists
- Locate faux numbered lists
- Locate paragraphs without style
- Locate insufficient visual contrast
- Set export tag as prefix to paragraph style
- Meta data and alternate text review
- Sample_JavaScript



- Visual feedback for tags

LEGGI L'OPERA
Distingui gli aspetti iconografici da quelli stilistici.

● = ICONOGRAFIA
● = LETTURA STILISTICA

La Dama di Auxerre

La Dama di Auxerre è un importante esempio delle prime statue votive della Grecia arcaica. La statua rappresenta forse una dea, una vestale o l'immagine votiva di un'offerente. È stata ritrovata a Creta e risente dello stile della scultura egizia.

Il viso
I lineamenti del viso sono incisi. Il naso prominente e la bocca e gli occhi scavati richiamano la statuaristica egizia.

La mano destra
È di proporzioni più grandi rispetto al corpo; è portata al petto.

La postura
La figura è rappresentata in modo rigido ed è frontale rispetto allo spettatore. Il soggetto ha una postura severa.

La testa
È di proporzioni più grandi rispetto al corpo, presenta una capigliatura con grossi trecce, simile a una parrucca.

Gli indumenti
Il peplo greco decorato con motivi geometrici, i meandri, avvolge il corpo della donna. Una cintura stringe la vita e una mantellina le copre le spalle.

La gonna
Conserva la decorazione incisa sul motivo del meandro. Un tempo la statua era policroma (fabio stretto in vita richiama la scultura cretese [vedi la statua Dea dei serpenti, p. 14]).

MadeToTag

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- ...and much more!
- <https://axaio.com/MadeToTag>



Composing tables for Universal Accessibility

Good and bad ways to create tables