



Fundamentals of Visual Design

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IR0000032 – ITINERIS, Italian Integrated Environmental Research Infrastructures System

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Mission 4 "Education and Research" - Component 2: "From research to business" - Investment
3.1: "Fund for the realisation of an integrated system of research and innovation infrastructures"



My name is David, I'm a visual designer and street artist. Today, I'm excited to guide you on this journey through graphic design and infographics.

Let's start with a simple, yet important question:

What is graphic design, in your opinion?

Is it a drawing? A decoration? A trend?

The answer is:

Graphic design is a language — it's communication.

It's how we transform ideas, data, and concepts

into images that speak for themselves.

And infographics are one of the most powerful tools to do this,

especially when we need to explain complex things in a simple way.

Course Overview

- Fundamentals of visual design
- How to structure effective slides
- Practical use of Canva
- Creation of a full presentation or scientific poster

Take a sheet of paper and a pen.

You have 5 minutes to draw yourself
using only symbols, icons, and metaphors.

Do not write anything—no letters, no numbers.
Only visual signs.

A sun? A mountain? A lightning bolt?

A turtle? A self-portrait?

Anything that represents you
in this moment.



Draw who you are without words



After the 5 minutes are over, share your drawing with the person next to you.

Explain its meaning.

Then switch roles: listen to theirs as well.

This simple exercise shows us that everyone is able to communicate through images, even without being designers.

Our brain is naturally inclined to see relationships, recognize symbols, and create visual connections.

Principles of Visual Communication

What is visual design and why is it important

- The difference between decorative graphics and functional graphics
- Common use cases: social communication, reports, presentations, dissemination

Principles of Visual Communication

message clarity

visual guidance

greater communicative impact

Why Visual Design Matters

Good design:

- enhances readability
- increases engagement
- reduces cognitive load
- strengthens credibility

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The role of graphic design beyond aesthetics

Visual communication isn't (just) about making things look good. It's about communication — guiding the eye, giving meaning to a message, even without words.

Today, we're surrounded by images — flyers, websites, billboards, social media. But knowing how to *see* and especially how to *design* these visuals is a valuable, versatile skill — and one that's increasingly in demand. Even in social, cultural, and educational fields.

Decorative Graphics vs Functional Graphics: What's the Difference?

Decorative graphic design is primarily meant to beautify content. It's designed to catch the eye or evoke an aesthetic emotion.

It can be powerful, but if not supported by a clear message, it may confuse or distract.

Functional graphic design, on the other hand, is created with the goal of conveying information in a clear, organized, and effective way.

It prioritizes readability, comprehension, and visual hierarchy.

This is the foundation of interface design, signage, infographics, and educational materials.

The two dimensions are not mutually exclusive:
a design can be both beautiful and functional.

The key is **not to sacrifice clarity for the sake of aesthetics.**

The Implicit Rules of Visual Communication:

Contrast – to create emphasis and make elements stand out

Alignment – to create order and visual connection between elements

Proximity – to show relationships by grouping related items together

Repetition – to reinforce consistency and visual identity

Introduction to Visual Semiotics:

Symbols – culturally learned signs that represent concepts (e.g. a heart for love)

Icons – simplified representations that resemble what they depict (e.g. a printer icon)

Signals – visual cues that guide behavior or trigger reactions (e.g. stop signs, warning symbols)

Mind maps – diagrams that visually organize information around a central idea, helping to connect and interpret concepts

Introduction to Visual Semiotics

Visual semiotics is the study of how images and visual elements communicate meaning. It helps us understand the hidden language behind what we see.

- **Symbols** – Signs that represent concepts through cultural convention (e.g. a dove = peace)
- **Icons** – Images that resemble what they represent (e.g. a camera icon = photo)
- **Signals** – Visual elements that prompt action or behavior (e.g. arrows, stop signs)
- **Mental maps** – Visual tools that organize and connect ideas in the mind

Anatomy of a Good Infographic

A well-designed infographic isn't just beautiful — it's effective.

It combines **clarity**, **structure**, and **visual appeal** to make complex information easy to understand.

Key elements:

- **A clear message** – One main idea, easy to grasp at a glance
- **Logical structure** – Organized flow from start to finish
- **Visual hierarchy** – Fonts, colors, and sizes guide the eye
- **Effective use of icons and illustrations** – Support understanding, not decoration
- **Data integrity** – Accurate and honest representation of information
- **Consistent style** – Unified typography, colors, and layout

WW II EFFECT 1941



PRES. QUEZON DECIDED TO CREATE A NEW CITY THAT WILL REPLACE AS MANILA THE CAPITAL CITY OF THE PHILIPPINES.

1938 PRESIDENT MANUEL L. QUEZON

HE FOUNDED THE CITY AND NAMED AFTER HIM. UNTIL 1976, THE NAME OF QUEZON CITY BECAME A CAPITAL OF THE PHILIPPINES.

MABUHAY ROTONDA 1948

ALSO KNOWN AS WELCOME ROTONDA, THIS LANDMARK IS THE BORDER OF QUEZON CITY AND MANILA CITY. THIS SERVES AS A SIGN THAT YOU ARE INSIDE THE QUEZON CITY.

1978 QUEZON CITY MEMORIAL CIRCLE

BEFORE THE WW2, THIS IS ORIGINALLY NAME NATIONAL GOVERNMENT CENTER. IT IS MEANT TO HONOR THE BRANCHES OF THE PHILIPPINE GOVERNMENT. PRES. OSMEÑA ISSUED EXECUTIVE ORDER NO. 79 STIPULATING THE CREATION OF QUEZON MEMORIAL COMMITTEE TO RAISED FUND TO ERECT A MEMORIAL FOR PRESIDENT MANUEL L. QUEZON.

1949 UP DILIMAN

BECAUSE OF THE DESTRUCTION OF SEVERAL OF THE BUILDINGS AFTER WW2 IN LOS BANOS, MANILA, CEBU AND ILOILO, BECAUSE OF THAT MUCH OF UP WAS TRANSFERRED FROM ITS CAMPUS IN MANILA TO A BIGGER CAMPUS IN DILIMAN, QUEZON CITY.

1954 STO DOMINGO CHURCH

IN 1588 IN INTRAMUROS MANILA BUT WHEN THE CHURCH IN INTRAMUROS MANILA WAS DESTROYED IT WAS BUILT IN QUEZON CITY. SO, THE CHURCH SERVE AS THE HEADQUARTER OF THE ORDER OF THE PRECHERED OR THE DOMINICAN IN THE PHILIPPINES.

1911 BARIO PUGAD LAWIN

THE LOCATION WHERE THE "CRY OF BALINTAWAK" ALSO KNOWN AS THE "CRY OF BALINTAWAK" DURING PHILIPPINE INDEPENDENCE. IT IS WHEN ANDRES BONIFACIO ALONG WITH KATIPUNEROS TORE THEIR CEDULA. IT SYMBOLIZE AS THE ACT OF REBELLION AGAINST SPANIARDS.

1960 ARANETA COLISEUM

THIS SERVE AS MULTI-PURPOSE SPORTS ARENA THAT IS PART IN THE AREA OF CUBAO QUEZON CITY. FROM 1960 TO 1965 THE ARANETA COLISEUM RECEIVES RECOGNITION AS THE LARGEST DOME IN THE WHOLE WORLD. ARANETA COLISEUM HAS A BIG CONTRIBUTION IN QUEZON CITY.

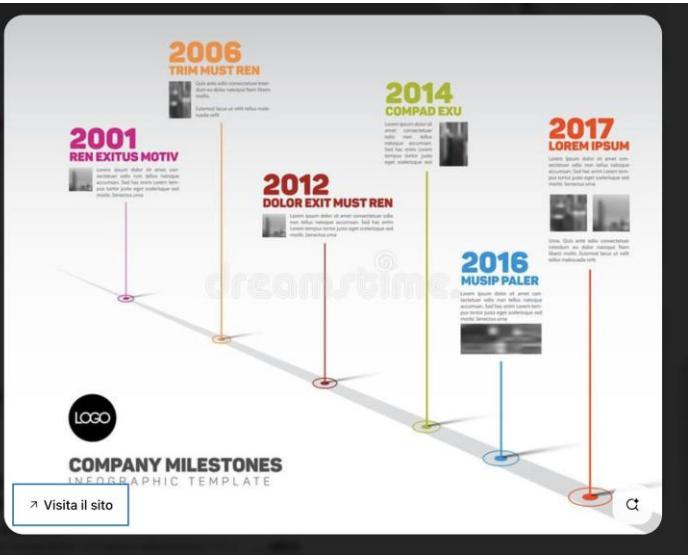
1986 BANTAYOG NG MGA BAYANI

IT IS A TRIBUTE TO ALL THOSE WHO DIED AS MARTYRS UNDER FORMER PRESIDENT FERDINAND MARCOS' DICTATORIAL RULE. THE WALL OF REMEMBRANCE, THE INANG BAYAN MONUMENT AND THE BANTAYOG ALSO PART OF THE MEMORIAL.

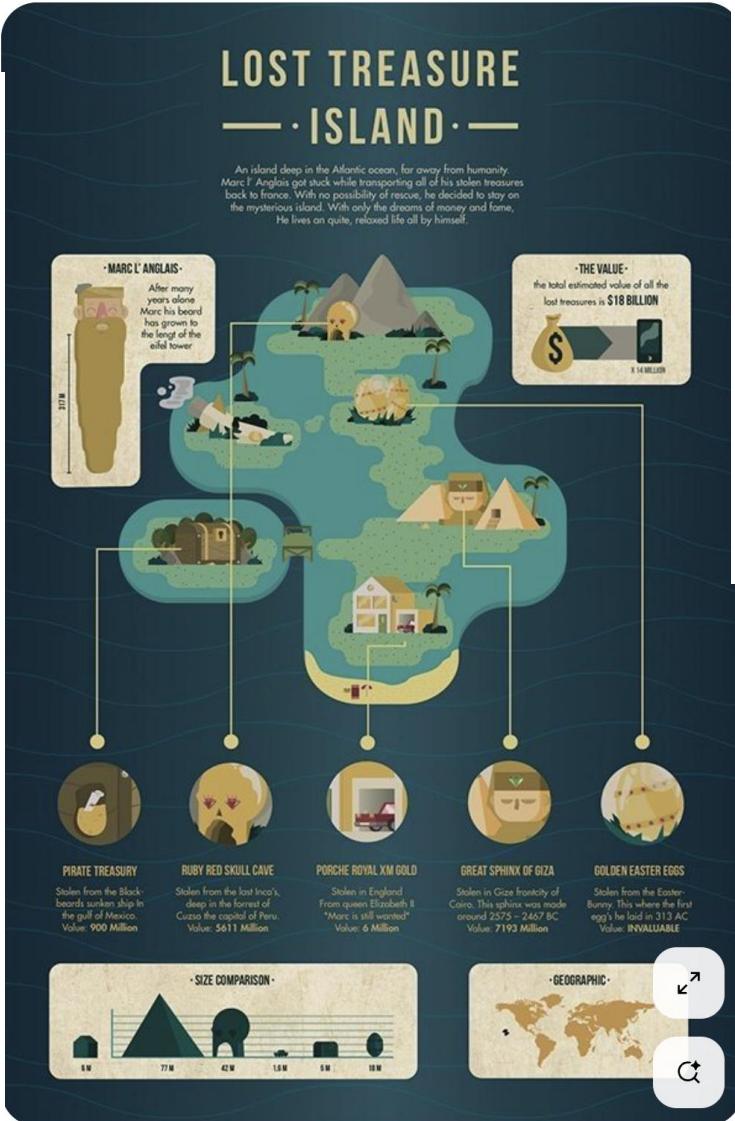
2008 MELCHORA AQUINO SHRIINE

MELCHORA "TANDAG SORA" FIGURE IN THE PHILIPPINE MOVEMENT DESPITE HER AGE SHE PROVIDED MEDICAL ASSISTANCE TO THE KATIPUNEROS. HER ASHEN SKIN IS PAINTED ON THE WALL IN TANDAG SORA SHRIINE IN QUEZON CITY SINCE 2012.

Timeline



Mappe



TRAVEL COLOMBIA INFOGRAPHICS

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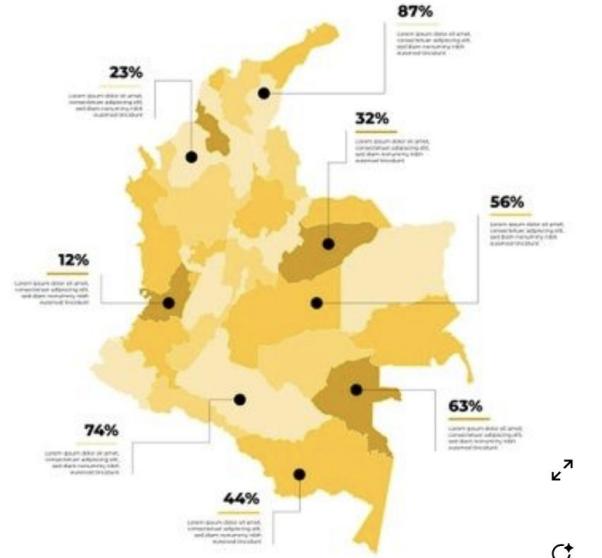
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ITALY: Export Power



Italy's export value

Italy's export reach \$112.7 billion worth of goods around the world. This is a 10% increase according to growth.



Export value of Italy's products contributes to 27% of Italy's total GDP.

\$532.7B

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19% Machinery including computers

\$101.1B

17.8% Textile, clothing, footwear

\$41.4B

6.3% Chemicals and chemical products

\$33.6B

6% Motor vehicles, parts and accessories

\$31.8B

4% Other manufactured goods

\$17.8B

2.6% Non-metallic mineral products

\$13.9B

2.9% Non-electrical machinery

\$12.1B

2.6% Electrical machinery

\$11.1B

2.2% Other products

\$10.1B

2.0% Other products

\$9.1B

1.8% Other products

\$8.1B

1.6% Other products

\$7.1B

1.4% Other products

\$6.1B

1.2% Other products

\$5.1B

1.0% Other products

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15.7% Asia

11.3% North America

6.7% Other

4.7% Europe

2.6% Asia

1.6% North America

1.2% Other

0.9% Europe

0.6% Asia

0.5% North America

0.4% Other

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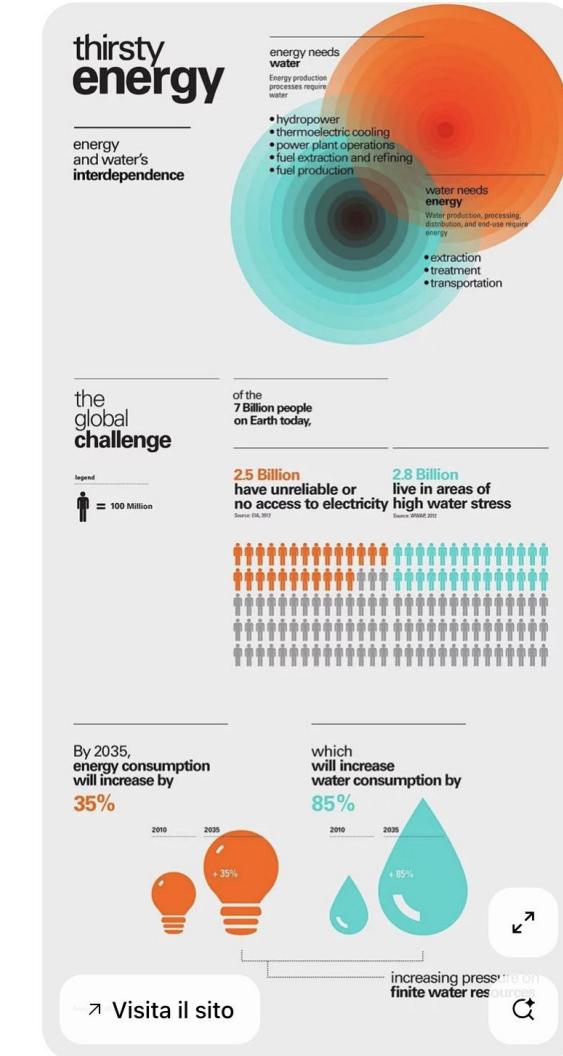
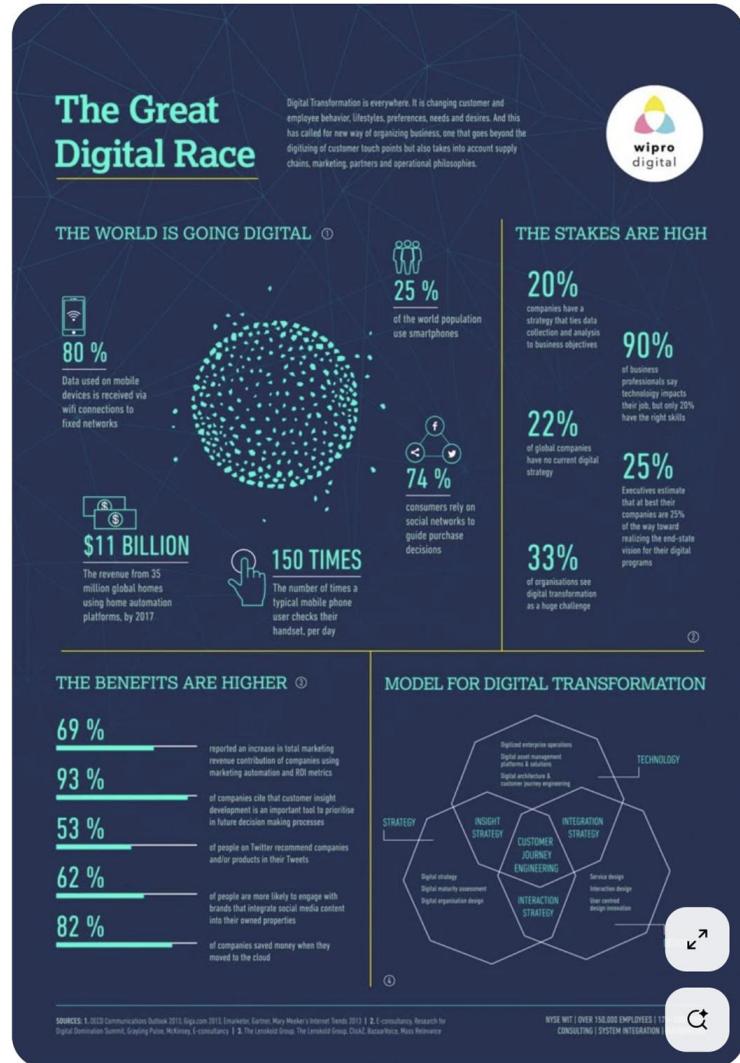
0.0% Other

0.0% Europe

0.0% Asia

0.0% North America

Data visualization



Layout:

The Essential Elements:

Message – What is the core idea you're communicating?

Structure – How is the information organized?

Visual Hierarchy – What should the viewer see first, second, third?

Typography – Are fonts readable and consistent?

Color Palette – Do the colors support the message and create contrast?

Icons & Illustrations – Do they clarify or distract?

Data – Is it accurate, relevant, and easy to interpret?

Whitespace – Is there enough breathing room for the content?

Font Pairing: Typographic Harmony

Choosing the right combination of fonts creates balance, contrast, and personality. Good font pairing enhances readability and reinforces the tone of your message.

Tips:

- Pair a **serif** with a **sans-serif** for contrast
- Use **one typeface** in different weights for cohesion
- Match the **mood** of the fonts to the content (e.g. playful vs formal)
- Limit yourself to **2 or 3 fonts** to avoid clutter

Core Principles of Visual Design

Balance

Contrast

Alignment

Visual Hierarchy



Font pairing:

Serif vs Sanserif

Aa

Aa

Aa

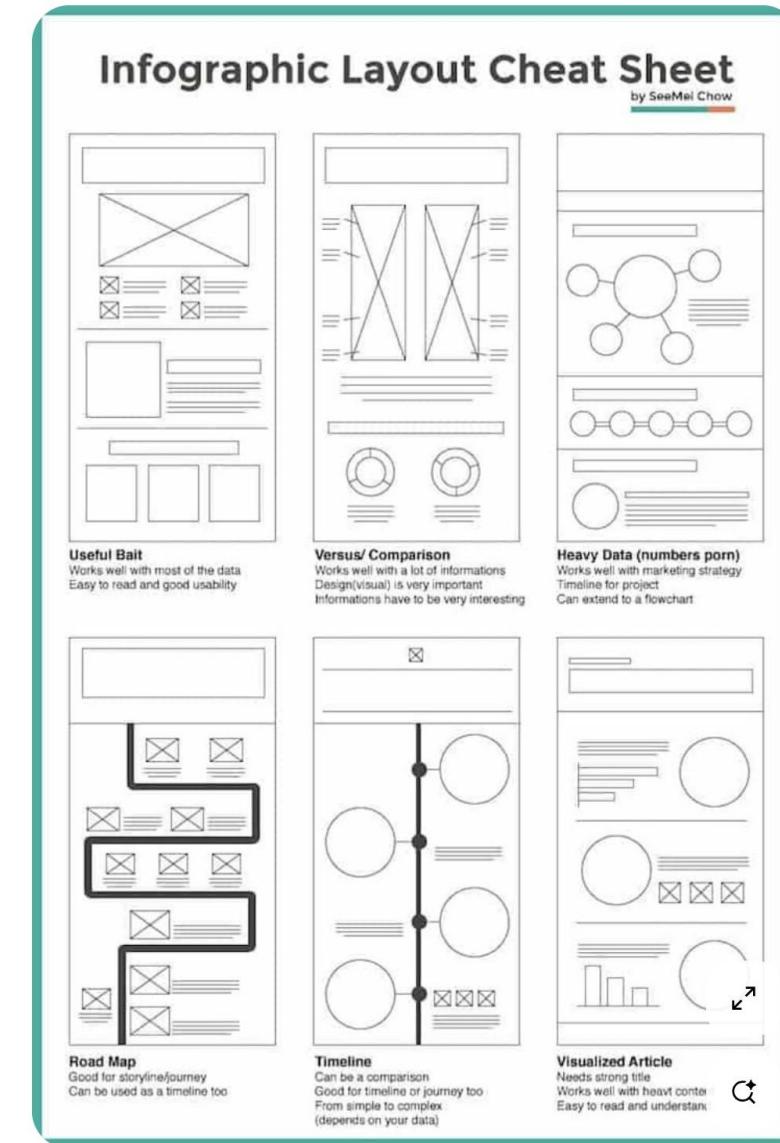
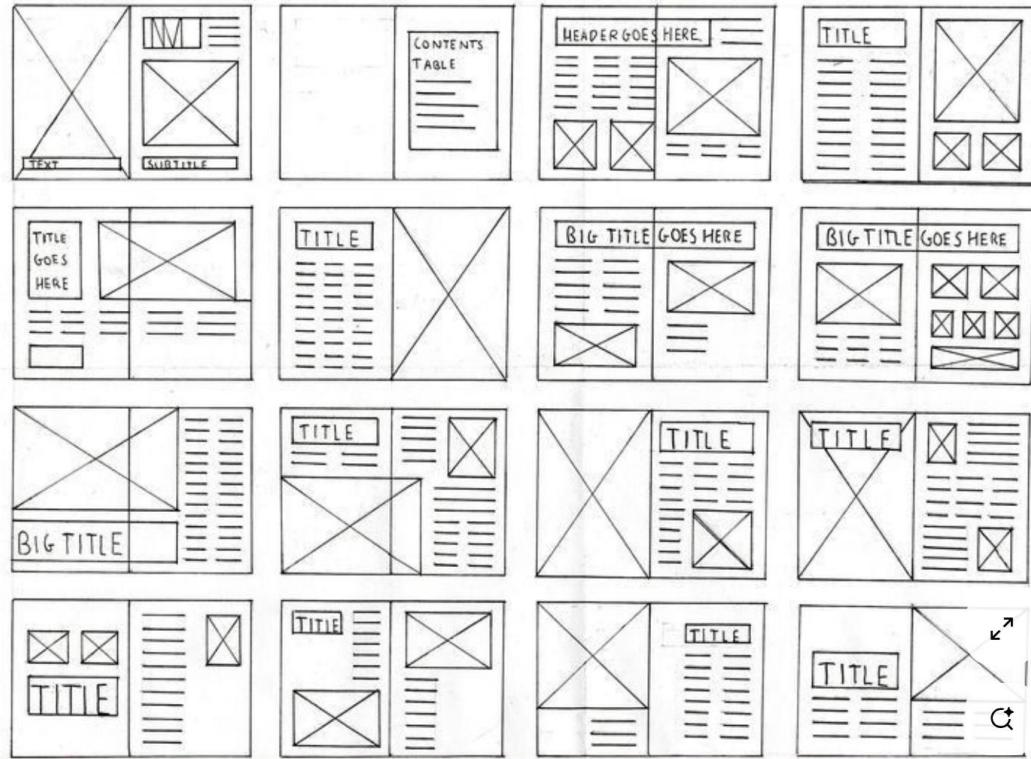
Some Example

[https://drive.google.com/file/d/1abg1eBbLvHM39h1gIII6avtkkWPLk_G2/view
?usp=drive_link](https://drive.google.com/file/d/1abg1eBbLvHM39h1gIII6avtkkWPLk_G2/view?usp=drive_link)

Sitography

- <https://fontpair.co> – Accoppiamenti pronti all'uso
- <https://fonts.google.com> – Google Fonts library font
- <https://www.typography.com> – Articoli e consigli professionali (in inglese)
- <https://www.canva.com/font-combinations> – Font pairing per progetti grafici
- <https://fontjoy.com> – Generatore casuale di accoppiamenti coerenti

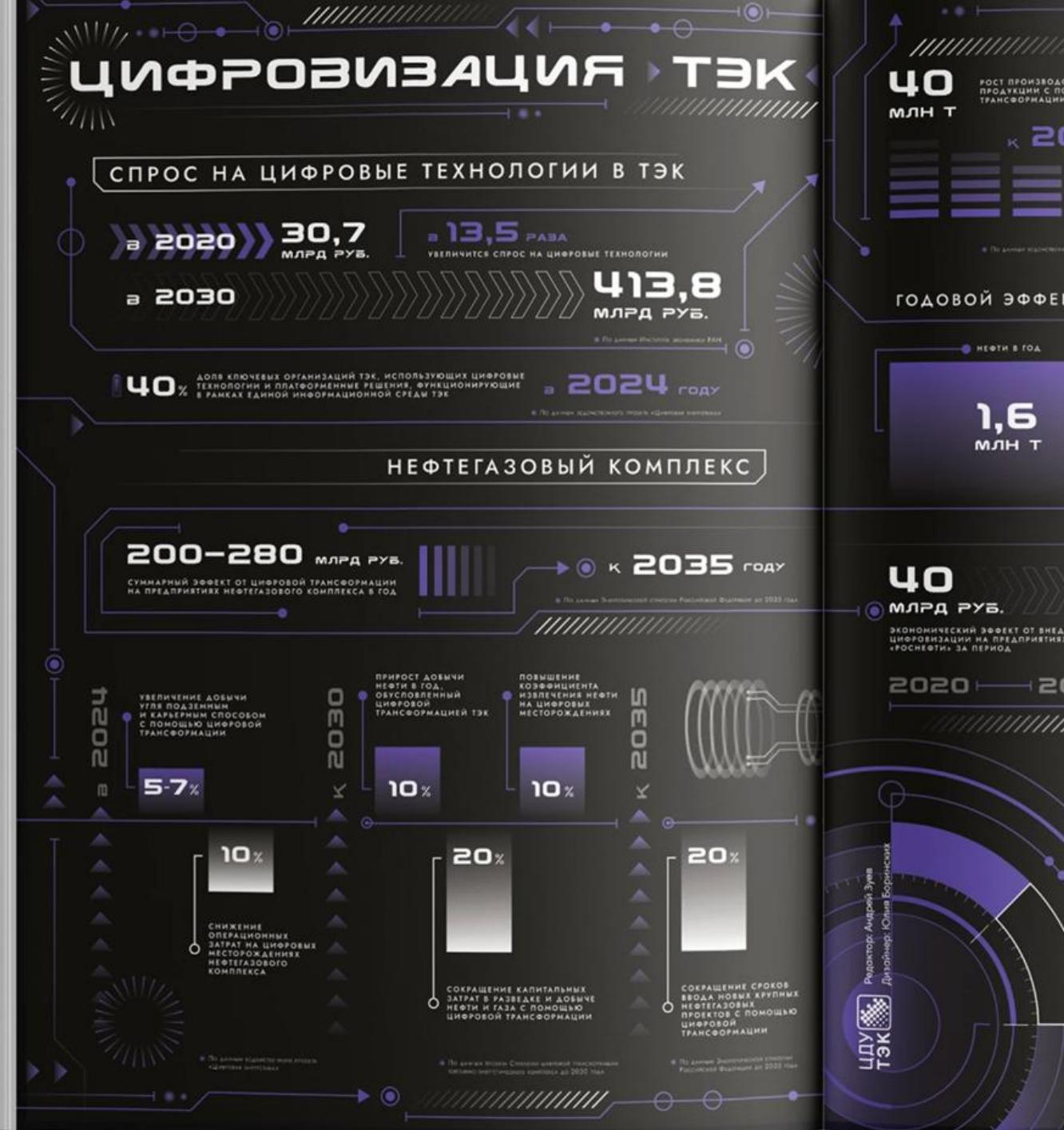
layout



BALANCE

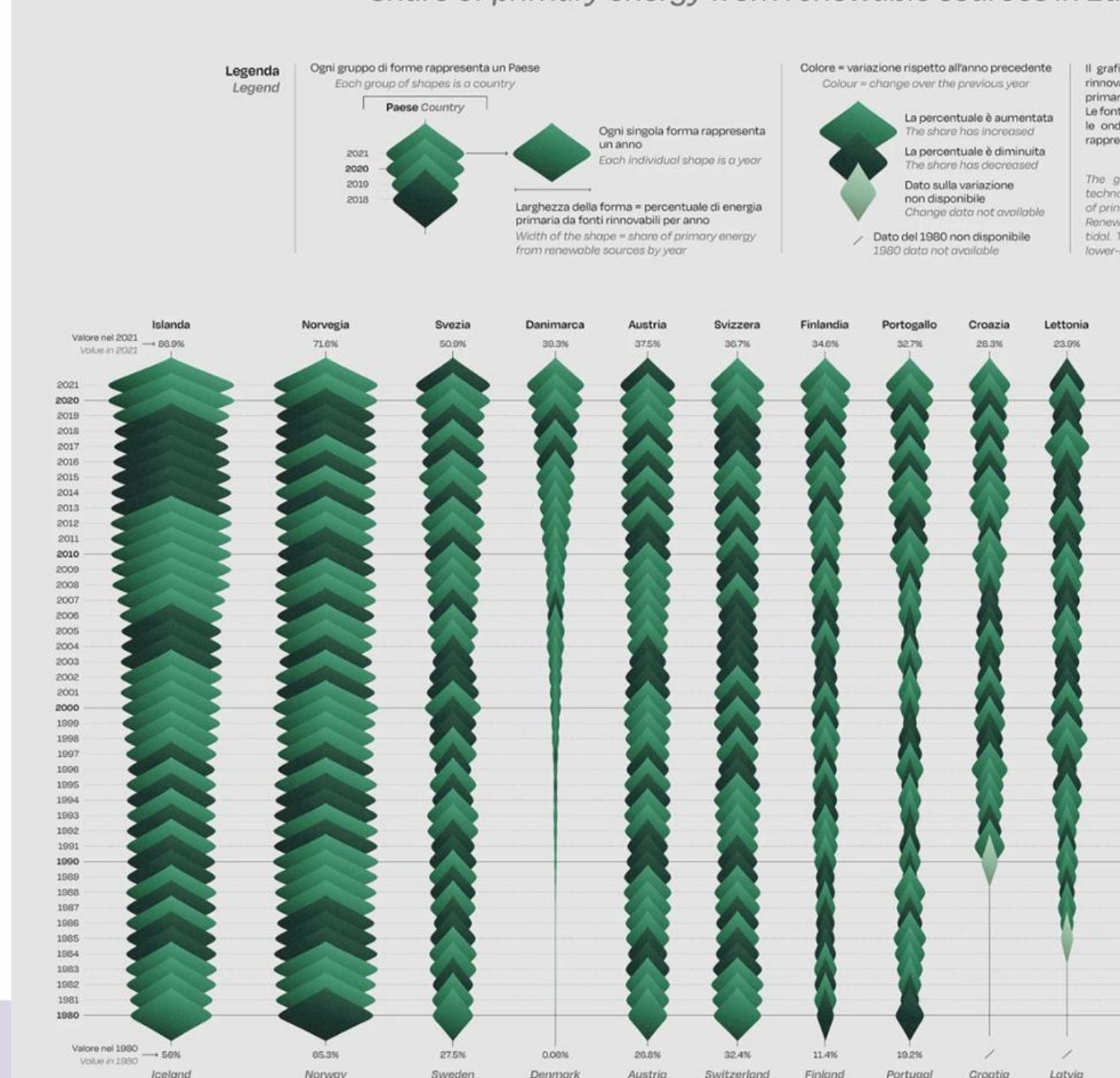
- Symmetry and asymmetry
- Visual weight
- Use of negative space

Balanced layouts feel stable and professional.



Video Course Information design

[https://www.youtube.co
m/watch?v=B7GzLy8qe
sA&t=1174s](https://www.youtube.com/watch?v=B7GzLy8qe sA&t=1174s)



[https://drive.google.com/drive/folders/1ZjPZcM_G3Y
YuPYoVU0X1LY7otu7U4O26](https://drive.google.com/drive/folders/1ZjPZcM_G3YYuPYoVU0X1LY7otu7U4O26)

Tool & inspiration

Breve overview su strumenti: Canva, Illustrator,
Fonti di ispirazione: Chance, Pinterenst, Visual Capitalist
Risorse Gratuite. Icon pack, Color Palette, font paring

<https://datavizproject.com/>

<https://ferdio.com/en/>

Modulo 4

Sitography

Sitografia generale del corso

Infografica e comunicazione visiva:

- <https://informationisbeautiful.net> – Infografiche d'autore e ispirazioni
- <https://visme.co> – Tool per infografiche e presentazioni
- <https://venngage.com> – Editor online per infografiche

Tipografia e font pairing:

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- <https://www.typography.com>
- <https://www.canva.com/font-combinations>
- <https://fontjoy.com>

Colori e palette cromatiche:

- <https://colors.co>
- <https://colorhunt.co>
- <https://paletton.com>
- <https://www.color-hex.com>
- <https://www.canva.com/colors>

Icone, immagini e risorse visive:

- <https://thenounproject.com> – Icone professionali
- <https://undraw.co> – Illustrazioni open source
- <https://www.flaticon.com> – Icone scaricabili in vari formati
- <https://www.pexels.com> – Foto gratuite per uso didattico

Strumenti di prototipazione e design accessibili:

- <https://www.canva.com> – Editor online intuitivo
- <https://www.figma.com> – Design collaborativo e wireframe
- <https://www.lunacy.dev> – Editor offline gratuito compatibile con file Sketch

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Ministero
dell'Università
e della Ricerca

