Practical Accessibility, in Practice

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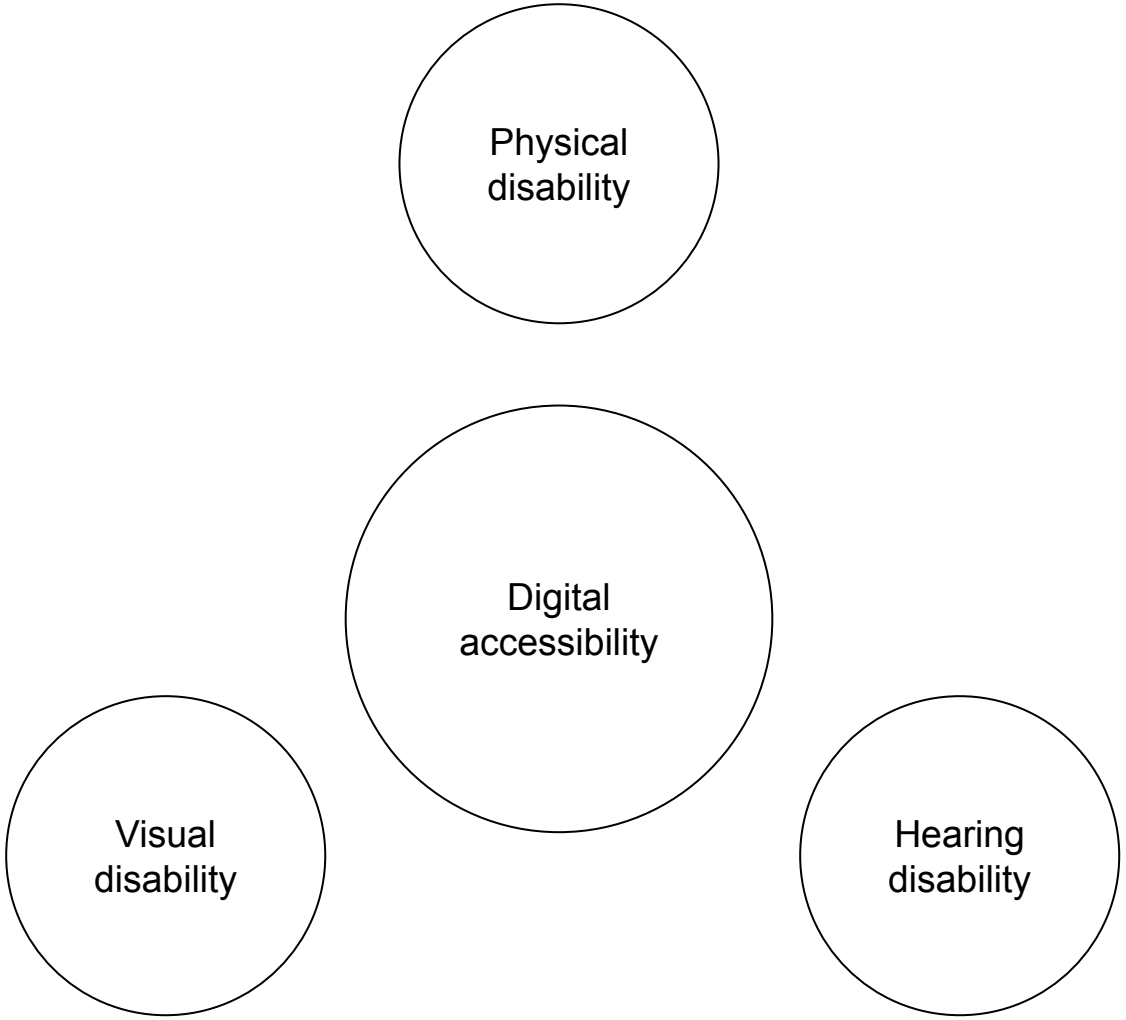
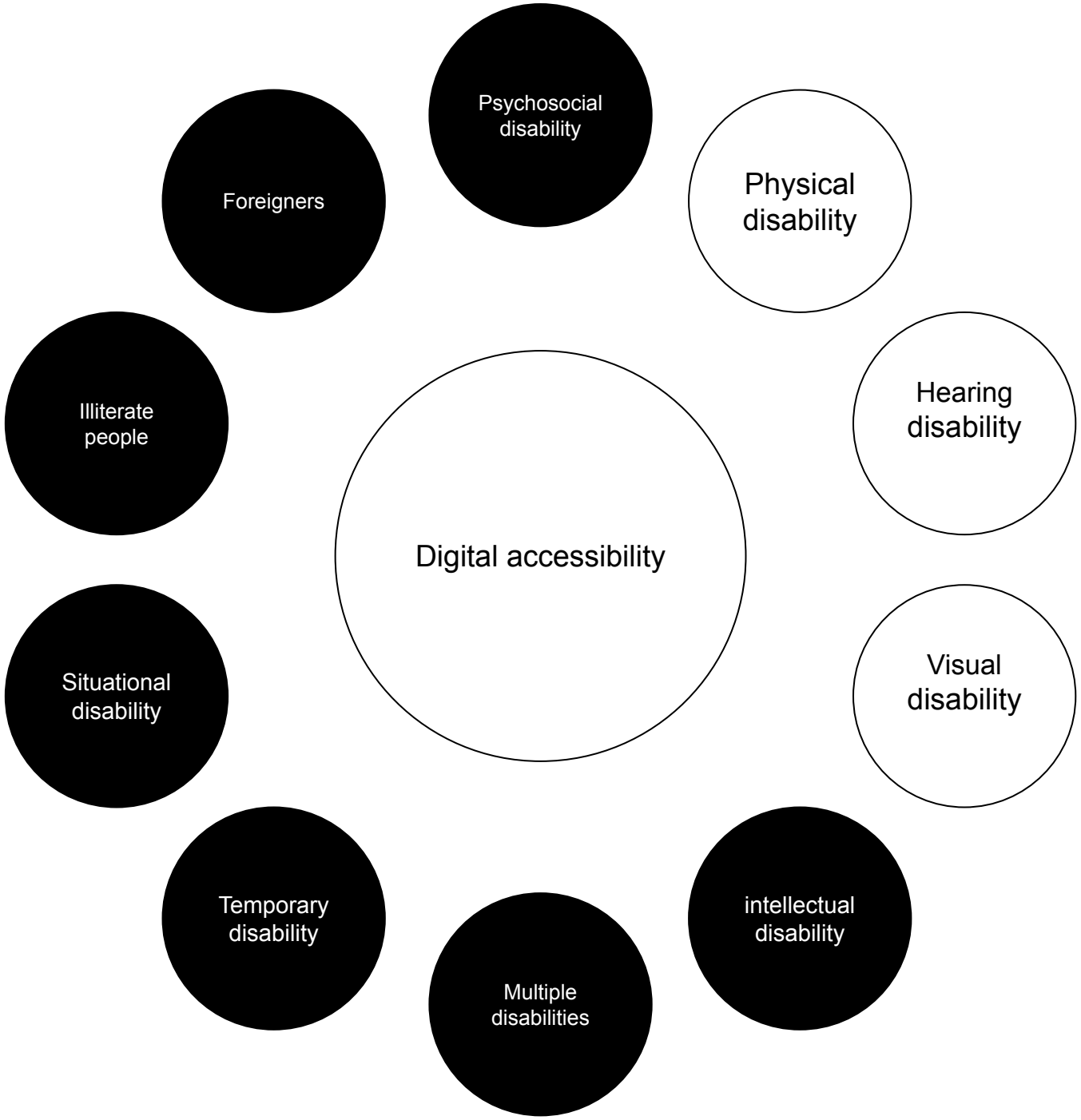
_What is accessibility?

It is the possibility for anyone, with or without a disability, to access a place, service, product or information in a safe and autonomous way. Without any kind of barrier.

Accessibility is easy access for everyone


Physical disability
Digital accessibility
Visual disability
Hearing disability


Digital accessibility
Psychosocial disability
Physical disability
Hearing disability
Visual disability
intellectual disability
Multiple disabilities
Temporary disability
Situational disability
Illiterate people
Foreigners

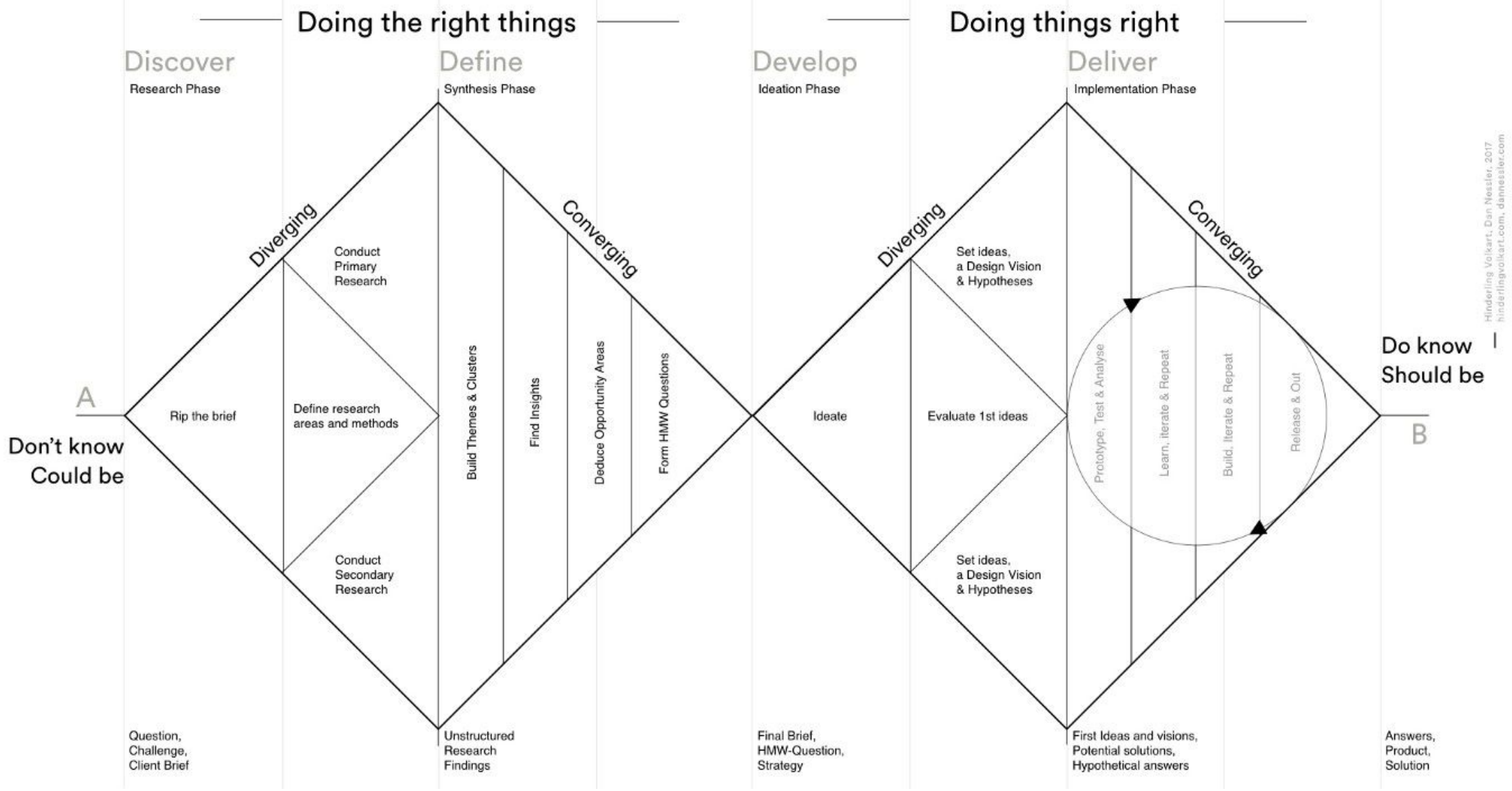
- Social responsibility
- Brand strengthening
- SEO
- Greater user loyalty
- Customer volume
- Reference in the market
- Lower maintenance cost
- Performance improvement
- Increased interoperability
- Better usability

0,74%

of the 14.65 million brazilian sites evaluated were considered accessible

(BigData Corp e Movimento web para Todos, 2020)

Revamped Double Diamond



understand, disseminate and design inclusive experiences and content

Developers

- code quality and semantic

Prioritize and measure -

Business

Quality

- Quality insurance and test

Design

Inclusive leadership and market reference -

Managers and leadership

Compliance

- Law enforcement

Marketing

Inclusive communication -

Discover

Data analysis:

Make sure your data reflects the audience you want to reach and not just what your business currently serves.

Thinking in this way, make sure that biases in the analyzed data are being taken into account.

If any bias is needed, consider whether it is strategic or exclusive bias.

Customer interview:

Make sure your recruiting has diversity.
If your customer base doesn't allow this, partner up to help.

When filtering your target audience, think about data, but also about intentions, often blocking usage occurs before the customer gets in touch with your brand.

Partner with marketing.

Desk Research / Secondary Research:

Seek information from reliable, unbiased sources.

Within your analysis, think about which bias each information may contain.

Separate inclusive references, even if they are not from the same market area.

Inception:

Ensure that early project discussions already include employees from different specialties and backgrounds.

Reflect on whether your team is diverse enough to truly develop inclusive hypotheses.

Involve people from the CS team and customer service.

Involve people of different senioritis, the "bosses" should be approached in a stakeholder interview!

Personas:

Remember the real purpose of this exercise: to generate empathy and connection

Create personas with disabilities and different types of access difficulties.

Stop doing öbvious" personas

User Journey:

Think about the risks of difficult access.

Think about the interaction channel.

Think about different triggers and motivations.

Define

There is no 100% negative or 100% positive bias, it all depends on the context, intention and impact on the final result. Respect your gut feeling, just don't be an ~~asshole.~~

Establish accessibility as a DOD of any deliverable, including the MVP.

Prioritize the MVP taking into account the value: The value it adds to the customer, the value it adds to the company, the value it adds to society and the market - the monetary value, cultural value and social value.

Remember that the great innovators are the ones who do it first. Your competitor not being approachable is no excuse, sorry.

In the agile methodology, when defining the deliverables, remember that the accessibility implementation is not a feature and must be integrated into the effort of each task.

Planning an accessible project from the start requires less effort than refactoring it later, generates less cost, less effort, less time and opens the door to innovation.

“

Human diversity is at the core of disruptive innovation

2020, Frances West

”

Develop

WCAG

Web Content Accessibility Guidelines

These are guidelines and recommendations that guide us to build accessible experiences for anyone, regardless of their disability and/or ability, in accordance with the law.

WCAG principles

- Perceivable
- Operable
- Understandable
- Robust

Success Criteria

{ A AA } AAA

WCAG best practices:

Start with the basics, don't see accessibility as 8 or 80 (when it comes to implementation)

Legally, every company must meet the AA criteria

You don't need to memorize the regulations, think about the principles: Perceptible, Operable, Understandable and Robust.

But, yes… when in doubt, consult the rules for both design and programming.

For designers:

More than one way to get to a place.

Contrast, motion and reading - Use and abuse of Figma's tools.

Respect good hierarchy and spacing practices.

Stop creating and using complex elements, opt to create layered interactions.

Prioritize native elements and their material honesty.

Offer control.

Think about the content! Be clear about labels, image descriptions, status and language

Test with varied customers what is possible and remember to test the understanding of the journey, not just the usability.

Study different ways of interacting with the product and assistive technology.

For developers:

Use native elements as much as you can.

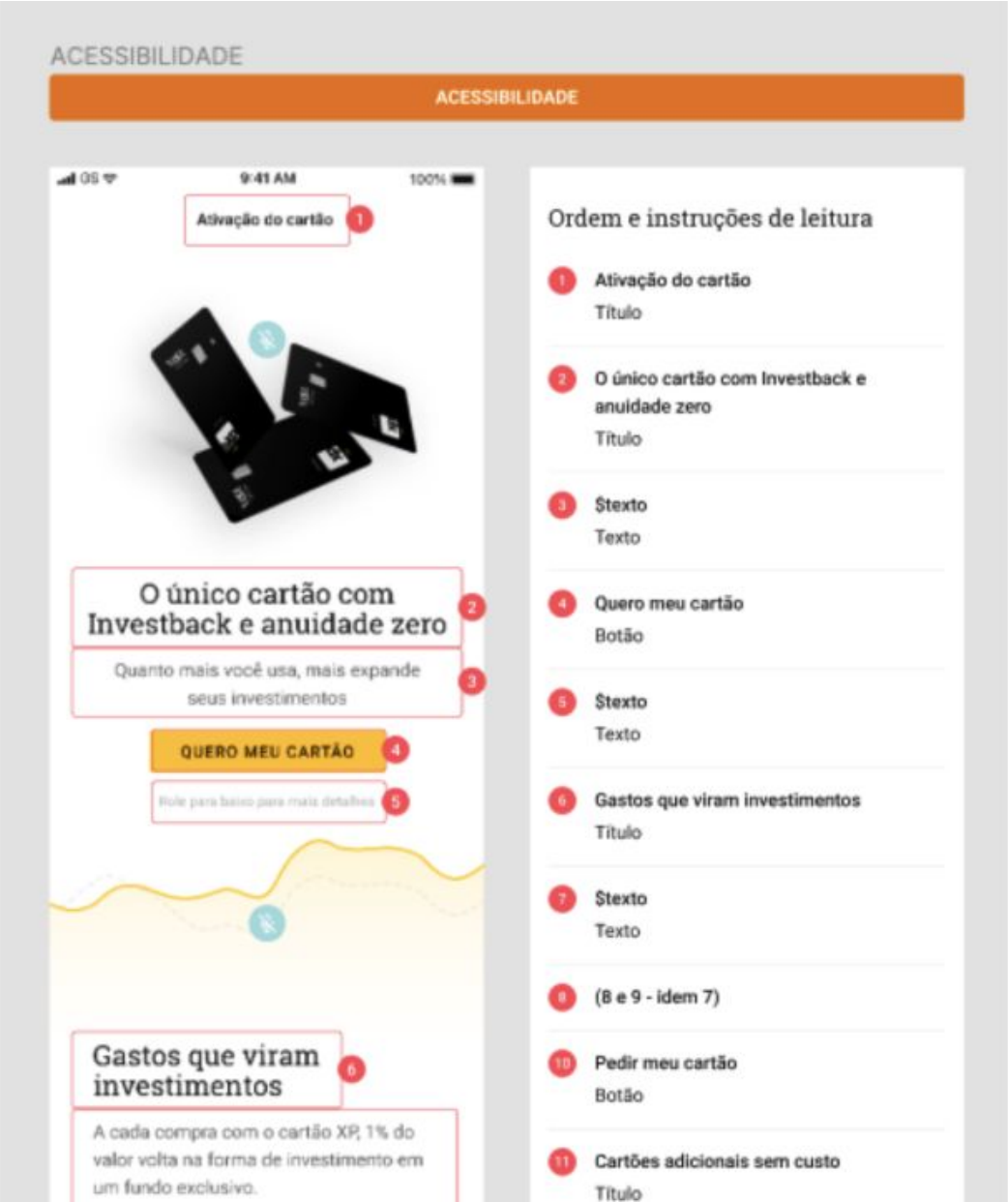
Material honesty and ARIA label.

Pay attention to the semantics of the code and the absence of basic elements such as labels. Ask for help of the designer and PM.

Code hierarchy, please!

If you need to create a "gambiarra", either the PM is not prioritizing properly or the designer concept is wrong. Work together on the solution (and responsibility for it).

- reading order
- hierarchy
- groupings
- speaks
- material honesty
- element rules



“

In most situations it is not necessary to differentiate usability from accessibility, because the two concepts are complementary.

”

2021, Anna Cook

Deliver

- WCAG again! It lists and explains how to test the acceptance criteria.

- Tests with tools to evaluate code semantics:
  - **Lighthouse** | Chrome
  - **Wave** | Chrome e Firefox
  - **Axe** | Chrome, Firefox e Android
  - **Accessibility Suite**| Android
  - **Xcode** | IOS
  - **Funkify** | Chrome
  - **Nocoffee Vision Simulator** | Chrome

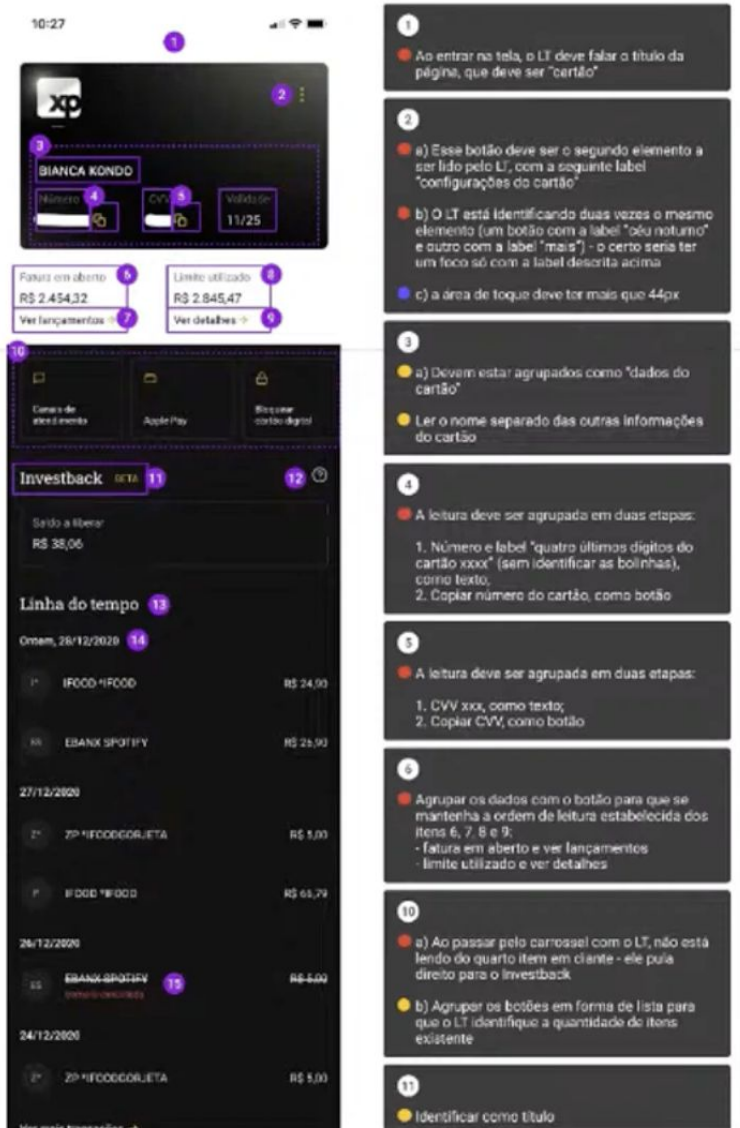
- Manual testing (yes, this is design responsibility to)

- Look for companies and experts to help

- Test with customers and establish criteria for organic feedback

Manual test:

- Involve users
- A per operating system analysis
- Use the most used screen reader in the operating system (NVDA, Talk back voice over)
- Check if the reading makes sense linearly
- Test if the reading makes sense by interacting elements
- Make sure the elements are properly indicated
- Add manual analysis with tool analysis
- Specify the criticality of adjustments
- Meet with the developers and pass on the QA



Foundation

“

But I can tell you one thing I know for sure: If the design system is not accessible, there is no way the final product will be.

”

Cheri Byrne-Haber

Standardized and ready-made read ordering in code

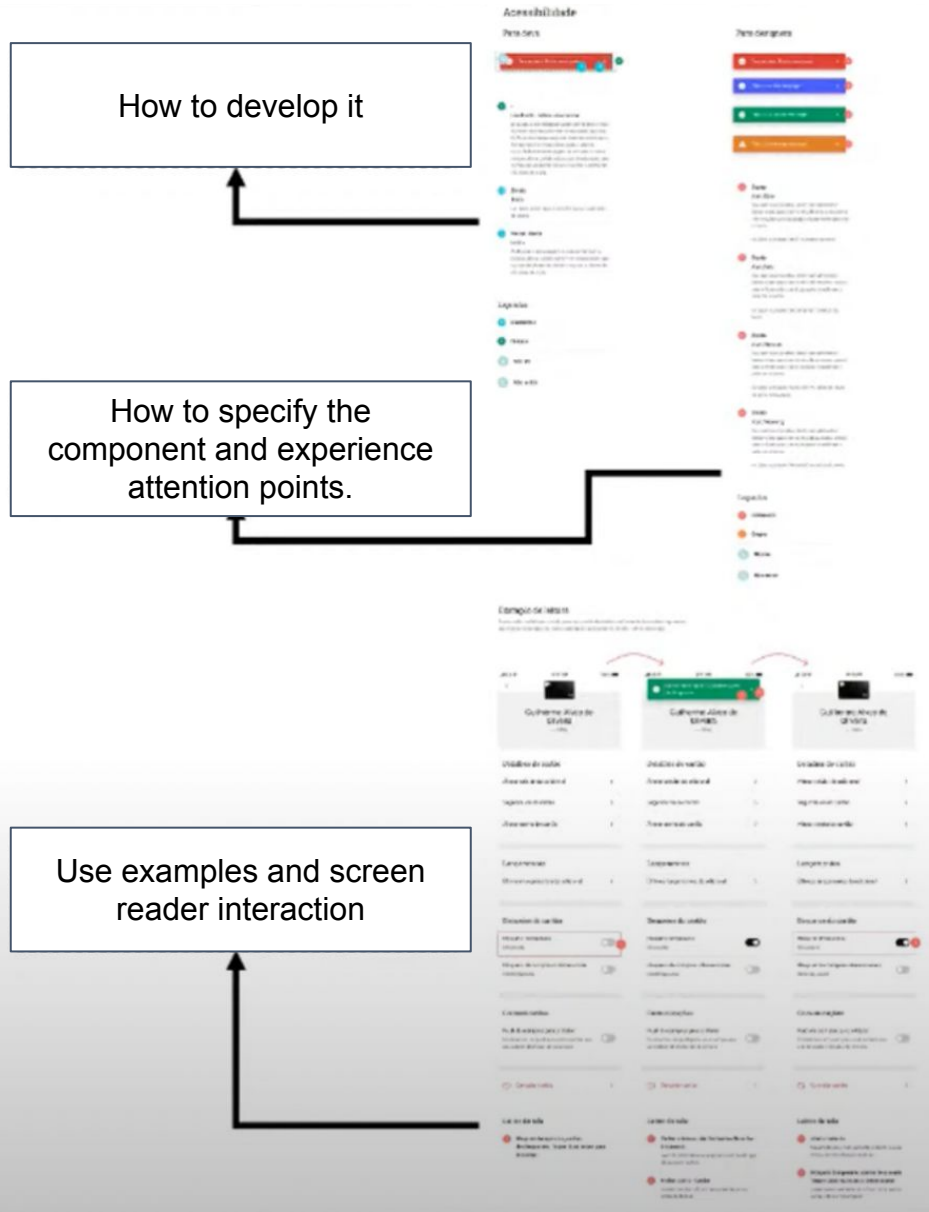
Guidance on the use of labels, complementary texts and the element itself

Ease of specifying experience

Scalability of experience tweaks

Possibility of customization if the component does not meet the customer's need

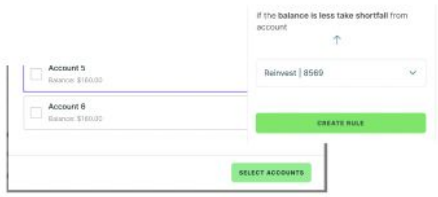
Group of ambassadors to discuss use cases for the evolution of elements



Details | Primary, secounday and add button

This element can be used in mobile and web, on light and dark backgrounds.

The width will change depending of the experience. The button can hug the content or fill the container (link in mobile experiences)



Also, visually this is a button but it can have a button function or a link function depending of the experience. Diferentiate the function will help in the acessibility and assistive tecnology integration and comprehention.

Primary

GG
Height: 80px;
H-padding: 48px;
Color: Relay Green;
Font: Basis M 24* (marketing)
Background color: Relay lime;
Spacing between elements: 8px;

Primary

Big
Height: 56px;
H-padding: 24px;
Color: Relay Green;
Font: Basis M 20*
Background color: Relay lime;
Spacing between elements: 8px;

Primary

Default
Height: 44px;
H-padding: 24px;
Color: Relay Green;
Font: Basis M 16;
Background color: Relay lime;
Spacing between elements: 4 px;

Primary

Small
Height: 34px;
H-padding: 24px;
Color: Relay Green;
Font: Basis M 14;
Background color: Relay lime;
Spacing between elements: 8 px;

Secoundary

Secoundary button
Color: Relay Green;
Stroke: 1 Relay green;
Background color: none;

Add button

Small
Height: 34px;
H-padding: 24px;
Color: Relay Green;
Font: Basis M 14;
Background color: Relay lime;
Spacing between elements: 8 px;

Acessibility

Next

On web:
If this element is sending the user to a new page, it is a link.
If this element is changing something in the same page it is a button.

On mobile:
Not all technologies diferentiate links from buttons on native coding.

Examples

Next

Next | button

-

-

next

Status don't need to specify

next

Next | button / Inactive

[Fill in the entire form to continue]

When the button is not active is good to insert a complementary text to explain why the user can't interact with it even though the message is not visual.

Loading page | button

-

When the loading ends, inform the user that the informations on the page are available.

Usually the focus dont work while the page is loading.

Wait, loading | button

-

When the loading ends inform the user what changed on the screen.

Variants

Button type

Primary: Primary
Secoundary: Secoundary
Add Button: Add button

Button size

Default: Primary
Big: Primary
GG: Primary
Small: Primary

Status

active	Hover	Inactive
Primary	Primary_over	Primary_inactive
Secoundary	Secoundary_over	Secoundary_inactive
Add button	Add button_over	Add button_inactive

Icon

True: Primary
False: Primary

Width

Hug content: Primary
Fill container: Primary

Loading

True
False: Primary_inactive

Skeleton

True
False: Primary_inactive

- Train the team. Beware of accessibility experts, and everyone's disclaimer and commitment. Accessibility knowledge does not reflect an accessible product.
- Focus on inclusive hires.
- Review your internal processes so they are inclusive.
- Please, remember that people with disabilities are not accessibility experts.
- Seek partnerships in the market, whether third-party companies to support, or competitors with this common goal.
- Plan where it makes the most sense to start in your company depending on your team's knowledge and product maturity.

Questions?