ANALYZING READABILITY ISSUES IN AN INFOGRAPHIC WEBPAGE

(TEAM E)

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INTRODUCTION

- Analyze the problems faced by users while reading an infographic web page
- Articles over the internet are replete with image references and tabular data.
- In this project we try to explore reading issues, especially with "out of sync" image references on the webpage.

PROBLEM STATEMENT

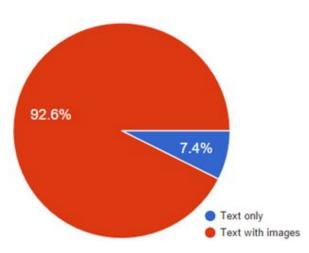
- Web page contains images and references to these images are made at multiple places across the page
- Reader has to scroll back and forth through the web page every time he has to refer to an image

• Problems:

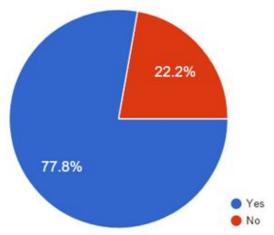
- Loss of comprehension, continuity, context
- Stress on user's vision
- Consumes considerable amount of time
- Goal: Extract the source web pages and enhance them to increase visual comprehension

SURVEYS AND RESULTS

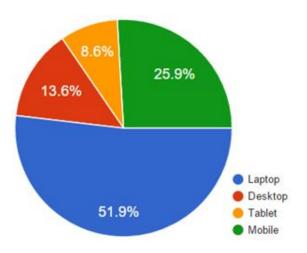
Which kind of articles do you prefer to read?



Do you lose context while navigating?



Which device do you use to read web articles?

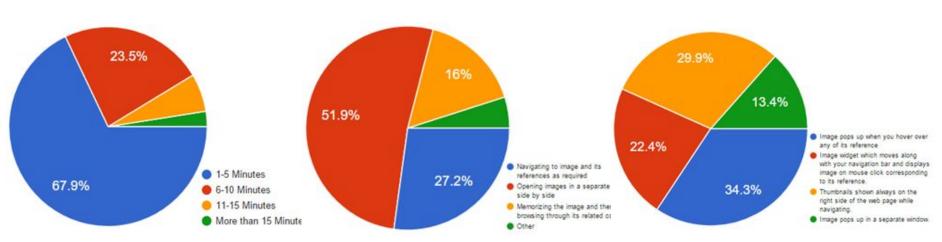


SURVEYS AND RESULTS

Approximately how much time is wasted in scrolling?

How do you deal with scrolling problem?

Which of the proposed methods do you prefer?



Proposed Solutions

Open image in a new tab

Image popup on hover

An image SideBar

Solution 3: Open image in a new tab

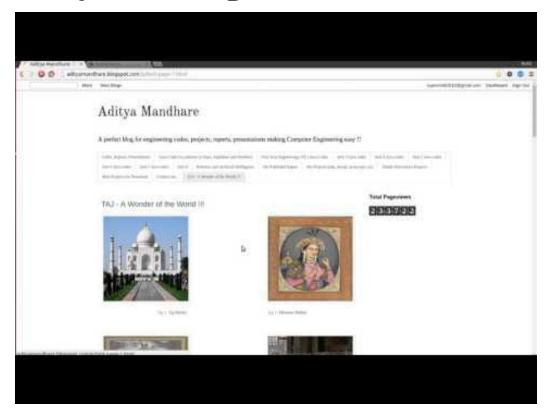
What it does?

- Identifies occurrences of image reference
- Matches pattern to convert to hyperlink
- Image opens in a new tab on click

Usability Testing: Observations

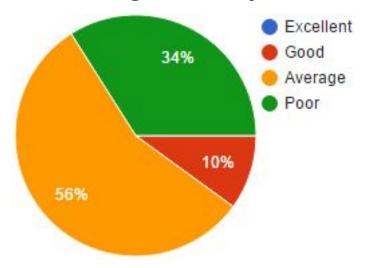
- Pattern matching
- Image opening in a new window

Solution 3: Open image in a new tab



Solution 3: Open image in a new tab

User Rating After Improvements



Why use this?

- Webpage remains intact
- Original sized image

Solution 2: Image popup on hover

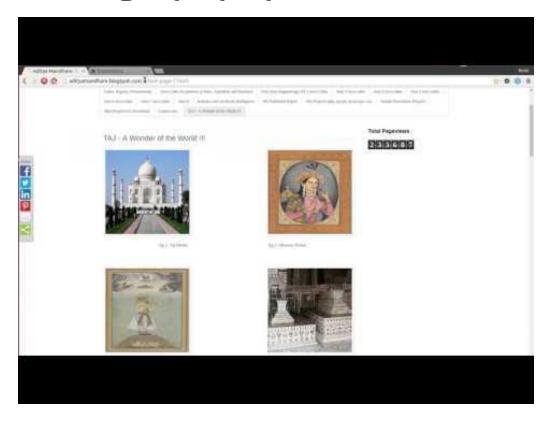
What it does?

- Identifies plaintext references in the page
- Converts references to hyperlinks
- Image pops up on hover over hyperlink

Usability Testing: Observations

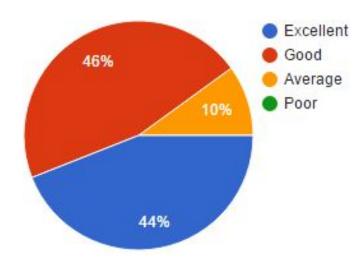
- Inline image replacement Vs Image popup
- Text disorientation
- Pattern matching
- Image flickering

Solution 2: Image popup on hover



Solution 2: Image popup on hover

User Rating After Improvements



Why use this?

- Simple, intuitive and clean
- Webpage remains intact
- User doesn't lose context

Solution 1: An image SideBar

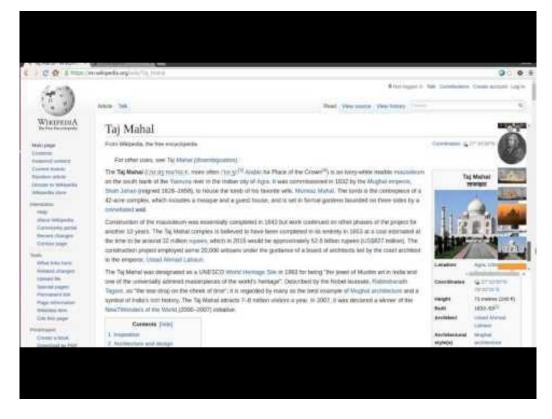
What it does?

- Identifies all the images in the webpage
- Group them together in a sidebar
- Hover over → Move to image position
- Hover away → Back to original position

Usability Testing: Observations

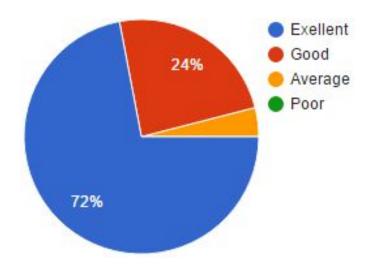
- Sidebar positioning and Preview Image Size
- Navigation method
- Valid image extraction
- Dismiss feature

Solution 1: An image SideBar



Solution 1: An image SideBar

User Rating After Improvements



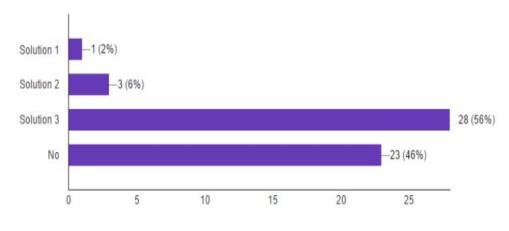
Why use this?

- Independent of web page structure
- Consolidated view of all images
- Reading continuity is maintained

And the winner is...

Best Solution: An image SideBar

Whether users lost context?



- Usability testing and Acceptance testing result in favor of Sidebar
- Concise view of all images in a sidebar
- Image can be referred from the original position without losing context

QUESTIONS??