

# HCI PROJECT

## UI/UX REDESIGN

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Your text here

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Your text here



# CASE STUDY ON NOPWASD WEBSITE

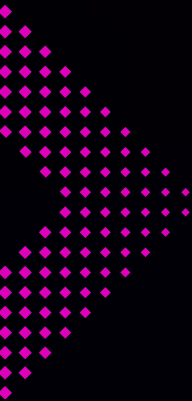

National Organization for Potable Water and Sanitary Drainage

<https://nopwasd.gov.eg/>






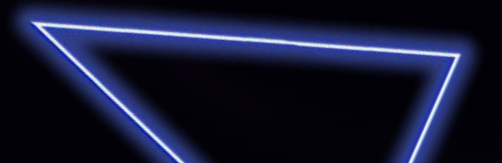
# INTRODUCTION

- The existing website suffers from multiple usability, accessibility, and interface design issues that negatively affect user satisfaction and efficiency.
  - The purpose of this case study is to transform a legacy digital interface characterized by outdated aesthetics and critical functional failures into a modern, user-centric platform.
  - By addressing core usability issues and implementing a robust design system, the redesign significantly enhances information accessibility, user engagement, and the organization's digital authority
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# PROBLEM STATEMENT

- The NOPWASD website lacks a user-centered design approach. Users face difficulties in navigating the site, understanding content structure, and completing common tasks efficiently. The interface design is outdated and inconsistent, while the user experience suffers from high cognitive load, weak information architecture, and poor accessibility support.
  - The current interface does not adequately support older users, who represent a significant portion of governmental website visitors.
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# USER INTERFACE ANALYSIS (UI)

## ➡ VISUAL DESIGN ISSUES

Poor Visual Hierarchy

High Visual Noise

Contrast Ratio Issues

## ➡ TYPOGRAPHY ISSUES

Readability Problems

Low Legibility

Inconsistent Typography

## ➡ AFFORDANCE AND CONSISTENCY

Poor Affordance

Weak Interaction Feedback

Lack of Consistency

# 1- OUTDATED AESTHETIC

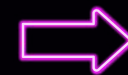
الرئيسية

Use of old design patterns (gradients, beveled edges) and low-quality images, giving an unprofessional and dated impression

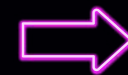
الصفحة الرئيسية

Adoption of a modern, clean "Flat Design" with high-quality imagery and a visually appealing interface aligned with modern standards

BEFORE



AFTER

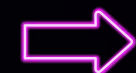




## 2- WEAK VISUAL HIERARCHY



### PROBLEM



Main navigation elements overlapped with content, and dense text blocks were used without sufficient white space, making it difficult to distinguish important elements.



# 2- WEAK VISUAL HIERARCHY

## SOLUTION

Use of ample white space, clear typography, and content categorization into cards and defined sections to guide the user's eye effectively.

we separated the main navigation bar from the content



# 3- INCONSISTENT FONTS & COLORS

## PROBLEM

→ Variance in font usage, sizes, and colors across pages, leading to user distraction and reduced readability.

الرئيسية

نبذة عن الهيئة

تم إنشاء الهيئة العامة لمياه الشرب لتتولى المسئوليات الخاصة بمرفق مياه الشرب في عام ١٩٦٨

( السيد اللواء مهندس / أمين شوقي عادل )

وذلك لتوليه منصب رئيس مجلس الادارة للهيئة

استقبل المهندس شريف الشربيني، وزير الاسكان والمرافق

الهيئة القومية لمياه الشرب والصرف الصحي

إدارات تقوم بأعمال الهيئة والغير

المعامل المركزية

رابط عن المعامل المركزية

لواء مهندس / أمين شوقي عادل  
رئيس مجلس الإدارة

# 3- INCONSISTENT FONTS & COLORS

## SOLUTION

Unified color palette and typography system to ensure a cohesive and comfortable visual experience, especially in sections like "Services" and "News".



**Arimo**

*IBM Plex SemiBold Italic*  
*IBM Plex Italic*  
*IBM Plex Light Italic*

typography



color palette



# 4- IMAGE-BASED NAVIGATION

**PROBLEM** → some buttons were images rather than text, increasing page load times and reducing accessibility.



**SOLUTION** → Implementation of a standard, clear text based navigation bar in a fixed header, improving site speed and ease of navigation.

# USER EXPERIENCE ANALYSIS (UX)

## ➡ **USABILITY ISSUES**

Low Learnability

Low Efficiency

High Cognitive Load

## ➡ **NAVIGATION ISSUES**

Poor Navigation Design

Weak Information Architecture (IA)

User Disorientation

## ➡ **3 TASK FLOW & USER JOURNEY ISSUES**

Inefficient Task Flow

Poor Content Organization

Weak Categorization

# 1- BROKEN LINKS & FUNCTIONS

## PROBLEM

➡ There 3 non-functional pages, a critical issue that leads to user frustration and loss of trust in the site.



## SOLUTION

➡ The new design ensures all links and pages function correctly, restoring user confidence.



# 2- DIFFICULT NAVIGATION

## PROBLEM

- ➡ The main menu was nonstandard and confusing, forcing users to think about how to access different sections.

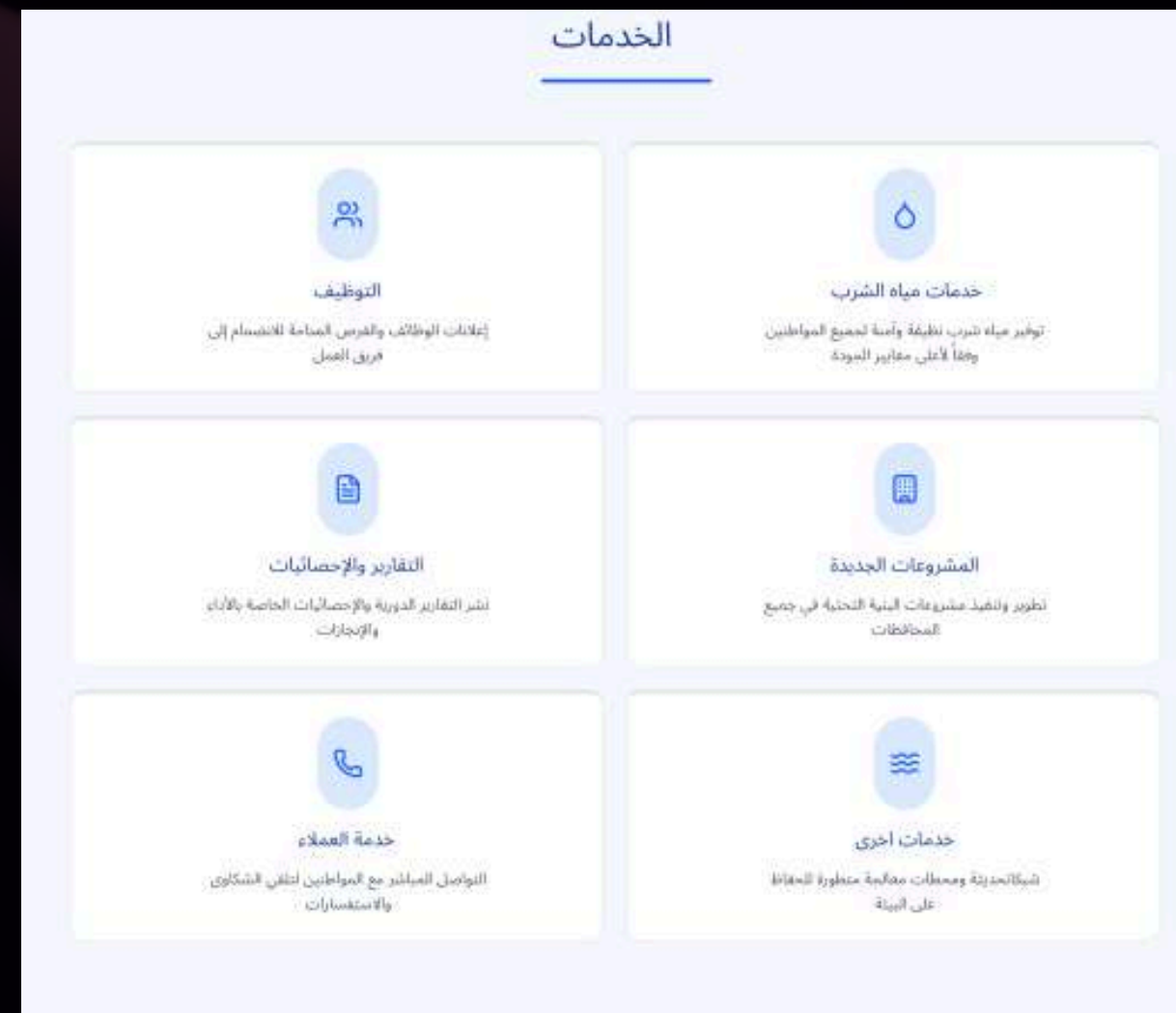
## SOLUTION

- ➡ Use of a standard, familiar top navigation bar with clear and direct labels, reducing cognitive load
- The redesign focused on reducing the Time-to-Information for every visitor.

# 3- LACK OF ENGAGEMENT

## PROBLEM

⇒ Content consisted of static, uninspiring text blocks, reducing user interaction with the site.



## SOLUTION

⇒ Integration of interactive and engaging elements, such as the prominent statistics section and clear icons in the "Services" area.

# 4- MISSING CLEAR CTAS

## PROBLEM

➡ Absence of clear Call-to-Action (CTA) buttons to guide users toward specific steps (e.g., "Learn More" or "Contact Us").



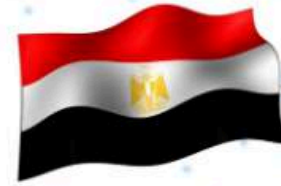
## SOLUTION

➡ Addition of prominent CTA buttons in the Hero Section, such as "Learn More," guiding new visitors to the most important content.





وزارة الاسكان والمرافق والمجتمعات العمرانية  
الهيئة القومية لمياه الشرب والصرف الصحي



إتصل بنا

الهيكل التنظيمي

المشروعات

اعلان وظائف

من نحن

الرئيسية

### نبذة عن الهيئة

تم إنشاء الهيئة العامة لمياه الشرب لتتولى المسئوليات الخاصة بمرافق مياه الشرب في عام ١٩٦٨.

تم إنشاء الهيئة العامة للمجاري في عام ١٩٦٨.

حتى عام ١٩٨١ كانت مشروعات مياه الشرب والصرف الصحي تتولاها الهيئة العامة لمياه الشرب والهيئة العامة للمجاري كأحد الهيئات التابعة لوزارة الإسكان والمرافق.



BEFORE

CLIK ME

AFTER

CLIK ME



وزارة الاسكان والمرافق والمجتمعات العمرانية  
الهيئة القومية لمياه الشرب



الصفحة الرئيسية من نحن الخدمات الاخبار الإدارات والاقسام إتصل بنا



تسجيل الدخول

EN



نحو مستقبل افضل لمياه مصر

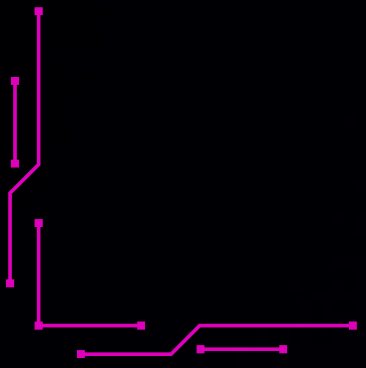
نعمل على توفير مياه شرب نظيفة وامنة وفعالة  
لجميع المواطنين

# CONCLUSION

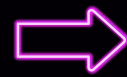


The new design successfully transformed the website from an outdated, non-functional interface into a modern and efficient digital platform. The most significant improvements were the modernization of visual aesthetics (UI) and the adoption of a clear, familiar information structure (UX), ensuring an easier and more enjoyable browsing experience for visitors

it became more simple well-planned and easy to use ,so older people who have low technology knowledge won't face too many troubles like while using the old one



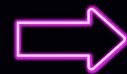
LINKS :



GITHUB



FIGMA



OLD WEBSITE





THANK  
YOU