

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- The purpose of this case study is to transform a legacy digital interface characterized by outdated aesthetics and critical functional failures into a modern, user-centric platform.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

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 The interface design is outdated and inconsistent, while the user experience suffers from high cognitive load, weak information architecture, and poor accessibility support.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.

USER INTERFACE ANALYSIS (UI)

→ VISUAL DESIGN ISSUES

- Poor Visual Hierarchy
- High Visual Noise

- Contrast Ratio Issues

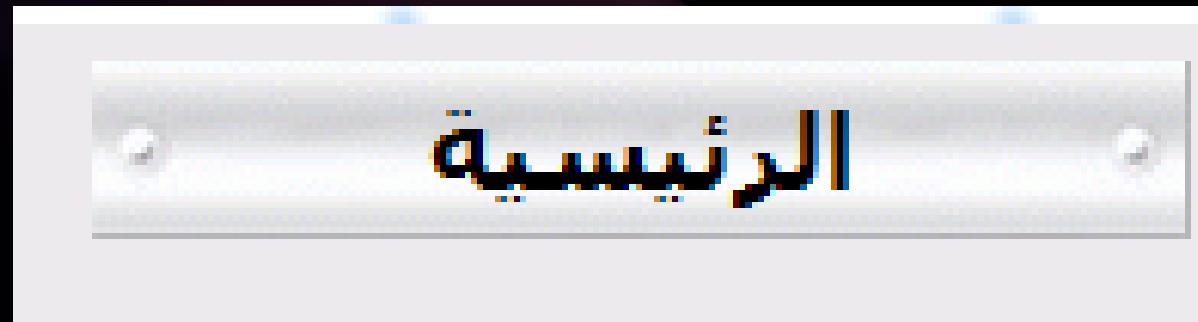
→ TYPOGRAPHY ISSUES

- Readability Problems
- Low Legibility
- Inconsistent Typography

→ AFFORDANCE AND CONSISTENCY

- Poor Affordance
- Weak Interaction Feedback
- Lack of Consistency

1- OUTDATED AESTHETIC



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

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

من نحن

الرئيسية

نبذة عن الهيئة

- تم إنشاء الهيئة العامة لمياه الشرب لتتولى المستويات الخاصة به
- تم إنشاء الهيئة العامة للمجاري في عام ١٩٦٨ .
- حتى عام ١٩٨١ كانت مشاريع مياه الشرب والصرف الصحي تتم تحت إشراف الهيئات التابعة لوزارة الإسكان والمرافق .

زيارة المهندس / شريف
والمجتمعات العمرانية
اللواء المهندس / أمين
سيادته الدكتور / أحد
مهندсы / سيد إبراهيم
والمجتمعات العمرانية
اهريت" و الحامولى
لمتابعة سير العمل بالمحافظة السبت المد

استقبل المهندس شريف الشربيني، وزير الاسكان والمرافق، والمجتمعات العمرانية الدكتور خالد عبد الحليم محافظ قنا، لبحث ملفات العمل المشتركة، وذلك بمقر الوزارة بالعاصمة الجديدة بحضور مسئولي الوزارة والمحافظة الخميس الموافق ٢٠٢٥ / ١٢ / ١١



افتتح المهندس / شريف الشربيني وزير الاسكان والمرافق والمجتمعات العمرانية محطة تنقية مياه الشرب بطاقة ١٠ ألف م³ يومياً بدقميرة بمحافظة كفر الشيخ ضمن المرحلة الثانية من المبادرة الرئاسية "حياة كريمة" لتطوير القرى الريفية، وذلك في إطار تنفيذ خطة التنمية المستدامة



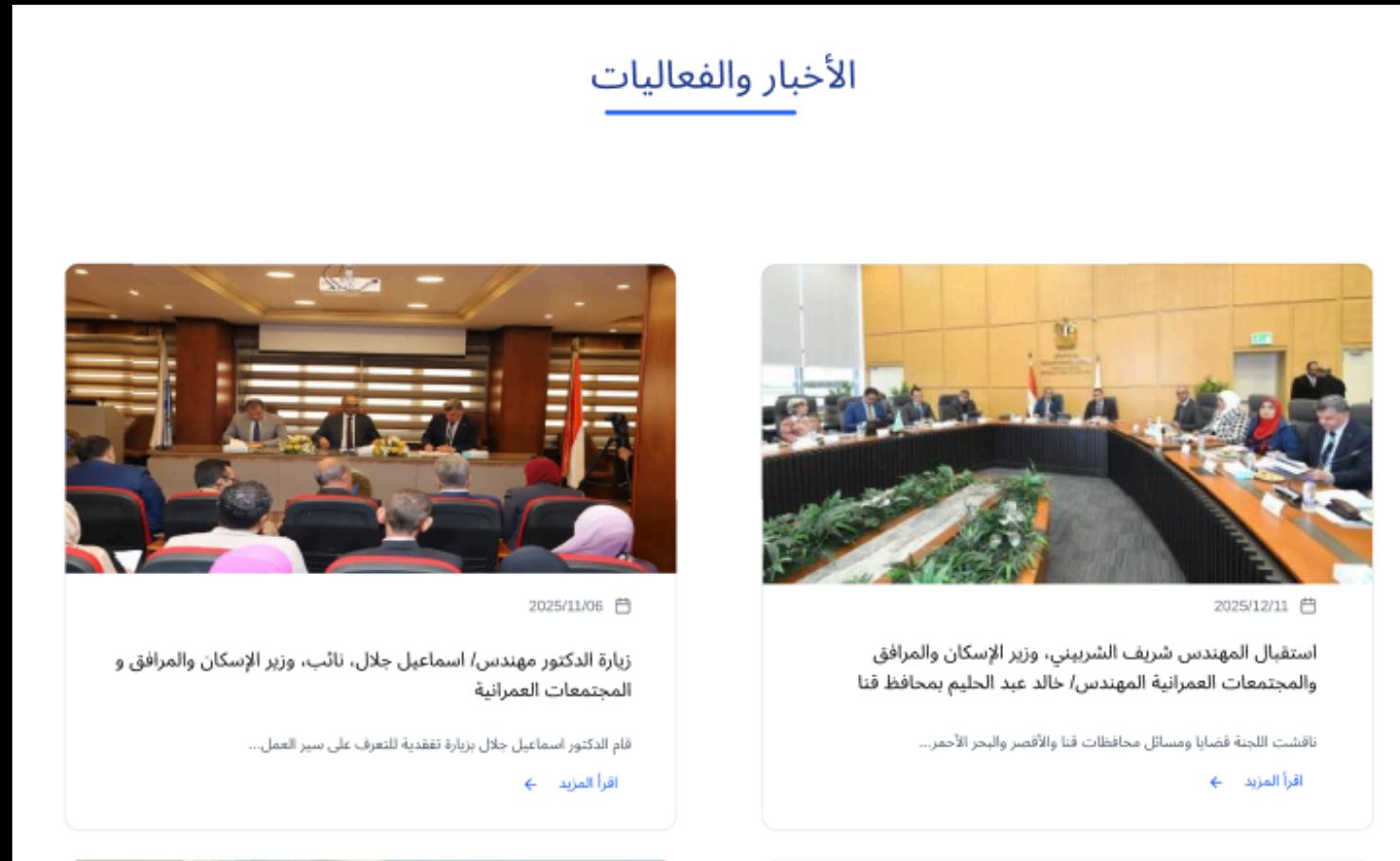
السيسي، رئيس
القدرات البشرية
صرية . قام السيد
م مجلس الوزراء
داخل شركة قها
محافظة القليوبية،
وزير، نائب رئيس
الصناعة والنقل،
وبيبة ، وكان في
مجلس الوزراء

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.

The collage consists of four rectangular screenshots arranged in a 2x2 grid. Each screenshot shows a different page or section of a mobile application with a distinct header and footer design.

- Top Left:** A white header bar with a blue gradient title "الرئيسية". Below it is a white page with a black background containing Arabic text: "نبذة عن الهيئة" and "تم إنشاء الهيئة العامة لمياه الشرب لتتولى المسئوليات الخاصة بمياه الشرب في عام ١٩٦٨".
- Top Right:** A white header bar with a blue gradient title "الرئيسية". Below it is a white page with a black background containing Arabic text: "(السيد اللواء مهندس / أمين شوقي عادل)".
- Bottom Left:** A white header bar with a black background containing Arabic text: "وذلك لتوليه منصب رئيس مجلس الادارة للهيئة". Below it is a white page with a black background containing Arabic text: "استقبل المهندس شريف الشربيني، وزير الاسكان والمرافق".
- Bottom Right:** A white header bar with a black background containing Arabic text: "الهيئة القومية لمياه الشرب والصرف الصحي". Below it is a white page with a black background containing Arabic text: "للواء مهندس / أمين شوقي عادل" and "رئيس مجلس الادارة".

Each screenshot features a decorative pattern of small, light-blue snowflake-like shapes scattered across the background of the main content area.

3- INCONSISTENT FONTS & COLORS

SOLUTION



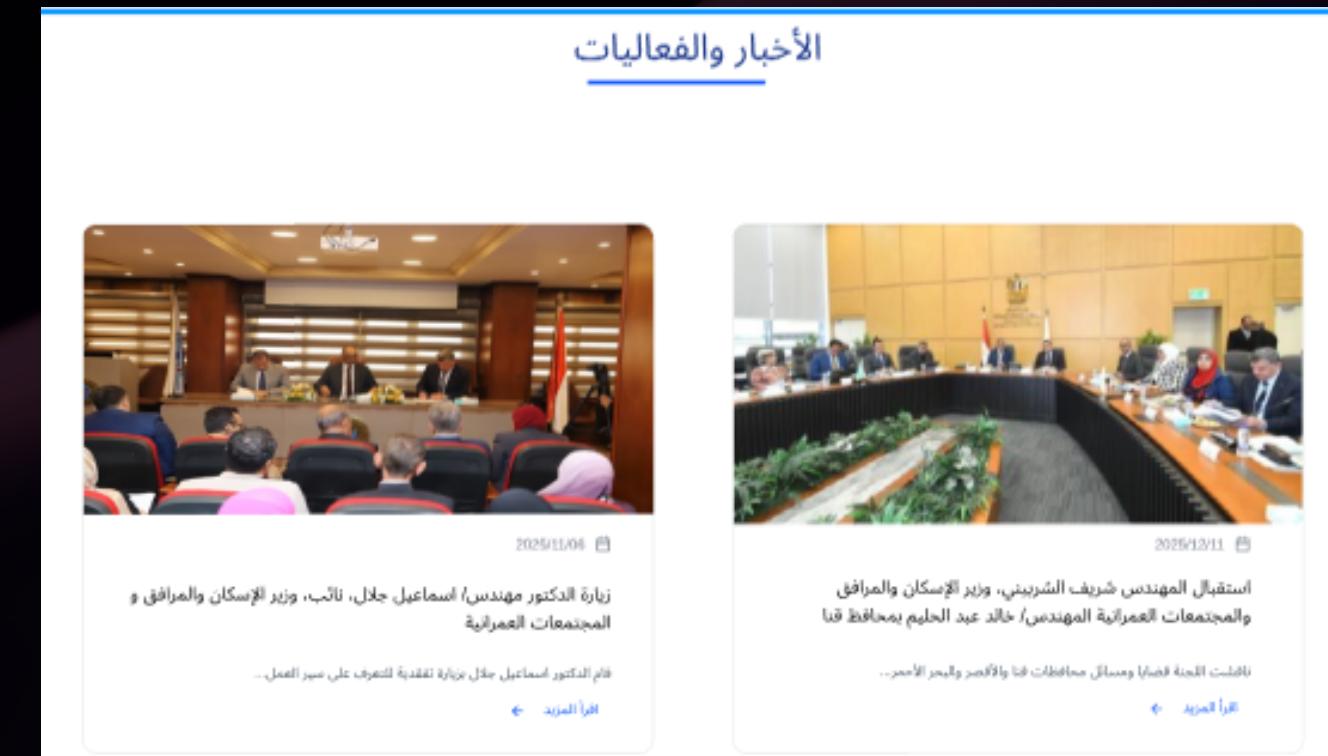
Unified color palette and typography system to ensure a cohesive and comfortable visual experience, especially in sections like "Services" and "News".



color palette

Arimo

typography



IBM Plex SemiBold Italic
IBM Plex Italic
IBM Plex Light Italic

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 are 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.

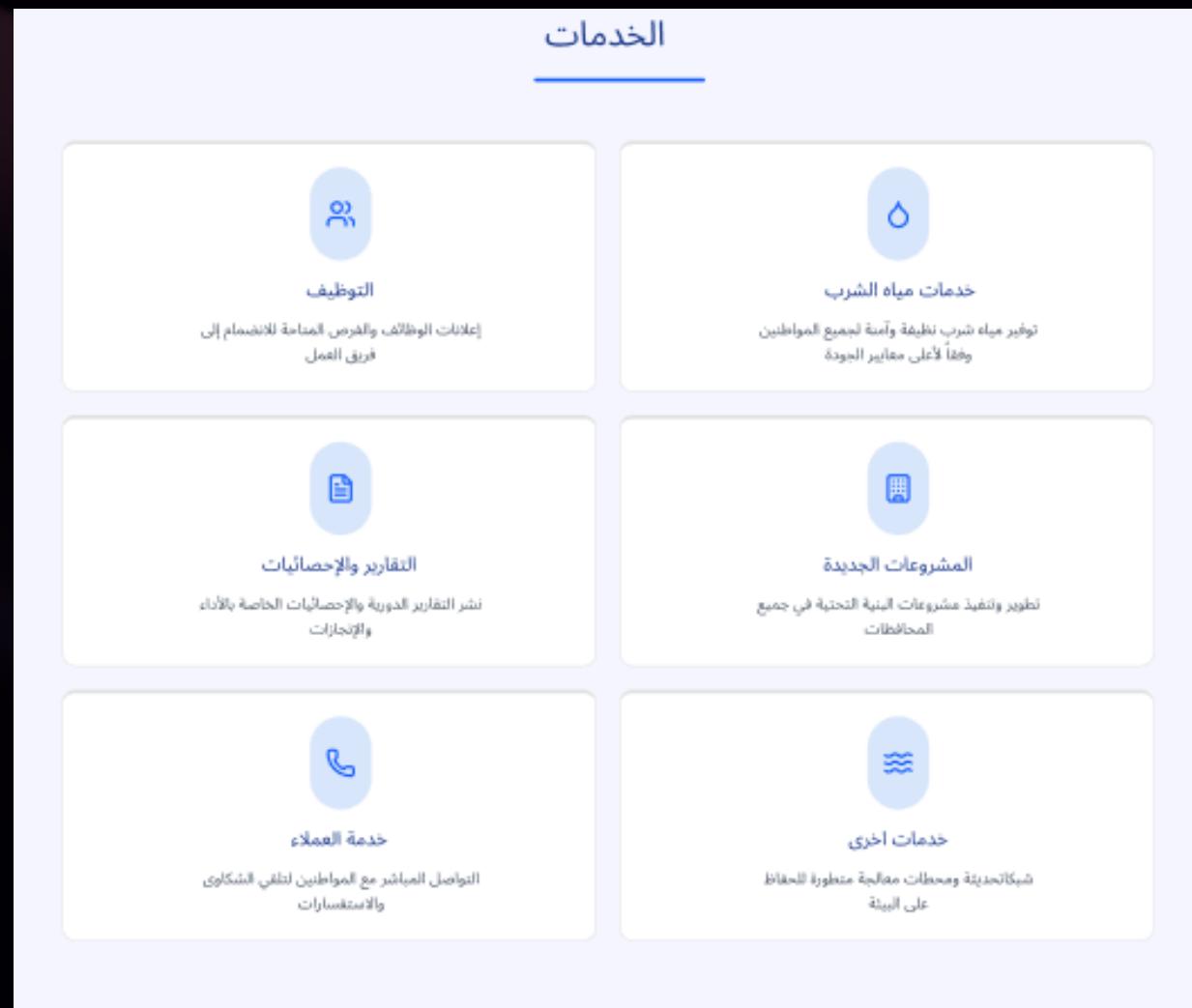
SOLUTION

- ➡ 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

National Organization for Potable Water and Sewerage (NOPWASD)

Egyptian Flag and Ministry of Housing, Utilities and Urban Communities Seal

Photos of water treatment facilities and infrastructure.

Menu navigation buttons: اتصل بنا (Contact Us), الهيكل التنظيمي (Organizational Structure), المشروعات (Projects), اعلان وظائف (Job Vacancies), من نحن (About Us), الرئيسية (Home).

نبذة عن الهيئة

- تم إنشاء الهيئة العامة لمياه الشرب لتتولى المسؤوليات الخاصة ب搬运 مياه الشرب في عام ١٩٦٨.
- تم إنشاء الهيئة العامة للمجاري في عام ١٩٦٨.
- حتى عام ١٩٨١ كانت مشروعات مياه الشرب والصرف الصحي تتولها الهيئة العامة لمياه الشرب والهيئة العامة للمجاري كأحد الهيئات التابعة لوزارة الإسكان والمرافق.

BEFORE
CLICK ME

AFTER
CLICK ME

وزارة الاسكان والمرافق والمجتمعات العمرانية
الهيئة القومية لمياه الشرب

National Organization for Potable Water (NOPWASD)

Menu navigation buttons: الصفحة الرئيسية (Home Page), من نحن (About Us), الخدمات (Services), الاخبار (News), الادارات (Departments), والاقسام (Sections), اتصل بنا (Contact Us), تسجيل الدخول (Login), EN, and a search icon.

نحو مستقبل أفضل لمياه مصر

نعمل على توفير مياه شرب نظيفة وآمنة 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 bacame more simple well-planned and easy to use ,so older people who have low technlology knowledge wont face too many troubles like while using the old one

LINKS :



GITHUB



FIGMA



OLD WEBSITE

THANK
YOU