

Accelerating UI/UX Transformation with AI

The MCC Scorecard Case Study,
and more.



Agenda

01 MCC Scorecard Explanation

02 AI Tools

03 Case Study

04 Interactive Exercises

05 Reflection and Next Steps

MCC Scorecard Explanation

What You'll Learn

Problem → The Millennium Challenge Corporation (MCC) needed to update a legacy Microsoft Access database and improve the MCC Scorecards.

Solution → Turner Consulting Group (TCG) created an online analysis system and updated the MCC Scorecards UI/UX between FY16 and FY17.

AI Analysis → Use AI to analyze the Scorecards UI/UX improvements.

Strategic Takeaways → AI analysis estimated an increase in users understanding results, user usability scores, and faster developer work.

By the End of this Workshop

Identify the problem statement in transitioning from legacy UI/UX to modernized scorecard interfaces.

Explain how Microsoft Copilot and AI-driven analysis can streamline data synthesis and design iteration.

Apply lessons from the MCC Scorecard case study to accelerate UI/UX updates in their own organizations.

Evaluate the cross-functional benefits for business analysts, UI/UX designers, and developers.

Afghanistan FY16

Population: 31,628,000
 GNI/Cap: \$680 (LIC)

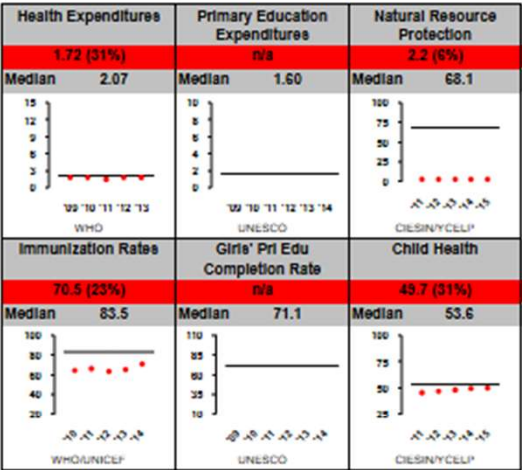
Control of Corruption
 Democratic Rights
 Pass Half Overall



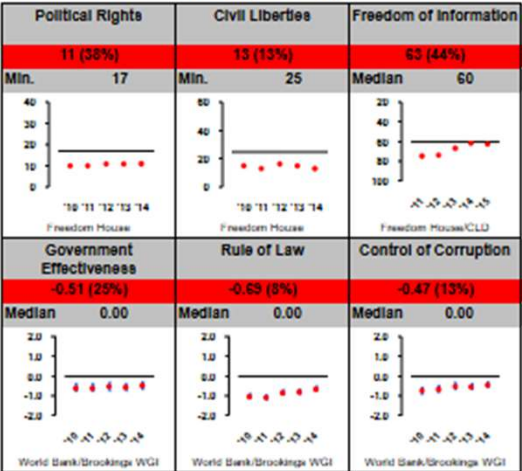
Economic Freedom



Investing in People



Ruling Justly



Challenges with the Legacy UI/UX

- Categories that are challenging to follow
- Difficult to comprehend
- Tough to interpret

For more information regarding the Millennium Challenge Account Selection Process and these indicators, please consult MCC's website: www.mcc.gov/selection

The Millennium Challenge Corporation Scorecards

MCC prioritizes indicators that:

- use an analytically-rigorous methodology and objective, high-quality data,
- are publicly available,
- have broad country-coverage among MCC candidate countries,
- are comparable across countries,
- have a clear theoretical or empirical link to economic growth,
- are policy-linked, (i.e. measure factors that governments can influence), and
- have appropriate consistency in results from year to year.

*Text directly from MCC

Legacy Scorecard Interface

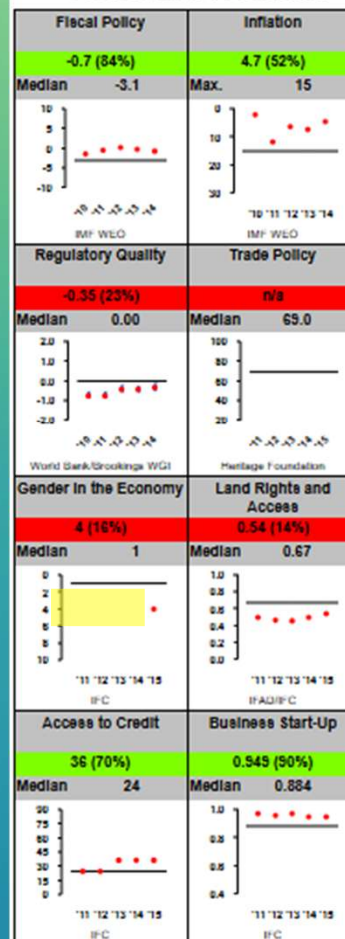
Difficult to comprehend categories.
 Challenging to interpret percentages.
 Tough to identify minimum values.

Afghanistan FY16

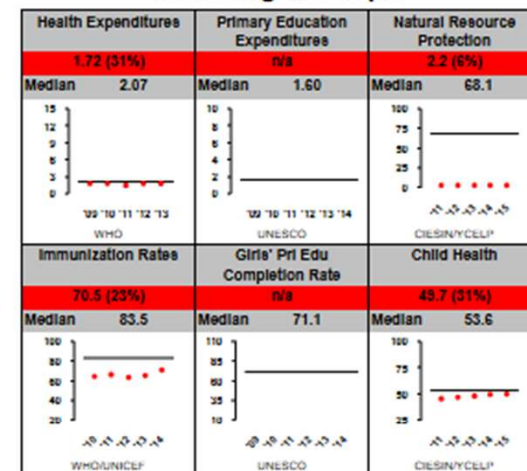
Population: 31,628,000
 GNI/Cap: \$680 (LIC)

Control of Corruption
 Democratic Rights
 Pass Half Overall

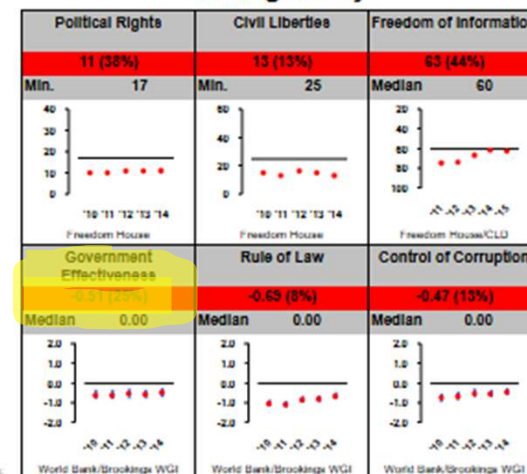
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Introducing AI + Copilots

Case Study Walkthrough

How AI and Microsoft Copilot Transforms the Workflow



Data input → Millennium Challenge Corporation Scorecard



Assessment of Attention Insight → Analysis of Millennium Challenge Corporation Scorecard



Evaluation with Microsoft Copilot → Enhancements in natural language



Wireframe Development → Revise wireframes based on AI suggestions



Assessment of Attention Insight → Analysis of Millennium Challenge Corporation Scorecard



Code development – Use GitHub Copilot to analyze and provide code suggestions for developers

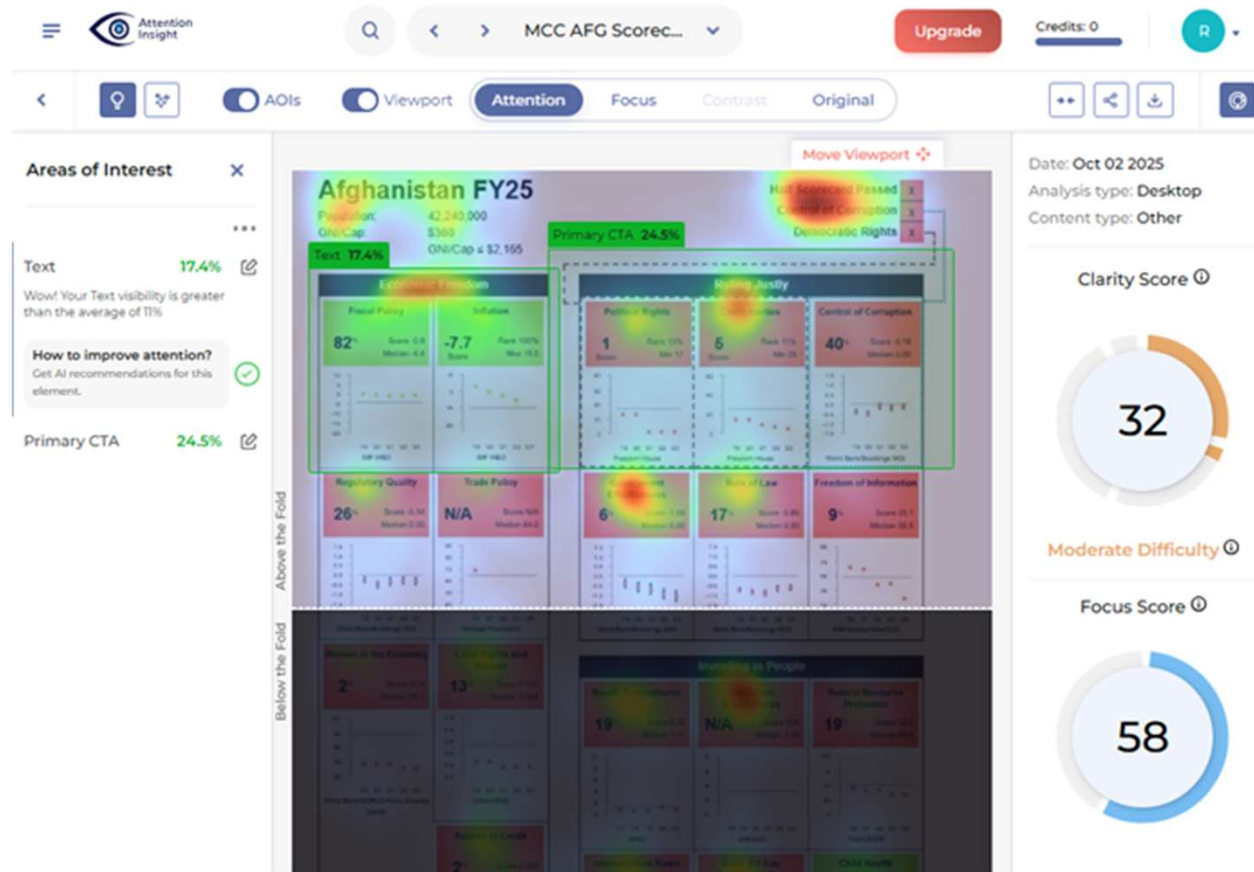
AI Analysis

AI highlights key regions for eye contact.

Evaluates the size of the text.

Assesses the clarity of the information.

Examines the focus of the content.



Redesign Scorecard Interface

Categories that are simple to understand.

Percentages that are straightforward to interpret.

Minimum values that are easy to recognize.

Afghanistan FY17

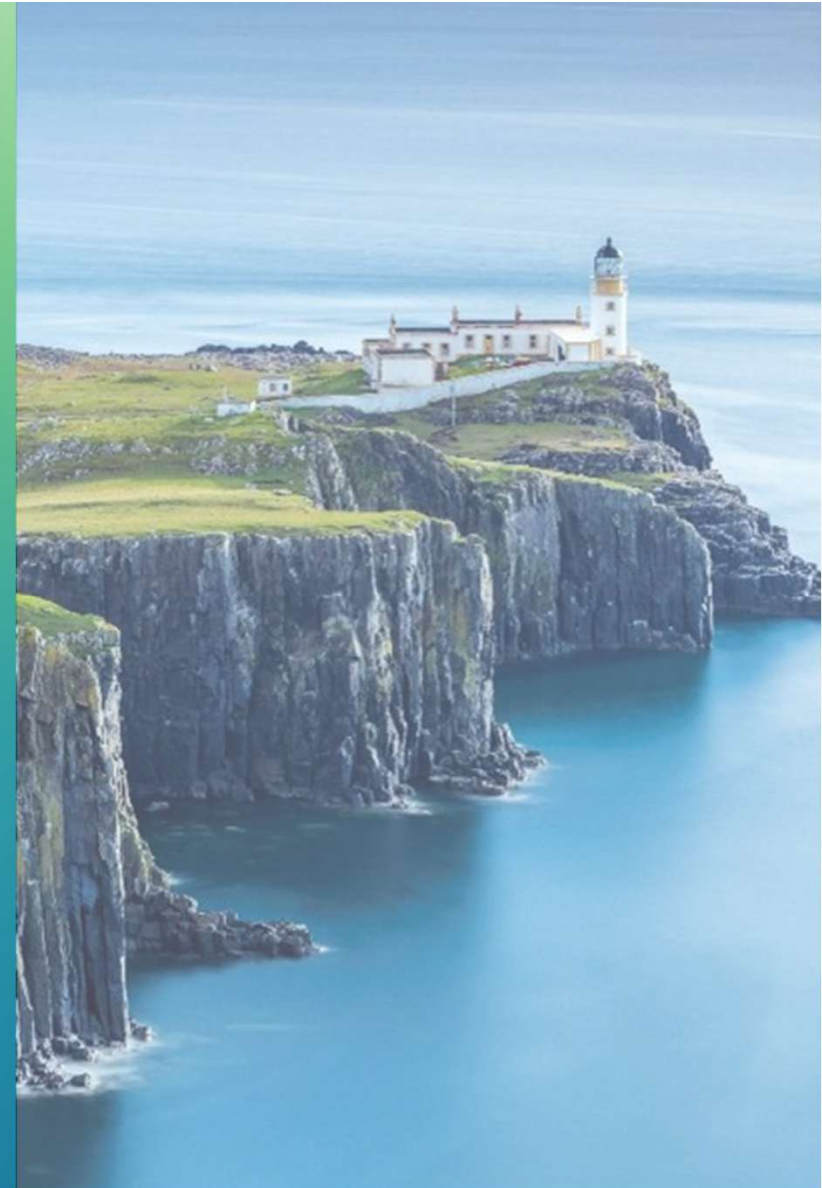
Population: 32,527,000
GNI/Cap: \$630 (LIC)

Half Scorecard Passed X
Control of Corruption X
Democratic Rights X



Interactive Exercise: MCC

Generate Insights with AI



Interactive Exercise – Data Analysis

MCC Country Selection Indicators for FY25
released Apr 28, 2025
modified Apr 30, 2025

MCC Country Selection Indicators for FY25

view less ^

Access to Credit FY25

View ▶

accessCreditCountry	accessCreditScore
Afghanistan	0.028571429
Afghanistan	0.04
Afghanistan	0.055555556
Afghanistan	0.055555556
Afghanistan	0.055555556
Afghanistan	0.055555556

Use company data to extract meaningful insights

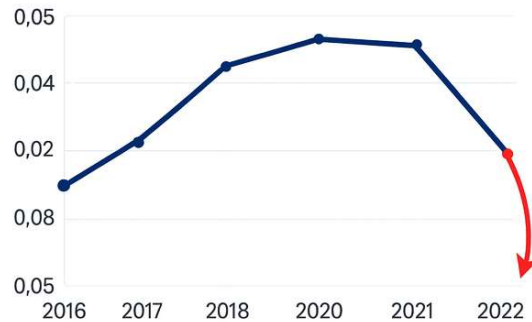
- Alternatively, examine the provided MCC data for FY25 Access to Credit.

Give a prompt to Microsoft Copilot

- Create a summary highlighting the trends in your dataset.
- For instance, with MCC data: Please summarize the trends for Afghanistan's Access Credit Score from the column: accessCreditScore.

Afghanistan Access Credit Score Dashboard

Access Credit Score by Year



Highest Score
0.0556

Lowest Score
0.0286

Current Score
0.0226

Year	Score
2015	0,0286
2018	0,0556
2019	0,0226
2020	0,0226

Afghanistan's score peaked (2018-2021), then declined to its lowest level in 2022.

Interactive Exercise – Wireframes

Create a Dashboard Using Wireframe

Utilize a prompt with Microsoft Copilot

- Microsoft Copilot prompt: Kindly produce a visual prototype.
- Based on MCC data: Design a wireframe that displays these insights within a dashboard layout.

Interactive Exercise – Developer Code

```
Jsx Copy
import React, { useMemo, useState, useEffect } from "react";

/**
 * ScorecardFilterPanel
 *
 * A reusable, accessible filter panel for scorecards.
 * - Supports country, region, year, income group, indicator, threshold, score
 * - Emits a normalized filter object via onChange and onApply.
 * - Designed for analysts/designers/devs to plug into tables, charts, or reports
 *
 * Props:
 * - countries: Array<{ code: string, name: string, region?: string, incomeGroup?: string }>
 * - indicators: Array<{ id: string, label: string, category?: string }>
 * - years: number[] (e.g., [2020, 2021, 2022, 2023, 2024])
 * - regions: string[] (optional; if not provided, will derive from countries)
 * - incomeGroups: string[] (optional; if not provided, will derive from countries)
 * - defaultFilters: FilterState (optional initial state)
 * - onChange: (filters: FilterState) => void (fires on any control change)
 * - onApply: (filters: FilterState) => void (fires when user clicks Apply)
 * - onReset: () => void (fires when user clicks Reset)
 */
```

Generate Code

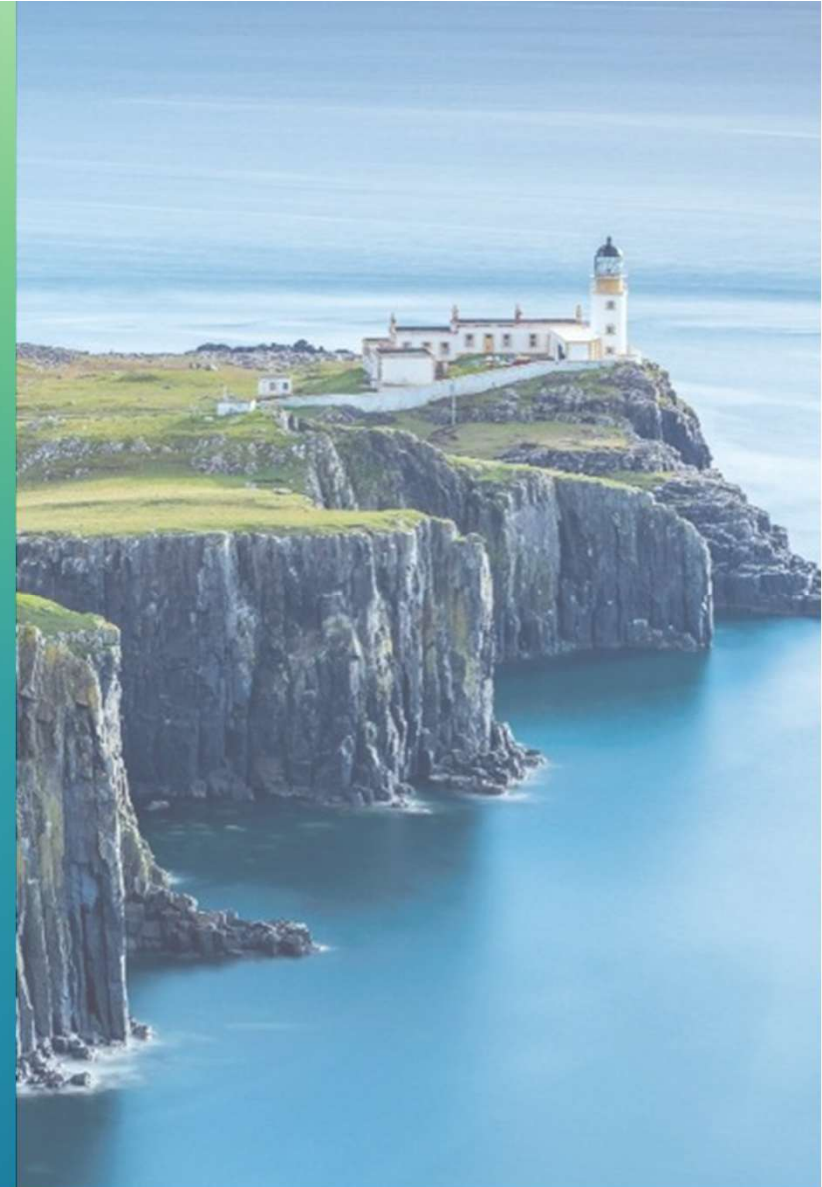
- Alternatively, make use of the MCC data for FY25 Access to Credit.

Prompt GitHub Copilot with

- Using MCC data: Please create a React component for the scorecard filter panel.

Once the code is generated, use GitHub Copilot to review and enhance the proposed code.

Cross-Functional Benefits

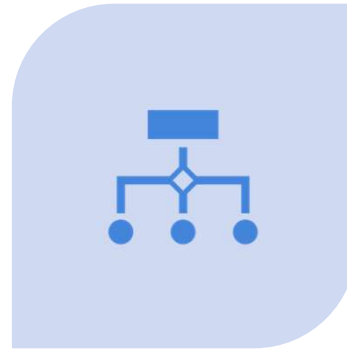


What Each Role Gains



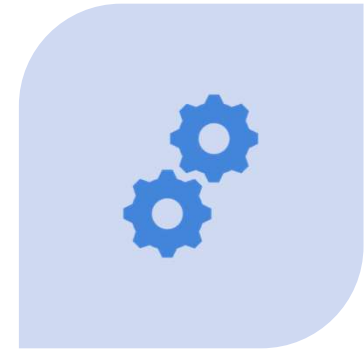
DESIGNERS

RAPID PROTOTYPING → MORE
ITERATIONS, BETTER USER-
CENTERED DESIGN.



ANALYSTS

FASTER INSIGHT GENERATION →
MORE TIME FOR STRATEGIC
INTERPRETATION.



DEVELOPERS

CLEANER, AI-ASSISTED CODE →
REDUCED TECHNICAL DEBT AND
FASTER DEPLOYMENT.

Why This Matters for Executives

ROI visualization (reduced time-to-market, increased efficiency).

AI establishes a shared language among teams.

Integrating AI into UI/UX processes leads to quantifiable improvements in time-to-market and collaboration efficiency across teams.

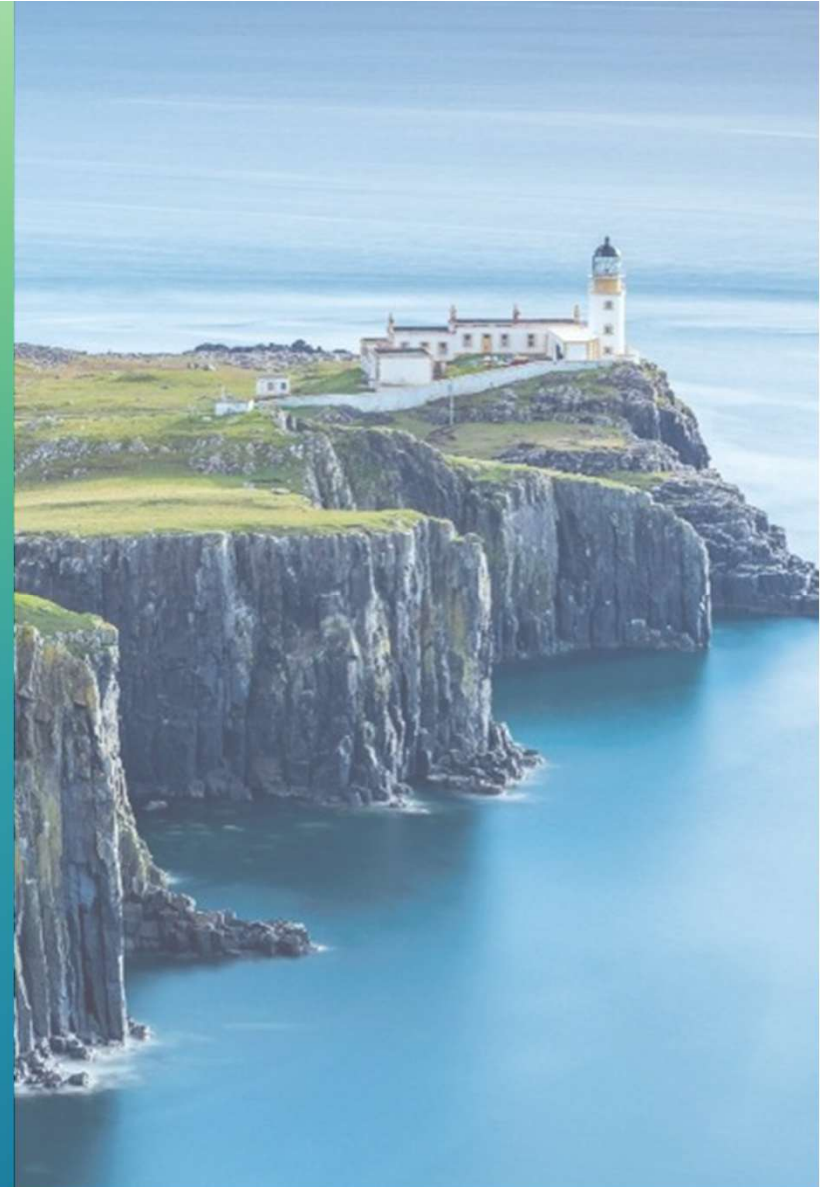
Evaluation of Metrics

Metric	Legacy UI/UX	New AI-Enhanced UI/UX	Improvement
Time to Generate Insights (Analyst)	3–4 hours per dataset	30–45 minutes	~70–80% faster
Usability Score (SUS – System Usability Scale)	55/100 (marginal)	82/100 (excellent)	+27 points
Iteration Speed (Design Cycle)	2–3 weeks per iteration	3–5 days per iteration	~65–75% faster
Developer Rework (Code Refactoring)	25–30% of sprint time	10–12% of sprint time	~60% reduction
Executive Decision Readiness	1–2 weeks after data release	2–3 days after data release	~80% faster

Microsoft Copilot additionally evaluates these metrics to enhance performance, drawing insights from the MCC case study.

Interactive Exercise: Real Estate Market Report

Generate Insights with AI



You built a weekly intelligence pipeline and needed a domain where rapid market movement would demonstrate the value of structured automation. The DC, Maryland, and Virginia real estate market provided the right density of activity, the right volume of public data, and a clear geographic boundary for consistent analysis. The result is a local intelligence product that converts constant market noise into a reliable weekly signal for decision-makers.

Microsoft Copilot Prompt

Zapier

Clear instructions

Copilot built-in to support development

Setup on my instructions

No coding needed

Real Estate Insights Report v4 Published Configure Activity v5 Publish Share

Copilot AI beta

Welcome to the Zapier Agents Copilot! I'm a general assistant that can help you with various tasks.

I can help you with:

- Building Zapier Agents
- Finding apps, actions, or documentation
- Investigating runs and errors
- Editing them based on your feedback

Just let me know what you'd like to do.

Chat with Copilot

Trigger: Edit trigger

On Demand

Instructions to follow: Expand

****Weekly Ross Jobs Report: Local Real Estate Intelligence****

****Trigger:**** On Demand

****Objective:****

Scan three reliable real estate platforms and identify notable activity from the past 30 days in the Denver, CO region. Extract signals, score opportunities, and produce a structured JSON file (data.json) and push it to GitHub.

****SOURCES TO CHECK (3 Primary):****

1. Redfin (new listings, price drops, pending sales, sold properties)
2. Zillow (new listings, price changes, sold properties)
3. LoopNet (commercial listings, leases, developments)

****TIME WINDOW:****

Only include activity from the past 30 days.

****FILTERING RULES:****

1. Remove duplicate listings (same address across platforms)
2. Prioritize listings with status changes or price drops
3. Exclude generic, unrelated content

****SCORING MODEL (Simple):****

Score each opportunity 1-10 using:

- 4 pts: Recency (within 7 days = 4, 8-14 days = 3, 15-30 days = 2)
- 3 pts: Signal strength (price drop, status change, new permit = high signal)
- 3 pts: Category relevance (residential, commercial, or development potential)

****CLASSIFICATION:****

Use [?] to add to tools & knowledge sources

Tools this agent can use: Add Tool

Default Tools: Visit Site & Web Search

GitHub: Create or Update File

File Path: "data.json" Repository: rmallorybpc/real-estate-report

Knowledge sources: Add Knowledge Source

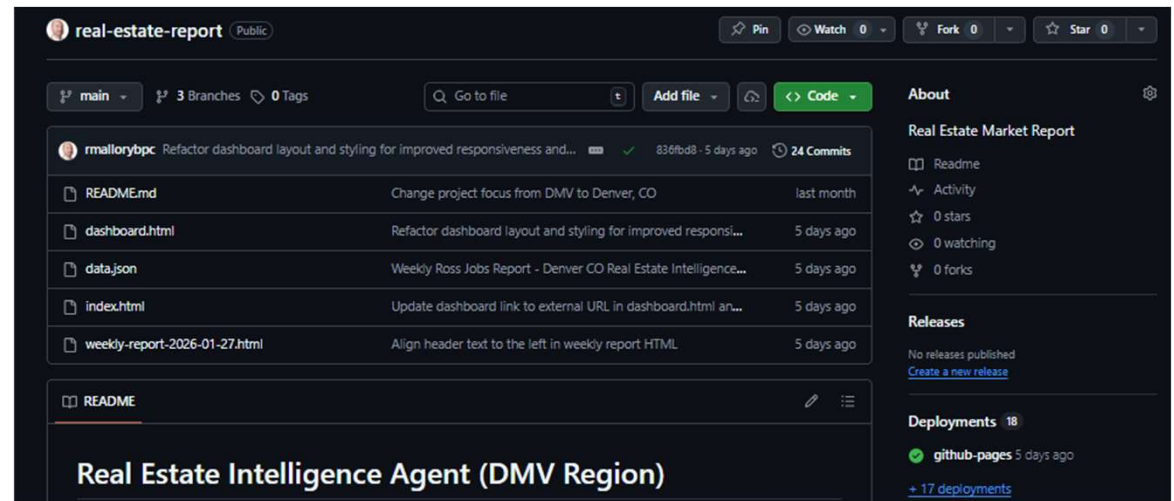
+ Add knowledge source...

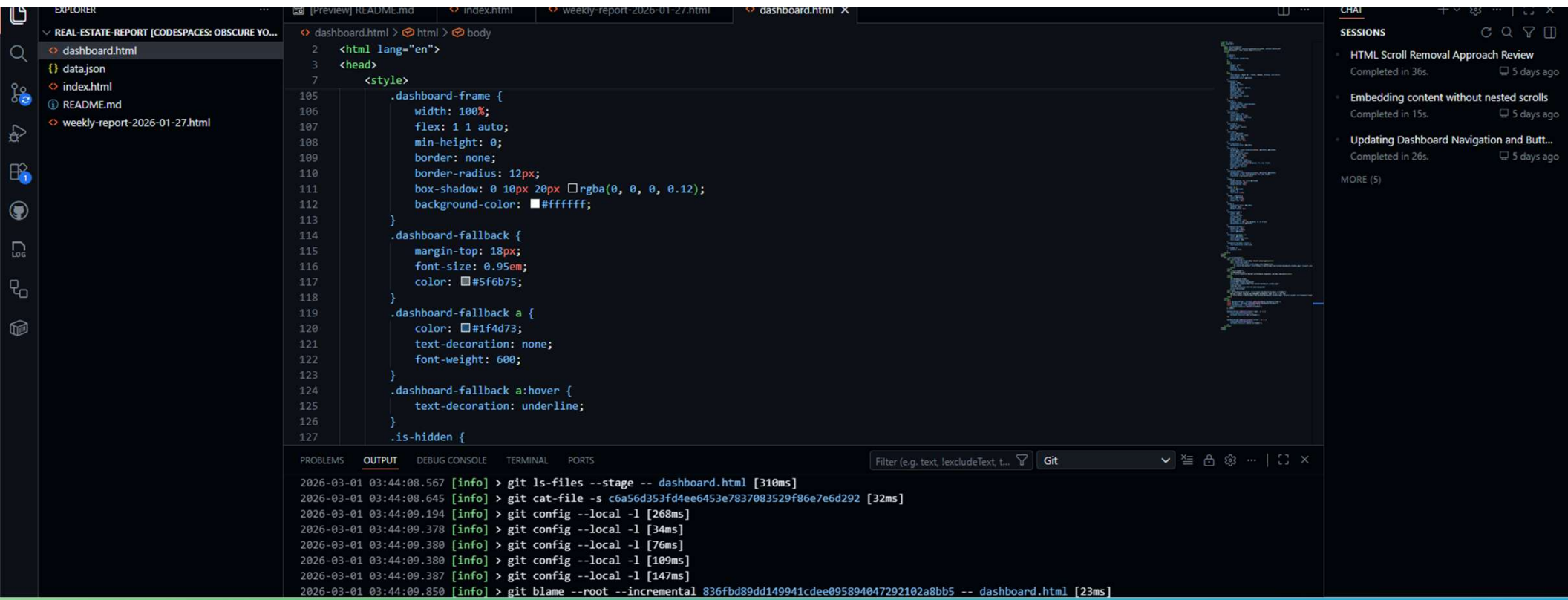
GitHub Repo

Public repo

Fully automated results feed
from Zapier

Secured by GitHub





GitHub Copilot

VS Code built into GitHub web

Natural language prompting

GitHub Pages

Analysis information

Live hosted site on GitHub Pages

REAL ESTATE INTELLIGENCE Report [VIEW DASHBOARD](#)

Real Estate Report

Local Real Estate Intelligence: DC/MD/VA Region
Report Date: January 27, 2026 | Analysis Period: Past 30 Days

Market Overview

The DC/MD/VA real estate market is experiencing a significant shift toward buyer-friendly conditions in early 2026. Key indicators show increased inventory, slower sales velocity, and emerging price adjustment opportunities across residential and commercial sectors.

\$720,000 DC Median Home Price (+0.7% MoM)	49 Days Average Days on Market Washington DC	3,199 Active Listings (vs 2,440 5-yr avg)	18.5% Homes with Price Drops (+1.3 pt YoY)
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● HIGH PRIORITY OPPORTUNITIES (Score 8-10)

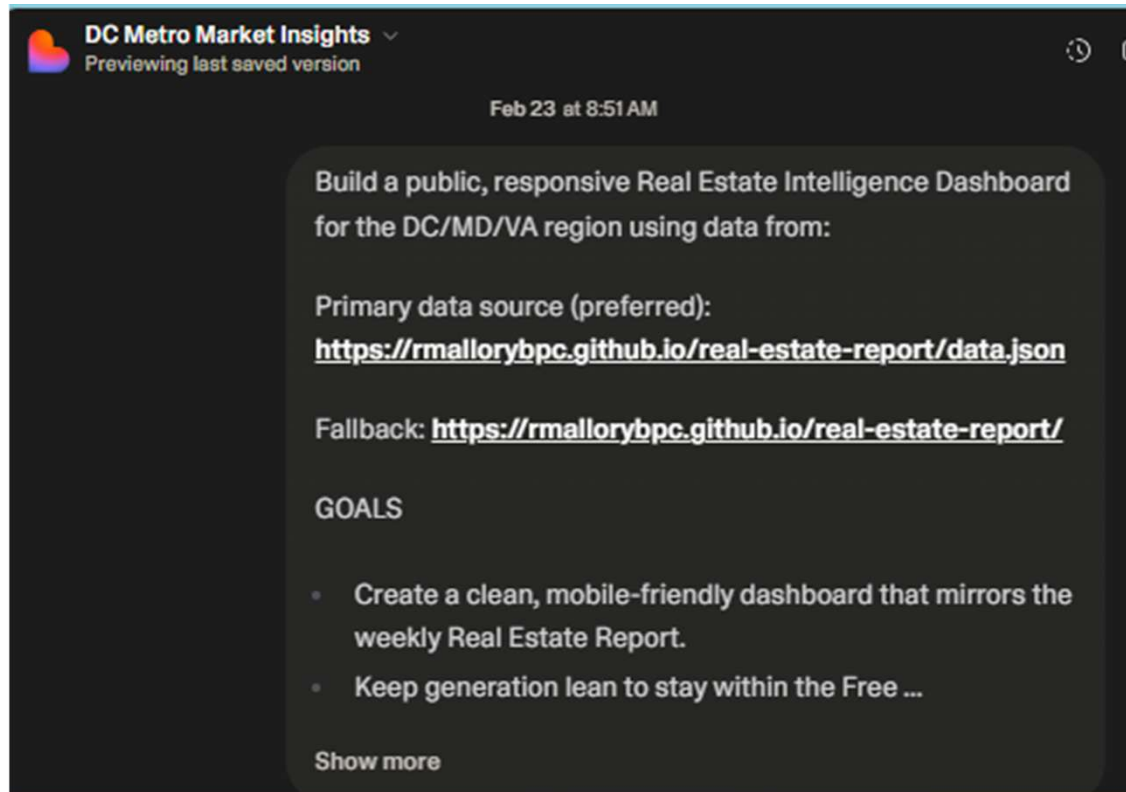
Clarens Estate Record Sale - Alexandria, VA Score: 9

Residential

Signal: Record-breaking \$7.5M sale, significant price drop from \$11.5M listing

Historic 3.5-acre Alexandria estate with ties to George Washington sets new city record for residential sales. Property dropped from \$11.5M listing to \$7.5M sale price, indicating market adjustment in luxury segment. Seven-bedroom main home with Potomac River views represents high-end market recalibration.

Source: Washington Business Journal | [View Article](#) | Date: January 25, 2026



Lovable

Natural language prompts

No coding

Dashboard

Market performance snapshots and key indicators

Denver, CO Real Estate Intelligence

Overview

Opportunities

Market Snapshot

Methodology

Market Overview

Denver, CO · Past 30 days · Elevated inventory, buyers returning earlier than normal

Median Home Price \$
\$571,250
+1.6% YoY

Days on Market 🕒
70 days average

Mortgage Rates 🏠
6.2% (30-year fixed)

Market Competitiveness 📈
55/100 (Somewhat Competitive)

Total Opportunities ↕
12
3 high · 5 med · 4 low

Avg Opportunity Score 📊
5.8
9 residential · 3 commercial

Lovable Embedded in GitHub

Reflection & Next Steps:

*Implementing This Within Your
Organization*



Strategic Reflection

Understanding the Challenge

- Which limitations in your current systems delay the generation of insights and the design process within your organization?
- How does unclear data workflow affect trust in decision-making?

AI Integration & Impact

- What AI solutions (like Microsoft Copilot or Attention Insight) could enhance your existing UI/UX workflows?
- In what ways might AI shape collaboration between analysts, designers, and developers?

Evaluating Success

- What metrics would you use to gauge the success of a UI/UX transformation?
- How do aspects such as speed, usability, and iteration effectiveness influence overall business outcomes?

Cross-Functional Application

- How could AI-driven shared workflows foster better cooperation among analysts, designers, and developers?
- What obstacles does your organization encounter in implementing AI, and what approaches could address them?

Next Steps



Governance → *What governance or compliance considerations should be addressed before scaling?*



Pilot → *What pilot project could you launch to test AI's impact on UI/UX transformation?*



Train → *Equip your team with tools and AI literacy skills.*



Expand → *identify the tools that suit your team best and enhance aspects where the tools fall short.*

Questions?