



GovTech Maturity Index 2025: The State of Public Sector Digital Transformation

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This review verifies the reproducibility of the exhibits included in the paper “GovTech Maturity Index 2025: The State of Public Sector Digital Transformation”.

Contents in this review:

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Main findings

- **Every exhibit in the main section of the paper as well as the resulting data has been reproduced accurately.**
- The package does not include any executable code. The verification therefore focused on (i) the exhibits presented in the brief and (ii) the GovTech 2025 dataset. The input survey data was provided directly by the authors. We verified both the reproducibility of the exhibits in the brief and whether all sheets in the output dataset can be traced back to the underlying source data. The following files were reviewed:
 1. WBG_2025 GTMI Maps.xlsx
 2. WBG_GovTech Dataset_Dec2025.xlsx
- We conducted our reproducibility analysis based on the paper shared by the authors.
- **Verification Process and Data Handling:**
 - The reproducibility package relies on 1 type of data: open data.
 - Open data is included in the public reproducibility package.
 - *data_hash_report.csv* lists the SHA256 hashes of all files in the Data folder to support data integrity checks.
- **Reproducibility Summary:**
 - **Data:** All data sources are publicly available and included in the reproducibility package.
 - **Code:** No code files are used in the reproducibility package.
 - **Outputs:** All outputs are generated by manually in Excel files included in the reproducibility package.
 - **Dependencies environment:** The reproducibility package does not use external dependencies.

List of exhibits and reproducibility status

Results in the database WBG_GovTech Dataset_Dec2025.xlsx

- **Sheet GTMI_Data Reproduced.** The sheet includes the survey responses and remotely collected data for 2025, 2022, and 2020. This serves as the raw data and the starting point for all subsequent calculations. The sheet also references additional information from other worksheets in the same workbook:
 - 2025 rows pull values from columns FU, GG, PR, IX, NQ, NR, and PR in the "External" sheet.
 - 2025 rows also reference columns QE–QM in the "GTMI_Groups" sheet.
- **Sheet GTMI_Groups Reproduced.** The sheet uses data from the "GTMI_Data" sheet to calculate the scores in columns N–JM. Columns D–L contain formulas that compute the intermediate indices based on the data in the same sheet.
- **Sheet Stats Reproduced.** The sheet uses data from the "GTMI_Data" and "GTMI_Groups" sheets to generate the summary table in columns A–S. The remaining sections of the sheet contain exhibits that were manually prepared by the authors using data from within the same sheet.
- **Sheet Region Reproduced.** The sheet uses data from the "GTMI_Data" sheet to display results by World Bank regions.
- **Sheet Trends Reproduced.** The sheet uses data from the "GTMI_Data", "GTMI_Groups", and "External" sheets to generate graphs that show historical trends.
- **Sheet External** The sheet includes input data as mentioned in the README.
- **Sheet Economies** The sheet includes input data as mentioned in the README.

Results in the Main Section of the Paper

- **Figure 1 Reproduced.** Map prepared manually (WBG_2025 GTMI Maps.xlsx) using grading, generated according to the alphabetical listing of the countries in each GovTech Maturity Index group. Grading calculated based on the scoring found on the Stats sheet (WBG_GovTech Dataset_Dec2025), columns X-AF. The bar chart within the map is located on the Stats sheet (WBG_GovTech Dataset_Dec2025), columns X-AF.
- **Figure 2 Reproduced.** Charts prepared manually and found on Stats sheet (WBG_GovTech Dataset_Dec2025) columns AH-AJ using data from columns X and V. Year can be changed using the drop down in cell V11 of the Stats sheet.
- **Figure 3 Reproduced.** Charts prepared manually and found on Stats sheet (WBG_GovTech Dataset_Dec2025) columns AH-AJ using data from columns AM and AL. Year can be changed using the drop down in cell V11 of the Stats sheet.
- **Figure 4 Reproduced.** Chart prepared manually and found on Stats sheet (WBG_GovTech Dataset_Dec2025) cells AH63:AN73 using data from columns AA-AE.

- **Figure 5 Reproduced.** Chart prepared manually and found on Stats sheet (WBG_GovTech Dataset_Dec2025) cells AH39:AN49 using data from columns V-Z.
- **Figure 6 Reproduced.** Chart prepared manually and found on Stats sheet (WBG_GovTech Dataset_Dec2025) cells AH50:AN61 using data from columns V-Z.
- **Figure 7.1 Reproduced.** Chart prepared manually and found on Regions sheet (WBG_GovTech Dataset_Dec2025) cells EE51:EN70 using data from EE-EG.
- **Figure 7.2 Reproduced.** Chart prepared manually and found on Regions sheet (WBG_GovTech Dataset_Dec2025) cells EO51:ES70 using data from EL-EN.
- **Figure 8.1 Reproduced.** Chart prepared manually and found on Regions sheet (WBG_GovTech Dataset_Dec2025) cells EE72:EN82 using data from EE-EG.
- **Figure 8.2 Reproduced.** Chart prepared manually and found on Regions sheet (WBG_GovTech Dataset_Dec2025) cells EO72:ES82 using data from EL-EN.
- **Figure 9.1 Reproduced.** Chart prepared manually and found on Regions sheet (WBG_GovTech Dataset_Dec2025) cells EE84:EN92 using data from EE-EG.
- **Figure 9.2 Reproduced.** Chart prepared manually and found on Regions sheet (WBG_GovTech Dataset_Dec2025) cells EO84:ES92 using data from EL-EN.
- **Figure 10.1 Reproduced.** Chart prepared manually and found on Regions sheet (WBG_GovTech Dataset_Dec2025) cells EE94:EN109 using data from EE-EG.
- **Figure 10.2 Reproduced.** Chart prepared manually and found on Regions sheet (WBG_GovTech Dataset_Dec2025) cells EO94:ES109 using data from EL-EN.
- **Table 1** Does not apply.

Results in the Annex of the Paper

- **Table 2** Does not apply.

Reproduction Environment

Paper exhibits were verified on a computer with the following specifications:

- OS: Windows 11 Enterprise
- Processor: Intel(R) Xeon(R) Gold 5218 CPU @ 2.30GHz
- Memory available: 7.97 GB
- Software version: Microsoft Excel Version 2509