README – Cost Template Automation

# Overview

The Cost Template Automation project streamlines the monthly dashboard preparation process by using three Python tools. It eliminates the manual effort of refreshing TM1 extracts, validating data, and generating paste-value reports.  
  
Estimated Savings: ~12 hrs/month (~144 hrs annually)  
Benefits: Faster, consistent, error-free dashboards ready for stakeholders.

# Project Structure

Folder structure and key files:  
  
/Cost\_Automation  
├── Base\_Dashboard\_Template.xlsx # Master dashboard template (input)  
├── Total\_PV.xlsx # TM1 data extracts (Actuals + Targets)  
├── Mapping file.xlsx # Mapping data (entities, regions, report names etc.)  
│  
├── CostTemplate\_Data\_Prep\_Tool\_KS.py # Tool 1  
├── Cost\_Templates\_Gen\_Tool\_KS.py # Tool 2  
├── PasteAsValuesUtility.py # Tool 3  
│  
├── Output/  
│ ├── CT\_Base\_Data.xlsx # Output from Tool 1  
│ ├── Cost\_Templates/ # Generated dashboards (from Tool 2)  
│ └── Cost\_Templates\_PV/ # Final lite reports (from Tool 3)

# Process Flow

## Step 1 – Data Preparation (Tool 1: CostTemplate\_Data\_Prep\_Tool\_KS)

1. Update Total\_PV.xlsx with latest TM1 extracts:  
 - Target HC  
 - Actuals HC  
 - Target DC  
 - Actuals DC  
2. Update Mapping file.xlsx with current mappings.  
3. Run Tool 1 – it asks user for current month and year (YYYY).  
4. Generates CT\_Base\_Data.xlsx which contains mapped & consolidated data with tagging (YTD, Prior Year, MoM, monthly data).  
5. Copy this data and paste into Base\_Dashboard\_Template.xlsx → Data sheet.  
6. Update Dates sheet with current + prior months.

## Step 2 – Report Generation (Tool 2: Cost\_Templates\_Gen\_Tool\_KS)

1. Run Tool 2 and select updated Base\_Dashboard\_Template.xlsx.  
2. Tool generates a Cost\_Templates folder with dashboards (one per Report Name).  
3. Automated tasks performed by the tool:  
 - Generate all dashboards  
 - Remove unwanted rows and data  
 - Update headers dynamically  
 - Refresh all sheets

## Step 3 – Finalization (Tool 3: PasteAsValuesUtility)

1. Run Tool 3 and select the Cost\_Templates folder.  
2. Tool generates a Cost\_Templates\_PV folder with paste-value reports.  
3. Automated tasks performed by the tool:  
 - Remove Data and Dates sheets  
 - Create lightweight reports ready for sharing

# Key Highlights

- Automation replaces manual TM1 refreshes  
- Generates 30+ dashboards in minutes  
- Ensures consistency across reports  
- Reduces manual errors  
- Saves 12 hours monthly (~144 hours annually)

# Naming Recommendations

Current file: Base\_Cost\_Template.xlsx  
Suggested names:  
 - Base\_Dashboard\_Template.xlsx (clear, simple)  
 - Cost\_Master\_Dashboard.xlsx