DATASET: ROOSTER ASSIGNMENT REVAMP

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ORGANIZATION CHART LOOK & FEEL
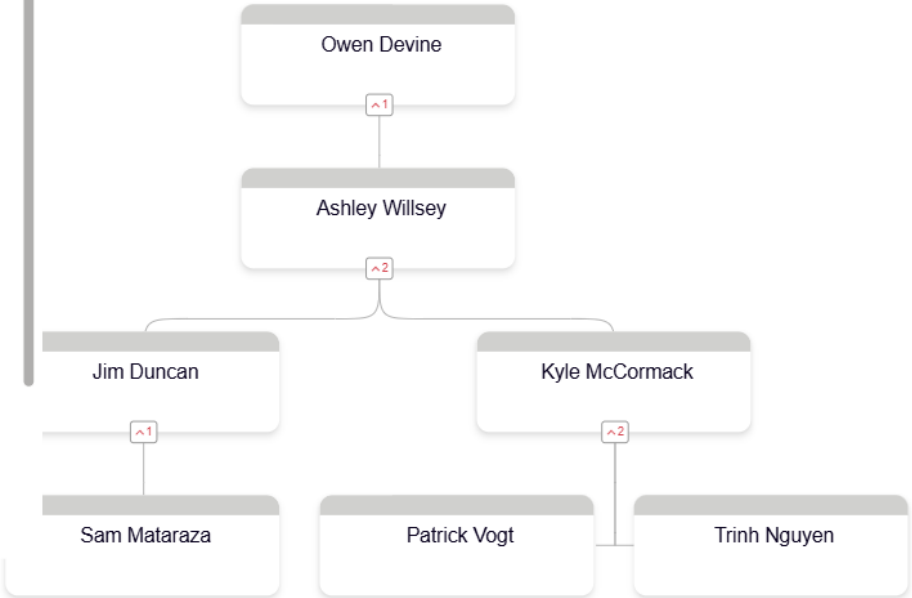
✓ **Organize by each unit with subordinate view**
✓ **Search by name/ scope of work**
✓ **Click on Email with a small default outlook pop-up**

Content

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01 Objective

Context

- ➤ Currently, there is no official organization chart for the entire Division of the Budget (DOB).
- ➤ The existing structure is based on Excel roster directories, which:
  - ▪ Are not user-friendly for quick information lookup
  - ▪ Make it difficult to understand reporting lines and team hierarchies

Objective

- ➤ Evaluate tools to transform the current roster into an interactive, visual org chart
- ➤ Target layout: Hierarchical (Top-Down) Structure
- ➤ Desired features:
  - ▪ Collapsible branches for improved navigation
  - ▪ Ability to easily update the chart using a clean source file
  - ▪ Final deliverable: A dynamic org chart that can be published on DOB Online

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Methodology
Tool Exploration

02

Identify the most suitable tool for creating a dynamic, maintainable, and visually clear organizational chart.

Tools Evaluated			
Python (NetworkX + Pyvis)	**Microsoft Power Apps**	**Visio**	**Power BI**
• Highly customizable • Less user-friendly for structure layout • Requires technical knowledge	• Clean static visuals • Manual updates required • Limited interactivity	• Allow importing data from Excel but static, limited interaction • Require subscription for full features	• Interactive dashboards and visuals • Supports data-driven hierarchy • Easily publishable and maintainable

Evaluation Criteria

✓ Integration with existing data (Excel/CSV)
✓ Visual clarity and interactivity
✓ Ease of maintenance and updates
✓ Compatibility with DOB Sharepoint platform

Power BI was selected as the preferred tool for its balance of visual interactivity, ease of use, and seamless integration with existing workflows.

Methodology
02 PBI – How and what

Tools Used
➢ Microsoft Excel – for initial data cleanup and formatting
➢ Power Query – for data transformation and column creation
➢ Power BI – for model building and visualization

Data Preparation & Initial Setup
▪ Developed a standardized Excel file as the source dataset
▪ Consolidated roster data into a single, structured format
▪ Standardized employee names, titles, and contact info to ensure all records had: Unique identifiers & Valid reporting relationships to avoid structural errors in hierarchy

Power BI Setup
▪ Imported the cleaned dataset into Power BI
▪ Created additional calculated columns using Power Query and DAX measure, including:
  - Email username extraction (e.g., from full email address)
  - Role-based color coding to visually differentiate titles/levels

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03 Data Description & Sources

- **Dataset name (Excel):** data-viz
- **Overview:** Current data has 60 records for selected ADU & EDU team for pilot period. Data to cover units when fully migrated to 300+ employees
- **Source:** C:\Users\bdnguy\OneDrive - New York State Office of Information Technology Services\Data & Technology - Shared Documents\Personal Work\Trinh\3. Assignment Rooster

- **Main table:** ADU
- **Other tables:** For viewing information/expression from different perspective (Ex: all existing columns will go to column tables, all measures of the dashboard will be shown under Measure tables, etc.)

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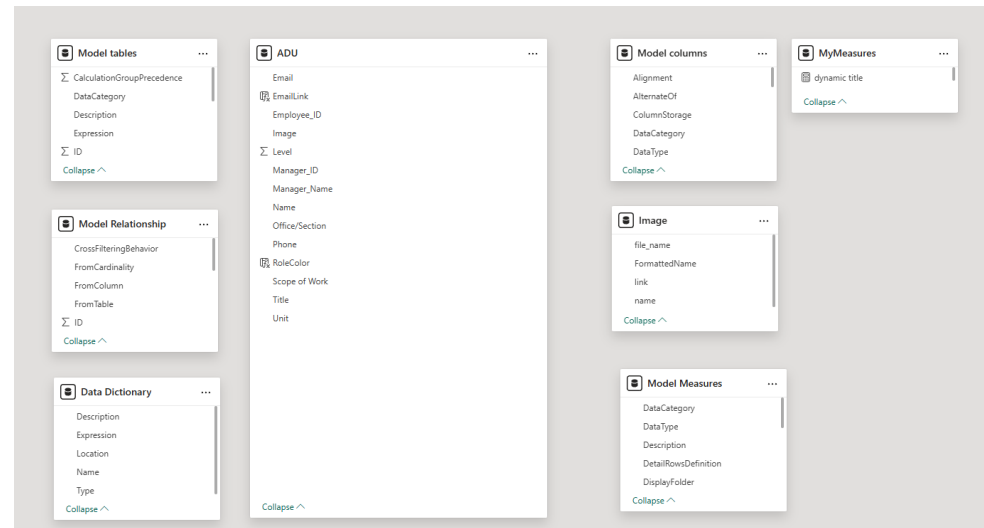
04 Data Dictionary

Type	Name	Location	Expression
Table	ADU		
Table	MyMeasures		
Table	Image		
Table	Model Measures		INFO.VIEW.MEASURES()
Table	Model columns		INFO.VIEW.COLUMNS()
Table	Model tables		INFO.VIEW.TABLES()
Table	Model Relationship		INFO.VIEW.RELATIONSHIPS()
Measure	dynamic title	MyMeasures	VAR GetValues =CONCATENATEX(VALUES(ADU[Office/Section]), ADU[Office/Section]," - ") RETURN GetValues
Measure	no_data	MyMeasures	if(ISBLANK(SELECTEDVALUE(ADU[Name])),"")
Column	Employee_ID	ADU	
Column	Manager_ID	ADU	
Column	Unit	ADU	
Column	Name	ADU	
Column	Email	ADU	
Column	Office/Section	ADU	
Column	Title	ADU	
Column	Scope of Work	ADU	

04 Data Dictionary

Type	Name	Location	Expression
Column	Level	ADU	
Column	Manager_Name	ADU	
Column	Phone	ADU	
Column	Image	ADU	
Column	link	Image	
Column	file_name	Image	
Column	FormattedName	Image	
Column	Name	Image	
Column	RoleColor	ADU	SWITCH(ADU[Title], "Unit Head", "#B32E31", // dark heart red "Assistant Unit Head", "#154973", // primary core blue "Section Head", "#62666A", // dark gray "Team Leader", "#DDD7D3", // LOCAL & REGIONAL AUTHORITIES TERTIARY COLOR "Examiner", "#EDEDED", // Light gray "Office Manager", "#457AA5", // secondary core blue "#D0D0CE" //mid gray)
Column	EmailLink	ADU	"mailto:" & ADU[Email] & "?subject=Hello&body=Hi%20" & SUBSTITUTE(ADU[Name], " ", "%20")

05 Maintenance Guideline
Data Refresh

In the excel file, refer to sheet name "Viz Data" to add new record at the bottom of the table. Then go to PBI in Reporting View and click Refresh.

Note:

- In the scope, Image for each employee is for testing purpose
- All images to be updated after full portfolio mapping for all employees is acquired.

Next Steps:

- Publish dashboard into SharePoint to test feasibility and interface being display to users
- Update full employee profiles & Images to complete dashboard.

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