

## Organizational Skills & Capability Dashboard

### Project Overview & Objective

The client's HR and leadership teams lacked a clear, data-driven view of the skills and capabilities within their organization. They possessed a wealth of data on employee skills but had no way to visualize it effectively. The objectives for this dashboard were to:

- **Map the Skills Landscape:** Provide a comprehensive overview of the prevalence of 22 key skills (e.g., Power BI, SQL, Gen AI, Blue Prism) across the entire organization.
- **Analyze by Hierarchy:** Understand how capabilities are distributed across different Pay Levels (PL) to identify skill gaps at seniority levels.
- **Support Strategic Planning:** Enable department heads to assess their team's strengths and weaknesses for project staffing and training budgets.
- **Identify Talent Pockets:** Quickly find experts and groups with high concentrations of in-demand skills.

### Key Challenge & Approach

The main challenge was transforming a complex, granular skills matrix into intuitive and actionable insights.

- **The Problem:** The raw data was likely a table with one row per employee and multiple columns for each skill (e.g., a column for "Excel," another for "Power BI," etc.), containing proficiency levels or simple yes/no flags. This "wide" data structure is difficult to analyze effectively in Power BI.
- **The Solution:** I restructured the data into a "**long**" format using Power Query. This involved unpivoting the 22 skill columns to create a single Skill column and a corresponding Proficiency or Has Skill column. This optimal structure allows for dynamic filtering and slicing across all skills and is the foundation for all the measures and visuals in the report.
- **Advanced DAX:** I created a suite of DAX measures to calculate unique employee counts, percentages, and distributions to ensure metrics remained accurate even with multiple filters applied.

### The Solution: Interactive Skills Inventory Dashboard

The report is designed to be filtered deeply, allowing users to answer a wide range of talent-related questions.

#### Core Interactive Filters:

The report features slicers for:

- **Skills:** Multi-select from the 22 key skills.
- **PL Level:** Filter by employee Proficiency Level.
- **Department:** Drill into specific business units.
- **Supervisory Role:** Differentiate between individual contributors and managers.
- **Main Categories:** Group skills into broader categories (e.g., "Data Visualization," "Automation," "Programming").

## Key Visuals and Insights:

- **Top 5 Certifications (Bar Chart):** Shows the most commonly held certifications in the selected population. This helps identify standard and niche qualifications within the company.
- **Skills by PL Level (Stacked Bar Chart):** A crucial visual that displays the count or percentage of employees at each PL level who possess a selected skill. This immediately reveals if strategic skills are concentrated in junior staff or if leadership also maintains key capabilities.
- **Department Count with Skills (Bar Chart):** Visualizes which departments have the highest concentration of a selected skill. For example, selecting "Gen AI" would quickly show if it's isolated in an R&D department or widespread across the organization.
- **Skills Level Distribution (Stacked Column Chart - 100%):** For a selected skill and department, this chart shows the breakdown of proficiency levels (e.g., Beginner, Intermediate, Advanced, Expert). It is formatted to 100% to show the proportion of skill within a department, not just the volume.

## Business Impact & Value Delivered

- **Targeted Training Programs:** L&D departments can use the "Skills Level Distribution" visual to identify specific departments that need beginner or advanced training in key areas, ensuring optimal use of training budgets.
- **Succession Planning & Staffing:** Leadership can quickly find experts (Advanced/Expert proficiency) for critical projects or identify high-potential employees (PL Level vs. Skill) for mentorship and career development.
- **Competitive Analysis:** By understanding their internal skills portfolio, the company can better assess its competitive advantages and gaps in the market regarding future-ready skills like Gen AI.

