

Power Automate – Data-First Automation Notes (Meeting Reference)

Core Principle (framing for the meeting)

For most reporting and distribution tasks, automation is more reliable and scalable when it targets the data source or dataset rather than the Power BI report itself.

Power BI reports are primarily a presentation layer.

Automating directly from reports can be limiting, licensing-dependent, and fragile if reports change.

Where possible, we should:

- Automate from source data (Syrinx / Excel / database), or
- Automate from the Power BI dataset (semantic model),
- Use Power BI primarily for visual analysis, not as the automation trigger.

Request 1: Monthly export of Power BI reports to PDF and email

Original request

“Run an automation that exports our Power BI files to PDF and sends them to different people every month.”

Data-first assessment

This requirement is about distribution of information, not interactivity.

Options

Option A – Report-level export (Quick win)

- Export report or specific pages to PDF.
- Email PDFs to recipients.
- Suitable when visual layout matters (board packs, exec summaries).

Limitations

- Requires Premium/Fabric capacity.

- Tightly coupled to report structure.
- Any report changes may break automation.

Option B – Dataset-level automation (Preferred where possible)

- Use the dataset (or data source) to generate purpose-built outputs:
 - Excel summaries
 - KPI tables
 - Tailored PDFs
- Reports can change without breaking the flow.

Recommendation

Use report-level exports sparingly, where layout matters.

For operational reporting, automate from the data and generate outputs designed for the recipient.

Request 2: Export specific pages from Power BI to Excel and email

Original request

“Export specific pages from Power BI files to Excel and send to relevant people.”

Data-first assessment

This is fundamentally a data extraction requirement, not a visual one.

Power BI does not treat report pages as structured exportable objects.

Attempting to automate Excel exports from visuals creates fragility.

More effective approach

- Identify the data and measures that power the report page.
- Extract directly from:
 - Power BI dataset, or
 - Underlying source system.
- Generate clean Excel files designed for use (by depot, region, role).

Benefits

- Proper numeric formatting.
- Filtered, role-specific files.
- No dependency on report layout or filters.
- Easier to test and maintain.

Recommendation

Target the dataset or source data, not the report page.

If report-accurate layouts are required, consider paginated reports as a separate use case.

Request 3: Save specific tabs of monthly Excel accounts by depot and email

Original request

“Save specific tabs of our monthly accounts (Excel based) by depot and send out to relevant depot manager.”

Data-first assessment

This is already a source-level problem, and Power BI is not required at all.

Best approach

- Read monthly accounts from source Excel file.
- Split data by depot.
- Create individual files or worksheets per depot.
- Email each manager their own data.

Benefits

- No Power BI dependency.
- No additional licensing requirements.
- High confidence, low complexity automation.
- Excellent candidate for proof of concept.

Recommendation

Implement entirely at the data / Excel level using Power Automate and Office Scripts.

“Send a tab as an email” – clarification

When users say this, they typically mean:

- **“Send the information from that tab automatically.”**

Technically:

- **Power BI “tabs” are visual snapshots.**
- **Data automation should operate on the logic behind the tab, not the tab itself.**

Best practice

- **Email body: summary and key numbers.**
- **Attachment: Excel or PDF generated from data.**
- **Power BI remains the analysis tool, not the delivery mechanism.**

Why data-first automation is preferable

- **Less fragile (report changes don’t break flows)**
- **Easier to test and support**
- **Lower licensing impact**
- **More reusable across teams**
- **Better long-term scalability**

Power BI continues to add value by:

- **Validating the data**
- **Providing insight**
- **Serving as a reference point**

But automation should not rely on screenshots of analysis.

Suggested proof-of-concept plan

1. Excel-based automation

Monthly accounts split by depot and emailed automatically.

2. One Power BI-adjacent automation

Either:

- **Dataset-driven Excel summary, or**
- **Single report page PDF export (if capacity allows).**

This allows value to be demonstrated without committing to complex licensing or brittle designs.

Meeting summary statement (optional)

“Power Automate is a good fit here, but the key design choice is whether we automate from reports or from the data. In most cases, targeting the data directly gives a more robust and scalable solution, with Power BI remaining the analysis layer rather than the automation driver.”