NPS Survey Automation System

Category: Customer feedback ops

Problem: Daily NPS survey sending and response matching required manual exports, uploads, and reconciliation.

What I Built: Created an automated NPS pipeline handling uploads, survey triggers, SMS matching, follow-up tracking, and eligibility logic.

Tools Used: Google Sheets, Google Apps Script, SurveyMonkey, TextMagic, Zapier

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Output: Automated NPS masterfile, follow-up list, executive report

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NPS Survey Automation System

Google Sheets + Drive + Apps Script + SurveyMonkey + TextMagic + Zapier

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Quick backstory

This started because sending NPS surveys became a daily operational burden.

Appointments were exported from one system. Patient details lived in another sheet. Surveys were sent via SurveyMonkey for email and TextMagic for SMS. Responses came back in separate exports. Follow-ups were tracked in yet another tab.

It worked.

But every single day, someone had to:

Download files.
 Clean data.
 Upload lists.
 Cross-check responses.
 Update tracking sheets.
 Prepare follow-up call lists.

It was repetitive. Easy to miss things. And mentally draining.

So instead of adding another tool, I built a structured system inside the client's existing workflow and automated the daily process end-to-end.

The Problem

Every day looked like this:

- Export patient and appointment CSV files
- Manually filter eligible patients
- Upload contacts to SurveyMonkey
- Upload phone numbers to TextMagic
- Track who was sent email vs SMS
- Wait for responses
- Export SMS survey results
- Match names manually back to the master sheet
- Update NPS score and rating

- Prepare follow-up call list
- Remove already-responded patients from call sheet

For a clinic with moderate volume, that easily becomes:

1.5 to 3 hours per day
30 to 60 hours per month

And the real risk was not time.

It was human error.

- Sending duplicate surveys
- Missing SMS responses
- Incorrect NPS classification
- Forgetting to remove responded patients from call lists
- Inconsistent follow-up tracking

It functioned. But it was fragile.

The System I Built

Instead of treating NPS as a daily checklist, I turned it into a guided workflow inside Google Sheets with controlled automation behind it.

Step 1: Controlled CSV Upload via Sidebar

Inside the spreadsheet, I built a custom NPS sidebar.

Users can:

- Drag and drop CSV files directly into the sheet
- Upload patient exports, appointment exports, or survey exports
- Get filename validation before processing
- See real-time upload progress
- Prevent incorrect file types

No switching between Drive folders. No confusion about where files go.

Step 2: Automated Survey Send Pipeline

With one click:

- The system processes new patient and appointment files
- Identifies eligible patients
- Flags Email vs SMS availability
- Updates "Survey Masterfile" automatically
- Classifies send type (Email, SMS, or both)
- Logs send date
- Computes NPS category rules (Promoter, Passive, Detractor)

Survey delivery itself uses:

- SurveyMonkey for email surveys
- TextMagic for SMS surveys
- Zapier to trigger sends automatically

However, the architecture is built so Google Workspace alone can handle the entire process if needed.

No manual tagging.
No tracking columns forgotten.
No re-sending to the same patient twice.

Step 3: Automated SMS Response Sync

When SMS responses are exported:

- The system imports only valid survey rows
- Filters by correct Collector ID
- Rejects incomplete responses
- Matches patients using multi-layer matching logic:

    - Full name + practitioner

    - Last name + practitioner within 14 days

    - Email fallback match

If matched:

- Marks "Responded"
- Logs response date
- Updates NPS score
- Auto-classifies rating
- Records feedback
- Stamps channel as SMS

Unmatched entries are flagged clearly.

This replaces manual name comparison and guesswork.

Step 4: Call Follow-up Sync + Archive

For patients contacted by phone:

- A checkbox triggers sync
- NPS score and comments push directly into Survey Masterfile
- Response channel marked as "Call"
- Timestamp logged
- Row auto-archived
- Removed from active follow-up list

If a patient already responded via survey, the system automatically removes them from the call queue.

No double follow-ups.
 No missed updates.

Step 5: Automatic 6-Month Eligibility Generator

The system also:

- Cross-checks billing records
- Skips travel-only items
- Identifies patients active with upcoming appointments
- Filters those added more than 6 months ago
- Appends eligible rows into a structured sheet
- Calculates elapsed time dynamically
- Sends success or error notification emails

What used to require cross-referencing multiple workbooks now runs in seconds.

Step 6: One-Click Active Patient Report Export

From the sidebar:

- Generates a brand-new workbook
- Classifies patients as Active, Inactive, or New
- Breaks down counts by practitioner and category
- Formats clean summary sheets
- Auto-opens report
- Sends notification email to admin
- BCCs the trigger user

Daily operational insight becomes structured reporting.

The Tools Used

- Google Apps Script
- Google Sheets automation
- Google Drive API
- GmailApp / Gmail API
- Custom HTML + CSS sidebar UI
- SurveyMonkey
- TextMagic
- Zapier

Built directly inside the client's Google Workspace environment.

No heavy software stack.
No complex dashboard tools.
No additional subscriptions required beyond what they already use.

The Measurable Result

Before automation:

- 1.5 to 3 hours per day on survey admin
- Manual file uploads
- Manual response matching
- Manual follow-up tracking
- High cognitive load
- Daily risk of error

After automation:

- 10 to 20 minutes of review time per day
- 1 to 2.5 hours saved daily
- 30 to 50+ hours saved monthly
- 350 to 600 hours saved yearly

Operational improvements:

- Zero duplicate survey sends
- Structured NPS classification
- Automatic follow-up cleanup
- Automatic SMS matching
- Auto-generated eligibility lists
- Controlled exports and reporting
- Built-in audit trail with timestamp logs
- Error notifications on failure

The system runs daily with lock protection, validation rules, and structured email reporting.

It reduced manual effort by roughly 70 to 85 percent.

Why This Matters Beyond NPS

The same architecture can be reused for:

● Automated onboarding surveys
 ● Payment reminder systems
 ● Controlled bulk messaging
 ● Renewal notices
 ● Client satisfaction tracking
 ● Referral follow-ups
 ● Internal compliance checklists
 ● Recurring daily or weekly workflows

If a business already runs inside Google Workspace, internal automation like this can quietly remove hours of admin work every week without changing platforms.

It is not about adding more tools.

It is about making the tools you already use work properly.