

# Executive Summary – RFID System Debrief

Event: Melanated Campout – 3-Day Event

## ■ What Worked Well

Attendees responded positively — many saw RFID as a modern upgrade over manual check-ins. RFID successfully tracked arrivals, attendance, and meals where used consistently. Tap-to-validate was intuitive and faster at staffed stations. Supabase API sync was reliable for early arrivals and meal tagging. Established a baseline for scaling tech at future events.

## ■■ Key Issues

**Data & People:** No roles/permissions, flat file limited person-level visibility, wrong phone numbers.  
**Hardware:** Tablets underpowered/unprepared, not enough scanners, vendor dependency (identical bands).  
**Software:** Last-minute training, no search at stations, override issues, meal plan slowed lines.

## ■ Recommendations

**Custom System:** Person-level tracking, role-based permissions, digital waivers, companion handling.  
**RFID Vendor:** Pre-print names, color-coded bands, 100–150 blank spares.  
**Hardware:** Event-grade tablets, RFID readers with built-in power, Starlink Wi-Fi, barcode backup.  
**Software:** Search by name/email, assisted activation logging, override counter, tap=meal redesign, dashboards, automation.

## ■ ROI & Bottleneck Reduction

Productivity: Faster check-ins and meals with tap = action.  
Cost Savings: Barcode backups pennies vs \$1–\$3 RFID.  
Staff/Admin Relief: Automated reports replace manual reconciliations.  
Accuracy: Relational DB + validation ensures proper counts.  
Better Experience: Shorter lines, fewer errors, smoother issue resolution.  
Smarter Spending: Consolidate platforms, reinvest in durable hardware + automation.

## ■■ Takeaway

RFID is a promising foundation for Melanated Campout. With refinements — role-based access, automation, pre-printed/color-coded bands, and streamlined station workflows — the system can

become a signature feature that increases ROI, reduces staff/admin pain points, and delivers a smoother attendee experience.

# RFID System Debrief & Recommendations

Event: Melanated Campout – 3-Day Event

## 1. Data & People Issues

**Observations / Issues:** No role differentiation, flat file database, phone errors, manual workarounds.

**Recommendations:** Relational DB, role-based permissions, ID names, digital waivers, phone validation, companion handling, color-coded wristbands.

## 2. Hardware Issues

**Observations / Issues:** Tablets underpowered, not charged, single-port conflict, insufficient devices, vendor dependency.

**Recommendations:** Vendor pre-print names, spare bands, event-grade tablets, Starlink, barcode hybrid.

## 3. Software Issues

**Observations / Issues:** Training gaps, activation workflow failures, no station search, override conflicts, meal plan bottlenecks, fragmented reporting.

**Recommendations:** Station search, assisted activation logging, override counter, override redesign, tap=meal workflow, dashboards, automation.

## 4. Strategic Recommendations

Custom role-based system, automation, vendor deliverables, hybrid backups, budget optimization.

## 5. What Worked Well

Positive attendee feedback, RFID successful where used, faster lines at staffed stations, Supabase sync worked, strong foundation for growth.

## 6. Assumptions & Limitations

Vendor dependency, outdoor challenges, group registration complexity, staff turnover, visual ID limits.

## 7. ROI & Bottleneck Reduction Opportunities

Productivity gains, cost efficiencies, reduced admin load, higher accuracy, improved attendee experience, visibility into overrides, optimized IT spend.

## **Executive Takeaway**

RFID is a promising foundation. With refinements — role-based access, automation, pre-printed/color-coded bands, streamlined workflows — the system can increase ROI, reduce staff/admin burden, and improve attendee flow and data accuracy.