

# Recommended Solution Strategy for ParkM

## Proposed Project Timeline

Priority	Focus Area	Timeline	Dependencies
1	Email Classification & Auto-Tagging	Week 1-3	OpenAI API integration
2	In-Workflow Guidance System	Week 2-5	Priority 1 data
3	Refund Automation + ParkM.app API	Week 3-6	Priority 1 data
4	Unified Agent Desktop	Week 5-8	Priority 3 API
5	Progressive Automation (2 phases)	Week 7-10	Priorities 1-4

**Total Timeline:** 10 weeks with parallel execution  
**Parallel Execution:** Multiple priorities overlap - requires coordinated team effort  
**Critical Path:** ParkM.app API integration (Priority 3) unlocks Priority 4  
**Quick Wins:** Priority 1 delivers immediate value

## Priority 1: Intelligent Email Triage & Classification System

**Timeline:** Week 1-3

**Problem it solves:** New CSRs struggling to understand what customers are asking for; 3-month training time; process inconsistencies; refund/cancellation requests require specific eligibility checks

**Solution:** - Build an AI-powered email classifier that runs immediately upon email receipt in Zoho Desk - Automatically tags emails with: intent (refund/cancellation/account update/inquiry), complexity level (simple/moderate/complex), language, urgency - Extract key entities: move-out dates, license plates, charge amounts, dates (critical for 30-day refund window) -

Auto-detect missing information (license plate, bank statement) and flag for agent follow-up - Routes emails to specialized queues based on classification: - **Accounting/Refunds Queue:** Refund requests with move-out date within 30-day window - **Quick Updates Queue:** Simple cancellations (no refund) or missing info requests - **Auto-Resolution Queue:** Status inquiries, simple questions - **Escalations Queue:** Complex issues, angry customers, legal threats - Adds confidence scores to help agents understand email clarity

**Why this first:** - Non-invasive - doesn't change CSR workflow, just enhances it - Immediate value - reduces decision fatigue and routing errors - Foundation for future automation - classification data informs what to automate next - Low risk - no customer-facing automation yet - Directly supports refund/cancellation process workflow (30-day window validation)

**Estimated impact:** 30-40% reduction in training time; 50% reduction in escalations from misrouted tickets; 70% faster routing of refund-eligible requests to accounting

---

## Priority 2: Dynamic In-Workflow Guidance System

**Timeline:** Week 2-5

**Problem it solves:** CSRs missing steps in refund/cancellation process; "nothing in the flow that reminds them right now"; inconsistent application of 30-day refund window; forgetting to update ticket status

**Solution:** - **Contextual guidance overlay** within Zoho Desk based on ticket classification: - **Refund requests:** Step-by-step checklist from refund-cancellation-process.pdf: 1. Search parkm.app by email 2. Review Vehicles and Permits tab 3. Check if permit already canceled 4. Verify last transaction date in Payments and Transactions 5. Validate move-out date within 30-day window 6. Cancel permit (Actions → Cancel → Cancel Now → Send Email) 7. Submit refund to accounting or send denial with T&C - **Missing info requests:** Template for requesting license plate + bank statement screenshot - **Account updates:** Validation prompts before sending response - **Smart forms** (can be implemented with basic Zoho features initially, enhanced with API later) - **Real-time validation:** - "Did you verify the move-out date is within 30 days?" - "Did you cancel the permit in parkm.app before closing?" - "Did you update the ticket status to 'Waiting on Accounting'?" - **Knowledge base snippets** appear inline based on ticket context

**Technical Dependencies:\*\*** - Priority 1 classification data - Zoho Desk extension/widget development - Custom UI components in ticket view

**Why second:** - Directly addresses Katie's acute pain point about missing steps - Can start with Zoho's built-in workflow features before API integration - Prevents errors before they happen vs. fixing them after - Reduces cognitive load on part-

time workers - Standardizes application of refund eligibility rules - Creates process compliance data to identify automation candidates - Lower technical complexity than full API integration

**Estimated impact:** 60-70% reduction in training time; 40% reduction in escalations; 25% faster ticket resolution; 90% reduction in missed process steps

---

## Priority 3: Refund Process Automation & Validation

**Timeline:** Week 3-6

**Problem it solves:** 20% of customers request refunds; manual eligibility checking; accounting handoff delays; CSR confusion on 30-day refund window; high-volume repetitive workflow

**Solution:** - **ParkM.app API Integration** (critical foundation): - Build authenticated API client for parkm.app system - Implement endpoints for: \* Customer account lookup by email \* Vehicles and Permits data retrieval \* Payments and Transactions history access \* Last charge date and amount extraction \* Permit status checking (active/canceled) \* Permit cancellation automation (Actions → Cancel → Cancel Now → Send Email) - Handle authentication, rate limiting, and error cases - Cache frequently accessed data to minimize API calls - **Automated eligibility validation** based on refund-cancellation-process.pdf workflow: - Extract move-out date from email (via Priority 1 classifier) - Query parkm.app API for last charge date - Calculate if within 30-day refund window - Flag permit cancellation status (already canceled vs. needs cancellation) - Detect missing information (license plate not in system, no payment history) - **Auto-generated refund submission emails** to accounting@parkm.com with: - Resident email (from parkm.app account data) - Refund amount (from last transaction via API) - Reason for refund (move-out date + charge date) - Permit details (license plate, community name) - **Smart templates** for common scenarios: - Refund approved (auto-populated with 5-day timeline) - Refund denied (with Terms & Conditions attachment) - Missing information (license plate or bank statement request) - **Accounting workflow integration:** - Update ticket status to "Waiting on Accounting" automatically - Reopen ticket when accounting replies - Track refund processing time and volume - **Automated refund validation** for straightforward cases: - AI validates all eligibility criteria automatically via parkm.app API: \* Move-out date extracted and within 30 days of last charge \* Permit already canceled or customer confirms cancellation intent \* Single permit only (no multi-permit complexity) \* No dispute or legal language detected - Auto-generates refund submission to accounting with all required details - Notifies customer that refund is being processed (5-day timeline) - Tracks status and follows up automatically when accounting completes - **Human approval still required for financial transactions** (accounting reviews before processing)

**Technical Dependencies:** - Priority 1 classification data (move-out dates, refund intent detection) - ParkM.app API access and documentation - OAuth or API key authentication setup - Test environment for parkm.app integration

**Why third:** - Requires significant external API integration work - Directly addresses 20% of all support volume (refund requests) - Eliminates manual date math and eligibility confusion - Reduces accounting back-and-forth delays - Leverages Priority 1 classification data (move-out dates, intents) - High ROI - impacts both CSR efficiency and customer satisfaction - Enables enhanced Priority 2 guidance with real parkm.app data

**Estimated impact:** 60-80% time savings on refund request processing; 90% reduction in eligibility errors; 40% faster refund cycle time

---

## Priority 4: Unified Agent Desktop

**Timeline:** Week 5-8

**Problem it solves:** Context switching between Zoho Desk and parkm.app; inefficiency during refund/cancellation processing; data lookup delays; manual permit cancellation steps

**Solution:** - **Custom Zoho Desk extension** that embeds parkm.app data directly in ticket view: - Customer account details (email, permit count, status) - Vehicles and Permits tab (license plates, active/canceled status) - Payments and Transactions tab (last charge date, amount, refund history) - Move-out date and refund eligibility indicator (30-day window calculation) - **Bi-directional API integration** with parkm.app (read and write operations) - **Single-screen workflow:** ticket on left, customer permit data on right - **One-click actions** without leaving Zoho: - Cancel permit (executes: Actions → Cancel → Cancel Now → Send Email) - Submit refund to accounting (auto-generates email with resident email + amount + reason) - Reverse charge (for accounting users) - Update vehicle information - **Status automation:** Auto-update ticket status based on action (e.g., “Waiting on Accounting” after refund submission)

**Technical Dependencies:** - Priority 3 parkm.app API integration (must be complete) - Zoho Desk Extension SDK/Widget framework - parkm.app write API endpoints (permit cancellation, vehicle updates)

**Why fourth:** - Technical dependency - requires parkm.app API integration work (Priority 3) - Significant efficiency gains once implemented (eliminates app switching) - Enables faster execution of refund/cancellation workflow - Improves CSR satisfaction and retention - Foundation for Priority 5 automation

**Estimated impact:** 35-40% faster ticket resolution; 50% reduction in context-switching delays; improved CSR satisfaction; enables one-click refund processing

---

## Priority 5: Progressive Automation for High-Volume Simple Cases

**Timeline:** Week 7-10 (phased rollout)

**Problem it solves:** Simple account updates and refund requests; scaling challenges; repetitive refund/cancellation workflow; CSR time spent on straightforward cases

### **Solution:**

**Phase 1: Simple cancellation requests** (no refund, customer already moved out) - 2 weeks - AI detects “just cancel my permit” intents - Validates account found in parkm.app via API - Auto-cancels permit if already past move-out date and no refund mentioned - Sends confirmation email to customer - CSR reviews in batch daily for quality assurance

**Phase 2: Vehicle updates** (vehicle changes where there’s only one permit) - 1.5 weeks - AI validates request clarity and completeness (license plate clearly stated) - Auto-updates permit in parkm.app via API if unambiguous - Sends confirmation email to customer - Human review for ambiguous cases

**Why this approach:\*\*** - Handles real volume reduction (refunds = 20% of all tickets) - Maintains quality and brand protection through human oversight - Starts with lower-risk cancellations before financial transactions - Uses data from earlier phases to identify best automation candidates - Follows proven refund-cancellation-process.pdf workflow

**Estimated impact:** 25-35% reduction in CSR workload on simple tasks; 60-70% time savings on vehicle updates; supports 2x growth with same team size

---

## Implementation Phasing Recommendation

### **Phase 1: Email Classification & Refund Intelligence**

**Priorities:** 1 (Email Classification)

- Quick wins with immediate measurable impact
- Builds foundation for refund automation
- Reduces escalations and routing errors immediately
- Extracts critical data (move-out dates, 30-day window validation)

### **Phase 2: Workflow Guidance & Process Compliance**

**Priorities:** 2 (Workflow Guidance)

- Prevents missed steps in refund/cancellation process
- Reduces training time for new CSRs

- Standardizes application of business rules
- Creates compliance data for automation candidates
- Can start with Zoho native features before API work

### Phase 3: Refund Process Automation

**Priorities:** 3 (Refund Automation)

- Addresses 20% of all support volume
- Eliminates manual eligibility checking
- Accelerates accounting handoff
- High ROI and immediate time savings
- Requires ParkM.app API integration

### Phase 4: Unified Agent Desktop

**Priorities:** 4 (Unified Desktop)

- Streamline CSR workflow (eliminate app switching)
- Single-pane-of-glass experience
- One-click permit cancellation and refund submission
- Foundation for full automation

### Phase 5: Progressive Automation

**Priorities:** 5 (Progressive Automation)

- Start with simple cancellations (no refund)
- Expand to vehicle updates
- Finally automate straightforward refunds (with accounting approval)
- Continuously improve based on data and feedback

---

## Why NOT Start with Full Refund Automation

1. **Complexity:** Multi-step approval process per refund-cancellation-process.pdf (account lookup, permit check, 30-day validation, accounting handoff, status tracking)
2. **Risk:** Even at \$10/permit, errors damage brand reputation and customer trust
3. **Prerequisites:** Need classification and workflow systems first to:
  - Extract move-out dates reliably
  - Validate 30-day refund window accurately
  - Detect edge cases (multiple permits, disputes, already-canceled permits)
  - Gather data on automation candidates
4. **Better ROI:** Start with intelligence/validation layer (Priorities 1-2) to assist CSRs, then move to full automation (Priority 5) once proven
5. **Human oversight:** Financial transactions require accounting approval -

automation should streamline submission, not bypass approval

## Key Success Metrics to Track

- Time to resolution per ticket type
- Escalation rate by CSR and by ticket type
- Training time for new CSRs to independence
- Customer satisfaction scores
- CSR confidence scores by ticket type
- Automation accuracy rates
- Volume handled per CSR (capacity metric)

## Proposed Investment

Priority	Focus Area	Anticipated Hours	Anticipated Investment
1	Email Classification & Auto-Tagging	25-35	\$5,625-\$7,875
2	In-Workflow Guidance System	20-30	\$4,500-\$6,750
3	Refund Automation + ParkM.app API	40-50	\$9,000-\$11,250
4	Unified Agent Desktop	45-55	\$10,125-\$12,375
5	Progressive Automation (2 phases)	25-35	\$5,625-\$7,875

**Total Anticipated Hours:** 155-205

**Total Anticipated Investment:** \$34,875-\$46,125