Implementation Playbook

Member Services Automation: Step-by-Step Guide

For Implementation Teams:

Project Managers • IT Teams • Operations Teams
Change Management • Quality Assurance

BackPro AI
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www.backpro.ai

How to Use This Playbook

This document provides step-by-step instructions for implementing BackPro AI member services automation. Each phase includes:

- **Actions:** What to do
- **Owners:** Who is responsible
- **Duration:** Time required
- **Success criteria:** How to know it's done
- **Common issues:** Troubleshooting guidance

Timeline: 9-12 weeks from kickoff to production

Contents

1 Phase 1: Pre-Implementation Planning (Week 1-2)

1.1 1.1 Stakeholder Alignment

1.1.1 Executive Steering Committee

Action: Establish governance structure

Members:

- Executive Sponsor (COO or Chief Member Officer)
- Project Sponsor (GM Operations)
- IT Lead (CIO or GM Technology)
- Risk Lead (CRO or GM Risk & Compliance)
- Operations Lead (Head of Member Services)

Meeting cadence: Weekly during implementation, monthly post-launch

Success criteria:

☐ Steering committee formed

☐ Roles and responsibilities documented

☐ Decision-making authority defined

☐ Budget approved

1.1.2 Project Team Formation

Roles required:

1. **Project Manager** (0.8 FTE, 12 weeks)
   - Overall coordination and timeline management
   - Stakeholder communication
   - Risk and issue management
2. **Technical Lead** (1.0 FTE, 8 weeks)
   - Infrastructure setup
   - API integration
   - Security configuration
3. **Operations Lead** (0.5 FTE, 12 weeks)
   - Business requirements
   - Query type prioritization
   - Staff training coordination
4. **Quality Assurance** (0.5 FTE, 6 weeks)
   - Test script development
   - Accuracy validation
   - User acceptance testing

5. **Change Management** (0.3 FTE, 12 weeks)
    - Staff communication
    - Training delivery
    - Member communication

1.2 1.2 Infrastructure Requirements

1.2.1 Technical Prerequisites

Action: Validate infrastructure capacity

Requirements:

Component	Specification	Notes
Compute	4 vCPUs, 16GB RAM	Azure/AWS/GCP VM
Storage	500GB SSD	Model + logs
Network	Private subnet	No internet access
Authentication	Azure AD/SAML SSO	Inherit permissions
Logging	SIEM integration	Audit trail

Success criteria:

☐ VM provisioned in correct environment (prod/non-prod)

☐ Network firewall rules configured

☐ Azure AD authentication tested

☐ SIEM logging validated

1.2.2 API Access Requirements

Action: Document and request API access

Systems to integrate:

1. **Administration Platform**
    - Balance inquiry API
    - Contribution transaction API
    - Investment option API
    - Insurance coverage API
    - **Access level:** Read-only
    - **Authentication:** Service account with certificate
2. **Member Portal**
    - Chat widget integration
    - Member authentication passthrough
    - **Access level:** Embed widget
    - **Authentication:** JWT token
3. **Contact Centre System**

- IVR integration (optional Phase 2)
- Case escalation API
- **Access level:** Create tickets
- **Authentication:** API key

Success criteria:

☐ API documentation received

☐ Service accounts created

☐ API access tested in non-prod environment

☐ Rate limits documented

1.3 1.3 Query Type Prioritization

1.3.1 Volume Analysis

Action: Analyse 3 months of member query data

Data collection:

- Export contact centre ticket data
- Categorize by query type
- Calculate average handling time per category
- Identify peak periods (EOFY, budget nights)

Example output:

Query Type	Volume	Avg Time (min)	Priority
Balance inquiry	5,250	15	P1
Contribution tracking	3,750	25	P2
Investment options	2,250	30	P3
Insurance coverage	1,800	20	P4
Pension calculator	1,200	35	P5

Success criteria:

☐ Query types categorized and prioritized

☐ Automation feasibility assessed for each type

☐ ROI calculated by query type

☐ Phase 1 query types selected (typically top 3)

1.3.2 Edge Case Documentation

Action: Document scenarios requiring human escalation
Examples:

1. **Balance inquiry edge cases**
   - Multiple accounts (rollover, split accounts)
   - Pending transactions affecting balance
   - Negative balance (insurance premiums overdue)
   - Defined benefit accounts (non-accumulation)
2. **Contribution tracking edge cases**
   - Employer in default
   - Spouse contribution splitting
   - Government co-contributions
   - Voluntary contributions from multiple sources
3. **Investment option edge cases**
   - Lifecycle product auto-switching
   - Grandfathered investment options
   - Managed account (personalized asset allocation)

Success criteria:

☐ Edge cases documented per query type

☐ Escalation triggers defined

☐ Fallback responses drafted ("I'll connect you with a team member")

2 Phase 2: System Integration (Week 3-4)

2.1 2.1 BackPro Deployment

2.1.1 Installation

Action: Deploy BackPro container
Steps:

1. SSH into VM
2. Pull BackPro Docker image from registry
3. Configure environment variables:
   - `AZURE_AD_TENANT_ID`
   - `AZURE_AD_CLIENT_ID`
   - `ADMIN_PLATFORM_API_URL`
   - `ADMIN_PLATFORM_API_KEY`
   - `SIEM_LOGGING_ENDPOINT`

4. Start container
5. Validate health check endpoint

Success criteria:

☐ BackPro container running

☐ Health check returns 200 OK

☐ Logs writing to SIEM

☐ No outbound internet traffic detected

2.1.2 Knowledge Base Configuration

Action: Load fund-specific content

Documents to ingest:

1. **Product Disclosure Statements**
   - All investment option PDSs
   - Insurance PDS
   - Pension account PDS
2. **Member Guides**
   - "Understanding Your Balance" guide
   - "How to Check Contributions" guide
   - "Investment Options Explained" guide
   - "Insurance Coverage Overview" guide
3. **FAQs**
   - Website FAQ page
   - Contact centre internal FAQ database

Process:

1. Upload PDFs to BackPro admin interface
2. BackPro extracts text and creates embeddings
3. Test retrieval: Ask sample questions and verify correct documents returned

Success criteria:

☐ All documents ingested

☐ Test queries return relevant content

☐ No hallucinations detected in test responses

2.2 2.2 Administration Platform Integration

2.2.1 API Connection

Action: Configure administration platform API
Test scenarios:

1. **Balance inquiry**
   - Input: Member ID
   - Expected output: Current balance, investment option breakdown, YTD return
   - Test with: Active account, pension account, multiple accounts
2. **Contribution tracking**
   - Input: Member ID, date range
   - Expected output: List of contributions (employer, personal, government)
   - Test with: Recent contribution, old contribution, no contributions
3. **Investment options**
   - Input: Member ID
   - Expected output: Current investment option(s), allocation percentages
   - Test with: Single option, diversified (multiple options), lifecycle product
4. **Insurance coverage**
   - Input: Member ID
   - Expected output: Death cover, TPD cover, Income Protection details
   - Test with: Default cover, custom cover, no cover (opt-out)

Success criteria:

☐ All test scenarios return correct data

☐ API response times ¡2 seconds

☐ Error handling works (invalid member ID, API timeout)

☐ Credentials stored securely (Azure Key Vault)

2.2.2 Data Privacy Validation

Action: Confirm data sovereignty
Checks:

1. **Network traffic analysis**
   - Run packet capture during test queries
   - Verify zero outbound traffic to external IPs
   - Confirm all traffic to internal APIs only
2. **Logging review**
   - Check SIEM logs for all API calls

- Verify member data not logged in plaintext
- Confirm audit trail includes timestamps and user IDs

3. **Security scan**
   - Run vulnerability scan on VM
   - Check for exposed ports
   - Validate TLS certificate

Success criteria:

☐ Zero external network calls

☐ All API traffic encrypted

☐ Audit logs complete

☐ Security team sign-off

2.3 2.3 Member Portal Integration

2.3.1 Chat Widget Embedding

Action: Add BackPro chat widget to member portal
Implementation:

1. Add BackPro JavaScript snippet to portal footer
2. Configure widget appearance (colors, position)
3. Test authentication passthrough (member logs in, widget inherits session)
4. Add "Speak to a person" option within widget

Success criteria:

☐ Widget loads on all portal pages

☐ Member authentication works (no re-login)

☐ Chat history persists across pages

☐ Escalation button visible and functional

3 Phase 3: Testing & Validation (Week 5-6)

3.1 3.1 Accuracy Testing

3.1.1 Test Script Development

Action: Create 50 test queries per query type
Test query structure:

1. **Happy path** (70% of tests)
   - Standard phrasing: "What's my super balance?"
   - Expected output: Exact balance from test member account

2. **Alternative phrasing** (20% of tests)
    - Casual: "How much super do I have?"
    - Formal: "Please provide my account balance."
    - Expected output: Same as happy path
3. **Edge cases** (10% of tests)
    - "I have two accounts, what's the total balance?"
    - Expected output: Escalation to staff or combined balance if supported

Success criteria:

☐ 50 test queries per query type documented

☐ Expected outputs defined

☐ Test member accounts created (non-prod)

3.1.2 Accuracy Validation

Action: Execute test scripts and measure accuracy

Accuracy formula:

$$Accuracy = \frac{Correctresponses}{Totalqueries} \times 100\%$$

Accuracy targets:

- Balance inquiry: ¿99% (highest volume, lowest complexity)
- Contribution tracking: ¿98%
- Investment options: ¿97% (more nuance in explanations)
- Insurance coverage: ¿98%

Error categorization:

1. **Critical:** Factually incorrect (wrong balance amount)
2. **Major:** Incomplete answer (missing investment option breakdown)
3. **Minor:** Phrasing awkward but factually correct

Success criteria:

☐ Overall accuracy ¿98%

☐ Zero critical errors

☐ Major errors ¡1%

☐ Root cause analysis completed for all errors

3.2 3.2 Performance Testing

3.2.1 Load Testing

Action: Simulate peak query volume

Load profile:

- Normal load: 50 concurrent queries
- Peak load: 200 concurrent queries (EOFY simulation)
- Sustained load: 100 concurrent queries for 30 minutes

Performance targets:

- Response time: ¡3 seconds (p50), ¡5 seconds (p95)
- Success rate: ¿99.9%
- No memory leaks over sustained load

Success criteria:

☐ Performance targets met

☐ No errors or crashes

☐ Resource utilization ¡80% CPU, ¡90% RAM

3.3 3.3 User Acceptance Testing

3.3.1 Internal UAT

Action: Contact centre staff test AI responses

UAT participants: 10-15 contact centre staff (mix of junior and senior)

UAT approach:

1. Staff submit real member queries (anonymized)
2. AI generates response
3. Staff rate response: Accept / Needs improvement / Reject
4. Staff provide feedback on errors

Success criteria:

☐ ¿95% acceptance rate

☐ Staff feedback incorporated into AI prompts

☐ Escalation workflow validated

4 Phase 4: Pilot Rollout (Week 7-9)

4.1 4.1 Pilot Scope

4.1.1 Pilot Parameters

Query types: Balance inquiry only (highest volume, highest automation rate)
Member segment: Web portal users (tech-savvy, lower escalation risk)
Duration: 3 weeks
Volume target: 500-1,000 queries
Success criteria:

- Automation rate: ¿90%
- Accuracy: ¿98%
- Member satisfaction: NPS ¿30
- Zero critical errors

4.2 4.2 Monitoring & Refinement

4.2.1 Daily Monitoring

Action: Operations team reviews all AI interactions
Daily dashboard:

- Query volume
- Automation rate (queries handled without escalation)
- Accuracy rate (spot-check 10 queries/day)
- Escalation rate
- Error log

Immediate action triggers:

- Any critical error (factually wrong answer)
- Accuracy drops below 95%
- Escalation rate exceeds 15%

4.2.2 Weekly Refinement

Action: Update AI prompts based on errors
Refinement process:

1. Review error log
2. Categorize errors by type
3. Update AI prompt template to prevent recurrence
4. Re-test with queries that previously failed
5. Deploy updated prompt

Success criteria:

☐ Error recurrence rate ¡5%

☐ Accuracy improves week-over-week

5 Phase 5: Production Rollout (Week 10+)

5.1 5.1 Staged Rollout

5.1.1 Week 10: Add Contribution Tracking

Action: Enable contribution query automation
Steps:

1. Deploy updated AI prompt template
2. Test with sample queries
3. Monitor accuracy for 1 week

5.1.2 Week 11: Add Investment Options

Action: Enable investment option comparisons
Steps:

1. Update knowledge base with latest PDS documents
2. Add disclaimer: "This is general information, not financial advice"
3. Test with sample queries
4. Monitor for AFSL compliance (no personal advice)

5.1.3 Week 12+: Expand to All Channels

Action: Add phone IVR and email support
Steps:

1. Integrate with contact centre IVR system
2. Add email parsing for incoming member emails
3. Train staff on multi-channel escalation

5.2 5.2 Staff Training

5.2.1 Training Program

Duration: 2 hours per staff member
Training modules:

1. **AI Overview** (15 minutes)
   - What is BackPro AI?
   - How does it work?
   - What queries can it handle?
2. **Escalation Handling** (45 minutes)
   - When does AI escalate?
   - How to receive escalated queries
   - Full context provided by AI

- Faster resolution with AI-gathered data

3. **Quality Monitoring** (30 minutes)
   - How to spot AI errors
   - How to report errors
   - How errors are fixed
4. **Hands-On Practice** (30 minutes)
   - Staff submit test queries
   - Review AI responses
   - Handle escalation scenarios

Success criteria:

☐ 100% of contact centre staff trained

☐ Post-training quiz: ¿85% pass rate

☐ Staff confidence survey: ¿4/5 rating

5.3 5.3 Member Communication

5.3.1 Communication Plan

Announcement: 1 week before rollout

Channels:

- Member newsletter
- Website banner
- Member portal login message

Key messages:

Sample Member Communication

New: Instant Balance Lookup
We're excited to introduce instant balance inquiries through your member portal. Simply click the chat icon and ask "What's my balance?" to receive an immediate response.
Your data security: All interactions are processed within our secure Australian systems. Your data never leaves our infrastructure.
Need to speak to someone? Our contact centre team is always available. Click "Speak to a person" within the chat to be connected.

6 Ongoing Operations

6.1 6.1 Performance Monitoring

6.1.1 Monthly Metrics Report

Report to: Executive Steering Committee

Metrics included:

Metric	Target
Total queries processed	Track trend
Automation rate	¿70%
Accuracy rate	¿98%
Member satisfaction (NPS)	¿40
Cost per query	50% reduction vs. baseline
FTE productivity	Complex queries/FTE

6.2 6.2 Continuous Improvement

6.2.1 Quarterly AI Prompt Updates

Action: Refine AI prompts based on error patterns

Process:

1. Export 3 months of error logs
2. Identify top 5 error types
3. Update AI prompt template
4. Test with historical queries that failed
5. Deploy to production

6.2.2 Annual Knowledge Base Refresh

Action: Update knowledge base with latest documents

Triggers:

- New PDS released
- Investment option added/removed
- Insurance benefits changed
- Regulatory changes (government policy updates)

7 Troubleshooting Common Issues

7.1 Issue: Low Automation Rate (¡60%)

Symptoms:

- AI escalates too many queries to staff
- Members reporting "AI couldn't help"

Root causes:

- AI prompt too conservative (escalates unnecessarily)
- Knowledge base missing key documents
- Member queries outside scope (e.g., financial advice requests)

Resolution:

1. Review escalation logs for patterns
2. Adjust AI prompt to handle more query variations
3. Add missing documents to knowledge base
4. Educate members on query types AI can handle

7.2 Issue: Accuracy Below Target (¡98%)

Symptoms:

- Staff reporting factually incorrect AI responses
- Members escalating after receiving AI response

Root causes:

- Administration platform API returning stale data
- Knowledge base documents outdated
- AI hallucinating when answer not in knowledge base

Resolution:

1. Validate API data freshness (check cache settings)
2. Update knowledge base with latest documents
3. Adjust AI prompt to escalate when uncertain instead of guessing
4. Add guardrails: "I don't have that information, let me connect you with a team member"

7.3 Issue: Slow Response Times (¿5 seconds)

Symptoms:

- Members reporting chat is slow
- Timeout errors in logs

Root causes:

- Administration platform API slow
- VM under-resourced (CPU/RAM maxed)
- Network latency

Resolution:

1. Profile API response times (identify slow endpoints)
2. Scale VM vertically (more vCPUs/RAM)
3. Add caching layer for frequently-accessed data
4. Optimize knowledge base search (reduce document set)

Success Checklist

Production Readiness Checklist

Before declaring "production ready," confirm:

Technical:

- ☐ All integrations tested in production environment
- ☐ Performance targets met under load
- ☐ Security team sign-off
- ☐ Disaster recovery plan documented
- ☐ Monitoring dashboards configured

Operational:

- ☐ Staff trained and confident
- ☐ Escalation workflows validated
- ☐ Member communication sent
- ☐ Pilot results meet success criteria

Governance:

- ☐ Executive steering committee approval
- ☐ Risk register updated
- ☐ APRA notification sent (if material outsourcing)
- ☐ Board informed of launch

Contact & Support

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For urgent implementation issues, contact your dedicated implementation manager directly.