

AI Process Transformation Roadmap

From Content Chaos to Contextual Intelligence

An AI-driven KM strategy that transforms legacy content into real-time, contextual decision support for humans and digital channels alike.

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Knowledge as the Backbone of Frontline Service

The Scenario

A large-scale loyalty and rewards program serving millions of members through retail, travel, dining, and financial-services partners. Knowledge Management sits inside the contact centre, translating fast-changing business rules into the guidance frontline agents rely on to resolve live customer interactions.

My Role

KM strategy lead - diagnosed the operating model, designed the target AI architecture, and built the phased business case for leadership.

Millions

of members served across partner ecosystem

10+

business domains feeding KM content (Ops, Marketing, Product, Tech, Leadership)

High-Volume

daily contact-centre inquiries across rewards, travel, and account servicing

The Core Problem in Knowledge Delivery

F Fragmented Inputs

Business updates arrive in inconsistent formats, requiring heavy manual interpretation before they can become usable guidance.

S Skillset-Based Silos

Content is organized around departments, not customer workflows - so one inquiry can require five different articles.

G Guesswork & Backtracking

Agents stitch information together live, on the call, clicking across systems while the customer waits.

W The Scalability Wall

As partners, products, and volume grow, the manual effort to create and maintain content grows right along with it.

From Content Repository to Decision Support

CURRENT STATE

Content-Centric

- Slow content creation and updates
- Manual, multi-system lookups
- Inconsistent customer experience
- Limited capacity to scale with complexity



FUTURE STATE

Workflow-Centric

- ✓ Seamless flow of knowledge into the workflow
- ✓ Real-time, contextual recommendations
- ✓ High consistency across every channel
- ✓ Scales as the business grows in complexity

The Intelligent Decision Support Ecosystem

1

Customer & Interaction Context Layer

Assembles the situation in real time - tier status, channel, transaction and account history - so guidance is grounded in who is asking, not just what they asked.

2

Decision Support Engine

Reasons over that context to produce an issue summary, a recommended response, next-best actions, and a confidence score - the orchestration layer where agentic AI does the work.

3

Grounding & Reference Layer

Backs every recommendation with retrieval against verified knowledge articles, regulatory guidelines, and partner rules - the RAG layer that keeps output auditable and hallucination-resistant.



Mock-up



Customer

Michelle Reynolds

Customer ID

D-1099872

Channel

Email

Transaction

Apr 18, 2024

\$317.85

Partner X



Next Step

Issue summary

Customer is missing Miles from a recent Partner X transaction

Based on Partner Policy and Transaction Data

Suggested response

Your miles haven't posted yet, but this partner can take up to 2–4 weeks to report them. I'll be in touch soon.

Recommended next action

Reassure Wait Escalate Issue Goodwill Miles

Confidence



High



Quick Guidance

- Eligible transaction
- Posting timeline
2–4 weeks
- Recommended next step

Source: Knowledge Base

Last updated: Apr 9, 2024

[View steps](#)



Helpful



Not helpful

Respond

Issue goodwill Miles

Escalate

Best-in-Class Features Built Into the Design

Informed by a review of leading AI-KM platforms on the market - the strongest patterns were adapted into the architecture rather than treated as vendor-specific add-ons.



Cited Answer Synthesis

Generates a direct answer plus the exact source passages behind it, so agents can verify in one glance.



Unified Semantic Search

Understands intent, not just keywords, and unifies results across every fragmented content silo.



Embedded Agent-Assist

Lives inside the live interaction - not a separate tab - surfacing guidance in the flow of the call.



Content Gap & Drift Detection

Flags stale, conflicting, or missing articles automatically, closing the loop back to KM authors.



Omnichannel Deployment

One knowledge core powers the agent desktop, web self-serve, chat, and IVR consistently.



Analytics & Feedback Loop

Tracks deflection, escalation, and confidence scores to continuously retrain and re-prioritize content.

A Phased Implementation Roadmap

CRAWL

Standardize & Control

- Structured intake pilots for content creation
- GenAI-accelerated drafting & formatting
- Content audit + workflow mapping
- Baseline governance standards
- Core-team AI literacy training

WALK

Expand & Supervise

- Replace legacy KM platform
- Optimize taxonomy & metadata for AI
- Workflow-centric findability + internal chatbot
- Mandate intake forms enterprise-wide
- Automate recurring content-quality audits

RUN

Scale & Orchestrate

- Integrate CRM + RAG for live context
- Launch agentic AI orchestration
- Bounded autonomy for safe auto-resolution
- Central governance + feedback loops
- Enterprise-wide scale across channels

Buy the Platform, Own the Knowledge

Buy

Enterprise LLM models and a modern KM platform - proven components that save build time and carry vendor support.

Build

The RAG layer, metadata model, and agentic workflows - the proprietary logic that encodes how this business actually makes decisions.

Optimize

Route routine questions to lower-cost models; reserve advanced reasoning models for complex, multi-step orchestration.

Governance-First AI Framework

Regulatory Guardrails

Designed to align with applicable Canadian privacy and consumer-protection law (e.g., PIPEDA, Quebec Law 25) and sector-specific travel-industry guidelines - the same category of regulatory discipline any consumer-facing AI program needs, wherever it operates.

Access Control

Role-based access control, single sign-on, and least-privilege permissions enforced for every human and AI agent touching the system.

Multi-Tiered Oversight

Low Risk

Automated audits

Medium Risk

Human-on-the-loop tracking

High Risk

Human-in-the-loop approval gates

Business Impact & Success Metrics

≥ 90%

Resolution Quality

Inquiries resolved using
AI-supported workflows

≥ 98%

Compliance Baseline

Audit accuracy against
legal & partner policy

↓ AHT

Operational Gains

Reduction in average
handling time &
escalations

≥ 85%

Agent Satisfaction

Alongside a measurable
lift in first-contact
resolution

Capabilities Demonstrated in This Project

STRATEGY

KM Strategy & Information Architecture

Diagnosing a content-centric operating model and redesigning it around customer workflows.

DESIGN

Agentic AI System Design

Architecting a context → decision → grounding pipeline with RAG and bounded autonomy.

TRUST

Governance & Regulatory Compliance

Embedding privacy law, access control, and tiered human oversight into the design from day one.

PEOPLE

Change Management

Sequencing adoption through a Crawl-Walk-Run model that builds trust before expanding autonomy.

MARKET

Vendor & Market Evaluation

Benchmarking commercial AI-KM platforms and translating strong patterns into original design choices.

VOICE

Executive Communication

Translating a technical architecture into a business case leadership can approve and fund.

CONCLUSION

Knowledge Is No Longer Content - It's a Capability

- This proposal repositions Knowledge Management from a content repository into an operational capability that delivers contextual guidance within the flow of work.
- The path runs from content quality and governance, through workflow-based delivery, to an AI-enabled ecosystem powered by generative AI, RAG, and agentic AI.
- The goal was never to automate Knowledge Management - it was to scale it, reduce dependence on individual expertise, and enable better decisions, faster, with humans still firmly in the loop.

THANK YOU

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