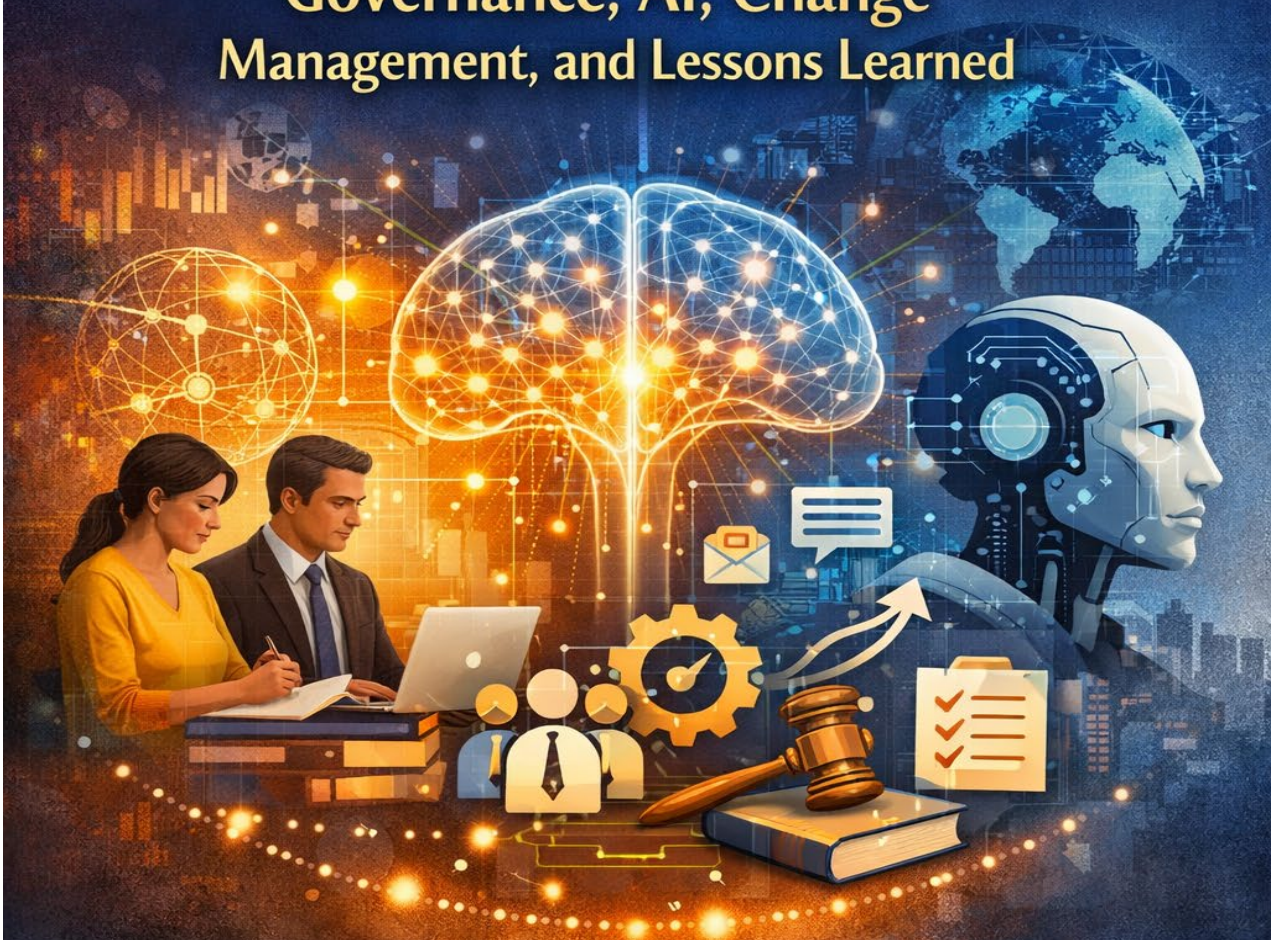
Foundations of Knowledge Management

A practical beginner's guide to People, Process, Technology, Culture, Governance, AI, Change Management, and Lessons Learned



by Cory Lee Cannon, CKM

Foundations of

Knowledge Management

A practical beginner's guide to People, Process, Technology, Culture, Governance, AI, Change Management, and Lessons Learned

Prepared by: Cory Lee Cannon, CKM
President & CEO
Knoco International

Edited by Knoco International Affiliates:

Ian Fry, Knoco Australia
Javier Martinez, Knoco Chile
Joaquim Carbeonell, Knoco Spain
Gladys Kemboi, Knoco Africa

How to Use This Book

This book is written for people who are new to Knowledge Management (KM). It avoids jargon where possible and focuses on what KM looks like in the real world. You can read it start to finish or jump to the chapters that match your immediate needs. It is an overview of the field; thus, it does not dive deep into any of the topics but gives the reader awareness of breath and scope of the field.

Throughout the book you will see checklists, templates, and example practices. These are intended to be adapted. KM is a management discipline, not a one size that fits all product. Your context matters.

Suggested reading path

- If you need a definition and why it matters, start with Chapters 1 and 2.
- If you are designing a program, focus on Chapters 3, 4, and 12.
- If you are building an AI enabled capability, read Chapters 7 and 13.
- If you are fixing lessons learned, read Chapters 5 and 11.

Table of Contents

1. What Is Knowledge Management?

Knowledge Management (KM) is the deliberate, systematic way an organization improves how it creates, shares, and uses knowledge to achieve its mission. A practical definition is KM helps the right people get the right know how at the right time, so they can make better decisions and execute faster.

KM includes information and data, but it is not limited to them. Information management (IM) focuses on documents, records, and information products. Data management focuses on data quality, stewardship, metadata, and lifecycle controls. KM focuses on knowledge flow, expertise, context, learning, and reuse.

As Knoco affiliate, Ian Fry of Knoco Australia puts it, Knowledge Management is the movement of practical knowledge between people leading to action (Fry, 2014).

Table 1. Distinguishing Data Management, Information Management, and Knowledge Management (simplified).

Discipline	Primary focus	Typical outputs	Common risks when done alone
Data management	Data quality, definitions, metadata, stewardship	Trusted datasets, data catalogs, metrics	Great data, weak adoption; decisions still rely on workarounds or data being ignored in decision-making
Information management	Documents, records, search, content lifecycle	Policies, SOPs, knowledge bases, records	Lots of content, low reuse; people cannot find what matters
Knowledge management	Knowledge flow, expertise, learning, reuse, decision support	Faster onboarding, fewer repeats, better decisions, better innovation	If treated as only a tool, it becomes a stale repository

KM as a Management System

The ISO 30401 standard describes a knowledge management system as a management system that supports value creation through knowledge by establishing requirements and guidance for planning, operating, and improving KM in any type of organization (International Organization for Standardization, 2018). In practice, this means KM is not a side project. It has objectives, roles, processes, measurements, and continual improvement.

Why KM Matters

Knowledge is one of the main drivers of operational excellence, risk reduction, and innovation. When knowledge does not flow, organizations see predictable symptoms: reinventing the wheel, repeated mistakes, slow onboarding, duplicated work, inconsistent decisions, brittle operations when key staff leave, and poor cross team coordination.

KM addresses these issues by turning learning and reuse into routine behavior. It improves performance not by asking people to work harder, but by reducing friction and waste.

What KM Is Not

KM is not a single software platform. KM is not an intranet redesign. KM is not a document dump. KM is not a library with no owners. Technology helps, but KM succeeds when it is embedded into how an organization's work is planned, executed, and reviewed. KM is not an offshoot of Data or information. In many ways KM is the human understanding of tacit and explicit (codified) knowledge.

Quick test: Do you have a KM problem?

- Do teams repeat the same mistakes across projects or sites?
- Do you struggle to onboard new staff quickly?
- Do experts get pulled into the same questions every week?
- Do people say, I know we solved this before, but I cannot find it?
- Do decisions depend on who is in the room rather than what the organization knows?
- Are people reluctant to ask for help?
- Is it hard to get experts to share knowledge with others?

2. Core Concepts: Knowledge, Context, and Learning

Knowledge is information interpreted through experience, judgment, and context. A spreadsheet can tell you what happened; knowledge helps you understand why it happened and what to do next. Unlike other organizational resources and assets, knowledge increases and spreads when shared and used.

Tacit and Explicit (Codified) Knowledge

Tacit knowledge is personal and experience-based: judgment, intuition, and skill. Explicit or Codified knowledge can be documented: procedures, checklists, models, and training materials. Most high value know how both blends. KM does not try to turn everything tacit into documents. It focuses on making tacit knowledge accessible through people, communities, mentoring, and well-designed workflows, while also documenting what is worth standardizing.

Knowledge Creation and Conversion

A well-known view of organizational knowledge creation highlights how tacit and explicit (codified) knowledge can move through socialization, externalization, combination, and internalization (often called the SECI model) (Nonaka & Takeuchi, 1995). The practical takeaway is that knowledge grows when people collaborate, reflect, document, and practice.

The Learning Organization

KM is closely linked to organizational learning. Learning organizations build routines that help them detect problems, learn from experience, and adapt. Classic work on learning organizations emphasizes systems thinking, shared vision, and team learning as disciplines that support continual improvement

(Senge, 1990). Garvin (1993) also stresses that learning requires concrete practices and measurement, not only aspiration.

Figure 1. A simplified ladder from data to action (conceptual).

Level	Name	Improved definition	Typical outputs	Quality test
1	**Data**	Raw observations or recorded facts without interpretation or meaning on their own.	Sensor readings, entries, logs, counts	Is it captured accurately and completely?
2	**Authentication**	Validation that data is **credible, traceable, and fit for intended use** (source, integrity, lineage, timeliness).	Verified dataset, provenance notes, audit trail	Can I explain where it came from and why it is trustworthy?
3	**Information**	Data that has been **organized and contextualized,** so it answers basic questions (who, what, when, where).	Reports, structured records, dashboards	Does it reduce ambiguity and support a shared view of what happened?
4	**Intelligence**	Information that has been **analyzed and assessed** to explain significance, implications, and likely outcomes (patterns, risks, opportunities).	Assessments, forecasts, risk statements, scenario notes	What does this mean for our situation and constraints?
5	**Knowledge**	Intelligence interpreted through **experience, judgment, and context** into practical know-how (what works, why, and how).	Playbooks, lessons learned, checklists, FAQs, expert guidance	Can a competent person apply this to produce a better result?
6	**Understanding**	Shared, organization-level comprehension of **cause and effect**, tradeoffs, and how the system behaves across teams and time.	Common doctrine, operating principles, standard decision logic	Do different parts of the organization interpret this the same way?
7	**Insight**	Higher-value recognition of **meaningful patterns** that reveal leverage points and options for change.	Key drivers, leading indicators, prioritized interventions	What is the simplest explanation that changes what we will do next?
8	**Action**	Execution informed by knowledge, plus **learning loops** that update standards, tools, and behaviors.	Decisions implemented, updated SOPs, infused lessons, performance gains	Did we act, and did we improve the system based on results?

Knowledge Risk

Knowledge has risk. If critical knowledge is concentrated in a few people, projects, departments, or if it is scattered across tools with no ownership, the organization becomes fragile. Knowledge risk often increases during rapid growth, turnover, reorganizations, and major technology change. A practical KM program begins by identifying where knowledge risk is highest and focusing effort there.

3. The Five Pillars of Knowledge Management

KM succeeds when it is designed as a balanced system. This book uses five practical pillars: People, Processes, Tools or Technology, Organizational Culture, and Governance. If any pillar is ignored, the program becomes fragile and adoption drops.

Table 2. The five pillars and the questions they answer.

Pillar	What it means in practice	Key questions
People	Roles, skills, incentives, communities, leadership behaviors	Who owns critical knowledge? Who facilitates sharing? What skills do we need?
Processes	Repeatable ways to capture, validate, reuse, and improve knowledge	Where in the workflow should knowledge be captured and reused? How do we avoid extra bureaucracy?
Tools and technology	Platforms that support finding, sharing, and applying knowledge	What tools reduce friction? How do we integrate with daily work? How do we design for adoption?
Organizational culture	Trust, psychological safety, learning norms, and collaboration habits	Do people feel safe sharing what they know? Is learning rewarded? Do leaders model curiosity and reuse?
Governance	Decision rights, policies, standards, measures, and accountability	Who decides what good looks like? How do we manage quality, risk, and priorities over time?

Pillar 1: People

People are the engine of KM. Even in highly automated environments, knowledge is created, interpreted, and applied by humans. A people-centered KM program clarifies roles, builds skills, and creates incentives that make knowledge sharing normal. Common roles include executive sponsor, KM lead, community facilitators, content owners, knowledge stewards, and champions within teams.

People practices that work in most organizations.

- Communities of practice for shared domains and craft skill.
- Mentoring and buddy systems to transfer tacit knowledge.
- Knowledge capture interviews for critical roles and retiring experts.
- Office hours with experts to reduce repeated one-off requests.
- Recognition for reuse, improvement, and teaching, not only for creation.
- Face to face or online conversations.

Pillar 2: Processes

KM processes must integrate into the normal workflow. The best processes appear to be lightweight because they are part of planning, execution, and review. Examples include after action reviews, peer assistance, standard work with embedded decision points, and content review cycles.

A common mistake is to add KM steps that feel like extra paperwork. Instead, design KM as a byproduct of work: capturing knowledge when you already meet, sharing knowledge where people already collaborate, and storing knowledge in systems they already use.

Pillar 3: Tools and Technology

Tools should reduce friction. If a tool makes sharing harder, people will bypass it. Common KM tool categories include collaboration platforms, searchable knowledge bases, document management and records, expert directories, learning platforms, and analytics. The trend today is to integrate these tools, so users do not have to guess where knowledge lives.

Technology decisions should follow knowledge needs. Start with user journeys: how a new employee learns the work, how an engineer resolves a recurring incident, how a program team finds precedent for a contract decision. Then choose tools that support those journeys.

Pillar 4: Organizational Culture

Culture determines whether people share what they know. High performing KM cultures are built on trust, psychological safety, the ability to share, and a belief that learning is part of work. Leaders matter because they signal what is valued. If leaders ask for evidence, reuse, and lessons, KM becomes normal. If leaders punish honest mistakes, knowledge hides.

Signals of a healthy knowledge culture

- People ask good questions and admit uncertainty without fear.
- Teams run short retrospectives and act on outcomes.
- Reusing proven approaches is celebrated, not seen as lack of originality.
- Bad news travels fast, and problems are surfaced early.
- Leaders model learning by sharing their own lessons.
- Multiple solutions are investigated as planned experiments/pilots.

Pillar 5: Governance

Governance makes KM sustainable. It defines decision rights, priorities, standards, ownership, and measurement. Governance is not bureaucracy; it is how you ensure knowledge remains trustworthy, current, and aligned to mission needs.

A minimal governance model defines: (1) what knowledge domains exist, (2) who owns each domain, (3) who are the decision makers and how are they selected (4) makes knowledge authoritative, (5) how content is reviewed, retained, and finally retired, (6) how lessons are validated and infused into work, and (7) how KM success is measured and rewarded.

4. What KM Does: The Knowledge Lifecycle

Most KM programs operate across a lifecycle. The names vary, but the functions are consistent: identify critical knowledge, capture and create it, organize and validate it, share it, apply it in work, and retain it. The lifecycle exists to support reuse and performance, not to create more content.

A useful rule: Embed the capture of knowledge into the work cycle, not as a separate project or activity.

Table 3. Practical KM activities by lifecycle stage.

Lifecycle stage	Examples of practices	Good metrics (examples)
Identify and prioritize	Critical knowledge mapping, decision mapping, risk-based assessments	Coverage of top decisions; knowledge risk heat map completion
Create and capture	After action reviews, interviews, process walk-throughs, peer assists, CoP notes	Percent of projects with AAR; time to capture within 30 days
Organize and validate	Taxonomies, templates, metadata, version control, peer review, approval workflows.	Findability score: percent content reviewed in last 12 months
Share and transfer	Mentoring, onboarding playbooks, lunch and learns, office hours, job aids, Communities of Practice	Time to proficiency; participation rates.
Apply and reuse	Decision checklists, playbooks, searchable case libraries, embedded help in tools	Reuse rate; defect reduction; cycle time improvements
Retain, refresh, and retire	Knowledge continuity plans, succession, archiving, retention schedules	Critical role coverage; updating compliance; stale content retirement

Findability and Cognitive Load

People do not have time to search five separate systems and read 40 documents. A KM system must reduce cognitive load. That means clear naming, good metadata, short summaries, and direct links to

the best source for a question. In practice, many organizations succeed by maintaining a small set of curated, high-value knowledge assets rather than maximizing volume.

5. Lessons Learned: Turning Experience into Better Performance

Lessons learned are a cornerstone of organizational learning. A lesson is more than an observation; it is an insight paired with a recommended action that others can reuse. NASA defines lessons learned as knowledge or understanding gained by experience and maintains systems to disseminate and infuse them into work (NASA Office of Inspector General, 2012; NASA, 2025).

The Four Levels of Lessons Learned Maturity

Lessons learned programs typically evolve through four levels:

1. Level 1: Collection. Teams capture observations, but reuse is low.
2. Level 2: Publication. Lessons are written and searchable but not embedded in work.
3. Level 3: Infusion. Lessons update standards, training, and decision tools.
4. Level 4: Learning system. Lessons drive measurable performance improvement and risk reduction.

Closing the Loop

Many efforts fail because they stop at collection. Teams hold a retrospective, write notes, and move on. Without validation and infusion, the organization does not learn. Effective lessons learned systems close the loop by making lessons easy to find and hard to ignore (Milton, 2010). Other efforts stall at Publication. There is an assumption that people will read and use the observations recorded.

Table 4. A lesson learned lifecycle that closes the loop.

Step	What happens	Practical example
Capture	Collect key events, context, and outcomes soon after the work	Project AAR within 2 weeks of a milestone
Validate	Ensure the lesson is clear, evidence-based, and actionable	Peer review by subject matter experts
Package	Turn raw notes into reusable formats	One page lesson with context, triggers, and recommended actions
Publish	Make it searchable and accessible at the point of need	Tagged in a lesson's library; linked to SOPs
Infuse	Embed into training, standards, and decision processes	Update checklist; incorporate into onboarding
Measure reuse	Track adoption and effect on outcomes	Reduced defects or rework; reuse citations

A fast template for writing a lesson learned.

- Context: What was the situation and constraints?
- Trigger: What event caused the issue or success?
- Outcome: What happened, and what was the impact?
- Root cause: Why did it happen?
- Recommendation: What should others do differently next time?
- Where to infuse: Which SOP, checklist, training, or system should be updated?
- Action tracking on implementation?

6. KM and Change Management: Making Change Stick

Change management focuses on adoption. KM focuses on capability, learning, and the reasoning for the change. See KM contribution to the WHY below. They are complementary: change management helps people move to new behaviors; KM supplies the know-how, support, and feedback loops that make the new behaviors possible.

Models like Lewin's unfreeze-change-refreeze emphasize that change requires shifting norms and stabilizing the new state (Lewin, 1947). Kotter's work highlights eight steps on the importance of building urgency, coalitions, and reinforcement to sustain change (Kotter, 1996).

The Prosci ADKAR model frames successful change at the individual level through Awareness, Desire, Knowledge, Ability, and Reinforcement (Prosci, 2025). KM contributes directly to the Knowledge and Ability elements by providing learning assets, communities, and performance support.

Table 5. Where KM strengthens change management.

Change management need	KM contribution	Example
Explain the why	Curate decision records, evidence, and stories	Create a change narrative backed by data and prior lessons
Build capability	Job aids, playbooks, learning pathways, mentoring	Role based onboarding for the new process
Support performance	Point-of-need knowledge embedded in tools	In-app guidance and searchable FAQ
Sustain and reinforce	Measurement, continuous improvement loops, communities	Monthly community review of issues and updates

KM for Change Leaders

If you lead a change, treat knowledge as a deliverable. Plan for: (1) what people need to know, (2) how they will learn it, (3) where the knowledge will live, and (4) how you will keep it current. Every major change produces new knowledge. If you do not capture it, you pay again in rework and confusion.

7. KM and AI: Why Knowledge Is the Fuel for Intelligent Systems

AI systems are only as reliable as the knowledge they can access. Modern generative AI can summarize, draft, and reason, but it can also produce confident errors. KM provides the practices that make AI safer and more useful by improving the quality, structure, and governance of organizational knowledge.

Why KM is an AI Risk Control

When an AI system gives an answer, users need to trust it. Trust is not created by marketing. It is created by traceability, evidence, and accountability. Curated sources, version control, clear ownership, and review cycles are KM capabilities that directly reduce AI risk. Recent research on AI integration in KM highlights recurring challenges such as data and knowledge quality, governance, skills, ethics, and organizational readiness (Rezaei, 2025).

From Search to Retrieval-Augmented Generation

A common pattern is retrieval-augmented generation (RAG), where an AI system retrieves relevant, approved sources from a curated knowledge base and uses them to generate an answer with citations. Compared to answering from a model alone, RAG can reduce hallucination risk because the answer is grounded in organization specific sources.

AI Use Cases That Align Well with KM

Begin with use cases where the risk is manageable and the knowledge base is reasonably mature. Examples include drafting first versions of policies, summarizing long documents, answering internal how-to questions with citations, supporting onboarding, and Root Cause Analysis of Lessons Learned.

AI Ethics in KM

Creating governance mechanisms is essential in managing organizational knowledge. This includes conducting AI literacy, conducting risk assessments and establishing KM committees to monitor AI use and performance.

AI use cases to avoid early.

- High stakes decisions with no clear authoritative sources.
- Automated actions without human review in safety, legal, medical, or financial domains.
- Use cases that require personal data without a clear privacy model.
- Use cases where the organization cannot explain the basis for answers.

8. Getting Started: A Practical Roadmap for KM Strategy

A successful KM program starts small, proves value, and scales. The fastest path is to focus on a high-value business problem and implement a few practices deeply rather than many practices superficially.

Knoco emphasizes that KM strategies should balance people, process, culture, governance and tools/technology and align to business needs (Barnes & Milton, 2014).

Choose a Clear Business Problem

Examples of strong starting points include reducing rework, improving onboarding, standardizing decisions, improving proposal reuse, reducing operational risk in critical roles, or strengthening continuity during turnover. These problems have measurable outcomes and strong sponsors.

Design the Minimum Viable KM Solution for Each Initiative

Minimum viable does not mean low quality. It means the smallest solution that solves a real problem. For example, if teams repeatedly ask the same how-to questions, a curated knowledge base with a good FAQ and expert office hours may be enough to reduce the burden quickly.

Assessing the Status of KM

Find out what resources are needed to move KM forward, the key steps you followed to develop and implement a KM strategy/plan, and what could be built on, replication, or expanded to improve KM?

Table 6. A simple 90-day and 12-month plan.

Timeframe	Outcomes	Actions
First 30 days	Define scope and sponsor; select pilot	Interview stakeholders; map decisions and pain points; define success measures
Days 31-90	Deliver a working KM solution for the pilot	Run AARs; launch a community; publish a small, curated knowledge set; embed reuse into workflow
Months 4-12	Scale and institutionalize	Expand to more teams; establish governance; invest in findability; integrate with training and change management

Roles You Typically Need

Even small programs benefit from clear roles. Common roles include an executive sponsor, a KM lead, KM Champions, content owners, Community of Practice facilitators, and IT partners. Many organizations succeed with a federated model: a small central team sets standards and enables them, while business units own and apply knowledge locally.

9. Measuring KM: Proving Value Without Fake Precision

Measuring KM is essential, but it must be meaningful. Avoid vanity metrics like total documents uploaded. Prefer measures tied to outcomes: cycle time, quality, safety, customer satisfaction,

onboarding time, and reduced repeat incidents. The success of KM should be measured through the success of organizational objectives.

A Balanced Measurement Approach

Use a mix of leading and lagging measures. Leading measures track adoption and behavior. Lagging measures track results. Combine quantitative metrics with qualitative evidence such as success stories, decision improvements, and lessons reuse examples.

Table 7. Example measures that connect KM to outcomes.

Outcome area	Leading measures (behavior)	Lagging measures (results)
Onboarding	Completion of learning pathways; mentoring participation	Time to proficiency; first year attrition
Quality	Use of checklists and playbooks; reuse citations	Defect rate; rework cost
Safety and risk	Lessons reviewed before high-risk work; pre-job briefs with knowledge inputs	Incident rate; near miss reduction
Customer delivery	Knowledge base usage; resolution playbook usage	First contact resolution; cycle time; customer satisfaction
Innovation	Community activity; idea pipeline participation	Time to prototype; adoption of new practices

10. Common Pitfalls and How to Avoid Them

KM pitfalls are predictable. They usually happen when KM is treated as content or IT management only, when governance is unclear, or when the work is not integrated into everyday processes.

Pitfall 1: Building a big repository before understanding users.

If you build a large repository without clear use cases, you create noise. Start with user problems. Curate content. Add short summaries. Make the best answer obvious.

Pitfall 2: No ownership, no lifecycle

Unowned knowledge becomes stale quickly. Assign content owners for critical domains and establish review cycles. Retire duplicates and outdated guidance.

Pitfall 3: Incentives punish sharing.

If experts are rewarded only for individual output, they will treat knowledge sharing as a distraction. Recognize teaching, mentoring, reuse, and improvements. Make knowledge sharing part of performance conversations.

Pitfall 4: Technology first, people last

Tools do not create knowledge culture. Adopt tools only after you design processes and roles. Then configure tools to support those processes with minimal friction.

Pitfall 5: Lack of budget for KM

Most organizations have no funding allocated for KM. For example, in departmental or country projects, the KM Focal Lead relies on funding from project activities.

11. A Practical Toolkit: High-Value KM Practices

The following practices are widely used because they are lightweight, scalable, and easy to embed. Most organizations do not need dozens of practices. They need a small set used consistently.

After Action Review (AAR)

An after-action review is a short, structured discussion held after an activity to capture what was expected, what happened, why it happened, and what to improve. The goal is learning and action, not blame.

AAR agenda (30 to 60 minutes)

- What was supposed to happen?
- What actually happened?
- What went well, and why?
- What did not go well, and why?
- What will we sustain, and what will we change next time?
- Who owns the follow-up actions, and by when?

Peer Assist

A peer assist is a structured session held before starting a task, where a team invites peers with relevant experience to share advice, patterns, and lessons. Peer assists prevent reinvention and reduce risk.

Peer assist steps

- Define the decision or challenge and what success looks like.
- Invite 3 to 8 peers with direct experience; mix internal and external viewpoints if possible.
- Share context in advance using a 1-page brief.
- Run a facilitated session focused on patterns and options, not status updates.
- Document recommendations and decide what to adopt.
- Capture outcomes and feed into lessons learned.

Mentoring

Mentoring is a structured relationship where an experienced practitioner supports another person's growth by sharing guidance, context, and hard-earned lessons. In Knowledge Management, mentoring

accelerates capability development, strengthens knowledge transfer, and reduces rework by making tacit expertise visible and usable.

Mentoring steps

- Define the mentoring objective and what "progress" looks like (skills, behaviors, deliverables, or decisions).
- Match mentor and mentee based on relevant experience, role demands and learning goals.
- Agree on the scope, cadence, confidentiality, and success measures in a simple mentoring agreement.
- Share context in advance (current challenges, priorities, and 2 to 3 focus questions).
- Hold structured sessions that blend reflection, coaching, and practical application (real work, real decisions).
- Capture key insights, recommended actions, and resources after each session.
- Review outcomes periodically, adjust goals, and contribute reusable lessons and guidance back into the KM system.

Communities of Practice (CoPs)

A community of practice is a group of practitioners who share a domain of work and learn together through ongoing interaction. CoPs are especially effective for tacit knowledge and rapidly changing domains.

Table 8. A simple community charter.

Element	Example
Purpose	Improve quality and consistency of [domain] work across teams
Membership	Practitioners, supervisors, and related specialists
Cadence	Monthly meeting plus asynchronous discussion
Outputs	Playbooks, FAQs, templates, lessons, mentoring pairs
Measures	Participation, reuse of outputs, reduced rework, improved cycle time
Sponsor	Senior leader who removes barriers and funds facilitation time

Knowledge Base and FAQ

A knowledge base is a curated set of knowledge objects designed for reuse. A common failure mode is treating it as a dumping ground. High value knowledge bases behave like products: they have owners, user research, release cycles, and retirement of low value content.

Design rules for a usable knowledge base.

- One best answer per question. Link to supporting detail, do not duplicate it.
- Short summaries at the top, with steps and examples below.
- Visible owner and last reviewed date.

- Standard templates so articles look consistent.
- Feedback loop so users can report issues and request updates.

Expertise Directory

Many questions are answered fastest by the right person. An expertise directory helps people find who knows what. It can be as simple as a tagged employee profile system or a maintained list for a domain. The key is keeping it current and making it searchable.

12. Governance and Operating Model

Governance is how KM remains aligned, trustworthy, and sustainable. A good KM governance model has just enough structure to ensure quality and accountability without slowing work. It should answer the following questions:

1. What does the organization expect from its members in terms of goals and objectives?
2. How will achievements be measured?
3. In what ways will the organization support its people in achieving these goals?

Core Governance Decisions

At minimum, government should answer these questions:

- What decisions and actions were negatively affected by poor knowledge?
- What knowledge domains are in scope, and which are most critical?
- Who is accountable for each domain's quality and currency?
- What counts as authoritative knowledge, and how is it approved?
- What metadata or taxonomy is required for findability?
- What are the review and retirement rules for knowledge assets?
- How are lessons learned validated and infused into policy, training, and tools?
- How do we measure KM outcomes and report value?
- How do we manage risk, privacy, and access control?

A Simple KM Operating Model

Table 9. Example KM operating model (federated).

Layer	Responsibilities	Typical roles
Enterprise enablement	Strategy, standards, governance, shared platforms, coaching	CKO or KM Director, KM analysts, platform admin
Business unit ownership	Domain knowledge ownership, prioritization, adoption, measurement	Domain owners, content owners, KM champions

Communities and networks	Practice sharing, peer learning, playbooks, and templates	Facilitators, SMEs, mentors
Projects and operations	Embed KM into workflows, capture, and reuse	Project managers, team leads, operators

Policy and Standards That Help

KM governance often includes lightweight policies such as knowledge classification and handling, content lifecycle and review, lessons learned processes, and minimum metadata. Standards work best when they focus on the few things that create the most value: clarity, ownership, and findability.

13. KM for AI: Trust, Governance, and Evaluation

If Chapter 7 explained why KM is critical for AI, this chapter explains how to operationalize it. AI introduces three practical requirements: trust, governance, and evaluation.

Trust Through Traceability

Users trust answers when they can see the basis for them. For AI systems, which means grounding outputs in authoritative sources and making citations visible. For high impact topics, require that AI outputs reference specific policies, standards, or validated lessons. This is a KM practice applied to AI.

Trust Through Environment

Users trust AI when the environment around the system reinforces reliability, accountability, and appropriate use. Ensure that organizational content is not shared outside the organization, or planned access group. For AI systems, which means operating within a controlled knowledge environment where sources are curated, access is governed, prompts and outputs are protected, and use is aligned to policy and risk controls. For high impact topics, require approved knowledge collections, role-based access, data classification handling, and human review thresholds, so answers are produced inside a trusted operational context. This is a KM practice applied to AI.

Knowledge Curation for AI

Curating knowledge for AI is not the same as uploading everything. It involves selecting authoritative sources, cleaning duplicates, applying metadata, and setting refresh cycles. Many organizations create an approved AI corpus that is safe for internal retrieval, with a clear owner for each content domain.

Evaluation and Feedback Loops

AI performance should be evaluated like any other system: accuracy, usefulness, safety, and user trust. A simple practice is to log questions and outcomes, then periodically review failure cases to improve content and prompts. This is continuous improvement for knowledge and AI.

Table 10. Practical evaluation questions for AI assistants.

Dimension	Questions to ask	Examples of measures

Accuracy	Is the answer correct given the authoritative sources?	SME review pass rate; citation correctness
Coverage	Does the system retrieve the right sources for frequent questions?	Top query success rate; retrieval precision
Safety	Does it avoid disallowed content and protect sensitive data?	Policy violation incidents; red team findings
Usefulness	Does it save time and improve decisions?	Time saved per task; user satisfaction; reduced ticket volume
Maintainability	Can knowledge owners update sources without heavy effort?	Time to update; percent content with owners

Governance for AI Enabled KM

AI governance should align with KM governance. Define who approves sources, who reviews models and prompts, and how incidents are handled. In many organizations, AI governance becomes the forcing function that finally clarifies knowledge ownership.

14. Short Case Vignettes

These brief vignettes illustrate how KM foundations apply in different contexts. They are simplified, but they show the pattern: start with a business problem, apply a few practices, and measure outcomes.

Vignette A: Operational Learning and Lessons (Aerospace)

A program experienced recurring integration issues across sites. The team implemented short after-action reviews after each major test event, validated lessons with senior engineers, and infused the lessons into a pre-test checklist and onboarding package. Within two quarters, repeat defects declined and test cycles shortened. NASA's experience highlights the importance of maintaining lessons learned systems and integrating them into work, not only storing them (NASA, 2025; NASA Office of Inspector General, 2012).

Vignette B: Clinical Knowledge and Patient Safety (Healthcare)

A hospital unit struggled with variation in a critical procedure. A community of practice standardized a playbook and created a short FAQ for exceptions. A governance routine ensured the playbook was reviewed quarterly. A simple dashboard tracked compliance and incident trends. The result was reduced variation and fewer safety events.

Vignette C: AI Assisted Support (Customer Service)

A service desk deployed an internal AI assistant grounded in a curated knowledge base. Knowledge articles were rewritten into a consistent template and assigned owners. The assistant provided answers

with citations. Tickets declined and first contact resolution improved. The key success factor was not the model. It was the disciplined knowledge lifecycle.

15. Frequently Asked Questions

This chapter answers frequent questions beginners ask when starting KM. The answers reinforce the principle that KM is a practical system of work, not a one-time initiative.

How is KM different from training?

Training builds capability through instruction. KM ensures that knowledge is available at the point of need, stays current, and improves through feedback. A strong program integrates training with curated knowledge assets and communities. Training build capacity. Learning and Development builds competence, because it not only transfers the What, but the WHY

Do we need a Chief Knowledge Officer (CKO)?

Not always. Small organizations often start with a KM lead and strong sponsorship. As KM grows, a senior accountable leader helps align priorities, fund enablement, and connect KM to strategy.

Should KM sit in IT, HR, or Operations?

It depends. KM works best where it can influence workflows, learning, and governance. Many organizations place a small enterprise enablement function centrally and run KM in a federated way across business units. A similar approach to the way in which a Project Management Officer interacts with projects is useful.

How do we avoid turning KM into bureaucracy?

Keep processes lightweight and tied to decisions. Capture knowledge as a byproduct of work. Measure outcomes. Retire low value content. Treat knowledge assets like products with owners and users.

What is the fastest way to show value?

Pick one painful problem with a sponsor. Examples: onboarding, recurring incidents, proposal reuse, or operational continuity. Implement two or three practices deeply, then measure improvements in time, quality, or risk.

Can AI replace KM?

No. AI can accelerate drafting, retrieval, and summarization, but it depends on trusted knowledge sources and governance. Weak KM produces weak AI answers. Strong KM makes AI reliable and safer.

How can someone be motivated to share their knowledge, especially those within the company who are considered experts?

Use recognition that matters to experts: visible credit, influence on standards, and opportunities to shape strategy or mentor high performers. Social status and professional pride are powerful drivers when the organization signals, they count.

Glossary

After action review (AAR): A structured discussion held after an activity to capture what was expected, what happened, why it happened, and what to improve.

Community of practice (CoP): A group of practitioners who share a domain of work and learn together through ongoing interaction.

Knowledge base: A curated collection of knowledge objects designed for reuse, often supported by search and metadata.

Knowledge governance: Policies, roles, decision rights, and standards that ensure KM remains effective, safe, and aligned to mission needs.

Peer assist: A structured session held before work begins to learn from others with relevant experience.

RAG: Retrieval-augmented generation, where an AI system retrieves relevant sources from a curated corpus to ground its responses.

References

Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. MIS Quarterly, 25(1), 107-136. https://doi.org/10.2307/3250961

Barnes, S. & Milton, N. (2014). Designing a Successful KM Strategy: A Guide for the Knowledge Management Professional. Medford: Information Today Inc.

Dalkir, K. (2023). Knowledge management in theory and practice (4th ed.). MIT Press.

Davenport, T. H., & Prusak, L. (1998). Working knowledge: How organizations manage what they know. Harvard Business School Press.

Garvin, D. A. (1993). Building a learning organization. Harvard Business Review, 71(4), 78-91.

Fry, I. (2015). Knowledge Management Elevator Pitch? YouTube. https://www.youtube.com/watch?v=jx0zkdcqrsQ

International Organization for Standardization. (2018). ISO 30401:2018 Knowledge management systems - Requirements. https://www.iso.org/standard/68683.html

Kotter, J. P. (1996). Leading change. Harvard Business School Press.

Lewin, K. (1947). Frontiers in group dynamics: Concept, method, and reality in social science; social equilibria and social change. Human Relations, 1(1), 5-41. https://doi.org/10.1177/001872674700100103

Milton, N. (2010). The Lessons Learned Handbook: Practical Approaches to Learning from Experience. Chandos Publishing.

Milton, N. (2019). The Knowledge Manager's Handbook: A step-by-step guide to embedding effective knowledge management in your organization. Kogan Page Publishers.

NASA. (2025, October 31). Knowledge Management. https://www.nasa.gov/learning-resources/for-professionals/appel-knowledge-management/

NASA Office of Inspector General. (2012). Review of NASA's Lessons Learned Information System (Report No. IG-12-012). https://oig.nasa.gov/docs/IG-12-012.pdf

Nonaka, I., & Takeuchi, H. (1995). The knowledge-creating company: How Japanese companies create the dynamics of innovation. Oxford University Press.

Prosci. (2025). The Prosci ADKAR Model. https://www.prosci.com/methodology/adkar

Rezaei, M. (2025). Artificial intelligence in knowledge management: Identifying and addressing the key implementation challenges. Technological Forecasting and Social Change, 217, 124183. https://doi.org/10.1016/j.techfore.2025.124183

Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. Doubleday/Currency.