Where Did Knowledge Audits Come From?

By Patrick Lambe

'As far as I remember I have not ever estranged myself from You, nor does my conscience prick me for it.' Dante, *Purgatorio*, XXXIII

In this verse, Dante claims to have no memory of sin. However, his lover Beatrice reminds him – somewhat sharply – that he has just drunk from the river Lethe, whose water brings forgetfulness. In Greek mythology, the goddess Lethe, who brought (sometimes convenient) oblivion, was the counterpart of the goddess Mnemosyne, who brought perfect memory, and with it, omniscience. Perhaps also guilt.

For a discipline that promotes the reuse of existing knowledge, the discipline of knowledge management is tremendously forgetful. We preach the virtues of Mnemosyne, but are addicted to the waters of Lethe. Elsewhere I have documented the tendency of knowledge management to forget or ignore its theoretical and methodological antecedents, which go back to the 1960s (Lambe 2011).

Beginning in the 1990s, knowledge management practitioners and writers alike systematically forgot or ignored four decades of consistent, solid research (and the development of accompanying management techniques and practices), around the understanding of knowledge as an economic resource, around knowledge creation and diffusion in and between organisations, and around the application and exploitation of knowledge in enterprises. A sampling of knowledge management journal literature from the late 1990s to the late 2000s found that the median citation memory (how far back their references went) was between 1 and 5 years; the closer the literature was to knowledge management's exuberant "beginning" in the mid-1990s, the shorter the citation memory was (Lambe 2011: 177).

This is true of knowledge management as a whole, and it is also true of knowledge audits and knowledge mapping. Let's take this statement from Wesley Vestal, in a 2005 book on knowledge mapping published by APQC: "Prior to 1995, few tools existed to understand what knowledge was embedded in organizations, and any methodologies for improving flow and use were miles away from materialization." There is clearly a vested interest in the waters of Lethe here, because Vestal continues: "For more than a decade [since then], APQC has worked on establishing methods and conducting benchmarking studies that have refined the practice of knowledge management" (Vestal 2005: 2).

Vested interest aside, even a cursory glance at the literature shows that the claim of novelty is manifestly untrue.

Before there were knowledge audits, there were information audits. And before that, there were communication audits. These audit types bear strong family resemblances to each other. They were all grappling with different aspects of the same question: how can we observe, measure and improve the quality of information and knowledge flow and utilization in large, complex organisations?

Only very rarely however is an explicit genealogy recognised, where the precedent audit-type is acknowledged as an influence. Even where it was recognised, the implication was that the successor audit type in some way went further in scale and scope than its predecessor. This may have been partly political, as the Vestal example suggests: the 1990s and 2000s was a period of strong management fads, and appeals to past authority may have held less attraction than appeals to inventiveness. It may have been laziness, or lack of awareness, or wishful thinking. It's hard to say. But we shall not fully understand what knowledge audits are capable of, if we do not understand where they come from.

The crime of forgetting is not restricted to knowledge management. As information audits gained currency in the late 1990s and early 2000s, a very small minority of writers (some 2% of the literature) made the connection to the communication audits that had preceded them, and that were in strong evidence at the time. Remarkably, the genesis of communication audits was focused on information flows to support decision-making and organizational control. Communication audits were also interested in how the knowledge of workers got deployed in support of enterprise effectiveness. There are striking connections with the aims of information audits (and later on, knowledge audits).

Similarly, as knowledge audits blossomed in the 2000s, slightly more writers (some 10% of the literature) made the connection back to information audits, but by then the thin linkages to communication audits had been all but forgotten – only 0.5% of the total literature on knowledge audits traces its lineage back to communication audits.

Figure 1 shows an analysis of the literature covering communication audits, information audits, and knowledge audits, from the 1950s to the end of the 2000s. The counts are from articles, dissertations and citations on Google Scholar, reviewed and vetted for false positives (eg. "communication; audit").

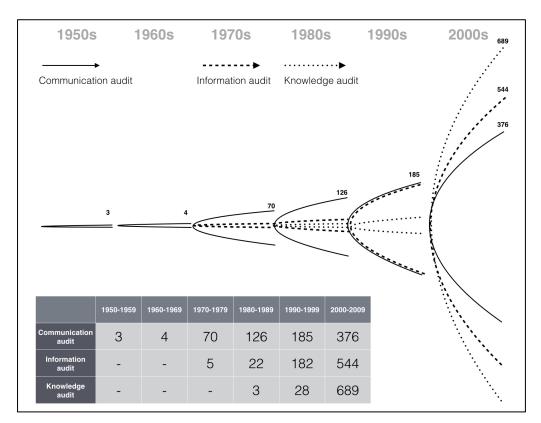


Figure 1: Growth of literature on communication audits, information audits and knowledge audits, 1950-2009, taken from an analysis of Google Scholar, August 2014.

The diagram shows that communication audits had a slow start, with a handful of articles each decade in the 1950s and 1960s focused on auditing and measuring organizational communications (although the general literature on understanding organizational communications was booming in the post-World War 2 era). In the 1970s, communication audits began to take off, with several audit instruments being developed and tested, and by the 1980s they were becoming solidly entrenched.

References to information audits did not begin until the 1970s and had a similarly slow start, but by the 1990s they were matching the volume of communication audit literature, and by the 2000s had outstripped it.

Knowledge audits began – again slowly – in the 1980s, but followed a similar pattern of expansion to its predecessors, and in the 2000s had outstripped both.

This representation is important because it shows two things: (1) a similar "pulse" pattern of audit methodologies being developed in successive decades, focused on similar organizational capabilities; and (2) each outstripping the others on ever accelerating growth curves.

Why is this prehistory interesting? Because beginning in the 1950s, a whole suite of systematic tools started to be developed and integrated for the sole purpose of auditing information flows and knowledge use in organisations. Some tools, such as social network analysis, had even earlier roots, in the sociograms of Jacob Moreno in the 1930s (Moreno 1934). Many of these tools are today poorly understood or inadequately deployed. A better understanding of the prehistory of knowledge audits would help us to master a much broader portfolio of tools and approaches.

What is also interesting about this history is that the pattern of generating new audit techniques around communication, information and knowledge seems to have ceased in the 1990s. Knowledge audits are the last in their line. For reasons we'll explain later, intellectual capital audits and measurement closely followed the growth curve of knowledge audits, and can be subsumed within the same pattern of activity. We have stopped inventing "new" audit forms. However, while knowledge audits are widespread and the literature continues to grow, they take multiple forms, lack methodological and theoretical stability, and are understood in widely varying ways.

How Are Knowledge Audits Understood Today?

'On the first day of an official audit, the audit team arrives at the agency in question, to be greeted by the management team. The chief auditor says "Good morning. We are here to help." The head of agency replies "Good morning. You're very welcome." In fact, neither of us believes the other.' *Government Auditor*

This anecdote, told many years ago to an ex-colleague of mine, points up the tensions inherent in the practice of auditing. An audit is supposed to ensure excellence of

processes and operations. It is supposed to result in validation of status quo or recommendations for improvements. Thus far it is supposed to be helpful.

But it is also troublesome. It is difficult, as an operational manager, not to feel defensive when you have strangers poring through your records, looking, you feel, for evidence of your mistakes. You are conscious that you and your team have developed unsanctioned ways of working that will take time and effort to defend and validate, even though you may be convinced they are in the best interests of the business. Auditors interfere. You are not a robot mindlessly following procedures to the detriment of common sense. Auditors, perhaps, are.

The term "audit" has other connotations. Here's a list of attributes frequently associated with the term when I ask workshop participants what auditing means to them:

- Conducted by a qualified person
- Systematic
- Has a rigourous methodology
- Precise and measurable
- Compliance-oriented
- Quality-oriented
- Checking
- Monitoring
- Accountability
- Evidence-based
- Ensuring value for money.

At face value, the conjunction of "knowledge" with "audit" seems like a conjunction of opposites. "Knowledge" as a term in common use is vague and unspecific, difficult to measure and define – in fact, you would think, the antithesis of all that is auditable. If the concept of "knowledge auditing" inspires interest it may be because of the mystery and implicit challenge that the phrase entails. How do you audit something as imprecise as knowledge?

As it turns out in the real world, however, this perception is a complete illusion. The connotations of rigour and systematics that accompany the term "audit" evaporate when we look at the use of the term in practice. In fact, once we peel away the associations with financial and internal audits, there is a wide spectrum of rigour in practices labeled as "audits", from the loosest sense of paying systematic attention to something and giving an account of it, to creating inventories for various purposes, to evidence-based evaluation, to checking practices systematically against standards, to valuation of assets and the exploitation of those assets.

"Knowledge," on the other hand, turns out to be surprisingly easy to pin down, once we are given a specific organizational context, and a frame of reference to work from. The precise turns out to be imprecise, and the vague turns out to be specific. In this chapter, we examine the notion of auditing. Our goal is to identify a typology of audits that we can then deploy in planning and delivering knowledge audits.

Models of Audit: Financial and Operational Audits

"Auditing" is a surprisingly imprecise umbrella term covering a multitude of very different practices, some of which masquerade under the illusion of its most controlled and controlling form.

As management communications experts Dennis Tourish and Owen Hargie put it, "The term 'audit' has by now been applied to an enormous range of activities. Its very ubiquity often generates confusion." (Tourish and Hargie 2000b: 23; cf Baker 1999: 1).

The Oxford Dictionaries now cover their bases by including both ends of the spectrum, both tight and loose, in their definition of "audit":

Audit

1. An official inspection of an organization's accounts, typically by an independent body: *audits can't be expected to detect every fraud*

1.1 A systematic review or assessment of something: a complete audit of flora and fauna at the site

Perhaps the tightest definition (and the one that brings with it the strongest sense of rigour) comes from the field of financial audits. Here is what Maire Loughran, a Certified Public Accountant, says: "Auditing is the process of investigating information that's prepared by someone else to determine whether the information is fairly stated... you investigate the assertions that a company makes on its financial statements" (Loughran 2010: 9).

There are two elements of interest to us here. First, the audit is an examination of records or evidence; and second, it is a validation check on the assertions made in those records. The "examination" component of an audit also explains the root of the term, from the Latin *audire*, meaning to listen. Both academic examinations and statements of accounts in the middle ages were delivered and quizzed orally. Let's hold on to the thoughts here for when we try to build a systematic understanding of knowledge audits a little later on: (a) a critical examination of evidence, and (b) a check as to the validity of assertions made about the business.

Crucially, the audit in this tightest sense is a purely descriptive exercise. Its output is an opinion, not a set of recommendations. The auditor takes no responsibility for ensuing actions. Regulatory mechanisms external to the auditor and to the client take care of that. The auditor is an impartial, uninvolved third party, whose sole role is to assess the validity of the assertions made as to the accuracy of their financial accounts.

So while the notion of a systematic review of evidence might make sense to us as knowledge auditors, the passiveness of a financial audit might not. There is no external regulatory framework in knowledge management to take care of ensuing actions for us. It's hard for us to see the utility of an assessment of accuracy of our statements on our knowledge management practices, without some guidance on follow-through. The financial audit may communicate rigour, but it provides little in the way of a model for a productive knowledge audit. The field of internal audit, now more commonly described as operational auditing, provides a no less tight, but a richer and more extensive understanding of the practice of auditing. Here, audits are examinations of mechanisms of control, that longstanding preoccupation of modern management. Here, more than with the financial audit, is our connection with the drivers behind the knowledge audit's ancestor, the communication audit.

An effective tool of managerial control is the internal audit, or, as it is now coming to be called, the operational audit... Although often limited to the auditing of accounts, in its most useful aspect operational auditing involves appraisal of operations generally... Thus operational auditors, in addition to assuring themselves that accounts properly reflect the facts, also appraise policies, procedures, use of authority, quality of management, effectiveness of methods, special problems, and other phases of operations (Koontz et al. 1976: 670-1; Chambers and Rand 2010: 4).

It is also in the practice of operational audits that we encounter the prescriptive audit – where findings lead to recommendations and specific guidance on potential improvements.

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. (Institute of Internal Auditors 2013; Chambers and Rand 2010: 5).

Operational audits start their work by looking at specific operational areas, i.e. the business functions of the organization. They examine the extent to which risk, control and governance are employed in the service of management objectives. However, they cannot take a completely functional view. All organisations are systems of interlocking and interconnected functions.

As the authors of a widely respected textbook on operational auditing point out, "Whereas the control processes operating within a function or department may be well defined and applied, there is the potential for control weaknesses at the point of interface with other related functions." They therefore stress the importance of an *audit universe* approach, organized around cross-organisational business processes. Department-oriented audits have the advantage of being tightly scoped and relatively easy to conduct. Business processes are more difficult to assess, because they cross business functions and reporting lines, but they are for that very reason more prone to failures in control, risk and governance, and therefore more worthy of attention (Chambers and Rand 2010: 11-12; 28-30).

What can the knowledge auditor gain from this audit model? First, the audit approach is more organic to the organisation's context and objectives than the financial audit. While being more difficult to implement and more demanding of auditor's skills, it is richer in its coverage and more likely to pick up actionable insights for management to consider.

Second, the functional orientation supplemented by the "audit universe" perspective, is a particularly useful concept for a knowledge management agenda – it is not © Patrick Lambe 2015 enough to examine specific functional siloes for their knowledge and information management practices and potential; many knowledge management concerns focus on how the organization as a whole exploits and leverages its knowledge.

Third, the operational audit espouses a theory of change: insight without action is limited in value. The operational audit is oriented towards empowering managerial decisionmaking in a way that the financial audit is not.

Thus far, operational audits would appear to contribute more towards a useful model to guide knowledge audits, than would financial audits.

Operational audits do have specific areas of focus and measurement: "They are looking for opportunities for business processes to be done differently so as to improve their effectiveness, efficiency and economy" (Chambers and Rand 2010: 15-16).

- Effectiveness means doing the right things it measures the extent to which planned objectives and outcomes are met;
- Efficiency means doing things well it measures the smoothness of the systems and processes that produce the outcomes, and is particularly concerned to reduce wastage, effort, mistakes and re-work; and
- Economy means doing things cheaply it measures the cost of actual effort versus planned effort.

In more recent years, three additional elements have been added to the operational auditor's scope, less easy to measure, but certainly amenable to evidence-gathering (Chambers and Rand 2010: 16):

- Equity avoidance of discrimination and unfairness, and recognition of the value of diversity;
- Environment behaving in an environmentally responsible way; and
- Ethics the conduct of staff and management is ethical in both moral and legal senses.

Thus far the operational audit model looks sound and reasonable. However, the application of this model in detail is problematic when it comes to knowledge management. What is an effectiveness measure for knowledge management? Is it the extent to which an organization has carried out its knowledge management objectives? Or is it the extent to which knowledge management can be shown to contribute towards overall business objectives of the organization? The former would seem easier to establish than the latter, unless the organization does not have KM objectives, and is conducting a knowledge audit precisely to establish them.

While it is easier to audit KM objectives isolated from the organisation's overall business objectives, this runs the risk of viewing KM as a functional silo and ignoring the "audit universe" exhortation – in principle an audit could reach a finding of effectiveness, efficiency, economy, equity, environment and ethics without any assurance that KM was contributing in a meaningful way to an organisation's overall performance.

The trouble is that while the contribution of KM to an organisation's performance is poorly understood (and it is very poorly understood, based more on intuition than

reproducible evidence), a traditional operational audit approach does not have the levers required to give actionable insights.

And indeed, when we look at the Chambers and Rand suggested approach to knowledge auditing, there is little in evidence in their measures about effectiveness, efficiency, economy, equity, environment or ethics. Their proposed audit observations (and presumably resulting recommendations) are guided by an understanding of generic good practices in KM without any foundational understanding of why they are supposed to be "good" and without any contextual basis for assessing their relative importance in different circumstances.

So, it is assumed, rather safely, that management needs to take action to ensure that the organisation recognizes the importance and value of knowledge and its effective management, but there is no guidance on how specifically that should be measured, nor even what it might look like in practice. The knowledge auditor is invited to find evidence that an "appropriate cultural tone" has been set for knowledge management, without any guidance on what "appropriate" means (Chambers and Rand 2010: 551).

What started out as a set of apparently rigourous measures – that may well work for auditing other organizational functions – ends up as a series of generic, hard-to-measure motherhood statements based on widely acknowledged generic practices.

The operational audit model gives us some useful ideas of how a knowledge audit might function and contribute, but it contributes little in the way of specifics. It is all very well to lay claim to "systematic, disciplined processes" covering risk management, control and governance, and we can see that these things would matter in a knowledge context. However, achieving that goal depends on having credible, measurable factors of observation and reporting, together with clear causal linkages to organizational performance, and this is where the operational audit model falls short. The workings of knowledge in enterprises just doesn't look as "hard" as other function-based or business-process-oriented audits.

We've already commented that the term "audit" can have very different applications, both tight and loose. If the tight definitions of "audit" don't meet our needs, what about the looser definitions? Perhaps the best place to start is inductively, with what knowledge managers themselves understand by the term.

What do KM Practitioners Mean by the Term "Audit"?

The variability of meaning we see in general usage also manifests itself in how KM practitioners understand the term "audit". There is little consistency or clarity of understanding. This introduces a great deal of ambiguity and potential for confusion in an activity that is often used as a foundation for knowledge management strategy development and planning.

Here are some examples of how KM practitioners have asked and answered questions about KM-related audits on some of the major online forums between 2008 and 2012.

October 2008 (sikmleaders@yahoogroups.com) Subject: Knowledge Culture Audit – How to? Do you know of anyone who could conduct an assessment of department to summarize how well its culture supports knowledge sharing?

Summarised replies:

- Conduct an organizational network analysis (ONA) or social network analysis (SNA).
- Conduct a knowledge architecture audit involving interviews, ethnographic studies and survey.
- Collect hundreds of stories from employees and visualize them in a quantitative way.
- Conduct a KM Capability Assessment using an online survey tool against a reference framework and with peer benchmarking capability
- Determine human information processing preferences of employees using a short individual survey.

September 2009 (ActKM Discussion List) Subject: Performing an audit using the Australian KM Standard

I am doing some work with an organisation who wish to perform an audit of their KM programme in the future (which is mostly information management at the moment) using the Australian KM Standard.

I don't see there's any reason why they can't compare what they are doing with the advice in the KM Standard but as it's an advisory not a prescriptive standard so measuring "compliance" is not really what the standard is about. This may just be a language issue as "audit" can mean many things.

Summarised replies:

- Use guiding questions: "What do I want to find out?"; "Why do I want to know?"; "How will I conduct the audit?"; "What is the business problem/opportunity I can help to solve using the audit?"; "How will I use the information from the audit to make that happen?"
- Use guiding questions: "What are the organisation's knowledge needs?"; "What knowledge assets does it have and where are they?"; "What gaps exist in its knowledge?"; "How does knowledge flow around the organization?"; "What blockages are there to that flow?"
- My first question is "Why?" "What is the problem they are trying to solve?"
- I have not audited against the guide but I know that others have.
- I have not used the KM Standard, either as a guide for any audit I have done in the past, nor as a tool for comparison.
- We used the framework of People, Technology, Process, Content used in the Standard and enquired from a sample population via email and focus groups how knowledge use fell into those areas participants said they learnt a lot from the process but not sure if the resulting tables had direct application.
- We use the KM Standard to guide our KM activities and run a regular survey using the four parts of the framework and a Knowledge Continuum ranging from basic to fully integrated.

• Managers want to be able to say they are complying with a national standard to reduce perceived risk, and they want to review their progress over time.

November 2012 (KM4Dev Listserv) Subject: Your advice on stocktaking/knowledge audit

We are doing a stocktaking of how far we got in implementing our 2007 KM strategy for better KM/KS /L as part of our business processes, people and technology. This should be an input to our efforts to define a way forward and implementation plan for the next three years... We seek your advice/practical tips in particular in how to undertake a stocktaking (knowledge audit).

Summarised replies:

- Conduct a survey and then focus group discussions, both face-to-face and through Skype. Once the survey results are analyzed and you have some key messages coming out of it, you can also follow-up with a short online discussion to validate those main findings.
- Surveys throw up a set of core issues, which then inform the focus groups/ workshops and interviews. We tend then to interview around events and critical decisions to see what knowledge and information is important in the organisation.
- I use a questionnaire to collect data on existing learning practices (and sources), knowledge generation (products), and knowledge sharing (question flows); I map the data and analyse the content to determine the learning and knowledge types.
- Examine the way people actually work as well as information artifacts and communication channels; I prefer the interview method to generate rich meaning and discovery but I also use surveys where applicable. But even in the survey, I allow for qualitative discovery and analysis.
- We ask people to give personal illustrations (stories) as examples to illustrate their replies to survey questions.
- In knowledge audits I include the multiple knowledges: biophysical, social, ethical, aesthetic and sympathetic. I don't use those technical words of course. I ask everyone involved to share, first their ideals, then their experiences, then their ideas for change then their ideas for action. In whatever action they choose we check against their ideals as we go. That way the audit is mutual which allows for collective learning and captures change.

December 2012 (ActKM Discussion List) Subject: Knowledge Audit Questions

It has been suggested to me that knowledge audits have been reduced to templates (i.e., a pre-existing set of questions). If true, that strikes me on the one hand as an indictment of knowledge audits and on the other hand as a sign that knowledge audits have been routinized... I'm also interested in your favorite knowledge audit questions.

Summarised replies:

- There's a difference between knowledge audits (which use workshops to map knowledge assets and knowledge flows) and knowledge management audits (which use surveys and interviews to uncover KM practices, processes, enablers etc).
- I think the knowledge audit would be most helpful in identifying what knowledge they need now and in the future, taking stock of what they currently have, and then identifying and addressing the gaps.
- I don't know that I've ever heard of a Knowledge Audit, in the sense of someone coming in and "measuring" some level of Knowledge Achievement, as (even to this date) there is no one globally accepted definition for what Knowledge even represents. However, I do know that there are Knowledge Assessments that are very much like audits that take things like a Knowledge Capability Inventory, and measure its components against things like a Knowledge Strategy.
- I've always thought a "knowledge audit" mainly pertained to identifying specific areas of explicit knowledge in the form of content (primarily) although it also could identify knowledge at risk or possessors of rare and valuable knowledge in the organization.
- Our knowledge assessment / audit poses these questions: "How do we find information?"; "How do we find our experts?"; "How do we retain critical knowledge?"; How do we learn and share across the organization to create new knowledge?"; "How do we learn and share publicly to create new knowledge?"
- An effective knowledge audit or assessment must recognize both living knowledge in people's heads, the tools for assessing this, and mechanisms for accessing and sharing it when and where it is needed for organizational needs, as well as explicit forms of knowledge.
- Knowledge management audits without a preceding knowledge assets audit tend to be very general and based on abstract notions of "best practice" the knowledge assets audit grounds knowledge management practices in real organisational knowledge requirements, and helps to prioritise and focus on practices that count.
- It occurs to me that a "knowledge at risk" assessment qualifies as a knowledge audit too.

Let's try to summarise the different understandings of KM-related audits being expressed here. The table below shows clearly that there are three different drivers of variation in how KM-related audits are understood: they can vary widely in terms of scope (what the audit is examining), operating model (the audit approach) and methods used (how the audit is conducted). They can also vary widely in how the three elements of scope, operating model and methods are combined with each other.

Audit Scope	Operating Model	Methods Utilised
Knowledge behaviours	Organisational climate assessment (presupposes presence of positive and negative factors and ability to identify them)	Network maps (knowledge flows)
KM practices	Discovery review (combines internal opinion-seeking with external insight)	Interviews, ethnographic study, survey

Knowledge behaviours	Discovery review (collective self- representation)	Story collection, content analysis, coding and analytics
KM capabilities and practices	Capability, maturity and benchmarking assessment	Survey following reference framework (KM capabilities and maturity), peer benchmarking
Individual information processing preferences	Discovery review (involves aligning individual preferences)	Survey
KM programme	Standards-based self- assessment	Assessment against business problems/ opportunities Surveys and focus groups to facilitate a learning conversation around the standards framework
Knowledge assets	Inventory of knowledge assets, gaps, flows	Knowledge mapping workshops
KM programme	Standards-based self- assessment and maturity assessment	Surveys
KM programme	Standards-based self- assessment and progress stocktake	Unclear
KM programme	Progress stocktake (implies reference to previous goals)	Survey, focus groups, interviews, discussion to validate findings
KM programme	Discovery review (multiple factors of analysis)	Survey, mapping of survey data on knowledge flows and content analysis of knowledge types
KM programme	Discovery review (multiple factors of analysis)	Observation, mapping of information assets and communication channels
KM programme	Discovery review (multiple factors of analysis)	Story collection in surveys
KM programme	Participative goal-setting, matching actions to ideals	Facilitated sharing sessions
Knowledge assets	Inventory of knowledge assets, gaps, flows	Knowledge mapping workshops
KM programme	Discovery review	Survey and interviews
Knowledge assets	Discovery review and stocktake of assets and gaps	Unclear
KM programme	Capability, maturity and content inventory	Survey and interviews, content inventory
Knowledge assets	Inventory of knowledge assets, risks, owners	Unclear
KM practices	Discovery review	Survey and interviews

Knowledge assets and KM practices	Inventory of knowledge assets, tools, processes	Assessment against business problems/ opportunities
Knowledge assets	Discovery review	Knowledge mapping workshops
Knowledge assets	Risk assessment	Unclear

Table 1. Variant understandings of KM-related audits among KM practitioners

The diagram below summarises the findings from the KM practitioner discussions in visual form.

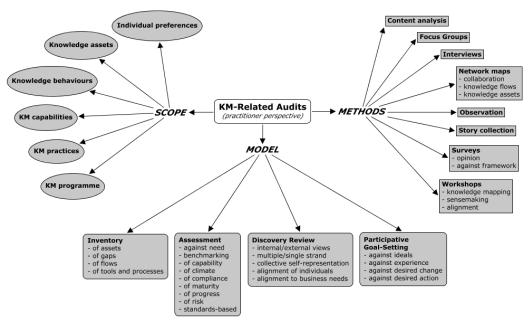


Figure 2. Factors of variation in the understanding of KM-related audits among KM practitioners

The inductive, naturalistic approach is helpful. We can break down different understandings of knowledge audits into three broad facets:

- the scope or focus area of the audit
- the operating model for the audit (from "tight" to loose")
- the methods to be deployed in the audit.

This is helpful because we can use this model as a planning and decision making for planning and conducting a knowledge audit, and we will explore this use later on in my book. The model is in fact borne out by variations in the understanding of knowledge audits in the research literature as well, going back to the prehistory of communication audits and information audits. Our ultimate goal is to reduce the confusion and ambiguity around the use of the phrase "knowledge audit" and provide a clear, comprehensive and usable framework that will help us define, design and scope a knowledge audit for any given set of needs.

For now, however, we can see that from the KM practitioners' point of view, there are at least four distinct operating models for a knowledge-related audit.

Inventory Audit – In this kind of audit, we are concerned mainly with creating an inventory of assets, gaps, flows, tools and processes related to the knowledge an

organization uses and may need. There is very little value judgment involved in this type of audit, and what is done with the results of the audit is left open. The audit itself is primarily descriptive, although it would usually be followed by an analysis and prescriptive phase. Note that this is also a possible meaning of the term "audit" in common usage. Oxford Dictionaries gives the following example: "a complete audit of flora and fauna at the site". Inventory audits can be used in conjunction with any of the other audit types below.

Assessment Audit – There are a number of different types of assessment audit, but they all involve evaluation and prescription of some kind. The reference model for the evaluation can vary in strictness, from standards, to guidelines, to benchmarking factors, to a "best practice" framework, to expert external assessment, to measurement of needs versus supply, to internal authoritative opinions gathered through instruments such as surveys and interviews. An assessment audit is highly prescriptive, often appealing to an external authority. In common usage, Oxford Dictionaries gives this example: "the situation will then be reviewed after a safety audit."

Discovery Review Audit – The discovery audit is much more open-ended. It seeks to gather evidence of any combination of knowledge assets, knowledge behaviours and use, issues around knowledge use, knowledge gaps and knowledge priorities. It often follows multiple lines of inquiry, examining the organisation's environment from multiple perspectives. It typically has an analysis and sensemaking phase that take some reference to the organization's espoused strategy and needs. The main difference between the assessment audit and the discovery audit is that the assessment audit tends to take a deductive "authority-based" approach, evaluating an organization against an external reference model, and the discovery audit tends to take an inductive approach, gathering an evidence base first, and then drawing conclusions from the findings, against an internally generated set of priorities. Discovery audits are also prescriptive, but priorities and goals are more often internally driven than externally driven. This type of audit is also implied in common usage – Oxford Dictionaries has this example: "Start by completing an audit of the existing lighting systems, assessing both the condition and the performance of all components in the system."

Participative Goal-Setting Audit – This is probably the most open form of audit we encountered in the practitioner discussions. As we'll see from our discussion of organizational improvement and self-assessment methods later on in this chapter, it is an approach that has been emerging for some decades, and is frequently connected with the work of David Bohm on dialogue. In this form of audit, there is a facilitated process and a loose framework to guide an organization or a group through a self-reflection, mutual understanding and alignment process. To be effective, this kind of audit also needs a prescriptive phase leading to decisions on action, but this is entirely self-driven. This type of audit is not obviously represented in common usage for the term "audit".

The typology of audit models that emerges from KM practitioners seems to be largely borne out by the research literature as well. A review of the literature on communication, information and knowledge audits from the 1950s onwards finds all four types of audit represented – with two significant additions:

1. The information audits of the 1980s and 1990s introduced the asset-focused **Value Audit.** While it has strong connections with an Inventory Audit, it goes

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beyond the inventory of assets. The stimulus came from corporate libraries and information services that needed to demonstrate the value of the services they provided in relation to their costs. They therefore have some influences from the "value for money" branch of financial audits (Robertson 1994).

2. Beginning in the 1990s, a branch of communication audits began to be heavily influenced by clinical and medical records audits, where the focus was on Learning Audits (Hargie and Tourish 2000). In clinical records audits, medical treatment records are reviewed, with the goal of determining patterns of outcomes for different treatment approaches, with the goal of minimizing adverse outcomes, and maximizing positive outcomes (Lembcke 1956; Fraser 1982; Baker et al 1999). Learning Audits have a lot in common with Discovery Review Audits, but they have very focused learning goals, and their scope is generally very tightly defined.

Both value audits and learning audits have great value for knowledge auditing, for obvious reasons. Taken together with the four operating models derived from an examination of KM practitioner understandings of knowledge audits, we now have a framework for knowledge auditing that helps us plan what kind of audit we want to conduct, and what the scope of our audit covers. From there, we can start to identify the kinds of tools and methods that might be appropriate.

This essay comprises excerpts from my forthcoming book: *Knowledge Audits and Knowledge Mapping* (Oxford: Chandos, 2016)

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