Baselines for knowledge management and organisational learning initiatives

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Abstract

Baselines are essential to measuring the impact of knowledge management/organisational learning (KM/OL) initiatives, as without them change over time cannot be robustly assessed. A baseline describes and measures conditions for those intended to benefit from the intervention and of its operating context before it starts. This article advances a theoretical approach and methods for describing, measuring, and assessing change of a baseline for KM/OL initiatives within a group (team, department, organisation). It outlines how the Knowledge, Attitude and Practice (KAP) survey approach can be adapted for the purpose of formulating and measuring proxy indicators of performance. It also suggests how key informant interviews can be used to measure baseline operating context. Steps in assessing change over baseline are described, as well as identifying additional evaluation approaches that could be used to complement these approaches when conducting impact and other evaluations of KM/OL initiatives. Inherent limitations in the KAP survey approach and risks during measurement of baselines are discussed with suggestions for mitigating actions. The article concludes that the theoretical approach and methods described can substantially address challenges in measuring the impact of KM/OL initiatives that arise because most knowledge is tacit, and its application usually occurs in private or subtle ways.

Keywords: baseline; description; indicators; measurement; methods; approaches; surveys; interviews; evaluation; knowledge management; organisational learning.

Introduction

This article advances a theoretical approach and methods for baselines of knowledge management/organisational learning (KM/OL) initiatives within a group (team, department, organisation).

Understanding the impact of KM/OL initiatives (in evaluation terms, what works, where, for whom and why) presupposes a successful chain of evidence gathering and analysis. Working
backwards, in logframe or theory of change terms, evidence is needed on an intervention’s outcomes, outputs, and inputs. However, before any of that evidence is gathered, the baseline conditions before the intervention starts should be understood (USAID, 2010).

As an intervention unfolds, baseline evidence can help to understand the scale and direction of any changes observed at higher levels of the logframe that may have been contributed to by the intervention. Before implementation, it can also help to finalise the intervention design, by highlighting risks, assumptions, the distribution of need, and suggest realistic target levels for performance indicators to be monitored.

Without a baseline, it is much harder to make a robust case about the contribution the intervention made to observed changes over time. For example, a learning group with 20 active members at the end of an intervention could be a success. We might look at this differently if we had known that it actually displaced three pre-existing groups with a total of 30 active members, or that the parent organisation’s staff numbers increased two-fold during the same period of time.

Putting to one side consideration of the many approaches, methods and tools we might select to conduct an impact evaluation of a KM/OL intervention, this article focuses on how to describe, measure and assess a baseline.

The theoretical approach and methods set out in the article assume a relatively high level of time, resources and organisational buy-in are available to those measuring the impact of a KM/OL intervention. Where this assumption is not reasonable, a few tactics (in order of preference) might be followed. Firstly, advocating for appropriate support through engaging internal and external champions for accountability and learning (e.g. oversight committees and external funders). Secondly, asking the intended users of impact measurement to prioritise a sub-set of the KM/OL intervention’s high-level aims to be assessed (however, this will limit the scope of any subsequent evaluation). Thirdly, reducing the level of statistical significance sought to allow for a smaller sample size (however, this will limit the strength of evidence and robustness of findings). Hopefully, this article can contribute to raising awareness of the necessity and practicality of baselines for impact measurement of KM/OL interventions such that you won’t find these tactics absolutely necessary.

**How to describe a baseline**

Baseline conditions should be seen as encompassing both those people intended to directly benefit from the KM/OL intervention and its context. Gathering evidence on those baseline conditions could become a very extensive exercise unless some boundary is placed around the task. We should be aiming at sufficiency for the uses and users that the eventual impact
evaluation addresses. Too little or too much effort will be hard to justify. This boundary can be wrapped up in what we can call the baseline description. For the KM/OL intervention, the baseline description should:

1. Characterise and quantify (with gender and social disaggregation, and sub-groups if appropriate) the people intended to directly benefit from it.
2. Identify the location(s) where it will take place.
3. Note its start and end dates, and any intermediate review point(s).
4. Describe its operating context (e.g. related external stakeholders, systems, and influences that might enable or constrain implementation).
5. Describe the eventual evaluation users (e.g. staff, managers, directors, funders, publics) and uses (e.g. learning, accountability, strategy, innovation, scaling).
6. Suggest relevant performance indicators (i.e. quantitative and qualitative measures, which when taken together help to build up a picture of whether the desired effect is being achieved or not).

The information needed to write the baseline description is likely to be largely available within the design document for the KM/OL intervention. If that’s the case, the main task will be to validate the information and fill any gaps. If much of this information is missing in the design, it will need to be collected in consultation with the KM/OL intervention’s champion and intended implementers. New information collected will need to be fed into a revision of the design document to maintain coherence between it and the baseline description.

**Performance indicators within a baseline description**

One area where information is likely to be lacking, is that of performance indicators. As the call for this issue of the KM4Dev Journal highlights, while process indicators are fairly common (e.g. number of knowledge products produced and downloaded – inputs and outputs), performance indicators are rarer (e.g. contribution to capability and effectiveness – outcome and impact). While the design document may set out high-level aims, related performance indicators are often missing. Examples of such high-level aims could include a KM/OL intervention’s contribution to:

- Achieving strategic/operational objectives
- Utilisation of explicit knowledge assets
- Socialisation of tacit knowledge between actors
- Deepening of learning cultures/behaviours
- Participation in reflective/discursive processes
- Navigation of peer networks

Defining relevant performance indicators that can be reliably and cost-effectively observed and verified is a challenge for KM/OL initiatives. Again, as the journal call for papers highlights, KM/OL activities often defy measurement because most knowledge is tacit and its
application usually occurs in private or subtle ways. For example, your accumulated knowledge is helping you to critically assess the information in this article as you read it. But an understanding of baseline conditions can iteratively help us to move from abstract to more concrete discussions of performance indicators. It can do this by helping us to construct robust proxy indicators of performance before the KM/OL intervention starts. Proxy indicators, as the name suggests, help to infer a change in something that is hard to observe directly (e.g. individual application of acquired knowledge or informal knowledge sharing) by measuring something closely related that is more obvious. The inherent limitation of proxy performance indicators is that any contribution to change is only inferred. As such, direct causality between the KM/OL intervention and change can’t be claimed. But if this methodological limitation is made clear to the users of the baseline and any impact evaluation using it, it is still a valid and useful approach. This limitation can be mitigated in a subsequent impact evaluation by using other methods (e.g. case studies) to generate additional data that can triangulate that obtained from the proxy performance indicators.

So, the baseline description should list the KM/OL intervention’s high-level aims, propose related proxy indicators and then set out to validate and enrich these as part of the pre-testing of the baseline data collection tool(s). Refined proxy indicators can then be used in the full baseline measurement stage. The advantage of this approach is that the relevance of the proxy indicators is improved through direct contact with reality, rather than remaining largely hypothetical. This still leaves the question of how to first go about proposing proxy indicators to be tested.

**Utilising KAP survey approaches to formulate proxy indicators**

A way forward is to draw on the Knowledge, Attitude and Practice (KAP) survey approach used widely in public health and social programmes at community level (e.g. family planning, child protection). A KAP survey is a quantitative study of a specific population that collects information on what people know, how they feel and how they behave in relation to a particular topic (Save the Children, 2012; WHO, 2008). KAP surveys collect data using a standardised questionnaire that can be analysed quantitatively. The standardised and quantifiable characteristics of KAP surveys lend themselves to understanding baseline conditions for impact evaluation because if repeated at intervals (pre-start, mid-point, end) they can produce evidence that can be compared over time. The fact that KAP surveys focus on people’s thoughts and behaviours also lends them to KM/OL initiatives, as these are fundamentally concerned with supporting people in groups to learn and act.

It is worth noting though that KAP surveys are not without limitations (Launiala, 2009), many of which are common to standardised questionnaire survey methods. Firstly, questions assessing awareness of a particular aspect of knowledge implicitly exclude answers about other types of knowledge that the survey designer may not be aware of, but respondents are.
Secondly, leading questions that imply a favourable or socially acceptable answer can bias responses about attitudes. Thirdly, questions asking about behaviour in relation to certain practices will not gather data on other related practices that may also be prevalent. These risks can be mitigated in at least two ways:

- Inclusion of open ended ‘additional comments’ answer options to collect qualitative data. KAP surveys don’t usually do this to keep costs down, but for KM/OL initiatives the survey populations are likely to be comparatively small, so cost is less of an issue.
- Careful question formulation to avoid leading questions (e.g. do not use positive/negative qualifiers in questions, such as: ‘Do you use good practices to support learning?’ or ‘How often do you decline offers to engage in knowledge sharing events?’)

Let’s work through an example of formulating proxy indicators using the examples of high-level aims for KM/OL initiatives referred to above, and assuming the intervention aims to be of benefit to staff in an organisation. Table 1 below has four columns, and in the first column the high-level aim is stated. For each high-level aim, the remaining three columns suggest proxy indicators for each KAP element (i.e. knowledge, attitude, practice). This provides three ways of looking at the extent to which different types of change occur once the intervention is underway. This in itself is an advantage as it allows the triangulation of data, which can make analysis more robust and insightful, compared to using a single data source.
### Table 1. KM/OL baseline proxy indicator example

<table>
<thead>
<tr>
<th>High-level aim – contribution to:</th>
<th>Knowledge proxy indicator</th>
<th>Attitude proxy indicator</th>
<th>Practice proxy indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieving strategic/operational objectives</td>
<td>What do staff know about staff experience and know-how currently helping to achieve strategic (or) operational objectives?</td>
<td>How do staff perceive the contribution of staff experience and know-how to achieving strategic (or) operational objectives?</td>
<td>How widespread in the last 12 months is the practice of staff drawing on the experience and know-how of other colleagues to help achieve strategic (or) operational objectives?</td>
</tr>
<tr>
<td>Utilisation of explicit knowledge assets</td>
<td>What do staff know about how explicit knowledge assets are intended to be used?</td>
<td>What do staff believe are appropriate ways that others are using explicit knowledge assets?</td>
<td>How widespread in the last 12 months is the practice of staff using explicit knowledge assets produced for them?</td>
</tr>
<tr>
<td>Socialisation of tacit knowledge between actors</td>
<td>What do staff know about ways to share their experience and know-how informally with others?</td>
<td>How do staff believe others would view them taking time out for informal knowledge sharing?</td>
<td>How widespread in the last 12 months is the practice of staff using experience and know-how shared with them informally?</td>
</tr>
<tr>
<td>Deepening of learning culture/behaviours</td>
<td>What do staff know about the desired learning culture (or) learning behaviours?</td>
<td>How do staff perceive the priority attached to learning culture (or) learning behaviours?</td>
<td>How widespread in the last 12 months is the practice of staff observing leadership on learning culture (or) learning behaviours?</td>
</tr>
<tr>
<td>Participation in reflective/discursive processes</td>
<td>What do staff know about ways to facilitate reflective (or) discursive processes?</td>
<td>How do staff believe others would view their participation in reflective (or) discursive processes?</td>
<td>How widespread in the last 12 months is the practice of staff taking time out to reflect (or) discuss with others?</td>
</tr>
<tr>
<td>Navigation of peer networks</td>
<td>What do staff know about the experience and know-how available from their peers?</td>
<td>What do staff believe are appropriate ways that others are using their peer network?</td>
<td>How widespread in the last 12 months is the practice of staff seeking advice from peers outside of their immediate team?</td>
</tr>
</tbody>
</table>
The proxy indicators in Table 1 for knowledge are formulated around what staff already know about a concrete aspect of the organisational culture or practice that the high-level aim is addressing. The proxy indicators for attitude are formulated around what staff feel (perceptions and beliefs) about how others act, or about how others see them acting in relation to the high-level aim. The proxy indicators for practice are formulated around what staff recall about how often an aspect of the high-level aim has been performed by them or others in the past. As you’ll see, the basic formulation has common elements. The task each time is to draw out, using your experience of KM/OL, a process- or method-based scenario that might be expected to occur when the intervention pursues that high-level aim. The intervention’s design document and intended implementers should be consulted to validate these scenarios.

The KAP survey approach isn’t the only way to structure and formulate proxy indicators for an KM/OL baseline. In the Outcome Mapping approach, the baseline seeks to highlight sub-sets of people intended to benefit from an intervention, and describes their current behavioural status in relation to the outcomes an intervention is seeking to achieve (Nyangaga, 2014). However, the approach is less attractive than KAP surveys for our purpose. It focuses on ‘limiting’ behaviours (deficits) that could block achievement of the outcome and pays little attention to baseline enabling factors.

**How to measure a baseline**

The KAP survey approach again offers a helpful way to design and plan how we go about measuring baseline performance indicators. A separate approach is needed to measuring baseline operating context, Key Informant Interviews - more on this later. Both approaches aim to produce a form of measurement that is sufficiently robust and clear to enable it to be repeated at later intervals in the life of the KM/OL intervention and by other people, should the original investigator(s) not be available.

**Measuring baseline performance indicators**

For the measurement of baseline performance indicators, having formulated proxy indicators the next step is to develop a standardised questionnaire tool. This should be pre-tested, revised, and then administered with a sample of people intended to directly benefit from the KM/OL intervention.

KAP survey standardised questionnaires largely aim to produce quantifiable data. So, for each proxy indicator, survey questions that have multiple choice, ranking or Likert scale

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1 Likert scales construct answer options on interval levels
type answers need to be produced. Open text boxes to record qualitative data should also be provided for additional comments for each survey question. Taking the first row of proxy indicators from Table 1, examples of questions are provided in Table 2 below. In practice one type of answer per proxy indicator may be sufficient, but additional ones would give greater depth.

Table 2. Example questions in multiple choice, ranking and Likert scale types

<table>
<thead>
<tr>
<th>Knowledge proxy indicator: What do staff know about staff experience and know-how currently helping to achieve strategic (or) operational objectives?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What areas of staff experience or know-how do you believe are currently helping to achieve strategic objectives? (Do not read aloud. Circle all mentioned.)</td>
</tr>
<tr>
<td>1. Partnerships</td>
</tr>
<tr>
<td>2. Innovative methods</td>
</tr>
<tr>
<td>3. Client needs</td>
</tr>
<tr>
<td>4. Lessons from failure</td>
</tr>
<tr>
<td>5. Opportunities</td>
</tr>
<tr>
<td>6. Good practices</td>
</tr>
<tr>
<td>Additional comments that don’t fall into any category above (please record below)</td>
</tr>
<tr>
<td>Please rank the top three areas of staff experience or know-how that currently help to achieve strategic objectives (fill in the number 1, 2 or 3: 1 = most important):</td>
</tr>
<tr>
<td>__ Partnerships</td>
</tr>
<tr>
<td>__ Innovative methods</td>
</tr>
<tr>
<td>__ Client needs</td>
</tr>
<tr>
<td>__ Lessons from failure</td>
</tr>
<tr>
<td>__ Opportunities</td>
</tr>
<tr>
<td>__ Good practices</td>
</tr>
<tr>
<td>Additional comments (please record below)</td>
</tr>
<tr>
<td>How strongly do you agree or disagree with the following statement: ‘People who have been working at the organisation for a year or more are well aware of the staff experience and know-how currently helping to achieve strategic objectives’?</td>
</tr>
<tr>
<td>__ Strongly agree</td>
</tr>
<tr>
<td>__ Agree</td>
</tr>
<tr>
<td>__ Disagree</td>
</tr>
<tr>
<td>__ Strongly disagree</td>
</tr>
<tr>
<td>__ Don’t know</td>
</tr>
<tr>
<td>Additional comments (please record below)</td>
</tr>
</tbody>
</table>

Attitude proxy indicator: How do staff perceive the contribution of staff experience and know-how to achieving strategic (or) operational objectives?

<table>
<thead>
<tr>
<th>What are your reasons for contributing experience and know-how to achieving strategic objectives? (Do not read aloud. Circle all mentioned.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To challenge assumptions</td>
</tr>
<tr>
<td>2. To highlight practitioner viewpoints</td>
</tr>
<tr>
<td>Please rank the top three reasons why staff experience and know-how currently make a contribution to achieving strategic objectives (fill in the number 1, 2 or 3: 1 = most important).</td>
</tr>
<tr>
<td>__ Challenge assumptions</td>
</tr>
<tr>
<td>How strongly do you agree or disagree with the following statement: ‘Staff experience and know-how currently make a large contribution to achievement of strategic objectives’?</td>
</tr>
<tr>
<td>__ Strongly agree</td>
</tr>
<tr>
<td>__ Agree</td>
</tr>
<tr>
<td>__ Disagree</td>
</tr>
</tbody>
</table>
Once questions have been developed for all of the proxy indicators to be covered in the baseline, it is important to pre-test the survey tool. This should first be done within the survey team and then with a small sub-set of those intended to benefit from the KM/OL intervention. Since these beneficiaries will be asked in the pre-test to give feedback on the

<table>
<thead>
<tr>
<th>Practice proxy indicator: How widespread in the last 12 months is the practice of staff drawing on the experience and know-how of other colleagues to help achieve strategic (or) operational objectives?</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>What activities are you aware of where staff have drawn on colleagues’ experience or know-how to achieve strategic objectives in the last 12 months? (Do not read aloud. Circle all mentioned.)</td>
<td>Please rank the top three activities where staff have drawn on other colleagues’ experience or know-how to achieve strategic objectives in the last 12 months (fill in the number 1, 2 or 3: 1 = most important):</td>
<td>How strongly do you agree or disagree with the following statement: ‘In the last 12 months staff have frequently drawn on other colleagues’ experience and know-how to help achieve strategic objectives’?</td>
</tr>
<tr>
<td>1. Designing</td>
<td>__ Designing</td>
<td>__ Strongly agree</td>
</tr>
<tr>
<td>2. Planning</td>
<td>__ Planning</td>
<td>__ Agree</td>
</tr>
<tr>
<td>3. Reviewing</td>
<td>__ Reviewing</td>
<td>__ Disagree</td>
</tr>
<tr>
<td>4. Partnering</td>
<td>__ Partnering</td>
<td>__ Strongly disagree</td>
</tr>
<tr>
<td>5. Adapting</td>
<td>__ Adapting</td>
<td>__ Don’t know</td>
</tr>
<tr>
<td>6. Implementing</td>
<td>__ Implementing</td>
<td>Additional comments (please record below)</td>
</tr>
<tr>
<td>Additional comments that don’t fall into any category above (please record below)</td>
<td>Additional comments (please record below)</td>
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</tbody>
</table>

Once questions have been developed for all of the proxy indicators to be covered in the baseline, it is important to pre-test the survey tool. This should first be done within the survey team and then with a small sub-set of those intended to benefit from the KM/OL intervention. Since these beneficiaries will be asked in the pre-test to give feedback on the
survey tool, they should not be included in the actual sample of respondents as they will have prior knowledge that could bias their answers. They should also be told this is a pre-test and that their answers will not be used in the baseline analysis. The Save the Children (2012) document ‘Knowledge, Attitude and Practice Surveys in Child Protection’ provides helpful tips on pre-testing:

- Identify questions respondents do not understand. Many ‘don’t know’ answers indicate that the question and/or response categories need rephrasing.
- Many ‘additional comments’ responses to multiple choice questions indicate the need to revise the response categories to cover common ‘additional comments’.
- Questions that appear to have been answered earlier in the survey indicate the need to look at the flow/sequencing and/or distinctiveness of questions.
- Very similar answers to Likert scale questions may indicate leading questions that need to be rephrased to avoid bias.
- Identify if the survey takes too long to administer. More than half an hour will be tiring and reduce the quality of answers to later questions.
- Review if overall the answers received are providing the kind of data (quality and completeness) you need. If necessary, delete redundant questions or add additional ones.

After the survey tool has been revised based on pre-testing, it can be administered before the KM/OL intervention starts with the people intended to directly benefit. For some initiatives, the number of people intended to benefit may be relatively small and so everyone can be included in the survey. If the number is large, and cost would prohibit surveying everyone, then a sample needs to be constructed. A random sample is most rigorous, either of the entire population of people intended to benefit or within several groups that need to be represented (e.g. people in different locations or in different roles within the organisation). Statistical methods for sampling are beyond the scope of this article, but further information can be found at: http://www.socialresearchmethods.net/kb/sampling.php

Good practice should be followed for administering the survey, coding the answer data and analysing the data. As for other standardised surveys, these practices are common for KAP surveys, and so are not covered in detail in this article. Key points to note are:

- Those administering the survey should have a common awareness of and approach to how to conduct interviews and record the answers. This helps assure consistency and is best achieved through a formal briefing session for administrators with the KAP survey designer.
- Those interviewed should be given prior knowledge about the purpose of the survey, how the information they give will be stored and used, how their privacy will be protected, and their right to withdraw consent.
• Answer data should be coded in a pre-structured spreadsheet or database and the quality of data entry should be checked, especially if there is a large sample and/or multiple people are coding data (e.g. by spot checks against survey records).
• Analysis of the data set should involve triangulation to improve robustness and generate deeper insights (i.e. by comparing aggregate data for different questions for the same proxy performance indicator, or by comparing findings from two or more people analysing the same data set).

Measuring baseline operating context

The operating context for the KM/OL intervention (e.g. related systems, influences and external stakeholders) may have been described in the design document and used to help write the baseline description. However, depending on how long ago and how systematically the evidence underlying the design was collected, it will often be necessary to validate or deepen this at the time the baseline is measured.

Measuring baseline operating context is important for two main reasons. Firstly, the operating context for a KM/OL intervention may significantly affect what can be achieved and why. This will be because of a range of factors that are largely beyond the scope of the KM/OL intervention to influence. These factors can include:

• Institutional structures and systems within which the group intended to benefit from the KM/OL intervention is situated (e.g. formal roles and responsibilities, pay and incentives, information security and confidentiality rules, corporate governance and ethics, etc.).
• Cultures and norms that shape individual, group and social behaviour (e.g. inclusion and exclusion based on gender, ethnicity, age, physical and mental ability, etc.).
• Political and economic conditions and trends that shape the space within which discourse and agency is possible (e.g. democratic freedoms, media plurality, predictability and sustainability of funding streams, corruption and transparency, etc.).
• Technology infrastructure and costs that affects the ease and reliability of communication (e.g. electricity supply, voice and data networks, internet firewalls, etc.).

Secondly, the operating context may include stakeholders external to the group who are pursuing related or parallel aims that could also contribute to observed changes over time. These can be thought of as potential rival explanations for performance. For instance, during implementation we may observe a positive change in the behaviour of staff drawing on other colleagues’ experience and know-how. However, we might view this differently if we knew that in parallel, a majority of the same people had attended a team building retreat sponsored by one of the parent organisation’s funders. These external stakeholder factors can include:

• Organisers of practice or thematic events and networks
Suppliers of knowledge assets or metadata
• Providers of capacity development or mentoring opportunities
• Champions of management or administrative change approaches

Measuring baseline operating context could become too wide-ranging an exercise in its own right if we sought to check for all of the factors suggested above. So, in this instance a standardised quantitative survey is not recommended. A key informant interview (KII) approach using a semi-structured question tool to gather qualitative evidence should be sufficient. This is because evidence on the baseline operating context will be used to help with the interpretation of findings about performance measured through proxy indicators, rather than needing to be a source of findings in its own right.

As the name suggests, a KII approach should include a sample of people who are already knowledgeable about the operating context of the KM/OL intervention. This sample can be purposive, rather than randomised, as we are not seeking to generate statistically representative findings. A purposive sample in this instance could include one or two people from the following groups:
- People intended to benefit from the KM/OL intervention
- Senior/long-standing staff of the parent organisation
- External stakeholders of the parent organisation (e.g. advisory board members)
- External experts working in the same practice or thematic area as the parent organisation

It is not uncommon to use ‘snowballing’ as part of the purposive sampling. This involves the expansion/adjustment of the sample based on the highlighting of the most relevant key informants during early interviews. Snowballing can help to improve the quality of the purposive sample.

To keep the baseline operating context KIIIs manageable and insightful, the semi-structured questions should largely be open ended and encourage the interviewer to seek additional information through follow-on questions. Depending on the key informant, the interviewer should also skip less relevant questions. Open ended questions could include:
1. What do you think are the most significant internal factors affecting knowledge sharing and learning in the organisation?
2. Which wider social beliefs do you think might affect how knowledge is shared and used in the organisation?
3. Do you know of any political or economic influences that could be shaping how freely people talk and act in organisations like this?
4. Can organisations like this rely on and afford good communication tools, and if not, what are the constraints?
5. Are there other actors or organisations pursuing similar knowledge sharing and learning objectives or activities you think are related, and if so what are these?

Good practice for conducting the semi-structured interviews should be followed. Key points to note are:

- Those conducting the interview should use an identical interview script and have a common approach to recording the answers.
- Those interviewed should be given prior knowledge about the purpose of the interview, how the information they give will be stored and used, how their privacy will be protected, and their right to withdraw consent.
- Answer data should be collated in a pre-structured table and the quality of data entry should be checked, especially if there is a large sample and/or multiple people coding (e.g. by spot checks against survey records).
- Analysis of the data set should seek to identify the most commonly occurring patterns in the aggregate data and any significant outliers.

**Validation and sense-making**

With baseline data collected and analysed for proxy performance indicators and operating context, the final two steps are to validate the provisional findings and seek to make sense of them. Both steps should be conducted in a participatory way to increase the legitimacy of the baseline and promote its use. By this stage the findings should not enable the identity of respondents to be associated with any individual or aggregate data so as to respect privacy.

Validation can be conducted by sharing provisional findings with those who have been surveyed for the proxy performance indicators and interviewed for the operating context. This should be done through individual communication (e.g. by email), so that the confidentiality of feedback is assured. Those who analysed the data should revise findings as necessary considering the strength and frequency of feedback, but should preserve their independence.

Sense-making can be supported by presenting and discussing the validated findings with the intended users of the eventual impact evaluation. A face-to-face workshop or webinar is probably the most effective way to promote group reflection on the findings, discussion that situates them within plans to implement the KM/OL initiatives, and planning for how to use them in subsequent impact evaluation. In particular, this is the time to set realistic target levels for the proxy performance indicators for ongoing monitoring. The workshop may ask: ‘Given the baseline, how much change in different areas should be aimed at and by when?’

**How to assess change**
With the baseline in place and target levels for proxy performance indicators agreed, the next step is to plan how to assess change. In one regard this is straightforward. The KAP survey and KIIs can be repeated at appropriate intervals across the implementation of the KM/OL intervention. Once after completion (end line) is necessary for impact assessment. How soon after completion depends largely on how the design of the intervention predicts that delivery of inputs and outputs will translate into outcomes and impact. A good intervention design will have considered whether there will be any substantial lags between the achievement of outcomes and their impact. For example, the KM/OL intervention may aim to contribute to the utilisation of explicit knowledge assets. However, if the window of opportunity to do so is linked to planning or funding cycles that occur after the intervention is planned to finish, the KAP survey and KIIs for impact evaluation should not be repeated until after that window has opened.

If the KM/OL intervention has a long or very intense implementation phase, or if the evidence underpinning its design had many gaps, it may also be appropriate to repeat the KAP survey and KIIs at an intermediate point. A mid-term evaluation (effectively a review of intermediate outcomes and prospects for impact) can be used as a feedback loop to adapt later stages of implementation. If necessary, it can also be used to revise the scope of proxy performance indicators and target levels if these are not seen to be useful or realistic. This would need to be transparently documented. This would also be the case if the KAP survey and KIIs were repeated earlier than the mid-point to improve project design. Such a formative evaluation can also help the KM/OL intervention to pivot or re-boot. This is especially the case if there have been significant delays between the project design and implementation, during which time the operating environment or partners may have changed (DFID 2013).

In all cases, findings from repeated KAP surveys and KIIs should be compared against the original baseline evidence to assess the scale and direction of any changes observed, that may have been contributed to by the intervention. As proxy performance indicators have been used, and the operating context evidence is not statistically significant, the contribution to change is only inferred. Stronger claims about causality and deeper insights into why this has occurred can be made if the impact evaluation uses additional approaches and methods to triangulate data. It is beyond the scope of this paper to discuss additional approaches/methods in detail, but Table 3 sets out some that appear most complementary to KM/OL initiatives and indicates the level of effort involved.

Table 3. Additional approaches/methods for impact evaluation of KM/OL initiatives

<table>
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<tr>
<th>Approach</th>
<th>Rationale for use/methods</th>
<th>Level of effort</th>
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Case Studies\(^2\) | Multiple case studies allow triangulation of data by exploring different instances of where the KM/OL intervention may have contributed to change. Document review and KII methods can be used to gather qualitative data for analysis. | High
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Most Significant Change\(^3\) | Multiple qualitative stories of change from which the most significant are selected by a review group. Focus group and interview methods can be used to gather stories from those intended to benefit from the KM/OL intervention. | Medium
After Action Review\(^4\) | Captures reflection prompted by discussion of what was intended to happen, what actually happened, why it happened, and what can be learned? Focus group method with impartial but informed facilitation and documentation for those intended to benefit from and those implementing the KM/OL intervention. | Low

Once KAP surveys, KII and any additional approaches/methods have been completed and the evidence gathered has been analysed, the final steps are to validate the provisional findings and seek to make sense of them, as discussed above.

Conclusion

Baselines should form part of the evaluation of KM/OL initiatives. Without evidence about baseline conditions before the intervention starts, it is much harder to make a robust case about the contribution made to observed changes over time. The challenges in measuring the impact of KM/OL initiatives (i.e. because most knowledge is tacit and its application usually occurs in private or subtle ways) can be substantially addressed by developing proxy performance indicators as part of describing and measuring a baseline. Existing practice in the public health and social programming sector using the Knowledge, Attitudes and Practices (KAP) survey approach can be adapted for this purpose. KAP surveys have limitations and risks in their design, administration, analysis and reporting, but these can be substantially mitigated through adoption of existing good practices in the field of evaluation. Definition and measurement of baseline operating context is also necessary to analyse factors outside of the KM/OL intervention’s influence and which may also constitute rival

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\(^3\) Davies, R and Dart J (2005) ‘The Most Significant Change (MSC) Technique’.

\(^4\) Overview and guides on After Action Review: [http://www.betterevaluation.org/evaluation-options/after_action_review](http://www.betterevaluation.org/evaluation-options/after_action_review)
explanations for observed changes. This can be accomplished through a key informant interview (KII) approach. Change over the baseline can be assessed at different intervals (formative, mid-term, impact/endline) by repeating the KAP survey and KIIIs and comparing new evidence to the baseline. However, as proxy performance indicators have been used and the operating context evidence is not statistically significant, the contribution to change is only inferred. Stronger claims about causality and deeper insights into why this has occurred can be made if the impact evaluation uses additional approaches and methods to triangulate data. Potential approaches include case studies, Most Significant Change, and After Action Review. At each stage of reporting (i.e. on the baseline and subsequent intervals), provisional findings should be validated with respondents and sense-making supported with evaluation users using participatory approaches to improve quality and utilisation.

References


About the author

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