KM COLUMN

SEPTEMBER 2005

Conducting intranet needs analysis

The fundamental question to ask for all intranets is: what is the intranet actually for? While this is an easy question to ask, answering it meaningfully involves gaining an in-depth understanding of staff and organisational needs.

While much has been written about the design of intranets, less is said about how to ensure that the intranet contains useful information and tools.

At the end of the day, staff will use an intranet if it is useful. To ensure this, there are a range of practical 'needs analysis' techniques that can be used to identify staff (and organisational) requirements.

This article provides an overview of these techniques, as well as discussing how to analyse and use the results of the research.

Ensuring usefulness

Much effort is being put into ensuring that intranets are *usable*, that information is quick and easy to find.

As discussed in the earlier article *The difference between usable and useful*, this is not enough. More than just being easy to use, the intranet must provide the information and tools that staff need.

These needs must be understood, beyond simply aiming to provide a "one-stop shop for information". Instead, it is necessary to explore how staff work, and the information they need to do their jobs.

Consideration also needs to be made for broader organisational goals, to ensure that the intranet delivers visible and measurable business benefits.

James Robertson is the managing director of Step Two Designs, an intranet and content management consultancy based in Sydney, Australia. James specialises in intranet strategy, web content management, information architecture and usability.

> A common trap is to just ask staff what they need

Don't ask staff what they need

A common trap to fall into is to ask staff what they need. This involves asking questions such as:

- What is most useful on the intranet?
- What are the problems with the current intranet?
- What features are missing from the intranet?
- What additional information do you need?
- How else could the intranet help you with your job?

The key problem with these questions is that they require staff to have an understanding of intranets, and how they can support day-to-day work in an organisation.

In general, however, staff have little understanding of intranet technologies or approaches. Instead, they have in-depth knowledge relating to their job role and activities.

Asking these questions therefore generates one of two possible responses:

- "I'm not sure. Can you give me some examples of how an intranet *could* help me?"
- "I think it would be great if the intranet provided feature *xyz*!"

In the first case, staff are unable to provide meaningful input into intranet design or strategy. In the second, a 'wish list' of features and tools is collected, but without ensuring that these ideas will actually be useful (or used) in practice.

In either case, attempting to gain intranet ideas from staff in this way will not generate a clear and concrete roadmap for how to improve the intranet.

Structured techniques

A better approach is to use a range of structured 'needs analysis' techniques. These are designed not to gather intranet ideas, but to build a comprehensive understanding of the *needs* and *issues* within the organisation.

These techniques focus on what staff do in their jobs, what activities they are involved in, the information required, and where this is obtained from.

Using these techniques helps to build a picture of the day-to-day operation of the organisation, and the environment in which staff work.

Once staff (and organisational) needs are understood, it then becomes a relatively straightforward process to identify potential solutions.

In this way, staff provide input on how they work, and the intranet team provides the expertise in intranet design, management and strategy.

Combined together, many practical activities and improvements will be identified that will further build the value and usage of the intranet throughout the organisation.

> There are a wide range of structured techniques

Summary of needs analysis techniques

There are a wide range of needs analysis that can be used, including:

- surveys
- focus groups
- staff and stakeholder interviews
- workplace observation
- contextual inquiry
- task analysis

Each of these techniques is discussed in the following sections.

Surveys

Surveys are a commonly-used tool to gather the input of staff throughout an organisation. While they can be quickly and widely distributed, they are often not an effective way of gathering meaningful results.

Surveys are best suited to assessing the opinions of staff, rather than needs. As such, surveys work well to assess satisfaction with the current intranet, but do not generate concrete ideas on how to improve the site.

Care must be taken when constructing survey questions. As much as possible, the questions should be specific, focusing on the recent experiences of the survey respondent, rather than on collecting broader opinions or perceptions about the site.

It is also important to communicate the results of the survey back to participants (and the organisation as a whole), and to be seen to act on the findings. Without this step, the apparent lack of impact of the survey can generate further dissatisfaction with the intranet team and the site itself.

Surveys should never be used as the sole mechanism to gather staff input, and should always be complemented with other techniques. Where surveys can be of greatest use is in demonstrating the problems with the current site, if more support for an intranet redesign needs to be mustered.

> Focus groups are best designed to gather current issues

Focus groups

These are a widely-used form of facilitated discussions that focus on exploring a topic within a group setting.

Often used as a way of gathering input from larger numbers of stakeholders, focus groups must be run carefully if they are to generate meaningful results.

In particular, the group dynamics needs to be closely managed, to ensure that a small number of individuals do not dominate the sessions.

Wherever possible, staff at the same level should be involved in the focus groups. Having a more senior staff member involved can discourage more open discussions, and can reduce the amount of useful debate.

Focus group are best used to explore current issues and problems, rather than to discuss 'wish-lists' of potential intranet ideas.

They should always be used in conjunction with techniques such as staff interviews and contextual inquiry, to ensure that the results are meaningful.

Interviews should focus on operational staff

Staff and stakeholder interviews

One-on-one interviews are a very effective way of gathering information on staff needs and issues.

In general, the surveys should focus on operational staff, to build up a picture of key information needs (see 'Planning the needs analysis' for more on this).

Stakeholder interviews can also be conducted, with intranet authors, senior managers and executives. These can complement the staff interviews, and provide top-down strategic input into the process.

As outlined earlier, the interviews should not focus on the intranet itself, and it's not necessary to cover the intranet at all during the interviews.

Instead, the interviews should explore how staff work, what this involves day-to-day, the information they need, and where they currently get this from.

The interviews are therefore designed to build up a picture of staff activities and working environments, which can then be used to determine how the intranet can provide greater assistance and support.

The earlier article *Stakeholder interviews as simple knowledge mapping* provides a list of sample questions that can be used during the interviews.

The interviews, however, should be run as 'semi-directed' sessions, with open-ended questions giving the opportunity to explore any issues or topics that arise. This allows the interviews to range widely over any issues of relevance to staff, ensuring that a complete picture is built up.

Rigid interview formats should be avoided, as these will miss opportunities to identify unexpected issues or needs.

In most cases, it will take about an hour to interview most staff, allowing 4–5 interviews to be conducted in one day. Notes should be taken during the interviews, or the sessions audio taped if possible.

For guidelines on choosing participants in the interviews, see the earlier article *Selecting staff for stakeholder interviews*.

As a variation on the interviews, the sessions can be run with a pair of staff, to identify differences in practices. For more on this, see the article *Fast-tracking research with paired interviews*.

Workplace observation

This involves going 'out into the field' to observe the activities of staff, and the environment in which they work.

Workplace observation is particularly effective in environments such as call centres, manufacturing areas, field working, or on-the-road staff.

This technique is less appropriate in environments where activities cannot be easily seen or heard. For example, policy officers working in head office would spend the majority of their time in Word, on email or using the phone. Observing this would provide few opportunities to gain a deeper understanding of activities, issues and needs.

Workplace observation is a very holistic technique that will identify patterns of work and environment issues that are impossible to gather using techniques such as surveys or focus groups.

Workplace observation will also identify the resources that staff use to support their work. For example, call centre staff may have folders of photocopied information that they rely on, more than the intranet.

Similarly, workplace observation may identify that mobile sales people spend little time in the office, and therefore have limited access to the intranet.

In general, workplace observation is a good way to provide a broader context for more detailed research, such as one-on-one interviews or contextual inquiry.

Contextual inquiry combines interviews with observation

Contextual inquiry

This is a combination of staff interviews and workplace observation that involves exploring issues with a staff member, while situated within their normal working environment.

By conducting the interview 'in context', it becomes possible to see the resources used by staff when conducting work activities.

The interviewer can also ask the staff member to show them how they complete specific activities, for example, showing how they find a piece of information on the intranet.

The key principle underpinning contextual inquiry is that the staff member acts as the 'teacher', while the researcher is the 'student'. The researcher then learns how to do the work of the staff person, including what information to use, and where to obtain it from.

This technique is very effective at identifying issues with currently-available information sources and tools. Due to its focus on systems and information sources, however, it often provides less insight into broader cultural and business-process issues.

> Not all business processes are of equal value

Task analysis

Not all activities within an organisation are of equal value. Key business tasks can be identified, and investigated to gain an understanding of the steps involved, and the information required at each step.

Existing sources of information can then be identified, along with the key issues and roadblocks impacting upon the effectiveness and efficiency of the task.

The results of the task analysis can then be used to determine how the intranet can better support key business processes within the organisation.

This can have a direct and measurable impact upon business outcomes, and is often the clearest way of demonstrating a return on investment (ROI) for intranet development.

The use of task analysis is only appropriate where there are defined business processes that are conducted consistently and repeatedly.

Processing an application for a bank loan would be a good example of where task analysis would be appropriate, while consulting work would have few (if any) activities that are conducted repeatedly without at least some variations.

Planning the needs analysis

There are a number of key principles to consider when planning the use of the needs analysis techniques.

Focusing on operational staff

On the whole, the research should focus on the operational staff within the organisation. That is, the staff who do the actual work, rather than managers or corporate services staff.

The key principle is to avoid having people discuss the current situation *on behalf* of other staff (such as a manager outlining the needs and issues of their staff).

To get a clear and realistic picture of needs, the staff themselves should be involved (via interviews, observation, etc).

Using a mix of techniques

A broad range of the needs analysis techniques should be used during the research.

As outlined earlier, each technique has strengths and weaknesses, and is better suited to certain situations.

For example, some techniques will be suitable for head-office staff, while others will be much more effective in the field.

Using a mix of techniques will ensure that the results are meaningful and comprehensive, as well as reducing the possibility of missing key issues.

> More than one technique should be used with each staff group

Overlapping techniques

For any one group of staff, multiple needs analysis techniques should be used. Relying on just a single technique introduces the possibility of either missing results, or biasing the results due to the way the technique works.

For example, staff interviews could be supported by workplace observation or a focus group. This would gather quite different information for the one group, broadening the scope (and confidence) of the findings.

Each staff member should not be involved more than once, as this would be intrusive. Instead, using multiple techniques gives the opportunity to involve a larger number of staff within a given area of the organisation.

Involving a wide range of staff

A broad cross-section of staff should be involved during the needs analysis activities. These staff should be selected according to their job roles, rather than according to their location in the organisational chart.

For example, it is more important to interview both admin staff and nurses, rather than talk to one admin from each of the major business units.

For more on guidelines and suggestions on this, see the earlier article *Selecting staff for stakeholder interviews*.

Either a horizontal cross-section or vertical slice can be planned

Selecting staff

The question of how many (and which) staff to involve requires some careful consideration. As outlined above, a wide range of staff should be involved.

In practice, there are two main ways of selecting staff:

- Horizontal cross-section

  This involves staff from across the organisation, in as many different roles, business units and geographic locations as possible.

  This gives a strong sense of overall needs and issues, as well as the culture of the organisation. As such, this type of needs analysis is very useful when determining intranet goals, or developing an overall intranet strategy.

- Vertical slice

  More in-depth needs analysis can be conducted within a single business unit, or a group of staff with the same role. Staff at all levels within these groups would then be involved to create a complete picture of operational issues and needs.

  This type of research looks in detail at the day-to-day tasks, and the specific information sources used. As a result, this provides concrete information on how to better support the specific group being researched.

In many cases, a horizontal cross-section is used to create the broad intranet strategy, and then followed up by a more specific investigation that targets specific groups of users or individual business units.

Amount of research required

The general principle is that the needs analysis should continue until nothing sufficiently new is being identified.

In practice, this point is reached a lot quicker than may be expected. In many cases, 3–5 days of needs analysis is enough to gather a substantial volume of information.

The key principle to remember is that the needs analysis is not intended to find *every* issue and requirement. Rather, it is designed to identify the largest and most important issues and needs.

In practice, changes to the intranet will be implemented incrementally. The goal is therefore to identify improvements that can be conducted over a 6–9 month period.

Once these changes have been made, additional needs analysis can then be conducted. This is often targeted research (a vertical slice) that looks at the needs of specific groups, once broader issues with the intranet have been resolved.

Protecting confidentiality

A key issue is to protect the confidentiality of the research participants, as issues will be raised that could get staff into trouble. The results of the research should therefore be anonymised before being used in reports or recommendations.

The raw notes or audio tapes should not be provided to anyone outside the direct research team, and should generally be destroyed at the conclusion of the needs analysis.

Look for patterns across the interviews and observations

Analysing research findings

Once the research has been completed, the wealth of information needs to be distilled into key findings and recommended actions.

In general terms, the process involves examining the observations and discussions across all staff involved, looking for patterns.

For example, if all staff comment that their main source of news is via gossip or word-of-mouth, this clearly indicates that there is an issue with the internal distribution of corporate news.

Types of findings

When analysing the results of the research, the intranet team is looking to identify:

- main information sources and key information needs
- major issues or problems impacting on staff's ability to do their jobs
- cultural or organisational issues impacting on the success of the intranet
- key business processes requiring information support
- opportunities for improving information management or delivery
- frustrating business tasks or processes

Based on these findings, a range of strategic (longer-term) and tactical (shorter-term) recommendations can be made regarding the intranet.

In most cases, the solutions are obvious, once the problem has been clearly identified. In other cases, further research or planning may be required to determine suitable approaches.

> The needs analysis will identify broader cultural issues

Broader issues

In many cases, the needs analysis will identify issues and needs beyond the scope of the intranet. For example, cultural or internal political issues are often uncovered.

In these cases, these should be documented, and forwarded to the relevant senior manager. While the intranet team cannot directly address these broader issues, they can highlight the problems, particularly where they impact on the success of the intranet.

Time required

The general rule of thumb is that it will take the same amount of time again to analyse the results of the needs analysis work. So five days of interviews and observation would take another five days to identify the key findings.

If multiple people have conducted the research, additional time will need to be allocated to consolidate the findings. This is generally best done via a series of group discussion and brainstorming sessions involving all project staff.

Building a case for change

Needs analysis can be most useful when the need for change must be powerfully demonstrated. While the limitations suffered by many intranets are well-recognised within organisations, these problems are not seen as sufficiently compelling (or urgent) to drive improvements.

While many intranet teams attempt to create dollars-and-cents business cases, this is often difficult, if not impossible. These business cases are often not powerful enough to obtain the resources required to meaningfully improve the intranet.

As an alternative approach, the results of the needs analysis should be used to 'paint a picture' of the current problems, the urgency of change, and how the issues can be resolved.

This 'narrative' approach involves bringing the issues and experiences of front-line staff directly into the executive boardroom. By exposing the day-to-day difficulties of staff, which are normally invisible, a powerful case can be made.

Wherever possible, use direct quotes or examples (anonymised to protect staff) to illustrate current pain, and how the intranet can help.

A concrete plan of action should then be provided, tied back into business benefits that will be delivered.

> Bring the issues of front-line staff into the boardroom

Even a little is worthwhile

This article outlines a structured and planned approach to conducting intranet needs analysis. Generally taking several weeks, this will uncover many issues, as well as identifying many possible approaches.

While this more formalised approach is valuable, there may be insufficient time or resources to conduct research at this scale.

If this is the case, even a small amount of informal research is worthwhile. The techniques outlined in this article are just as appropriate for use when chatting to people over coffee, or dropping by staff members' desks for a casual visit.

Taking advance of opportunities for small amounts of research can build up the same information, but over a longer period of time.

In all cases, having a better idea of staff practices and working environments is of benefit to centralised intranet teams.

Summary

There are a range of structured needs analysis techniques that can be used to identify staff (and organisational) needs and issues.

These techniques include one-on-one interviews, workplace observation and task analysis.

Using these techniques will clearly identify the areas where the intranet can assist staff to do their jobs, and where it can deliver tangible and visible business benefits.

The results of the needs analysis will also assist in building a powerful 'narrative' case for change that highlights the current points of pain, and practical intranet-based solutions.

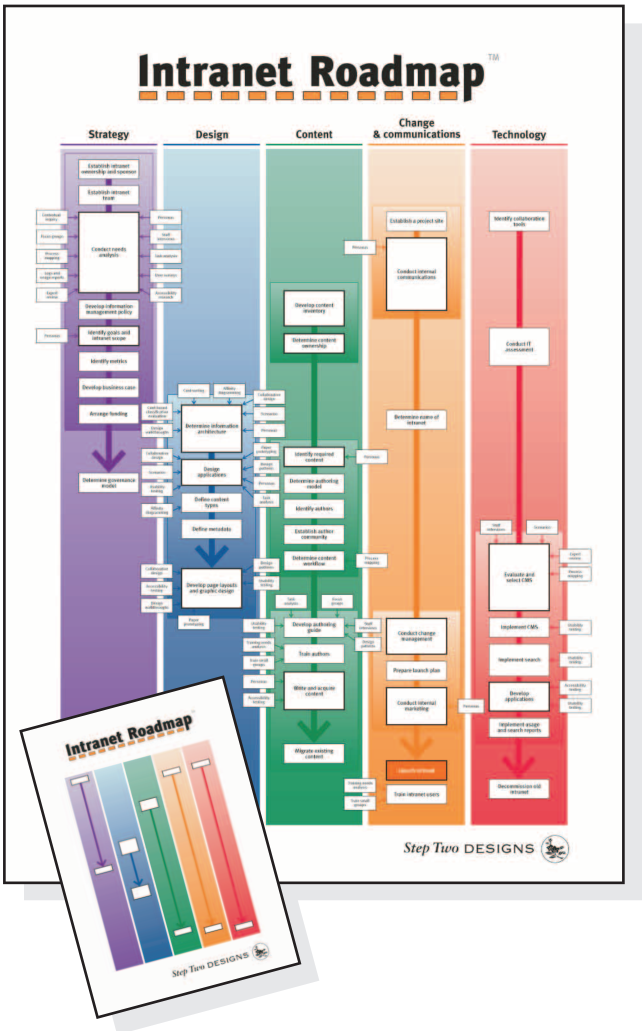
Further reading

We have previously published a number of articles covering individual needs analysis techniques and general principles:

- *Stakeholder interviews as simple knowledge mapping*
- *Selecting staff for stakeholder interviews*
- *The difference between usable and useful*
- *Fast-tracking research with paired interviews*
- *Five intranet reviews, five different results*

An excellent book on these topics is *Observing the User Experience: A Practitioner's Guide to User Research* by Mike Kuniavsky (ISBN 1558609237). This covers a number of the techniques in depth, including step-by-step instructions and examples.

Intranet Roadmap™



The **Intranet Roadmap**™ provides the first truly comprehensive methodology that describes all the activities required to develop (or redevelop) an intranet.

Beyond just implementing software or redesigning the site, the Intranet Roadmap covers activities in five key streams:

- **strategy**
- **design**
- **content**
- **change & communications**
- **technology**

The Intranet Roadmap does more than just indicate what activities need to be conducted, it clearly shows the sequence of activities required, and the techniques that will help at every stage of the project.

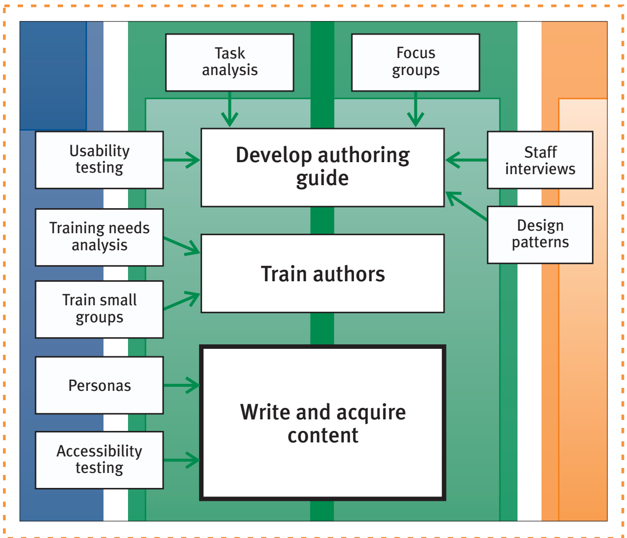
The Intranet Roadmap is delivered in two forms:

- **full colour A1 wallchart**
- **supporting 54 page booklet**

The **wallchart** lists the key activities required in each of the project streams. It also highlights which activities (such as usability testing, affinity diagramming, personas and collaborative design) can be used to support individual activities.

The supporting **booklet** then provides an overview of every activity and technique listed on the Intranet Roadmap, as well as linking to further resources and information.

The combination of the wallchart and booklet will be invaluable for any team looking to develop or redevelop an intranet, and it will assist in both planning and reviewing the approach taken.



US$120 + $15P&P

Secure online ordering:

www.steptwo.com.au

Step Two DESIGNS