Intranet content migration – a guide to good practice

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Executive summary

Intranets and Content Management Software (CMS) applications both have service lifetimes of probably 4-5 years although this can sometimes be extended with strong initial and ongoing implementation. Intranet teams will have the experience and expertise needed to develop an upgraded intranet on an existing CMS but will rarely have the experience to migration to a new CMS, especially where there is a requirement to introduce a new information architecture, to clean up the amount and quality of the content and perhaps implement a new search application.

As a result planning and executing an intranet content migration project become a very considerable challenge. This Research Note offers guidance on good practice from two consultants who have many years of experience in supporting organisations undertaking web and intranet content migrations. Particular attention is paid to the benefits of undertaking a comprehensive planning process ahead of the commencement of migration, focusing on a content inventory process that enables informed decisions to be made on the amount of content that needs to be migrated, and the extent to which this can be accomplished using content rules rather than a time-consuming inspection and migration of each content item.

Other topics covered in this Research Note are the importance of effective risk management, the need to work through the implications for the search application for the intranet, the requirement to have a well-designed and supported communications programme and the importance of deciding how the progress of migration will be reported.

1. Introduction

Intranets and Content Management Software (CMS) applications both have service lifetimes of probably 4-5 years although this can sometimes be extended with strong initial and ongoing implementation. Over that period the organisation has usually changed to the extent that user requirements can no longer be met efficiently and effectively with the current intranet, and those users also include content owners and content publishers. Intranet content management technology has also progressed, with the requirement to support enterprise social networks, workforce collaboration and now search-based intranets.

In most organisations the migration of intranet content into a new CMS will be a novel project to undertake. The life of a CMS application will probably be at least three years and often longer so there is usually no prior experience of undertaking a migration project. The intranet team may also have changed. Career opportunities for intranet managers within the organisation are usually limited so they have to move to other organisations, or take different roles within their current organisation, to progress their careers. Even if they have undertaken a migration in the past it may well have been for a less-complex intranet using a less-functional content management application. In addition the volume of content will have increased substantially over the period since the last migration was undertaken.

Between us we have undertaken enough migration projects to have seen good practice elements emerge and become very aware of the opportunities and challenges. This Research Note does not set out to be a handbook for migration but instead to highlight issues that need to be considered at the outset of the project to enhance the eventual user experience, meet the project timetable and reduce the risks inherent in a novel and complex project.

The decision to migration an intranet or a website to a new software platform is usually driven by a number of business requirements. These might include

- Greater functionality and flexibility
- Accommodate an acquisition or divestment
- Easier to manage the publishing process
- Improve content quality
- Support for mobile/ESN delivery
- Improve discovery (IA/search/monitor)
- Future-proof against platform change
- Less support required from IT
- Integration with other applications
- Increased levels of use and impact

However often the decision is taken by the IT team because

- The current application is no longer supported by the vendor
- The vendor has been acquired or gone out of business
- The application has become unstable because of the amount of specialised code that has been applied to improve functionality
- The application requires a high level of support from IT and the vendor that is both complex to manage and costly to undertake
- There are difficulties in integrating the intranet with other business applications
- Licence costs are not sustainable against the IT budget, and this could mean moving to an open source application

In many migration projects there could be multiple objectives and this can often result in internal project conflicts when the dependencies between these objectives have not been fully taken into account. These conflicts often arise when there is a mix of 'hard' deadlines, such as the termination of a CMS license, and 'soft' deadlines where the time line is measured in terms of 'Completion in Q3'.

In most cases there is a shared benefit to both the business and to IT to migrate the intranet content to a new application. That should mean that there is a common project plan but in reality the business and IT may see the project in very different ways. For an IT department this is one of many projects that they will be undertaking, and the project schedule may be highly dependent on the progress being made with other projects and the resource implications for these projects and the intranet migration. The end result is that it is very difficult to agree on a project completion date other than at the start of the project when neither the business nor IT fully understand the implications of the migration process.

2. The information quality opportunity

In a migration project the focus is often on taking advantage of new features in a CMS. Although this may often be regarded as the primary benefit it also gives the organisation an opportunity to enhance the quality of the content of the intranet with significant long term benefits. Over the last few years increased attention has been paid to defining and achieving the highest possible level of information quality to ensure that decisions are made on the best available information.

There are seven generally accepted dimensions to information quality.

Accessibility	The extent to which the information needed is always available and is retrievable in an easy and quick way.
Accuracy	The extent to which information is correct, exact, precise, free from error, unambiguous.
Believability	The extent to which information comes from reputable sources so that it is accepted as true, real, and credible.
Completeness	The extent to which information is comprehensive and comprises all the relevant information.
Consistency	The extent to which information is solid, objective, unique, free from bias. Absence of conflict between different sources.
Relevance	The extent to which information is exactly what is needed for the task at hand; that is, the information is useful, value-added, appropriate, and current or up-to-date.
Timeliness	The extent to which information is timely for use.

In general organisations do not establish standards and guidelines for information quality because of a lack of appreciation for the value of information as a business asset though they may pay a lot of attention to data quality along the lines of ISO8000:2011 Data Quality. It is common for little attention to be paid even to ensuring that every item of content has a relevant title.

The titles below come from www.ofcom.org.uk, the website of the UK's independent regulator and competition authority for the UK communications industries. (Checked 27 April 2016)

Minutes Thirty Fourth
1 165405454 Response
obb245
filtering report II draft 2
Microsoft Word - RR-604-OFCOM - Final v3
report
97

Our experience would indicate that many intranets have similar problems. Justifying retrospective management of poor quality content is difficult unless there is a requirement to migrate content to a new or upgraded CMS. Because of the overall time taken to move an individual item of content any reduction in the amount of content that is no longer relevant to the organisation can have a significant impact on the project duration and resources required. In the scramble to meet a deadline it is not unusual for the decision to be taken to migrate content as is and then enhance the quality later. It never happens because the resources that were allocated to the migration are not available once the project is notionally (all content migrated) complete.

In many intranet migrations the intention is often stated as "improving content quality" without any definition of the current state of content quality and what needs to be changed to achieve an improvement. The importance of the elements of information quality set out in the table on p6 is that they give a basis for a discussion about the relative priorities for content quality. If 'Believability' is important then that argues for content having an attribution to a current employee as the author or custodian of the content.

3. The importance of a content inventory

Of all many 'unknown unknowns' (to quote Donald Rumsfeld) in content migration the one that is most critical to the success of the project is knowing how much content will need to be migrated. With the low cost of storage it is not uncommon for intranet managers to be unaware of the scale of the archive and from an IT perspective only a server volume estimate is available. It is not uncommon for the project team to find that that the intranet has perhaps three times more content than the intranet manager estimated, of which two-thirds may not be worth migrating. However agreeing on what it not worth migrating is not easy.

A content inventory is a crucial yet often overlooked or misdirected aspect of migration planning. At its core the content inventory is essential for achieving a high *quality* intranet after migration.

That said, the inventory takes a significant amount of effort. So it is important to be methodical about the approach, using a four-step model.

1) Define what is needed
2) Enumerate or sample the content
3) Add metadata (as needed)
4) Search for patterns and answer questions

……and then repeat these steps as necessary!

1) Define what is needed

At the outset of the project the reason for conducting the inventory should be carefully defined to and make sure that inventory is undertaken in a way that will achieve those goals. Put another way, the inventory has to provide the information needed to answer important business questions. The key common questions include:

- What content can we drop?
- For the content that will be moved, how much effort will it take to migrate?
- Who is responsible for the content, and how does this affect sequencing?
- How can the progress of the migration be forecast and tracked?

As noted in the migration process below, ideally decisions on the content will be made at the level of *rules* and not on a content-by-content basis. The idea that the team are going to look at

every single piece of content is totally unrealistic. The inventory needs to include the information that will allow us to make those determinations by rule to the greatest extent possible, which may mean pulling data from multiple systems. As much as possible you want to *skip* steps when handling content during a migration, for example not even needing to look at the content we decide you need to drop. For instance, there could be a rule that everyone agrees to delete any content that is over three years old and has not been viewed in the last year.

The rules need to be agreed with the business, who may have a very different perspective on what can be deleted than the migration team no matter what the access logs may say about the level of use. The process of establishing rules may take some time, and there needs to be an element of the project plan that enables these rules to be reviewed on the basis of the migration experience rather than being set in stone for the duration of the project.

2) Enumerating or sampling
Ideally you will be able to generate a list of all of the pages on your existing intranet, along with key metadata (for instance, see this description of using PowerShell to create a spreadsheet listing all the pages along with some metadata such as title and URL http://en.share-gate.com/blog/how-to-build-an-inventory-before-sharepoint-migration This will be the baseline of the inventory. Ideally you create it in a way that can be replicated, so when information changes you can update it. Of course, you will need to ensure you generate some unique value that can be used to reference that content consistently (even if the title or other information changes), in particular so you can merge data sources.

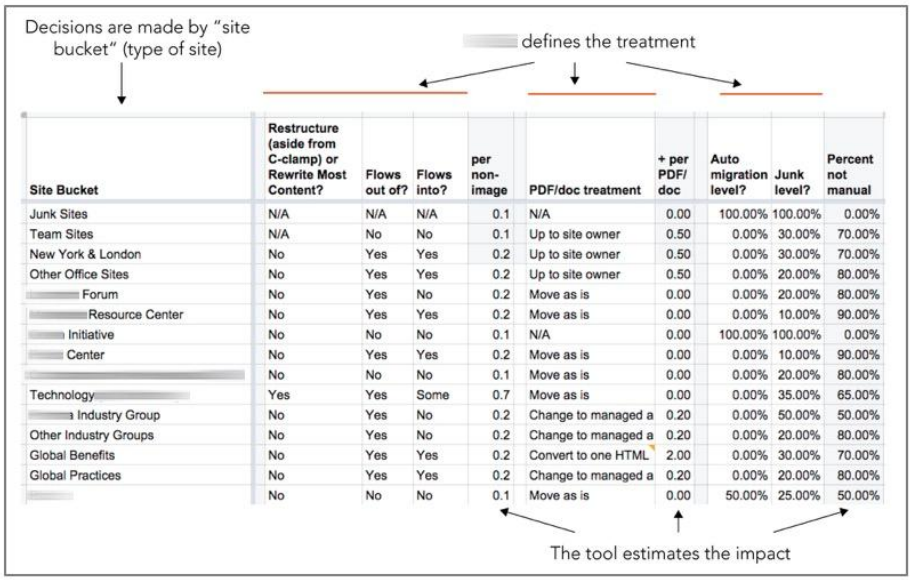
Sometimes, especially for intranets that are distributed across multiple systems, it is difficult to get a single list enumerating all the content. In this case you have two options: sample the content (or a hopefully-representative sample of content is used to inform decisions) or create *site* inventories (that only list rough counts of types of content).

3) Add metadata (as needed)
Oftentimes you will need to add more metadata to the inventory — in other words, sometimes the way that you enumerate all the content won't also give you all the metadata you need in one go. There are three ways of adding metadata:

- Manually
- Merge from another source
- Extract (for instance, pull out meaningful information from the URL structure)

Note that in all cases we want to add the metadata in a way that allows updates in the original, underlying data. For instance, sometimes decisions need to be made at a type of site level (an office site, a collaboration site, a subject matter expert site, etc). Sometimes this can be based on the the URL structure this may be gleaned automatically, but often this must be determined manually.

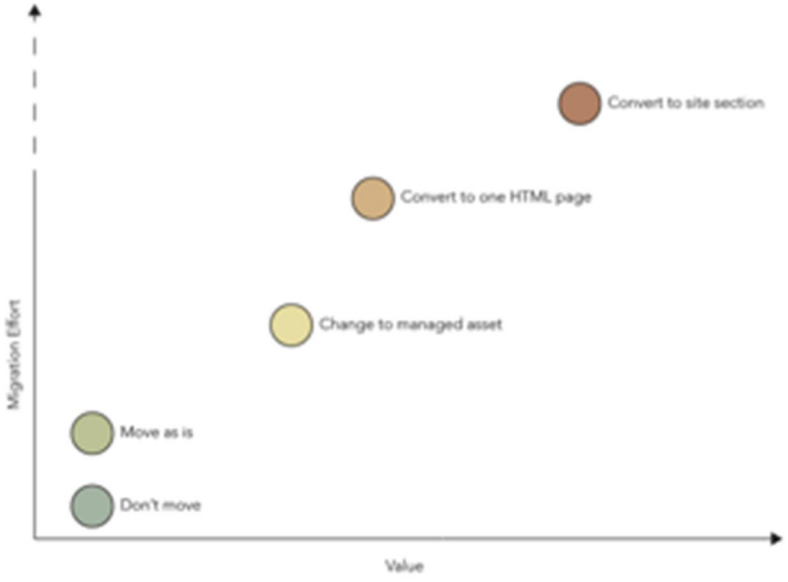
4) Search for patterns and answer questions
We then look for the patterns to answer those questions that we defined in the first place, although we may discover that we need more information (and hence need to repeat the process). As noted above, the ideal is to use *rules* to make decisions. Continuing on the point above about types of sites, note that the rules can be applied at the type of site level. For instance, in the following example the organization defines how content will be treated at the type of site level. This is then matched with the list of all the sites, where each site then has all its content listed — this example process allowed the organization to estimate the total migration effort level, without looking at every piece of content.



Site Bucket	Restructure (aside from C-clamp) or Rewrite Most Content?	Flows out of?	Flows into?	per non-image	PDF/doc treatment	+ per PDF/ doc	Auto migration level?	Junk level?	Percent not manual
Junk Sites	N/A	N/A	N/A	0.1	N/A	0.00	100.00%	100.00%	0.00%
Team Sites	N/A	No	No	0.1	Up to site owner	0.50	0.00%	30.00%	70.00%
New York & London	No	Yes	Yes	0.2	Up to site owner	0.50	0.00%	30.00%	70.00%
Other Office Sites	No	Yes	Yes	0.2	Up to site owner	0.50	0.00%	20.00%	80.00%
[redacted] Forum	No	Yes	No	0.2	Move as is	0.00	0.00%	20.00%	80.00%
[redacted] Resource Center	No	Yes	Yes	0.2	Move as is	0.00	0.00%	10.00%	90.00%
[redacted] Initiative	No	No	No	0.1	N/A	0.00	100.00%	100.00%	0.00%
[redacted] Center	No	Yes	Yes	0.2	Move as is	0.00	0.00%	10.00%	90.00%
[redacted]	No	No	No	0.1	Move as is	0.00	0.00%	20.00%	80.00%
Technology [redacted]	Yes	Yes	Some	0.7	Move as is	0.00	0.00%	35.00%	65.00%
[redacted] Industry Group	No	Yes	No	0.2	Change to managed a	0.20	0.00%	50.00%	50.00%
Other Industry Groups	No	Yes	No	0.2	Change to managed a	0.20	0.00%	20.00%	80.00%
Global Benefits	No	Yes	Yes	0.2	Convert to one HTML	2.00	0.00%	30.00%	70.00%
Global Practices	No	Yes	Yes	0.2	Change to managed a	0.20	0.00%	20.00%	80.00%
[redacted]	No	No	No	0.1	Move as is	0.00	50.00%	25.00%	50.00%

One pattern and ruleset to pay special attention to for most intranets is PDFs, since for a variety of reasons (obviously mobile but also for easier desktop access) we want to consider increasing their value. There are a variety of levels of PDF treatment, and, as in the above spreadsheet, ideally you make decisions on how to treat PDFs at some rule-based level (for instance, the Policy Center will move PDFs as-is). Here are some possible treatments (from the least to most effective for the intranet user)

1. Don't move (the PDF does not move to the new intranet)
2. Move as-is (literally move it as it is now)
3. Change to a managed asset, but still a PDF (in other words, instead of it being a "blind" PDF that is only linked to from within some HTML, give it some meaningful metadata that helps users find it)
4. Convert to one HTML page
5. Convert to site section (for a longer PDF that might not make sense as a single page)



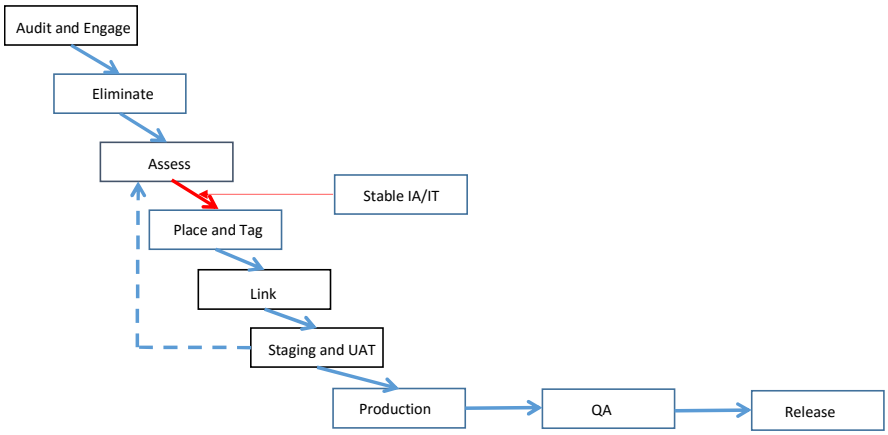
Further guidance on inventory management can be found at

https://davidhobbsconsulting.com/report/rethinking-content-inventory

https://davidhobbsconsulting.com/how-to-articles/estimating-migration-effort

4. The migration process

The main elements of the migration process are shown below. The work on developing an information architecture is not included.



Audit and Engage

The initial assessment of the scale of the content that is currently in the intranet, and shareholders are identified and brought into the communications plan.

Part of the Audit and Engage step to *estimate* the migration effort. In other words, we need to look forward to consider how long the different steps will be.

Eliminate

The process of discarding the content that will not be migrated. It may be necessary to find either a temporary or permanent repository for this content, based on discussions with the business and the advice of records management staff.

Assess

Making decisions on what changes need to be made to the content to ensure that it is all of a consistent quality

Stable IA/IT

Often the major challenge here is to ensure that the templates are developed and agreed so that it is possible for the team to view how the content will look in the new platform. All customization needs to have been completed and subject to user acceptance testing. Migrating content into some form of sandbox for eventual transfer into a template is a very high risk strategy.

Place and Tag

The content then has to be migrated and positioned in the information architecture, together with the addition of metadata. This element of the project cannot be started until there is a stable IT platform and the information architecture has been tested to the extent that is possible without migrating all the content across.

Link
A process that is often underestimated is the work involved in creating new links between content, especially where the content either has not been migrated across or has been written specifically for the new intranet.

Staging and User Acceptance Testing (UAT)
At this point the migration has been to a staging server. User acceptance testing now has to be carried out before it is moved to the production server. Almost certainly this will require some of the decisions made on content and architecture to be reconsidered. UAT needs to address fitness to purpose as well as fitness to specification, and the 'users' are both employees and content publishers.

Production
Once the move is made to the production server that are still further tests to be carried out. This is especially important when there are other operational applications that need to be integrated with the intranet, and this can usually only be tested out on the production environment.

Release
The release phase also has to take account of how the current operational intranet will be closed down.

5. Migration scenarios

Most teams' default assumption will be that the intranet users will see the old intranet on one day and then, upon a single launch date, the new one on another. There are many advantages to this approach:

- It is extremely easy to explain to all stakeholders
- It can lead to the most dramatic, attention-grabbing launch
- There is the satisfaction of being "done" on a particular date
- There is just one key deadline that everyone is working toward
- It promises to always have a consistent experience for the site visitor
- There may be licensing cost advantages
- No intermediate "glue" is needed (to connect the old and new intranet)

Another approach is a phased rollout. In this model, some sites or sections of the intranet are relaunched before others. The advantages of this approach:

- Ideally your intranet is continually being improved and maintained anyway, so a phased approach is consistent with that mentality (and can help get teams accustomed to it)
- You can start showing results earlier
- You can better learn what works and doesn't work so that as the rollout proceeds you are able to adapt for a better overall result
- Some sites may be approach the end of their lifespan anyway (but not yet ready to be deleted), which is a perfect situation for leaving it on the old system until it is taken down anyway
- This approach is far more resilient to changes and realities on the ground (for instance, if two site sections were supposed to launch first but only one is ready, then perhaps you could still do the initial launch, rather than having to hold up the entire process)

The biggest issue with a phased rollout is how the old and new intranet interact. Note that one possible approach to deal with this is to develop a redirect engine that allows requests to the old URLs to just those that have already moved.

It is not uncommon to find that there are some highly customized or sensitive areas within an intranet which because of the customization or sensitivity are not going to be easy to migrate. It may be that it would take a substantial amount of development resource to redesign these microsites. There is no generic solution to microsite migration strategies, but a sure recipe for disaster is to obtain an edict that the microsite has to be moved. This is because there will always be a higher authority that decrees that the integrity of the microsite has to be maintained. Discussions around specialized site migration can have a serious impact on the overall project plan.

6. Migration support software

There are a number of software applications available that can support the process of content migration. It is important not to select an application before there is agreement on the extent of the content that can be migrated by rule and the types of content that need to be manually migrated, albeit with a software application. However what seems to be comparatively simple rule-based migration requires training and some pilot trials with each member of the team involved in the content migration.

It also should be noted that this is very boring work, especially when there could be tens of thousands of items to be moved. Although the team may become more adept at using the software after a few thousand items this productivity gain can easily be offset by the realisation that there are fifty thousand more to go.

No matter what the claims of the software vendor there is no substitute for asking to speak with a client of the vendor, including staff using the current version of software on a day-to-day basis.

7. Search migration

In the course of an intranet migration it could be that either the existing search application will be used to index and search the new platform or the new platform has a search application that will be used for the intranet. In both situations it is important to appreciate that users will be very susceptible to changes in the user interface, such as

- Additional filters and facets
- Different displayed metadata
- Different approaches to summarization
- Different ranking algorithms which have subtle changes in relevancy rankings
- Changes in promoted content

A particular challenge can be maintaining security trimming on content as the migration process may not be aligned with the security model for the intranet. In addition the perceptions of what is 'good search' mean that a higher level of search satisfaction is expected.

If there are substantial differences in the information architecture of the old and new intranets then users will make immediate and intensive use of search to find content that seems to have become invisible as a result of the change in information architecture.

Whichever the search scenario it is important to appreciate that the final testing of the search application cannot be undertaken until all the content is migrated. Incremental search testing may identify functionality issues but relevance performance cannot be signed off without a complete index being available.

8. Managing migration projects

All project management methodologies recognise that there are three variables in a project, and these have to be managed individually and collectively to achieve the outcomes specified in the project plan. These variables are the scope of the project, the resources available and the project schedule.

In the case of a migration projects some of the factors that need to be considered under each of these three headings are given below.

Scope

- What are the user requirements and expectations going to be for the new intranet?
- What are the criteria for selecting the content to be migrated to meet the requirements and expectations?
- What else is being changed?
    - CMS software
    - Enterprise social network applications
    - Search software
    - Information architecture
    - Branding and design
    - Other IT applications, such as a new Active Directory schema

Schedule

- Is there a 'hard' deadline, perhaps because of an IT requirement?
- Can the migration be phased or will it have to be carried out 'in background'
- If it can be phased is there
    - An optimum phase sequence?
    - Adequate control over the user experience?
    - Adequate support for training users and publishers?
    - Very good change management to avoid scope creep?
    - An assessment of the impact on the search experience?

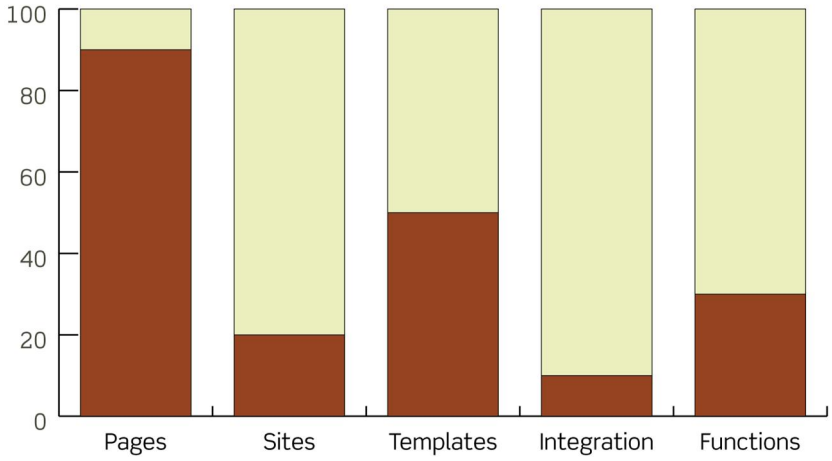
There can be a temptation to start out with a very detailed Microsoft Project Plan for the project which might well have a hundred or more tasks. All project plans built this way tend to underestimate the impact of known and uncertain dependencies and especially the work that needs to be carried out in the later stages of the project. It can be a valuable exercise for the project team to work backwards from the planned launch date and take an independent view on the work that cannot be undertaken until all the content has been migrated and the initial round of user acceptance tests has been undertaken.

One important thing to note here is that the scope is not just content, so we shouldn't only be tracking progress with how much content has been migrated so far. You can choose to also track key functionality and other metrics over time.

As the project proceeds it will be possible to become increasingly more specific about the completion date

- At the start of what might be a nine-month project the forecast might be plus/minus two months
- By the third month it might be plus/minus one month
- By the sixth month it might be plus/minus two weeks
- By the eighth month it should be plus/minus one week
- How will progress be measured and reported?

It is very risky to report on the migration process on the basis of the percentage of items that have been migrated. It could be that the final set of content items throw up some issues that might require other content to be revised



An example could be that based on the final set it is recognised that an additional metadata field is required across all content to maintain consistent discovery.

https://davidhobbsconsulting.com/how-to-articles/tracking-website-migration-progress

Resources

- Is there a good understanding of the amount of time needed to move each content item?
- As a starting point assume a minimum of 15 minutes per content item, but see https://davidhobbsconsulting.com/how-to-articles/estimating-migration-effort
- Are there special content categories that could take more time, such as pdf files?
- What will be the impact on content publishers?

9. Change Management

Teams often focus too narrowly on the "end" result of migration. As mentioned above, migration is both an opportunity to tackle quality issues that will be resolved as part of the migration process. But the real power comes from using the migration as a reason to set up a *system* for higher quality (for instance, making disposition decisions based on rules rather than on an item-by-item basis, partially since the decision at an item-by-item basis is also bound to a particular point in time).

The same is true for managing change. The goal of change management should not simply be to re-launch the intranet strongly. The goal should also include jumpstarting a change management process to use over the long term. There are two sides to this:

- When migrating an intranet, it's important that we get the "bones" right, and not just that the intranet looks and works the way we want on the day of relaunch. In other words, it's important that things are architected and structured in a way that can be managed and improved over time (and not just on a page-by-page basis, but for instance to make template changes that make broad, meaningful changes). When considering what changes to make to the intranet, these structural changes should be prioritized.

- Also, there is the general process of engaging with stakeholders to gather feedback and decide/communicate what changes should be made. This is the product management

process, which should methodically and clearly define what changes are made over time. The stakeholders should be engaged with in a similar process during rollout that will occur post-rollout.

See more at https://davidhobbsconsulting.com/topics/product-management.

10. Communications and training

The importance of a structured communications plan that starts before the rumours start to circulate cannot be over-emphasized.

The plan should consider the requirements of

- End users
- Content publishers
- Content owners
- Managers
- Support teams
- Other stakeholders

The people who often get overlooked are content publishers. They may have to undertake extra work such as including additional metadata tags and perhaps rewriting content to a new style guide. Publishing tasks are rarely included in job descriptions so a content publisher may be faced with continuing to add content without the support of their manager. Indeed the manager may question why this work is required as no one has complained about the quality of the department's content before.

One of the most important elements of the communications plan is how the transition from the current intranet to the new intranet is going to be achieved. Will it be a hard transition (in which the old intranet is switched off on Friday evening and the new one starts on Monday morning) or a soft transition with both intranets being in use for a period of time?

Allowance also needs to be made for training users and publishers. Publishers in particular are often overlooked in the training plan. However they may be publishing on two different CMS platforms as they maintain current content but also add content to the new intranet.

As a result there is a substantial amount of work to be undertaken late in the project, just as everyone is under pressure for the project to be completed. It might be worth starting out with a project plan in which 33% of the time is allocated to the planning and inventory stage, 33% to the migration and 33% to training and testing that can only be undertaken when all the content has been loaded into the correct templates and the search application has been tested. That leaves 1% for the launch party!

11. Risk management

Intranet migration is a very high risk project and the more comprehensive the risk planning the greater the chance of meeting all the requirements of all the stakeholders. The challenge in developing the risk register is that if there is only limited, or worse no, prior experience then defining the risks and developing approaches to monitor and ameliorate them is a significant challenge.

The core risks include

- Poor quality content inventory resulting in reforecasting of scope, schedule and resources
- Current intranet suffers from a lack of attention
- Managers resent having staff rewrite existing content to enhance quality

- Microsite migration management consumes time and resources out of proportion to the amount of content
- Highly dependent on key staff
- Project hangs at 90% completion for ever because the last 10% is the most difficult 10% to deliver
- Template designs are either not finalised or need to be modified once content is migrated in to them
- Significant dependencies on other projects and applications that are not under the direct control of the project team
- Difficulty in forecasting the project timetable to the level expected by senior managers
- Short cuts are imposed by managers in a misguided attempt to speed up the project
- Benefits are not as visible as expected
- Search satisfaction is lower

A common approach to risk management is to score each risk by the likelihood of it occurring and the impact on the project if it does. Another way of scoring the likelihood dimension is to assess the amount of advance warning of the risk. As a migration proceeds it will be possible to monitor it on a day to day basis and there should not be any unexpected surprises. However a key member of the team becoming unavailable through illness, or even leaving for another career opportunity, may well come with little notice.

The end result would be a table just as the one below. Red and orange risks would be monitored and reported weekly, whereas the yellow and green risks could be reported monthly.

	A	B	C	D	E
1	**Risk — an undesirable outcome**	**Likelihood to occur**	**Impact if it occurs**	**Impact factor**	**Mitigation**
2		1=low, 5=high	1=low, 5=high	1=low, 25=extreme	
3	Entire active migration halts due to work program-level reset	4	5	20	
4	Bits and pieces of the technology are not ready in time	5	4	20	- Everyone attempts to deliver *early* given tight timeframe - Even slight delays are dealt with swiftly - Clear communications on expectations
5	Product environment and/or template not complete by	5	3	15	
6	Having to touch content again long after it was first migrated (for example template/HTML changes)	5	3	15	- Identify elements that would cause a reset - Implement *structural* elements from the start - De-prioritize the quality requirements for the structural elements that cannot be implemented early in the process
7	Continued development on current draws resources away from migration	3	4	12	- De-prioritize current changes - Track progress against required resourcing (so know when over-using resources)
8	Poor buy-in due to underwhelming / incomplete design	4	3	12	- Get structural elements in place - Emphasize non-design aspects
9	Entire active migration halts due to technical malfunction	2	5	10	
10	not licensed or installed by	3	3	9	
11	Slow production due to unproven newly-staffed resources	4	2	8	
12	Acts of God	1	6	6	

It is important to realise that risks may not gradually move up or down the impact factor scale, but could well jump from green to red.

Appendix 1 Ten Critical Success Factors

1. Take advantage of a migration project to enhance content quality
A migration project is inevitably complex and risky. However it offers an opportunity to enhance the content quality of an intranet or website through the removal of redundant, obsolete and trivial content (often referred to as ROT) and the enhancement of the quality of the content to be migrated. For truly high impact define rules for content quality expectations that are used both during migration and on an ongoing basis.

2. Understand the scale of the project
Very few managers know not only the number of content items they are responsible for but also associated information on date, file format, content quality and use. Without a detailed initial inventory and estimate of migration effort it is impossible to determine the tasks that need to be undertaken, the resources that will be required and the schedule for the project.

3. Understand exactly how migration support software can add value
There are many software applications that can be of value in managing a content migration, especially in the case of migration from SharePoint 2010 to SharePoint 2013, but it is important to understand their capabilities and idiosyncrasies by talking to organisations that have already used these applications in projects of a similar scope. Bulk migration is possible but only under very specific circumstances.

4. Decide on the archive/disposal policy at the outset
The basis on which content is either archived but still accessible, or disposed/deleted, should be considered at the outset of the project plan. The options will form the basis for discussions with content owners and stakeholders who may have concerns about making a firm decision on deletion without understanding the implications and user reactions.

5. Engage with content owners and publishers
Decisions will have to be made on content that should not be migrated, and on the work that will need to be undertaken in improving content quality. Department managers may have a different perspective on content retention than corporate stakeholders. Publishers will have to find time to continue to contribute to the current application as well as make changes to content that may have no immediate impact on meeting business objectives.

6. Build and maintain a comprehensive risk register
Content migration carries with it substantial risks. The main risk is that the resources required to enhance and migrate the content are inadequate to meet the initial schedule and expected quality. A well-constructed risk register with the actions that can be taken to reduce the risks needs to be developed with input from all stakeholders and project team members.

7. Content migration should be managed as a project
Intranet and web teams are usually under-resourced so adding in responsibility for undertaking and managing a migration project of any size will have implications for both the project success and the management of the existing application. The migration should be established as a separate project. Given the complexity of these projects an experienced project manager is probably essential. Many migration projects require contract staff to be engaged to undertake aspects of the migration.

8. Consider how best to report on migration progress
It is tempting just to report on a percentage of content migrated but this can be very misleading, especially where complex content (such as a microsite) cannot be migrated until towards the end of the project, at which point additional issues arise.

9. Do not try to migrate to a pre-determined completion date
Any arbitrary date set before the full scope and implications of a content migration will almost certainly be missed by a substantial margin. The best that can probably be achieved at the outset

is a date to within a couple of months either side of a best-bet date which is then progressively revised on the basis of the lessons learned as the migration progresses.

10. Do not underestimate the amount of work needed from migration completion to launch

Because of the unknown unknowns in migration it is highly likely that even with the best project plan and highly committed team members the project will not run to schedule. That will put considerable pressure on testing, remedial work, training and communications, not of which are easy to reduce in length. It is advisable to develop some schedule and resource scenarios at the outset that work back from the launch date to establish how much time is required for post-migration work, rather than leave this activity until later in the project.

Appendix 2 Resources

There is virtually no published information on intranet migration. David Hobbs has written two books on web site migration, much of which can be applied to intranet migration. Details can be found on

https://davidhobbsconsulting.com/

In addition David is working on a chapter on intranet migration in a multi-author book on intranet management to be published towards the end of 2016 by www.intranatverk.se.

David Roe compiled a list of migration support software applications in 2013 with an emphasis on applications that support SharePoint version migration

http://www.cmswire.com/cms/information-management/sharepoint-migration-14-vendors-that-can-make-it-happen-022261.php

Most of these vendors publish briefing papers on content migration but of course with an emphasis on SharePoint 2010 to SharePoint 2013/Office 365.

There is a substantial amount of information on information quality which is summarized in a recent blog post by Martin White

Defining and managing information quality http://www.intranetfocus.com/archives/2500