Content Strategy Vol. 2

Planning, Producing And Maintaining Quality Content

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About This Book

A brilliant design deserves brilliant content. Content that is intuitive, compelling and flexible. But what seems so simple in theory can be quite hard to put into practice. A sound content strategy helps you stay on top of your content and, hopefully, make your content work *for* you.

With the help of this eBook, you will learn to face the content challenge. Take it as your guide through the critical phases of content planning, production and maintenance, your partner in crime to develop your content strategy.

To make the eBook as versatile as possible, we'll cover practical editing tips just like strategies to improve your information architecture. Ideas on how to run a content-planning workshop help you get everyone in your team pulling in the same direction — the foundation to cater for quality content. Furthermore, our authors share strategies for a content audit that is bound to tame the daunting beast that a mass of content can easily turn into. And to ensure your content is useful on every device, we'll provide tips for developing a mobile content strategy.

Don't let your content be only a sidekick. Give it the same attention and care you put into designing all the other bits of your product and you'll see its real power unfolding: it will improve usability and engage your users.

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Editing Tips For Business Web Content

BY BRAD SHORR ❧

The web is awash in content. A recent Moz article reports that 92,000 new articles[1] are posted online *every day*. Companies are spending billions on content marketing[2] to enhance credibility, build brand awareness and, especially of late, improve SEO.

Here is what Google has to say about content in its quality guidelines[3]:

- *Make pages primarily for users, not for search engines.*
- *Don't deceive your users.*
- *Avoid tricks intended to improve search engine rankings. A good rule of thumb is whether you'd feel comfortable explaining what you've done to a website that competes with you, or to a Google employee. Another useful test is to ask, "Does this help my users? Would I do this if search engines didn't exist?"*
- *Think about what makes your website unique, valuable, or engaging. Make your website stand out from others in your field.*

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1. http://moz.com/blog/future-of-content-upcoming-trends-in-2014
2. http://blog.customcontentcouncil.com/at-nearly-44-billion-new-survey-shows-rise-in-content-marketing-budget/
3. https://support.google.com/webmasters/answer/35769?hl=en

Google has always *tried* to reward great content with high rankings, but today, thanks to vast improvements in its algorithm, Google is better able to actually *do* it. Its content quality guidelines are perfectly aligned with what every writer and marketer should aspire to.

AS A DESIGNER, WHY SHOULD YOU CARE ABOUT CONTENT QUALITY?

- Your brilliant designs will be wasted if they are filled with inferior content.
- By developing the ability to evaluate content quality, you are able to provide constructive, difference-making input to other members of the creative team, increasing your value as a designer.
- If you are in a project management role, you must know what needs to be fixed, improved and enhanced in the deliverable's content.
- Unless the content meets a high standard of quality, the finished product will undermine rather than enhance credibility, diminish rather than build brand awareness, and damage rather than improve search engine visibility.

Defining "quality content" is difficult. A useful approach is to look at the editing process, because editing is where content theory is translated into cold hard facts. You could argue forever with clients about what constitutes quality content on a theoretical level. But when you break down quality into its specific editorial components, theoretical arguments evaporate.

A sound editing process *forces* quality into content, no matter how ill-conceived or weakly written the content was in the beginning, assuming it was properly conceived and at least decently written to begin with.

This article examines several aspects of content editing. By reading it, you will learn:

- how the editing process works for most forms of online business content, including website pages, infographics, landing pages, brochures, white papers and slide presentations;
- what "big picture" issues and technical editing details to get right before publishing;
- the different types of editing help you need, and where to find authoritative online resources for DIY editing.

Five Types Of Content Editing

There are various formulas for breaking down editing tasks. For business content, it helps to think about editing as having five specialties.

1. SUBSTANTIVE EDITING

Substantive editors are mainly concerned with overall cohesion, clarity, accuracy and effectiveness. They look for incomplete or faulty arguments, unsupported assertions, inconsistencies or gaps in the logical flow of the content, and faithfulness to the assignment's strategic goals.

2. COPYEDITING

Copyeditors are mainly concerned with style. Are sentences clear and concise? Is the tone consistent? Are the right words being used? Is the text free of jargon and obscure references? Does the copy adhere to rules of grammar, punctuation and style?

3. FACT-CHECKING

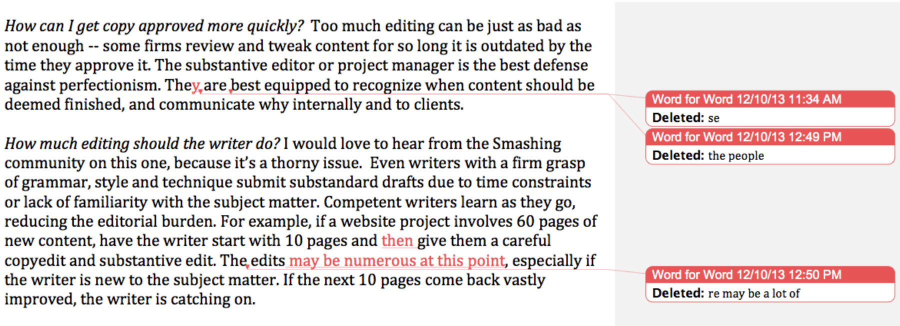
Fact-checkers are mainly concerned with informational accuracy. They make sure statistics and other quantitative information are stated fully and correctly. Fact-checking is often a research task, but in business writing, it also comes into play at the editing stage — with vitally important impact, as we will see in a moment.

4. SEO

SEO editing ensures that on-page content conforms to SEO best practices and follows the campaign's on-page guidelines. SEO editing is typically done by a client's internal or external SEO resource. The more the SEO resource is plugged into the creative process, the less artificial and stilted the optimized content will be.

5. PROOFREADING

Proofreaders are mainly concerned with technical precision. Different standards apply to different types of content; a list of authoritative editing resources appears at the end of this article.



How can I get copy approved more quickly? Too much editing can be just as bad as not enough -- some firms review and tweak content for so long it is outdated by the time they approve it. The substantive editor or project manager is the best defense against perfectionism. They are best equipped to recognize when content should be deemed finished, and communicate why internally and to clients.

How much editing should the writer do? I would love to hear from the Smashing community on this one, because it's a thorny issue. Even writers with a firm grasp of grammar, style and technique submit substandard drafts due to time constraints or lack of familiarity with the subject matter. Competent writers learn as they go, reducing the editorial burden. For example, if a website project involves 60 pages of new content, have the writer start with 10 pages and then give them a careful copyedit and substantive edit. The edits may be numerous at this point, especially if the writer is new to the subject matter. If the next 10 pages come back vastly improved, the writer is catching on.

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Word for Word 12/10/13 12:50 PM
Deleted: re may be a lot of

Editing done here by Johanna Shapiro.

If all of these editing tasks are done well, the final product will have the level of quality that readers and search engines desire. In terms of workflow, the editing process follows the order noted above, starting with substantive editing and ending with proofreading. However, as you might imagine, editing is not always linear; documents usually go back and forth between editors and writers as issues are fixed.

Editing Process FAQs

Effective editing is not only a matter of knowing what to do; it also requires an understanding of how to manage workflow and communication. Addressing these FAQs at the outset of your next project will help lay the groundwork for not only a better editing process, but a more enjoyable one.

DO I NEED TO HIRE FIVE EDITORS?

No. A talented editor can cover a lot of the work at an acceptable level for most business content. That being said, the substantive editor must be familiar with the product, industry and audience in question, since the effectiveness of the content hinges on understanding the audience's mindset and needs. The SEO editor must, of course, know SEO inside and out.

HOW CAN I GET COPY APPROVED MORE QUICKLY?

Too much editing can be just as bad as not enough — some firms review and tweak for so long that the content is outdated by the time they approve it. The substantive editor or project manager is the best defence against perfectionism. They are best equipped to recognize when content should be deemed finished and to explain why to clients and team members.

HOW MUCH EDITING SHOULD THE WRITER DO?

I would love to hear from the Smashing Magazine community on this one, because it's a thorny issue. Even writers with a firm grasp of grammar, style and technique submit substandard drafts due to time constraints or lack of familiarity with the subject matter. Competent writers learn as they go, reducing the editorial burden. For example, if a website project requires 60 pages of new content, have the writer start with 10 pages and then give them a careful copyedit and substantive edit. The edits may be numerous at this point, especially if the writer is new to the subject matter. If the next 10 pages come back vastly improved, then you'll know the writer is catching on.

WHAT IF MY CLIENT DOESN'T CARE ABOUT EDITING?

Clients might not care about content editing as such, but they certainly care about public image, leads and orders. High-quality content impresses Google, which leads to more search engine visibility, which leads to more traffic and more business. High-quality content also reassures prospects, customers and stakeholders that the company is reliable and competent.

WHAT'S THE BEST WAY TO MANAGE THE EDITING PROCESS?

One person, generally the project manager or substantive editor, should coordinate all editorial functions and communication and make final decisions. Creative teams have many editing tools at their disposal, but using good old Track Changes and Comments in Word documents is perhaps the easiest way to start. A big challenge is preventing multiple versions of an in-process document from floating around; implement a clear procedure to avoid this. In my experience, the competence of the manager, rather than the tools, will determine the efficiency of the process.

Common Editing Issues

Let's look at a few specific real-world issues that crop up in business web copy for each type of editing. These particulars will give you an idea of what to look for if you are doing the editing or looking for an editor or managing the project.

SUBSTANTIVE EDITING ISSUES

- Here is an instructive, real-life example of how substantive editing produces clarity. In a recent article about writing for slide presentations, I wrote, “Slide presentations are great for a ‘peeling the onion’ narrative approach.” My editor commented, “What does that mean?” I pondered the issue and realized that I didn’t really know what I meant! After further reflection, I changed it to, “Slide presentations are ideal for storytelling.” Moral of the story: Substantive editors don’t always need to make sweeping changes. Often, just knowing what to look for helps to get it right.

- Keeping content on point prevents content creep. Substantive editors remind clients that a landing page need not be a thousand words long to prompt a conversion, nor a website a thousand pages deep to convey the firm’s value proposition.

- Substantive editors police all content to maintain consistency of brand messaging.

- The company’s branding and positioning strategy, the value proposition of the product and service being marketed and the nature of the target audience will determine the content’s style and tone. The substantive editor must be crystal clear on all of them.

- Building on the last point, a substantive editor — if time, budget and skill allow — injects personality into flat business content by adding storytelling narratives and stylistic flair that speak powerfully to the target audience.

When it comes to substantive editing, Duluth Trading Company's website[4] does this extraordinarily well.

COPYEDITING ISSUES

- Headlines and headings should be descriptive and, in many cases, persuasive. Additionally, proper keyword placement in headlines and headings is important for SEO, so copyeditors and SEO editors must collaborate closely to balance these requirements.
- Active voice *usually* beats passive voice: "John saved $100" has more impact than "$100 was saved by John." There are

4. http://www.duluthtrading.com/

cases where the passive voice is preferred; a competent copyeditor makes the proper adjustments.

- Pronoun sensitivity leads writers to employ tortuous sentence construction to avoid "he" or "she" usage. Also, writers often shift from "it" to "they" when referring to a company. The copyeditor keeps pronoun use smooth and consistent.

- The wrong word or phrase can do worse than make a company look stupid; it can convey a message contrary to the one intended. My list of commonly confused business words and phrases[5] is a handy reference.

- Overuse of exclamation points and all-caps conveys HYSTERIA!!!!

- Copyeditors convert long unformatted paragraphs into web-optimized formats that employ bullet points, three- to five-line paragraphs, judicious use of bold text, etc. This is an area where designers provide valuable input.

FACT-CHECKING ISSUES

- Sadly, the web is a stewpot of misinformation, cooked up by marketers who feel pressured to publish. For example, a reader might come across a flashy infographic stating, "70% of Executives Use Tablets!" but, after checking the source, discovers that this "fact" is based on a survey of 25 anonymous respondents conducted by an obscure

5. http://blog.straightnorth.com/confusing-business-words-and-phrases/

agency. Fact-checkers protect you and your client from losing credibility as a result of shaky statistics.

- Fact-checkers make sure that basic corporate information is correct. The company's name, job titles and the spelling of employees' names should always be accurate — yet often are not.

- Fact-checkers review product specifications to make sure they are up to date. The value of this thankless task is appreciated only after, say, a customer orders a $1.5 million printing press that turns out to be 10 feet too long for its production line when it arrives at the plant.

SEO ISSUES

- Overusing keyword phrases on a page of content is counterproductive.

- Varying keyword phrases generally helps search engine visibility and makes content more readable and less "spammy" for humans.

- An SEO editor might opt to add links to the client's other relevant content on a given page of web content or a blog post. If done correctly, these related links build the authority of the client's website.

PROOFREADING ISSUES

- One space after a period is standard.

- Capitalization in headlines and headings should consistently follow a predetermined style.
- Font size and style should be consistent for text and headers from page to page.

In Conclusion, How Much Editing Is Enough?

Practical considerations such as deadlines and bandwidth, along with a clear understanding of the audience, will influence how thoroughly a piece of online content should be edited.

PROOFREADING

Generally speaking, readers do not hold blog posts to the same stylistic standard as, say, white papers. However, a blog post directed at an audience of scholars, physicians or attorneys *will* be held to a higher standard.

FACT-CHECKING

Visual content such as infographics and slide presentations, perhaps because of their formality, seem to carry more weight with readers than blog posts and website pages. For this reason, producers of visual content have a greater obligation to be sure of their facts, all else being equal. Firms undermine their credibility when they publish graphical material loaded with unsupported or misleading facts, whether intentionally or not.

SEO

If a firm has an organized SEO marketing program, then on-page SEO is crucial. If not, on-page optimization alone would probably not be enough to have any substantive impact on search visibility.

COPYEDITING AND SUBSTANTIVE EDITING

As for these, there is never any advantage to publishing vague, incoherent and uninspiring material. Some level of review is really a must. If resources are limited, and often they are, use this editing tactic: When in doubt, leave it out.

Resources

- *AP Stylebook*[6]
  The AP (Associated Press) style is the standard for newspapers and journalists and is commonly used for marketing and PR content. An online subscription gives you instance access to authoritative information on editorial issues relating to general business content.

- *The Chicago Manual of Style*[7]
  The CMS, published by The University of Chicago, is widely used in the humanities for formatting and citation, and it contains a wealth of information, analysis and

6. http://www.apstylebook.com/
7. http://www.chicagomanualofstyle.org/16/contents.html

insight on issues of grammar and usage. Whereas AP primarily tells you what to do, the CMS also explains why.

- *MLA Handbook for Writers of Research Papers*[8]
  This style guide of the MLA (Modern Language Association) is widely used for academic writing.

- Purdue OWL[9]
  The Purdue OWL (Online Writing Lab) is a convenient online resource for grabbing up-to-date answers to CMS[10]– and MLA[11]-related questions.

- *New Oxford Style Manual*[12]
  This book contains detailed information on UK style. Oxford Dictionaries has helpful tables on British and American spelling[13] and terms[14] for online reference.

- *AMA Manual of Style*[15]
  The AMA (American Medical Association) guide is widely used for medical and scientific publishing.

- *Publication Manual of the American Psychological Association*[16]
  This manual is widely used for academic and professional writing in the social and behavioral sciences. ❧

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8. http://www.mla.org/store/CID24/PID363
9. https://owl.english.purdue.edu/owl/
10. https://owl.english.purdue.edu/owl/resource/717/01/
11. https://owl.english.purdue.edu/owl/resource/747/09/
12. https://global.oup.com/academic/product/new-oxford-style-manual-9780199657223?cc=de&lang=en&
13. http://www.oxforddictionaries.com/words/british-and-american-spelling
14. http://www.oxforddictionaries.com/words/british-and-american-terms
15. http://www.amamanualofstyle.com/
16. http://www.apastyle.org/manual/index.aspx

Framing Effective Messages To Motivate Your Users

BY VICTOR YOCCO ❧

What you say in a user experience matters. *How* you say it matters equally. The way you frame communication, or how you say something, could be extremely effective at persuading people to start using your product (or to use it more).

So, how do you frame messages effectively? This article explains how design teams can do so in a way that resonates with their users.

Help! I've Been Framed!

- **Framing** is how you say something, using a "frame of communication."
- **Frames** are story lines that make an issue relevant to a particular audience. Framing is not lying. It is putting a particular spin (a frame) on factual details.
- **Framing effects** occur when a message frame alters someone's opinion on an issue.

For example, telling someone that smoking causes cancer and that they should consider quitting is not likely to produce any long-lasting change in their opinion towards smoking. Most smokers have heard these words all their life. However, smokers who view this (*caution: video may* *be unsuitable for some viewers*) video[17] by the Centers for Disease Control and Prevention (CDC), which frames the consequences of smoking in a very graphic way, have found it to have a long-lasting impact on their attitude towards smoking. In this case, both the message and the medium make the video a more powerful frame of communication.

How Framing Applies To Good Design

We have talked about framing messages, but what's that got to do with design? Everything. Everyone on a UX design team plays a role in effectively framing messaging and design. Frames consist of the words, images, metaphors, comparisons and presentation styles to communicate an issue.

Communications expert Matthew Nisbet[18], professor at Northeastern University, states[19]:

> *"There is no such thing as unframed information, and most successful communicators are adept at framing."*

Nisbet makes it clear: Accounting for framing should be a part of your overall content strategy. Good content doesn't just happen; it requires the same level of detail that you apply to the rest of your design.

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17. https://www.youtube.com/watch?v=5zWB4dLYChM
18. https://twitter.com/MCNisbet
19. http://www.environmentmagazine.org/Archives/Back%20Issues/March-April%202009/Nisbet-full.html

Let's check out some examples of framing, as well as how to use visual design to frame a message for greater impact.

Suppose you are designing for a bank that provides mortgages to clients. The bank's target demographic is upwardly mobile young professionals: college graduates ages 28 to 35, with a household income at or near six figures annually. Your client would like these customers to apply for mortgages. Your job is to frame the message of the public-facing mortgage page on the website.

Framing Without A Visual Aid (Message Is Words Only)

You find through pre-design user interviews that users in the target demographic often check out the current annual percentage rate (APR) when surfing your client's website. You can frame the APR for a mortgage as follows:

> *Today's mortgage APR: 3.75% for a 30-year fixed mortgage. Save today!*

Potential borrowers don't have much to get excited about. The message is short, which is positive. However, the 3.75% APR and 30-year term aren't concepts that most people find instantly relatable. Is 3.75% good? What was the rate yesterday? What will it be tomorrow? Why 30 years? What can this interest rate do for me over that length of time? Should I wait? It does say "save today," but I'm pretty busy today. I should probably wait. The bank doesn't seem to be too concerned that this rate is going anywhere.

You can present the same information like this:

> *Today's mortgage APR is at an all time low of 3.75%. Complete our pre-qualification form now to lock in this rate. This rate would save you enough money on a $250,000 loan over 20 years to send your child to college when compared to an increase of just 1%, which could happen at any time.*

You have framed the message to motivate behavior: Act now! Rates could change at any time. You have presented the user with context to motivate them to apply for a mortgage in the near term: Rates are at an all-time low. This means they were higher yesterday or last week. This means they might be higher tomorrow or next week.

While the 3.75% is still a somewhat murky concept, the user does see that this would save them enough to send a child to college in 20 years — unlike a 4.75% rate, which really doesn't sound like that much more, but must be. The user is thinking of having or adopting a child within the next few years, which would make saving enough to send the kid to college over that time period perfect. Also, it is clear what they need to do next: fill out the pre-qualification form and get in touch with the mortgage officer.

Both of the examples above require reading and a deep level of comprehension to motivate the user. This is where visual framing comes into play. Let's use the same bank and target demographic. When users land on the APR page, they see the following:

Today's mortgage APR is at an all time low of 3.75%.

If you lock in today's low rate, your family will be able to relax in its dream home for years to come. (Image: David Sawyer[20])

If you wait and rates rise, your new home might not have room for the grandparents to visit! (Image: simpleinsomnia[21])

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20. https://www.flickr.com/photos/18702768@N04/2983024881
21. https://www.flickr.com/photos/simpleinsomnia/12418747924

Users will be much more motivated to engage in behavior that leads to their dream home (act now), rather than the very sad shack that might not have enough room for the grandparents when they visit (wait). You have made your point without putting the focus on understanding the 3.75% rate, and you have preempted the user's internal dialogue from the first two examples.

Let's consider another example of the impact of visuals on framing information.

Suppose you are going to be giving a presentation on fire safety to first-graders. You need to grab their attention immediately or else you will lose them for the entire session. How might you kick off the visuals in your presentation? Here are two ways to frame fire safety and prevention:

First example of opening slide about fire safety and prevention (Image: DocStoc[22])

22. http://www.docstoc.com/

Second example of opening slide about fire safety and prevention (Image: Wikipedia[23])

Which opening slide do you think is more likely to grab the attention of a first-grader, or anyone for that matter? You have presented your audience with the same information, but you will likely get two very different reactions. Effective framing in this case means the difference between snores and cheers. The second example will captivate much of your audience for the important stuff that follows.

Now that we have covered framing and design, let's look at some tried-and-true techniques that you can use to effectively frame messages.

23. http://en.wikipedia.org/wiki/Firefighter#mediaviewer/File:FirePhotography.jpg

Effectively Framing Messages Sounds Great. How Do I Do It?

Private industry is, predictably, on the cutting edge of marketing techniques. However, nonprofits and the US government are well aware of the importance of effective framing. The CDC in particular has invested a lot of resources into researching how to effectively frame public health issues, including fire, injury and smoking.

The process described below for developing a well-framed message is adapted from the CDC's research-based guide[24] (PDF, 1.35 MB) on framing messages for injury prevention. I also used this modified method in my dissertation to create different messages to test on zoo visitors.

Identify Your Target Audience

First, decide exactly whom you are speaking to.

You can identify your target audience in a number of ways. Involve as many of your core team members as possible. Have you done any research on audience segmentation? If so, start by creating a message that will appeal to one of your largest audience segments. If you haven't discussed your target audience, now is a good time to start.

I have one rule for identifying a target audience. Your key audience *cannot* be everybody!

24. http://www.cdc.gov/injury/pdfs/CDCFramingGuide-a.pdf

If you think you can develop a message that will appeal to everyone at the same time, let me save you the effort by saying you can't. Rather, you would say different things to different people to motivate them.

One-size-fits-all doesn't work with t-shirts, and it doesn't work with messages.

In my dissertation, I targeted English-speaking adult visitors to natural history museums, science centers and zoos in the US.

Identify A Frame For Your Messages

Many frames exist. Choose one, and use it consistently throughout your messaging.

EXAMPLES OF FRAMES

- **Value-based**
  We know that people make decisions based on more than just the facts alone. Values-based frames access users' underlying values to motivate them to engage in a desired behavior. Common Cause has a guide[25] on values and framing.

- **Financial benefits**
  This frame highlights the financial benefits of engaging in a particular behavior.

25. http://valuesandframes.org

- **Gain**
  This focuses on what users will gain from engaging (or not engaging) in a particular behavior.

- **Loss**
  A loss frame focuses on what users will lose from engaging (or not engaging) in a behavior.

  Researchers continually examine[26] (PDF) which frames best motivate people to engage in certain behaviors. If you are not in a position to review relevant literature in order to choose a frame, then ask your UX researcher[27] to do this.

FRAMING ELEMENTS

Message creators need to consider additional elements when framing a message:

- **Urgency**
  Messages are more compelling when they contain "best," "worst," "first," "last" and other words that create a sense of urgency.

- **Persistence**
  Users should encounter your message multiple times, in multiple places.

- **Simplicity**
  Users should be able to easily understand the message.

26. http://updegrafflab.org/files/3113/3889/7925/URS-12.pdf
27. http://boxesandarrows.com/ux-researcher-a-users-manual/

- **Use of metaphors**
  Metaphors make abstract topics more concrete or understandable. Political communication[28] (PDF, 277 KB) often uses metaphors.

- **Use of visuals**
  Visuals play a key role in framing messages. The Frameworks Institute notes[29] (PDF, 212 KB) that the importance of visuals doesn't stop at the raw content. Message creators also need to consider the placement and sequence of visuals.

Make A Strong And Clear Statement About The Product

What do you want people to take away from your message? You can't assume that you can bury this under an avalanche of witty euphemisms or roundabout references to what your product does. Be clear.

Incorporate the following principles to create a strong and clear message.

USE POSITIVE LANGUAGE AND AVOID NEGATIVITY

Focus on how great the product is or how important the cause is, rather than how terrible the alternatives are (do-

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28. https://www.surrey.ac.uk/politics/research/researchareasofstaff/isppsummeracademy/instructors%20/THE%20METAPHORICAL%20FRAMING%20MODEL.pdf
29. http://www.frameworksinstitute.org/assets/files/PDF/FramingPublicIssuesfinal.pdf

ing that would just make your product seem less bad, not more good). If you cast stones at the competition, expect nothing but the same in return.

HIGHLIGHT PERSONAL RESPONSIBILITY AND CONTROL: EMPOWER YOUR USERS

Your message should explicitly show how using your product will give users more control. For example, telling users that your financial management software will put them in charge of their financial future makes for a much stronger message than simply noting how many options the software provides for sorting transactions in different categories.

AVOID JARGON (YOUR FIELD DOESN'T HAVE JARGON, RIGHT?)

By avoiding jargon, you avoid assuming that your audience has background knowledge of your product. If your target audience is heavily involved in your field, then you might want to incorporate some industry-specific language to make a stronger connection with those users. You don't always have to target the lowest common denominator; however, doing so allows your message to be understandable to the broadest number of potential users.

INCLUDE A CALL TO ACTION: TELL USERS WHAT YOU WANT THEM TO DO!

Do you want users to purchase something, to get more information, to call their local politician? Be explicit and direct. If you have constructed an effective message, then be confident in stating what you want the audience to do with that information. Your message's visual design is critical to this point. Are you clearly displaying what actions your users should take?

FOR LONGER MESSAGES AND PERSUASIVE ESSAYS

If you are framing a long message or an essay, consider additional factors. A well-framed longer message includes the following:

- A title or headline that tells the reader what the message is about and why they should care.
- No more than one key message.
- A lead paragraph that captures the reader's attention.
- A "nut" paragraph (i.e. the heart of your story — the details go here).
- Relevant quotes to make the topic more relatable.

Your chances of successfully framing a message increase by following the guidance presented above. However, there is one more requirement to effectively framing a message.

Test Your Message

Test your message before unleashing it on users. Don't assume what people know or how they will understand something. By testing your message, you ensure that your frame comes across clearly.

Testing can be simple and not resource-intensive. Everyone on the design team should work together here. Ideally, you would use the frame(s) you are considering to formulate multiple messages. I also recommend testing what your team thinks are the worst one or two messages it's created. You'd be surprised by what resonates with users. This is the entire point of user research: You can't assume what the user wants; find ways to get users to tell you what they want!

You can test messages the old-fashioned way by printing out the designs, laminating them and approaching people in scenarios that would be typical for your product. Seeing how someone responds to a message can be eye-opening. Pictures are worth a thousand words, as are facial expressions.

You can also conduct research online. You can easily insert screenshots into survey questions using online survey software, such as SurveyMonkey[30] or SurveyGizmo[31]. Many testing services will also recruit participants according to your specific demographics. Testing through a service such as UserTesting[32] is also very quick and inexpensive.

30. https://www.surveymonkey.com
31. http://www.surveygizmo.com
32. http://www.usertesting.com

ASK SEVEN QUESTIONS

Once you've developed your messages and designs, ask potential users the following seven questions:

- Does this message make sense?
- How does this message make you feel?
- What do you think this message is asking you to do? (Ask this even if the message isn't asking for anything.)
- With whom do you think this message will resonate?
- What would you change about this message to make it clearer?
- What would you change about this message to make it speak directly to you?
- What do you feel this message does well?

And if you are comparing multiple messages, then ask this question too:

- Which message do you think resonates the most? Why?

The number of people you test your message on will depend on the outcome you wish to achieve. Test on as many people as you feel is useful; don't feel you have to conduct a study worthy of publication in an academic journal. If you speak to 10 representative users and they all give you similar responses, then you might be comfortable moving forward. Their feedback will at least give you insight into potential confusion or misunderstanding of the terminology in your messages. If the responses are varied, then your message is probably not coming across clearly. Incorporate the feedback above to make the message clearer, and then retest the new message.

I tested my dissertation messages with visitors to a local art museum before deploying them in my studies. I tested each message on 20 visitors, asking them whether the message was clear. I asked participants to identify which frame they felt I was using (to ensure that I had framed the messages clearly). I also used my committee of four, each with a PhD, to check the quality of the messages. Then, I conducted research using a number of survey questions to determine characteristics of visitors and how they perceived the messages.

OTHER METHODS OF TESTING

You can test messages using other methods as well. For example, you could pose the same questions listed above to a focus group. A/B testing[33] will also reveal which of two (or more) messages users prefer.

Putting It All Together

We've covered how to effectively frame a message, and how to test it before implementation. Design teams need to give deeper thought to how they are conveying their message, not just what they are saying. Outlined above is a process for creating and testing a message, which will

33. http://alistapart.com/article/a-primer-on-a-b-testing/

help you communicate clearly and effectively with users. Your messages will resonate with them. Use this information to reassess your current messaging, and to move forward with future messaging.

ADDITIONAL RESOURCES

- Do Loss-Framed Persuasive Messages Engender Greater Message Processing Than Do Gain-Framed Messages? A Meta-Analytic Review[34]," Daniel J. O'Keefe and Jakob D. Jensen, *Communication Studies*, Volume 59, Issue 1, 2008
- "The Strategic Use of Gain- and Loss-Framed Messages to Promote Healthy Behavior: How Theory Can Inform Practice[35]," Alexander J. Rothman, Roger D. Bartels, Jhon Wlaschin and Peter Salovey, *Journal of Communication* Volume 56, August 2006
- To Motivate Healthy Behavior, It's Often Not What You Say, But How You Say It[36]," American Psychological Association ❧

34. http://www.tandfonline.com/doi/abs/10.1080/10510970701849388#.VDmg4ktfJHo
35. http://onlinelibrary.wiley.com/doi/10.1111/j.1460-2466.2006.00290.x/abstract
36. http://www.apa.org/research/action/motivate.aspx

Ways To Avoid Overwhelming Users: Lessons Learned From My High-School Teachers

BY JON BERNBACH ❧

High school. I won't lie: I did not have the highest grades in my graduating class. Some classes and lessons were so poorly designed and delivered that I would frequently become frustrated and fatigued and would ultimately shut down. The contents of the lessons would just wash over me. The experience wasn't pleasant, and the results were obvious from my transcripts.

But I did well in a few classes. The major difference was the teaching style. Currently, I am a user experience (UX) and user interface (UI) designer of mobile and web applications. In a way, like a teacher, I need to present information in an easily understandable way to new visitors. I need to consider how my students (end users) consume the information that I provide. So, reflection on my high-school experience serves a purpose (aside from painful fashion memories).

A Trip Down Memory Lane

My environmental science and algebra classes stand out as good sources of answers as to what does and doesn't work when learning new lessons. I remember the former class as being a very positive experience. I would want to use an application or website the same way I learned from my environmental science teacher: simply and intuitively.

On the other hand, my algebra teacher taught the class like an application or website that I would have great difficulty using, the kind that I would spend half of my mental energy trying to learn how to use, rather than learning about what I came for. Let's compare my two experiences:

- **Algebra**
  It start off well. The chalkboard was clean and organized as the teacher wrote a problem and worked out a solution. "OK, I'm getting this." Then slowly the chalkboard became cluttered as he added another problem somewhere else on the board. Then another. Then another, never erasing old problems to clear up space. The board became cluttered and busy. His pace sped up. I was still hung up on a problem from 10 minutes ago and I was losing my grasp. I looked up from my notebook at a chalkboard that now looked like a lesson in quantum mechanics, rather than simple algebra equations. I felt frustrated, defeated. I retained almost nothing. I gave up and checked out.

- **Environmental science**
  Again, it started off well. My teacher helped this process continue by putting a lot of effort into organizing her materials and lesson plans. She used the overhead projector often. This forced her to display one visual at a time, which I definitely preferred. She passed out print-outs of the visuals towards the end of class, so that we did not get

distracted by what was on our desk, but rather focused on and absorbed the lesson. My teacher had a unique way of tying together real-world examples that supported what she was teaching. The subject matter didn't feel as abstract to me this way. I was able to retain almost all of the information. This way of giving real-world examples and sharing stories that the audience can directly relate to can be useful in creating a great experience.

My experience in algebra class is what educational psychologists[37] would call a heavy "cognitive load[38]." This is the stress, anxiety and affected learning that happens to a student when content is presented in an overwhelming and excessive way. The student is weighed down and most likely turned off by whatever they were originally interested to discover, learn or find.

It's obvious that my science class, like a well-planned and well-executed website or app, was by far a more educational and enjoyable experience. The teacher designed her lessons in a way that helped the students avoid cognitive overload and maintain the focus needed to learn.

So, now that I've learned something about myself, how can I apply these findings to UX design?

37. http://en.wikipedia.org/wiki/Educational_psychology
38. https://en.wikipedia.org/wiki/Cognitive_load

Understand And Know Your Audience

TEACHERS AND UX DESIGNERS ARE ALIKE

Teachers are not very different from UX designers. A teacher's responsibility, like a UX designer's, is to present content in a format known as instructional design[39]. In other words, teachers and UX designers must both perform an audience analysis to be aware of their population as a whole. Teachers must understand the students' curriculum level, goals, skills, learning styles, skill gaps and attention spans to make lesson plans work in everyone's favor and close any skill gaps that may exist. They need to understand how much information their students can handle and when to deliver that information.

Audience analysis brings to light important insights, such as the students' goals, frustrations, likes and dislikes. Teachers, like UX designers, decide which content is relevant and how to visually present it. Then, they design a lesson plan that meets their students' needs without overwhelming their current abilities. The same goes for UX designers as they begin a prototype or wireframe.

STUDENTS AND END USERS ARE ALSO ALIKE

What happened to me in high-school algebra happens to users on websites, web apps and mobile apps every day. A user will visit a website or try out an application that is designed in such a way that they at once become overwhelmed with content and features that are too quickly

39. http://theelearningcoach.com/resources/online-learning-glossary-of-terms

displayed. Very often the user will not be able to retain the information and will simply get frustrated and leave the site or app. That's the worst case for a business that wants to retain and convert users.

For the purpose of this article, I'll loosely compare students with end users. Unlike users of applications, students do not have the option to try out a teacher or class and decide to move on to another if the first doesn't meet their needs; however, students and end users do both need to absorb new information from an outside source, process it and ultimately retain it.

Understand Your Subject And Content Types To Minimize Cognitive Overload

INTRINSIC COGNITIVE LOAD

"Intrinsic" here refers to the complexity that is inherent in certain tasks or materials. In plain terms, some lessons and content are harder to consume than others, and the more complex the content, the more likelihood of cognitive overload.

My algebra class would have been better had the teacher presented one problem at a time, explained the solution at an even pace, cleared the board and then presented the next problem. Print-outs of what was on the board could have been handed out, helping to eliminate the distraction of trying to recreate those problems and solutions in a notebook.

EXTRANEOUS COGNITIVE LOAD

This form of content consists of superfluous elements, such as an infographic that isn't necessary for the text it accompanies and that requires the user to do extra mental processing, which can lead to cognitive overload. Or perhaps text is being used when an infographic is called for instead; for example, by explaining in words what a square is when a drawing would get the point across more quickly.

My environmental science class avoided this because the teacher omitted the unnecessary or cumbersome content in our textbooks and provided simple examples and explanations of complex ideas.

How To Avoid Cognitive Overload

Let's put this into practice and review some ways of avoiding overwhelming your users when they visit your website or app. Below are some tips and examples on how to avoid cognitive overload when designing.

1. SIMPLIFY

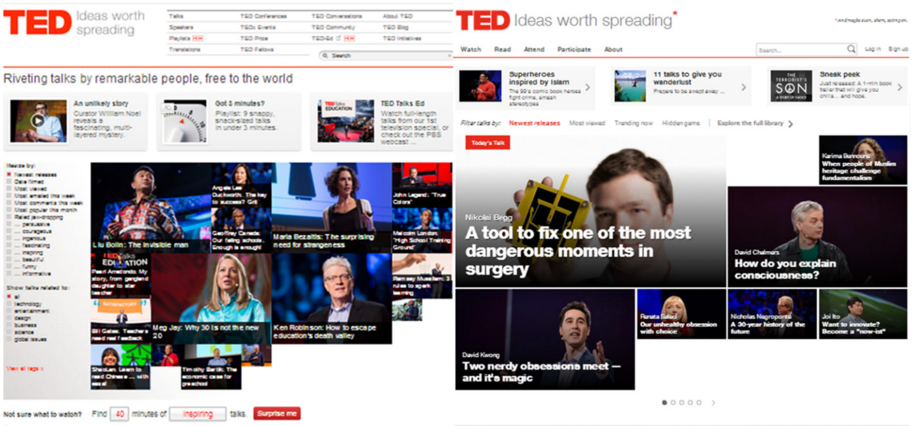
Audit all of your content and remove anything that isn't absolutely required for your user to realize their goal. This means auditing the content itself, the amount of content (see point 2 below), as well as the layout, design, graphics and typography (see point 6). Distractors[40] and

40. http://en.wikipedia.org/wiki/Social_facilitation#Attention_theories

extraneous elements will most likely lead not to increased stimulation, but to cognitive overload.

Decorative graphics might seem to make content more interesting, but they require extra mental processing and will increase the cognitive load. If the content doesn't support the instructional goal, then remove it. Use your judgment, and be mindful of branding and design aesthetics that the targeted audience would expect.

Good example: A great example is TED[41]'s redesign. Using the Wayback Machine[42] I accessed the 2013 version[43] of TED, and the simplification is easy to see.



A good example of simplification can be seen in the redesign (right) of TED[44]'s website.

Working with the design firm Huge[45], TED audited its website's content, listened to its users and developed an

41. http://www.ted.com/
42. https://archive.org/web/
43. http://web.archive.org/web/20130516065409/http:/www.ted.com/
44. http://www.ted.com/
45. http://www.hugeinc.com/

experience that feels much more personalized and exploratory. TED got away from bombarding the user with many types of navigation and filters. It picked only those that are necessary, giving the interface more breathing room and allowing for larger and cleaner typography, as well as larger and more vibrant images from its talks.

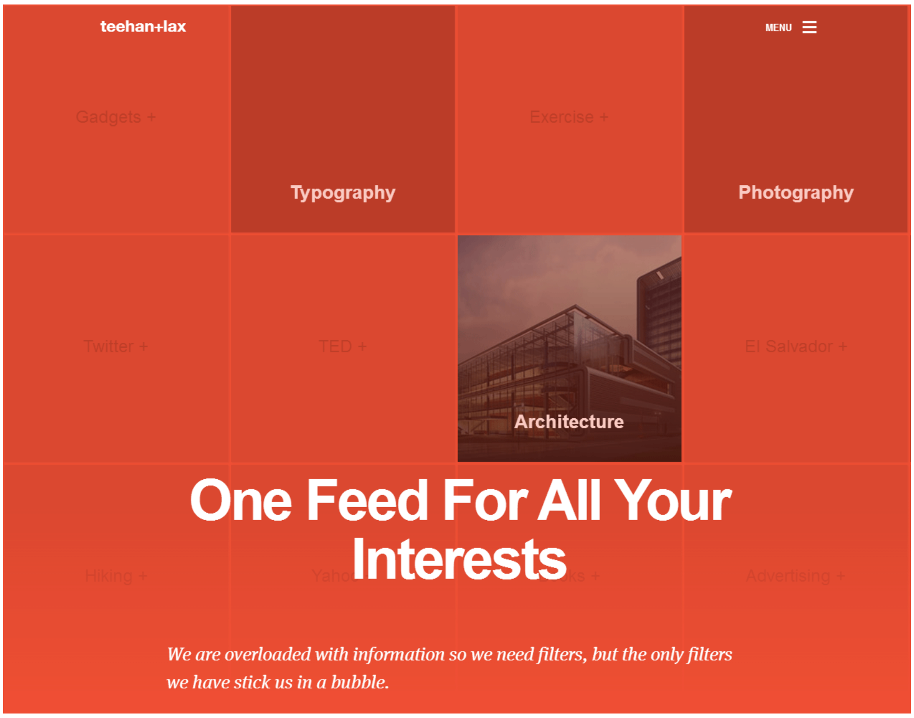
The redesign has been a great success, with more visits, more awards and more participation. It's a perfect example of how simplicity can draw in the user and help them orient themselves and not be frightened by the density of content.

2. BITE-SIZED INFORMATION

If the content is too complex and the layout too dense and clustered, then the user might not be able to, or even want to, process the information effectively. Breaking complex content into smaller chunks[46] and enabling the user to control their consumption of this content will help them process the information more effectively.

Good example: The designers at Teehan + Lax[47] did an outstanding job of chunking information. They set a high standard for how to lay out a lot of content, while keeping a nice rhythm, intuitive content breakers (including visuals and block quotes) and great design elements (such as typography and color).

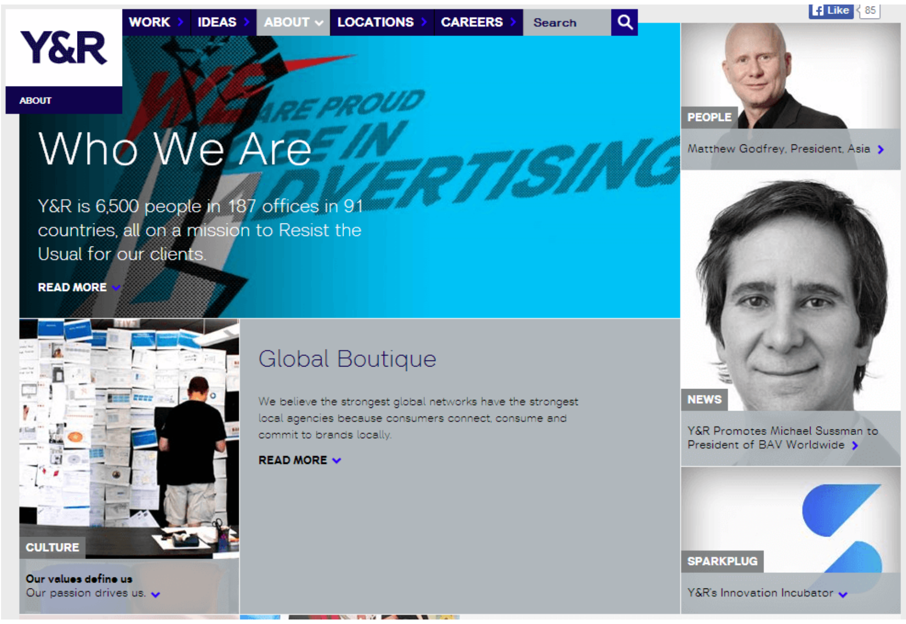
46. http://theelearningcoach.com/elearning_design/chunking-information/
47. http://www.teehanlax.com



Teehan + Lax did this particularly well with its case studies. Intrinsically complex, the case studies are easy and enjoyable to read because the designers have chunked the well-written content with large typography, interesting parallax scrolling effects and animations, and stunning graphics and colors. The case study of Prismatic[48] illustrates just this.

Bad example: Y&R's "About Us[49]" page is an example of intrinsically dense content that's made even more difficult to consume.

48. http://www.teehanlax.com/story/prismatic/
49. http://www.yr.com/about



The page is much too dense with content and cluttered with distractors. Comparing it to Teehan + Lax, you should be able to see the difference that well-implemented chunking makes.

Using a grid for a copy-heavy subject was a risky decision that makes this page appear cluttered. The actual "About Us" content is buried beneath large boxes of related articles and quick links to sections below. The type is too small and its alignment and width change three times on the page. Too many seemingly random and busy images appear that don't support the text. And the "Related Content" links, much like the images, are too many in quantity and seem randomly placed. All of these distractors force the user to orient themselves and understand the page's layout before actually learning about Y&R and its culture.

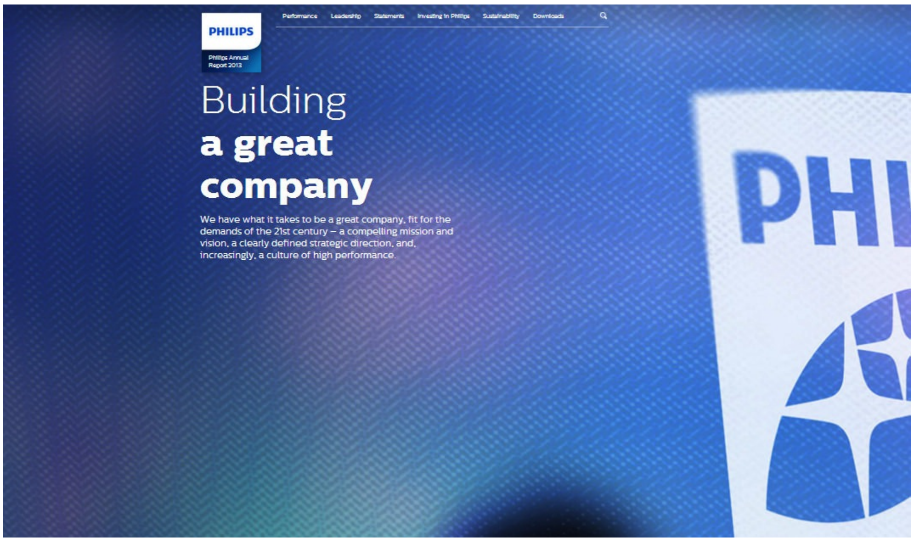
3. BE CREATIVE

Present information in different ways. Because the web is visual, try to present content graphically, through images or graphs. This is a great way to exploit the user's different processing methods, freeing up their mind as they consume content, which in turn reduces their cognitive load. Most importantly, design the visuals in a meaningful way and not with such unorthodoxy that they become frustrating to use.

Good example: Well-produced annual reports creatively merge gorgeous infographics, photographs and illustrations to capture and hold the reader's attention. Even though they're digital now, they uphold the principles forged by their printed forefathers. Philips' annual report for 2013[50] is a fine example of bite-sized headlines and facts, undistracting photographs, simple infographics and well-paced layouts, helping the user absorb information without being turned off.

Philips' designers and writers introduce great creative elements along with standard tactics (including chunking). The information architecture is set up so that users can find new articles through "Read More" links, rather than everything being squeezed into one space.

50. http://www.annualreport2013.philips.com/



Bad example: GE's annual report for 2012[51] is similar to Phillip's in that the website is a vertical-scrolling storyboard with parallax effects. Unfortunately, it is not as effective in preventing cognitive overload. It starts off well, but as soon as the user arrives at the "Letter to Shareowners," the volume of text clearly becomes overwhelming. Even with the infographics and pictures, the small text demands that shareowners absorb a lot. If the content could not have been made less complex, then perhaps more editing, auxiliary navigation, clear headings and section dividers would have made it easier to digest.

51. http://www.ge.com/ar2012/

GE has award-winning designs, and its annual report[52] *starts off great but gets very dense with the "Letter to the Shareowners," giving the reader way too much to absorb.*

4. KEEP THE STORY INTERESTING AND FREE OF REDUNDANCY

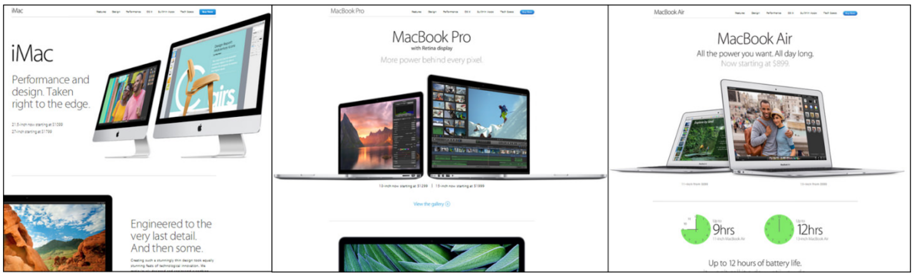
It's easy for designers and content strategists to get boxed into templates. Templates are great for many reasons. They make writing, designing and development easier, especially when you're dealing with multiple content types (such as products and company departments). They also indicate to the user what to expect from page to page.

On the other hand, they can become repetitive. When every page is based on the same template, unique story-

52. http://www.ge.com/ar2012/

lines are lost because everything becomes homogenous. This can create apathy in the user for the brand. To counter this, make high-level pages visually unique, and tell a story from the top of the page to the bottom to capture and hold interest.

Good example: Apple shows how product pages can adhere to an overall template and design style yet not come across as repetitive or uninspired. The pages for MacBook Air[53], MacBook Pro[54] and iMac[55] all have the same secondary navigation, photography and typographic style, but within each product area lies a distinct and fresh layout. This engages the user and prevents cognitive overload.



Each product in Apple's[56] Mac line has its own layout, while still adhering to an overall design style and template.

Bad example: Granted, Sony has a much larger catalog of products than Apple, and the case for adhering more closely to a template for its product pages is much

53. http://www.apple.com/macbook-air/
54. http://www.apple.com/macbook-pro/
55. http://www.apple.com/imac/
56. http://www.apple.com/

greater. With Sony's product page template[57], pages become easy to produce, write, develop and update in bulk. Nevertheless, the story gets lost, and the products are homogenized. The user can easily read and understand the content, but the excitement is lost. That excitement and energy, exemplified by Apple, captures the user's attention and focus (two of the main ingredients in the process of learning).

Sony's[58] product pages all adhere to the same template and layout, making it easy for users to read and understand the content but losing the excitement and the story.

5. MAKE IT MULTIMEDIA

People learn better when words and graphics are combined — that is, when graphics on their own would not be self-explanatory. Just be sure to make the relationship between the two very clear, whether by embedding the text in the graphic or by showing the elements in close proximity.

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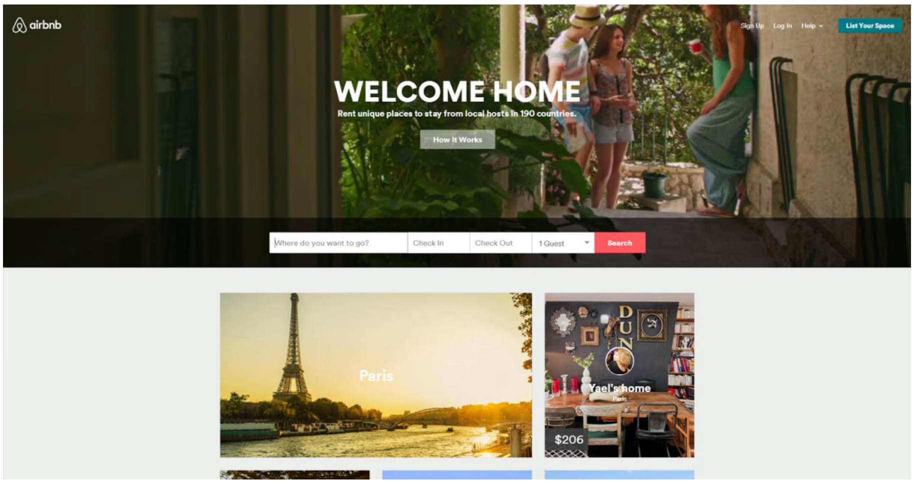
57. http://store.sony.com/televisions/cat-27-catid-Televisions?SR=nav:electronics:televisions:ss
58. http://www.sony.com/

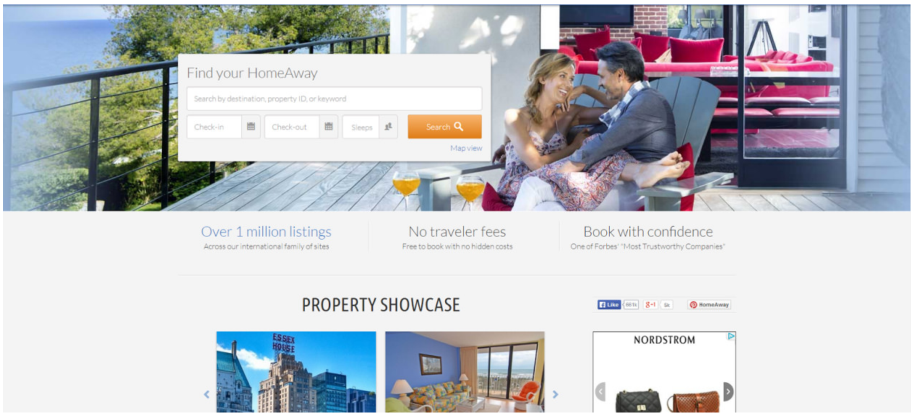
Good example: Airbnb[59] is a great example of multimedia done right. Videos of lifestyle vignettes rotate on its home page, under the powerful headline "Welcome Home." People tend to be drawn in by video, so this approach (which includes persisting the headline) works well as a branding vehicle.



Airbnb[60]'s video vignettes under the powerful headline "Welcome Home" draw in the user.

Bad example: Another apartment-sharing company, HomeAway[61], does not engage its users as well as Airbnb. HomeAway has a single static image and headline — no movement, no energy to the content, which forces the user to expend extra energy to orient themselves and figure out what's marketing and what's relevant. While the layouts of both websites are similar and well designed, any extra energy the user has to exert is a negative.

59. https://www.airbnb.com/
60. https://www.airbnb.com/
61. http://www.homeaway.com/



HomeAway[62]'s home page has a single static image and headline, lacking any movement or energy and not engaging the user to the fullest.

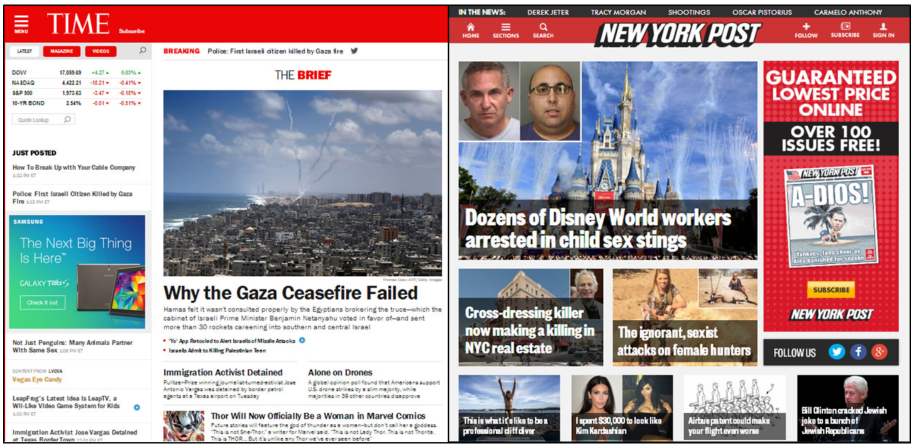
6. FOLLOW BASIC DESIGN PRINCIPLES

Any good designer instinctively understands the following principles, but we'll mention them anyway because they are extremely relevant to the presentation of content and the user's experience:

- Make the typography big.
- Choose readable font faces.
- Employ summaries and headings.
- Make the layout clear.
- Use generous white space.
- Clarify with examples.

62. http://www.homeaway.com/

Good example: Big Human[63]'s redesign of Time[64]'s completely adaptive website is a perfect example of superb design considerations. Like the other good examples above, Time's redesign is a lesson in the principles listed above. The website is easy to read, in large part due to the white space, the well-sized typefaces (Franklin Gothic and Georgia) and adherence to a vertical as well as a baseline grid. As a result, the intrinsic complexity of the content does not feel overwhelming. The user can easily parse the headlines, blurbs and sections. Quite a few options are presented to the user, but done in a way that minimizes cognitive overload.



Time[65]'s website is clear, with readable typefaces and plenty of white space. The New York Post[66] lacks clarity with its condensed typeface and meager white space.

63. http://www.bighuman.com/#/work/
64. http://time.com/
65. http://time.com/
66. http://nypost.com/

Bad example: The New York Post[67] struggles with what Time does so well. The layout is a grid of uninspiring images that are hard to view because they are overlaid with a condensed typeface that is hard to read (Founders Grotesk). The lack of white space makes the content difficult to navigate and read. The layout in general is conducive to cognitive overload. With the abundance of photos, repetitive typeface styles and minimal white space, the user will most likely not respond well to the presentation and shut down.

Prevent Cognitive Overload To Be A Successful UX Designer And Teacher

My old science teacher could have probably become a solid UX designer. She knew her target audience, and she knew how to connect with them. Her lesson plans were clean and thoughtful, designed around intrinsically complex material. She provided helpful visuals and supporting documentation to help her students retain the material.

Following these six rules when designing a website or lesson plan will minimize cognitive overload and keep your users (or students) easily informed and happy. Simplify and chunk complex information, eliminate extraneous content to reduce repetitiveness, and follow the basic design principles above. ❧

67. http://nypost.com/

How To Run A Content-Planning Workshop

BY JAMES DEER ❧

Content is hard. It takes a lot of planning, collaboration and governance to produce high-quality content that meets business needs, speaks in an authentic way and targets an audience effectively.

Whether you're an agency working with clients, or an in-house team working with others around your organization, getting people onboard with producing content is challenging. Thankfully it isn't all doom and gloom. There is something you can do to help soothe your content woes. You can run a content-planning workshop.

Workshops work really well to get everyone onboard with how to produce content. By involving as many people and key stakeholders as possible in these workshops, you can really underline people's responsibilities, where they fit into the workflow and make it clear this process won't happen overnight.

In this article, I'll share the approach we developed to run content-planning workshops. While you will need to adapt the format to your scenario, you should be able to apply most of the steps.

1. Prepare

You'll have to sort out a few things before inviting people to the workshop. These workshops have a few components, so put in the work beforehand to make sure everything runs smoothly and you don't have awkward pauses during the session.

Put in some planning work beforehand to make sure everything runs smoothly and to avoid awkward pauses.

FIND A VENUE

You'll want to get a room with a large table and a whiteboard. If you're in-house, this should be easy to arrange. If you work with clients, you could bring them to your agency's boardroom or do the workshop somewhere offsite that you agree on. Having an inspiring new environment is always good for attendees. Sometimes they will be engaged, but I've been in a few workshops where no one wanted to be there and they were constantly checking their email or not taking it seriously.

Finding the best environment, either somewhere familiar or somewhere neutral, can help keep everyone interested and makes it easier to set ground rules (no phones, for example).

INVITE THE PROJECT MANAGER, PROJECT OWNER AND SENIOR EDITOR

These roles will vary according to the project. Either way, involve some kind of senior manager and someone on the ground who will actually be producing the content. This way, you'll get buy-in from the top and a realistic plan from the bottom.

Invite a technical person, too, so that they can talk about CMS formatting and any details regarding migration and publishing processes. By inviting people who represent key areas of the project, you are minimizing risk. I've been in workshops where someone from legal turned up and effectively redefined the requirements by sharing important legal requirements.

INVITE REPRESENTATIVES FROM DIFFERENT TEAMS

Invite one or two representatives from each of these groups: writers and producers, subject experts, and digital producers. Again, these roles will vary according to your situation. Essentially, you want to get managers from a cross-section of departments, as well as the people who will actually be carrying out the production process that you map out. Be aware of organizational politics and the workloads of the people you're involving.

BRING MATERIALS

Bring plenty of sticky notes and markers and some big sheets of paper. These will be used throughout the workshop, and you will need enough for up to three groups.

2. *Map Your Process*

First, look at the production stages that a piece of content will need to go through before it is ready to be published. This generally starts with identifying the key content types (for example, "product pages," "course summary pages," "how-to guides"). Content types are not necessarily "pages" as such, but could be more modular components of the website — things like product specifications or staff biographies.

Look at the production stages that a piece of content will need to go through before it is ready to be published.

Once you've identified the main content types, look at what's involved in taking them from a basic page brief (which outlines what an item of content is supposed to achieve) to a product that is published and maintained.

CHOOSE A CONTENT TYPE

Choose a content type that you expect to appear on your new website, such as a service or product page, a blog post or a course outline. Choose something that everyone can relate to; avoid specialized content types such as legal documents and engineering reports.

MAP A PUBLISHING PROCESS

In groups, map out a production process to get a single piece of content published on the new website. Again, this will vary according to your team.

A simple workflow might look something like this:

1. Draft content
2. Edit tone of voice
3. Review internally
4. Get approval
5. Optimize for search engines
6. Import to CMS
7. Review web page
8. Publish
9. Maintain

You might need to account for legal and compliance reviews or technical accuracy, or you might need to specify phases for formatting and publishing content (such as formatting for mobile or converting items into downloadable PDF documents). This is another reason to start with a fairly generic piece of content, and then move on to creating more elaborate workflows for specific content types or sections of the website.

The bias that stems from people's roles in the project is always interesting, which is why having people with different roles involved in the workshop is so valuable in the first place. You might find legal representatives claiming to need four separate stages for legally reviewing every page, while a copywriter might want to break the editing for tone of voice into multiple phases. A concerted team effort should result in a workflow that is balanced, realistic and agreed by all.

3. Assign Responsibility

One of the most powerful things about these workshops is that you assign responsibility, making it clear who exactly is accountable for which work. Failing to clarify responsibility over content is one of the most common causes for delays. Bottlenecks happen usually because people didn't know they were expected to produce content or because responsibility has all been put on one person. This part of the workshop should prevent such trouble.

Failing to clarify responsibility over content is one of the most common causes for delays.

ASSIGN RESPONSIBILITY

Annotate each stage on your sheet with the person or role responsible for it. This might look something like this:

1. Draft content: subject expert
2. Edit tone of voice: copywriter
3. Review internally: senior editor
4. Get approval: project owner
5. Optimize for search engines: SEO editor
6. Import to CMS: CMS editor
7. Review web page: project owner
8. Publish: CMS editor
9. Maintain: subject expert

IDENTIFY LACK OF OWNERSHIP

Mark any stages that don't have a clear owner. This is often a huge revelation. "We need to hire an SEO editor!" "We need a copywriter!" "We need a pastry chef!" By simply highlighting the parts of the process for which no one is responsible, you'll quickly see where the challenges for your project lie. By acknowledging these now, you will save a huge amount of stress down the line. You might find that the plan is solid and has no gaps, or you might immediately see that hiring a copywriter will save you a whole lot of trouble. Either way, this part of the workshop is critical.

CLARIFY RESPONSIBILITIES

Ask, "Do the people responsible know they are responsible?" This is another great opportunity to minimize risk. Make sure that everyone knows what's expected of them, and see whether anyone has too much on their plate. A well-organized content inventory or dedicated project-management software comes in handy here.

4. Identify Risks In The Process

Building on the previous step, make sure the following questions are resolved to avoid bottlenecks.

"DO TOO MANY PEOPLE HAVE A SAY?"

Multiple heads aren't always better than one for producing content. Keep an eye out for pages or sections of the website that have a lot of editors and reviewers involved.

I've seen so many projects delayed because content was bounced between editors for days on end, often just leading to over-edited and nonsensical text.

"IS ONE PERSON OVERBURDENED?"

These workshops are the perfect time to assess the volume of work assigned to individuals and assess how realistically they can get it done. Give less outspoken people a chance to air their concerns, which is a lot easier when you've estimated the hours of work involved. Speak with each individual to review their workload.

"DO WE HAVE THE SKILLS REQUIRED?"

Is poorly written content a risk? Or could the content be misinformed (due to a lack of expertise)? Will the content be optimized for search engines? Go back to your content requirements and make sure you have the manpower to meet them all. If you don't, call for some outside help.

"WHERE MIGHT THINGS GET POLITICAL OR CONTENTIOUS?"

It's an awkward subject to broach, but organizational politics could pose a serious threat to the project. I've often seen people hold back their opinion (or, more dangerously, overestimate their ability to deliver work) due to certain people being in the room. The best way to deal with this is to treat all team members as equals and to ask probing questions of everyone in the room.

5. *Estimate Hours*

It might not be easy, but try to calculate the hours of work required to complete each stage of the process. This isn't the same as calculating how long it will take to complete a stage, although both are important when planning resourcing.

Estimate how much effort is required to complete each stage.

ESTIMATE WORKLOAD

Estimate (in fractions of hours) how much effort is realistically required to complete each stage. Once you've come to an agreement on the time required, write the number beside each stage. If the debate about estimates is taking too long, you could try adapting the "planning poker[68]" technique used in scrum.

68. http://en.wikipedia.org/wiki/Planning_poker

CALCULATE TIME

Add up the time required to complete all stages. This might be a good time for a break.

ESTIMATE TOTAL WORKLOAD

Multiply the total time by the number of pages anticipated for the website to get an estimate of the total amount of effort required for all of your content. As mentioned, you might be dealing with modules or items of content (things like product specifications or staff biographies), rather than pages. Either way, consider the average size of these items to get a realistic estimate of the time required to get the work done. I often group together additional content, such as microcopy, treating it as a single item in the calculation.

The calculation might look like this: 4 hours (time to produce and approve one page) × 125 pages = 500 hours of work.

6. Present The Process

Everyone should review the process at the end of the workshop to be clear on what's going to happen, who is doing what and how it will be implemented. This is also a good time to outline the next steps.

WALK THROUGH THE PROCESS

Each group should walk the whole team through their process (on a sheet of paper) and then open up the presentation for discussion. The person facilitating the workshop should go around and get input from everyone in the room. Address any concerns or anxieties immediately. Concerns tend to focus on whether there is enough time! Also, address any technical issues that people might not feel confident asking about.

Try to film the presentations so that any absent stakeholders can keep up with the discussion.

Following this discussion, move on to the slightly more serious task of setting realistic deadlines for the content and assigning responsibility. Talk about the software you might use to host your editorial calendar[69], once you have a clear idea of the process that the software has to support. Choosing the software first could lead you to have to shoehorn the process in; this is best avoided!

Workshops Work

Hopefully this template will help you to run successful content-planning workshops of your own and, more importantly, help you to get content finished on time and to a high standard.

With everyone on the same page (literally), the risk of delays with content production will be far less.

69. http://blog.crazyegg.com/2013/10/18/content-strategy-editorial-calendar/

ADDITIONAL RESOURCES

- "Help Your Clients Produce Their Own Web Project Content[70]," Liam King
- "The Art of Content Approval[71]," Joel Barker
- "A Checklist for Content Work[72]," Erin Kissane
- "Content Production Planning for Agencies[73]," GatherContent
- "Let's Talk About Migration[74]," Hilary Marsh
- "Evolving Client Content[75]," Steven Garrity ❧

70. http://www.lagomstrategy.net/blog/2014/16/06/8-tactics-help-clients-produce-web-project-content
71. https://blog.gathercontent.com/art-of-content-approval
72. http://alistapart.com/article/a-checklist-for-content-work
73. https://gathercontent.com/content-production-planning-for-agencies
74. http://www.hilarymarsh.com/2014/04/23/lets-talk-migration/
75. http://alistapart.com/article/clientcontent

Help Your Content Go Anywhere With A Mobile Content Strategy

BY KERRY CRAWFORD ❧

You've put a lot of thought, time and effort into creating great content, and you want users to have a great experience with your content. While you might have created the best content in the world, you don't get to choose how users access it. That's why it's important to make sure your content works beautifully on every platform and device, desktop, mobile or something else entirely.

Before you panic, I'm not advocating that you create individual content strategies for each device or network that your content is published to. That would be crazy, and it wouldn't necessarily work better for your users.

It's not because you wouldn't do a good job — it's because it would be impossible to plan and keep up with special content strategies for every device that exists now (not to mention ones that haven't been invented yet).

While there's no magic bullet to make sure your content is publishable and useful on every device, you can change the way you think about, plan for and create content so that it can go anywhere it needs to go.

Developing a mobile content strategy isn't just about making content look as good on phones and tablets as it does on the desktop. As Sara Wachter-Boettcher writes in her book, "Content Everywhere[76]", it's about creating portable, flexible content structures that go wherever your users are, without sacrificing quality. It's an intimidating task, but not impossible. We'll start with an example, then cover some of the things you can do to make your content more flexible and accessible.

First, An Example: How NPR Learned To COPE

National Public Radio's (NPR) core product has long been high-quality audio journalism. But because audiences don't solely rely on their radio for news, NPR needed a content strategy that would allow it to reach a larger audience by publishing stories to multiple platforms. It needed a way to expand its radio stories with photos, videos, audio and text and get them to readers, no matter what devices they were using. They also needed to be efficient and cost-effective and make it easy for journalists to publish their stories. So, it developed a content strategy that would ensure that its stories would work well on every device without their having to create new publishing platforms for each type of device or having to duplicate every story for each platform.

The key to the strategy was to create "display-agnostic" content structures that allow journalists to COPE — create once, publish everywhere[77]. In NPR's new strategy, journalists file their stories once to a CMS. Each story published to the CMS has common elements — titles, cat-

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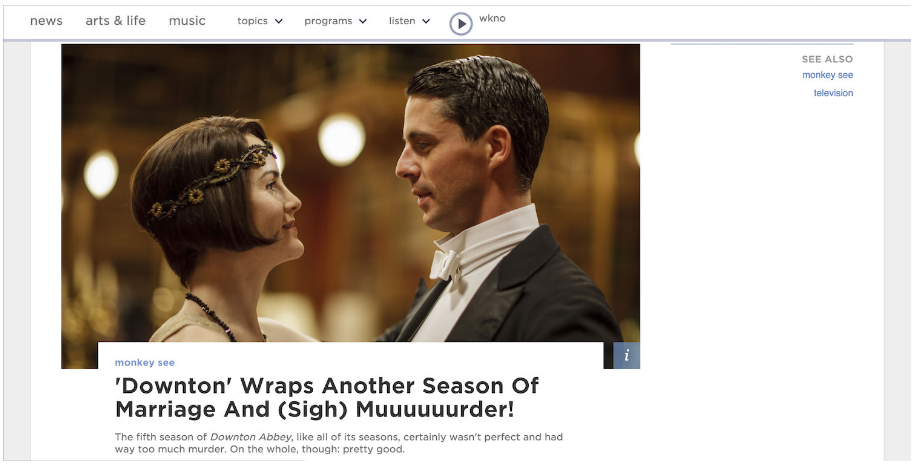
76. http://rosenfeldmedia.com/books/content-everywhere
77. http://www.programmableweb.com/news/cope-create-once-publish-everywhere/2009/10/13

egories, tags, captions, etc. — that can be shown or hidden depending on the device and that is distributed via an API. This way, NPR's designers can change the content's presentation for each platform without sacrificing quality or requiring the editorial team to publish stories multiple times.

Here's a small example of how it works. Check out one story about Downton Abbey from NPR's Monkey See blog. The story was written, edited and then published to NPR's CMS. But because of NPR's COPE model and APIs, it displays a little differently on different screen sizes.

Here's how the story's excerpt was displayed on NPR's home page on the desktop:



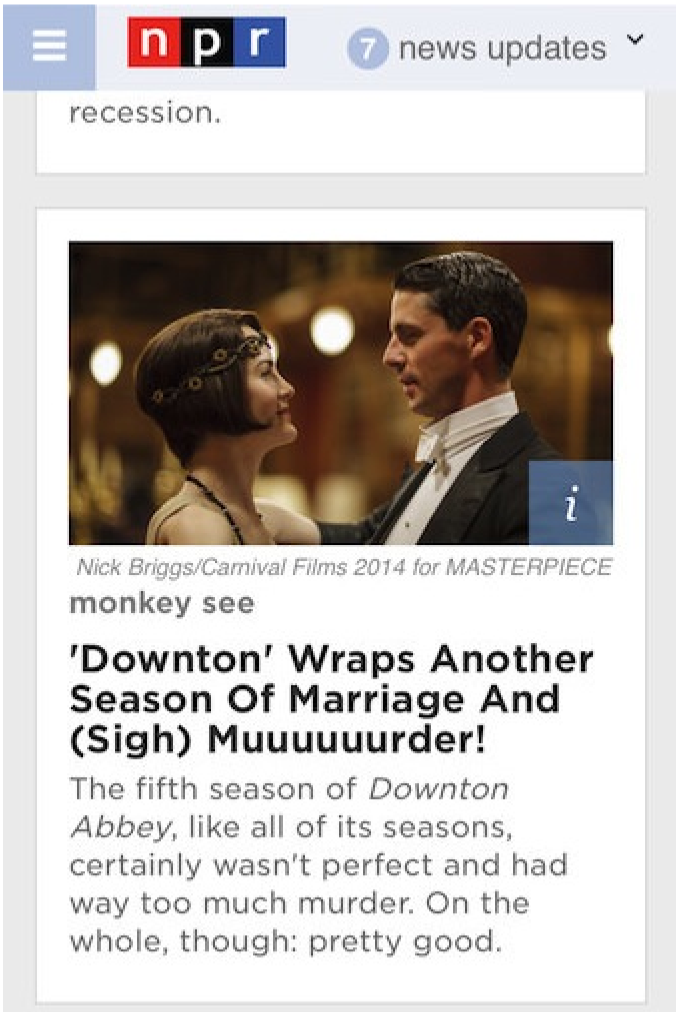
This is how the story appears on NPR's home page on the desktop.

Looks good, right? Let's break it down by the elements in the desktop excerpt:

- categorization (of the Monkey See section)
- headline

- excerpt
- a few links to related tags (to the right)
- image
- image caption (hidden behind that blue button)
- image credits (also hidden behind the blue button)

Now, here's how that same story's excerpt looks on the mobile version of NPR's home page:



This is how the story appears on NPR's home page on mobile.

You'll notice it's pretty much the same, but with a few small differences:

- While the category is still there, the related tags aren't used.
- The image credit is visible right below the image, while the caption is still hidden behind the button.

So, the journalist published the story once, and the same content is presented, but some of its elements are left out or rearranged to accommodate for the smaller screen.

In order to create a content strategy that works for you and that goes wherever your users are, you have to stop thinking about devices. Instead, start working to create content that has structure, even as it takes on different forms.

Content Modeling: A Difficult, Time-Consuming And Incredibly Necessary Process

Before you can build an effective content strategy, mobile or otherwise, you have to know exactly what you're working with. That's where content models come in — they're a way to give your content an organizational structure without defining its form, and they're very important to your strategy's success.

Trust me, content modeling is something you want — no, *need* — to do, not because it's a fun time necessarily, but because doing it early has the potential to save you a ton of time, money and heartache later. Doing content modeling early, before you get into the design and development process, is much better.

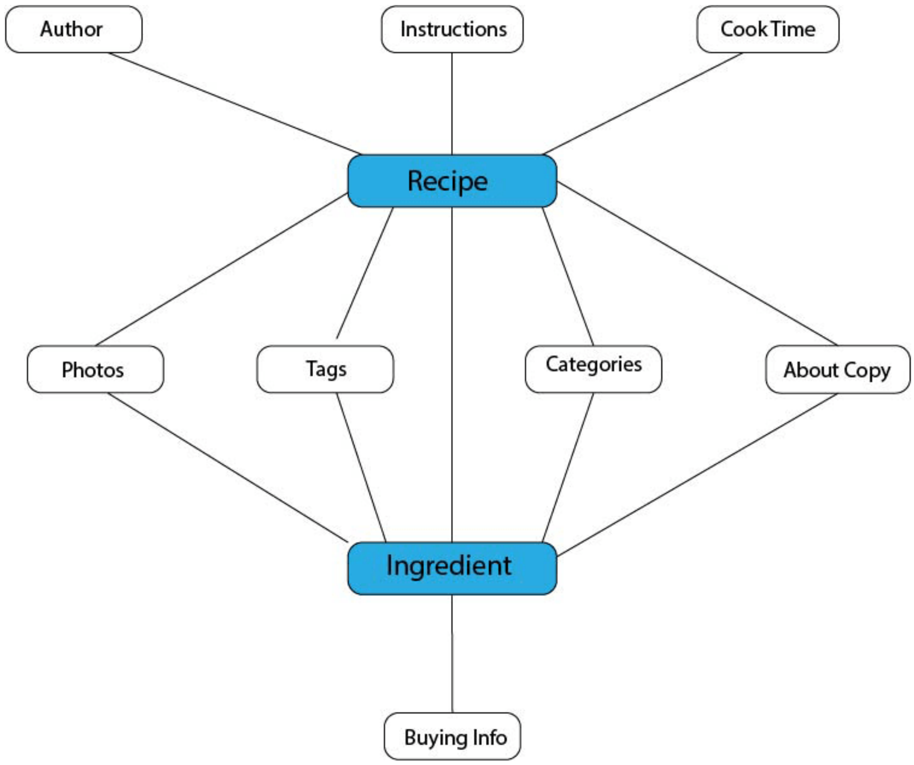
Raise your hand if your design team has ever spent weeks or months on a really lovely design for desktop and mobile, only to show it to the client for review and realize that you haven't accounted for content types that need images or video or some other crucial element. That's the worst, right? By spending a little time on content modeling, you're reducing the risk of that happening, while also making your designers and developers' lives easier. Content modeling isn't difficult, but it takes some time and effort.

Let's say you're working on a website geared to home cooks. Your team is ready to start working on a new mobile content strategy. Before diving into your strategy, though, you need to get your team together for a content modeling session.

A content modeling session is easy to set up. You'll just need to get a few key stakeholders together around a whiteboard for an hour or two (though, don't be surprised if it takes longer). There's no limit to how many people you should invite to the content modelling session, but don't let it get too big. Include a few of the people who will be creating the content — they're the ones who will be dealing with the content the most — as well as anyone charged with setting standards, goals and direction for the brand.

Start by looking at the website's existing content types. What kinds of stories, blog posts or other content types are being created? List each content type and the elements it includes, like photos, captions, body copy, headlines, etc. Don't forget to include things like newsletters, podcasts, listings and events — the point here isn't to do this quickly, but to be thorough. For our cooking website, two of the website's content types might be recipes and ingredients.

Once you've got a list of content types, break them down by element. You've established that two of the content types are recipes and ingredients. These two content types are related (recipes consist of ingredients, and ingredients can be tied to specific recipes), but each includes its own unique set of elements.



This is an example of what the content model for recipes and ingredients might look like. The diagonal lines show the relationships between content elements and content types.

After you've listed each existing content type and its elements, think about what content types you'd like to be able to create in future. For example, do you want to go beyond recipes and ingredients and create sets of seasonal dishes? Or is your business model shifting to include notable chefs or contributors, who will need to be featured. Nothing is off limits — think about your business goals, editorial goals and audience's needs.

ONCE YOU'VE GOT MODELS, START BUILDING THEM OUT IN THE CMS

Once you've got your content model in place, start setting up a CMS that will help you COPE.

Every CMS is a little different, but in most cases you won't need to create an entirely custom CMS to support your new content strategy. In most cases, you can bend your existing CMS to your will by creating page types, post types, custom fields and field sets that make it easier to create and display content. You can tie field sets to page and post types, which will make it easier for your content creators to add all of the necessary information.

For example, you might set up a page type in your CMS for each recipe and include these fields:

- ingredients list (linking each ingredient to its ingredient page);
- cooking time;
- categories (like season or course — think appetizers, desserts, etc.);

- introductory copy about the recipe;
- recipe instructions;
- tags;
- author (which could possibly include fields for the author's name, a head shot and a short bio).

Once you know which elements make up each content type and have accounted for them in your CMS, you'll be able to COPE. You'll have a flexible content structure that allows you to publish each recipe or ingredient once, even though it might be presented differently on each platform. You can then work with your designers and developers to figure out which elements should appear when.

Understand How Your Content Will Be Used

Ultimately, we don't get to choose when someone decides to use the content we create or which platform they use it on (but, oh, the world would be a much simpler, if less interesting place, if we did). So, why think about use cases? Because our job is to make our content accessible and useful to all users, no matter when or where it's being used.

Super-smart content strategist Karen McGrane puts it this way[78]:

78. http://alistapart.com/article/your-content-now-mobile

> *"People use every device in every location, in every context. They use mobile handsets in restaurants and on the sofa. They use tablets with a focused determination in meetings and in a lazy Sunday morning haze in bed. They use laptops with fat pipes of employer-provided connectivity and with a thin trickle of data siphoned through expensive hotel Wi-Fi. They use desktop workstations on the beach — okay, they really only use traditional desktop machines at desks. You've got me on that one."*

Going back to the recipe website, it has a ton of possible use cases. You may have users who:

- spend time browsing the website for recipes on their desktops and planning their menu before going to the grocery store;
- pick up an interesting ingredient at the store and pull up your website on their phone to learn more about it and to see what recipes it could be used in;
- call on Google Glass to find a recipe on their way to the store;
- prop their tablets up in the kitchen like a cookbook;
- ask an audio interface to read a recipe to them step by step.

What do all of these users have in common? Each one of them deserves to have a great, complete experience with your content.

"But wait!" you might say. "We've got a ton of data showing that our users use our website in this particular way on this particular device." That may be mostly true, but you can't always be absolutely positive. That's why the best solution is to make all of your content available and easily accessible across all platforms.

Such accessibility doesn't mean sacrificing the user experience, though, nor does it mean that the presentation of your content must be identical on phones, desktops and tablets.

Each device has its own considerations for design and user experience that your content can work within. Let's consider some examples.

- You might choose to highlight specific content elements on different platforms, while placing others behind a menu.
- Or you could opt for a more visual presentation on large screens, using larger images that might not work as well on smaller screens. (For example, you might hide each section of a recipe behind a tappable button on a phone, so that users can quickly see and access the information they need.)
- On desktop displays, you might choose to immediately show more photos of recipes associated with an ingredient to encourage further browsing.

The point is that while your content's presentation may change, users should be able to access the same amount and quality of content from any platform.

Adapt Your Editorial Process To Your Strategy

Once you've done the hard work of modeling your content and thinking about use cases, you should have a pretty good idea of the content you're working with and where it needs to go.

Before running off and firing up your CMS, you need to consider one more thing: the editorial process. Remember that content strategy is not just about structuring content for the reader, but also about making the process of creating content efficient, thoughtful and sensitive to the content's mobility.

Your editorial team and its process are crucial to implementing your new content strategy. Your content creators are the ones who will be dealing with the new structure the most, so it's important to understand their existing processes, any pain points they may have and any changes they'd like to see. Even if you feel pretty good about the editorial process, this is a good time to check in with the content creators to see whether they need anything to make their work easier.

Creating and implementing a flexible content strategy could also mean making some changes to the way your content is published. In a perfect world, it'll make things easier. When you don't have to worry about publishing each piece of content to its own platform, you'll probably be able to streamline the editorial process. Instead of content creators having to create content in more than one place and editors having to edit for each platform, a COPE model allows the editors to edit each piece only once.

During content modeling, you may have added a few new content types or elements to the content's structure. Don't forget that these new pieces will need to be brought into your editorial policy. Here are a few things to consider:

- Who is responsible for creating each piece of content? The writer, the editor or someone else?
- Who publishes the content once it has been edited? Does the editor publish it, or do they inform the writer that it's ready to go?
- Who is responsible for categorizing and tagging content? Will your writers do that or your editors?
- How will the content be created? Will the writers create content directly in the CMS, copy and paste from a document, or submit a document to an editor for publication? Given that many CMS' allow writers to save unpublished drafts, asking your writers to create their stories in the CMS instead of in a document might not be a bad idea. This will reduce the number of steps each story goes through and will make formatting and editing easier.

Additionally, the new content structure could require changes to your editorial standards. You'll likely have to put new guidelines in place for any new content elements you have added. This is also a good time to review existing editorial guidelines to make sure they still make sense. Think about things like the following:

- Who will choose the photos that go with posts? Who will write the captions? Do photos have to have captions?
- If you've added any new content types (for example, "chefs"), who is responsible for creating those new pieces?
- How many categories and tags should be assigned to each piece of content? Does the writer or editor choose them? Also, who determines when it's time to add a new post category or tag? (Personally, I recommend that editors set them in order to keep things consistent and to make sure you're not doubling up on tags. This is especially important in content structures such as in the recipe example, which require posts to be in certain categories in order to be found.)

Before implementing your new device-agnostic content strategy, you may need to revisit your guidelines to account for things that might display differently on small screens. Headline lengths may have to be adjusted so that they don't completely take over small screens. Also, you might have to change the guidelines on image sizes to make sure that a photo attached to a story looks just as good on large monitors as it does on tablets.

Finally, even if you feel pretty good about the editorial process, this is a good time to check in with the editorial team to see whether they need anything or whether you could implement new processes as part of your strategy to make content creation easier. To dig deeper, I highly recommend reading Sara Wachter-Boettcher's book, "Content Everywhere[79]".

Final Thoughts

Remember that any new strategy is partly a learning process. And content is messy — it's human and it's vital, and ensuring that its creation, distribution and use go smoothly requires a lot of time, effort and coordination. As long as you're working to make sure that every user has a great experience with your content, you're fighting the good fight.

Use content models to understand each type of content you're publishing and the elements it includes. Then, use post types, page types and custom fields to account for each element in your CMS. Study your users to learn how they interact with your content. Try to address their most common needs while making sure the content works well across all platforms. Adapt the process of creating content to your new strategy. Train your content creators to use the new content structures you've created, and put editorial guidelines and practices in place to ensure that the strategy will be implemented.

By taking the time to create content structures that can go anywhere, as well as considering use cases and tightening up your editorial strategy, you'll be confident that the content will work, no matter who's using it or where. ❧

79. http://rosenfeldmedia.com/books/content-everywhere/

Improving Your Information Architecture With Card Sorting: A Beginner's Guide

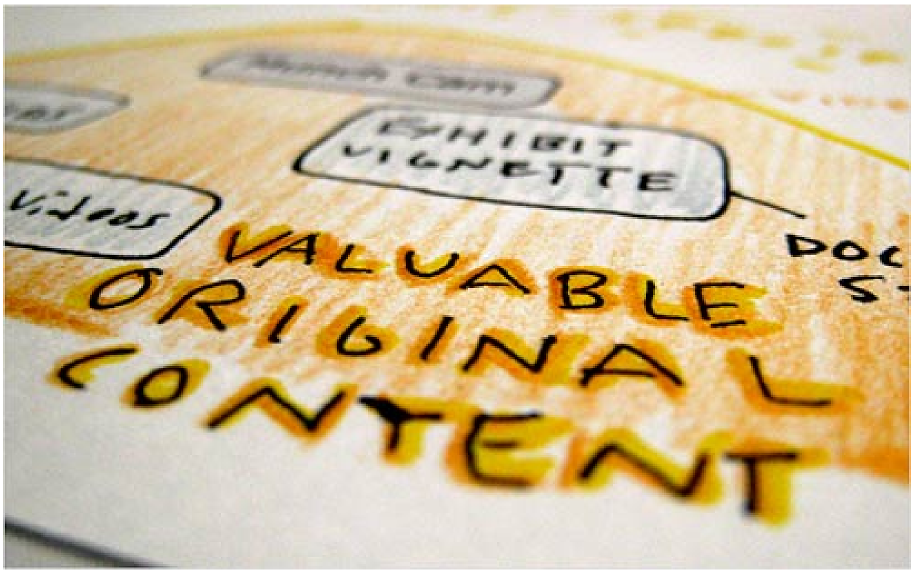
BY PIERRE CROFT ❧

Information architecture (IA) is one of those buzzwords you've probably heard before. It refers to the organization of the information on your website and how it all fits together. When planning your IA, involve users of your website in the process as soon as you can.

In this article, we'll discuss card sorting, a tried and true technique for doing just that. We'll go through some practical tips for running a card-sorting session, and also cover some examples.

What Is Information Architecture?

One of the great things about modern web design is the way it considers users' needs from the start. Successful projects are successful often because the owners commit to understanding users, their backgrounds and their goals as early as possible. Like anything else in this game, though, a successful project takes work and planning.



Good IA helps to make a project successful. It makes content easy to find on a complex website. This is also helped by effective navigation; however, there is some confusion about the difference between the two. What is *the difference, anyway? (Image source: 10ch*[80]*)*

GOOD NAVIGATION STARTS WITH GOOD IA

IA refers to the structure of information on a website, and it is depicted with site maps, diagrams and spreadsheets. Navigation refers to elements of an interface that people use to make their way through that structure — menus, breadcrumbs, links — and it is depicted in wireframes or prototypes. Therefore, improving IA starts with analyzing the website's content and structure first — navigation comes after.

As with many website improvements, it helps to use techniques that involve users. Card sorting is one such technique that has been used for many years due to its reliability and effectiveness. To start with, we'll examine

80. https://www.flickr.com/photos/10ch/3347658610

the causes of poorly organized information — prevention is always better than a cure! We'll then cover some practical tips for running your own card-sorting sessions and consider how they can improve the IA in your own projects.

BAD IA IS EVERYWHERE

Bad organization can happen anywhere. When was the last time you spent ages looking for something within a complex system and couldn't find it? A typical example is trying to find something at a large supermarket. Most people could easily find household staples in the frozen goods, dairy or fresh produce section. But which section would you visit to find more obscure products? Where would you find gluten-free bread, your favorite imported brand of hot sauce or that artisanal handmade bean dip you tried at the party last weekend?

WHERE'S THE HOT SAUCE?

I sometimes struggle when looking for products at my supermarket, which increases my frustration. I usually end up asking a store employee where to find the item, assuming I haven't left the store already. The same is true of the web, except that users are even less patient. If users can't find what they want in seconds, by either browsing or searching, they're unlikely to stick around. As a result, websites (and supermarkets) benefit greatly from an intuitive structure and organization. Unfortunately, some fail to address these issues properly, leading to lost sales as customers grow frustrated and leave.

How Bad IA Happens

It's not difficult to end up with a badly organized website, despite one's best intentions. But how does a website end up like this in the first place?

One of the most common reasons is that the IA is created from the business structure of the organization, rather than from users' needs. This is the default option for many clients. More common still is when the information is organized according to the preferences and whims of senior members in the company. This is often due to the influence of the HIPPO[81] (the highest paid person's opinion), usually made by an assertive individual who often lacks a grasp of what makes a good website.

THE IMPORTANCE OF CONTENT STRATEGY

For larger websites, the issue is often the lack of a clear content strategy. Managing content is crucial for websites that are large or frequently updated. Content strategy covers processes like:

- who updates the website and how often,
- the system for managing old or out-of-date content,
- maintaining the taxonomies for content on the website (tags, types, categories, labels).

As web professionals, we take pride in our work and planning abilities. Being confronted by an overbearing HIPPO

81. http://www.askahippo.com/

and archaic content strategies is frustrating. However, both of these problems have a common solution. User-centered techniques such as card sorting are powerful because they enable you to be much more scientific in diagnosing and fixing website problems. Later on, we'll look at how card sorting and content strategy work hand in hand.

How Card Sorting Helps

So, how do we get users involved in organizing the information on our website? Ideally, we want a solution that's cheap, quick and useful. Thankfully, card sorting is all three of these. The process is much like it sounds. You write down all of the discrete elements that you wish to organize onto cards, and then ask participants to collect them into groups that make sense to them. But is that all there is to it? When can it be used, and what should the outcome be?

WHEN TO USE IT?

The process of organizing content is fraught with questions. Should it be grouped by type or by subject? Which category does this FAQ question belong to? Card sorting answers these types of questions and is useful in many situations. Some specific examples include:

- classifying the products in an e-commerce store,
- organizing questions in an FAQ section,
- untangling a complex site map.

One of the great things about card sorting is that it needn't be confined to client projects or even websites. After having used it for clients, we saw its value as a general purpose tool. We have started using it in our own internal meetings to incorporate feedback from our team about how to organize a particular business process or how to structure an upcoming presentation.

Ultimately, the goal of any card sort is to improve the labelling, grouping and organization of information. However, it is best suited to organizing content, and it won't fix everything on its own. If your website is very task-focused (if it's an airline-booking website, for example), then card sorting on its own will provide limited benefit. Best to direct your energies towards usability testing, especially if your time or budget is tight.

Card sorting can be useful in your own internal meetings when you need to organize something. It's a great way to incorporate feedback from your team.

OPEN OR CLOSED?

Card sorting sessions can be classified as one of two types — open or closed. Open card sorting is the more flexible option of the two. Here, users are free to organize the cards you supply into groups that make sense to them, and then come up with their own names for these groups. They are also free to rename cards or make their own suggestions for new cards if they wish.

This type is best when you want to understand how users would group your content. Gathering their ideas and suggestions for names and labels goes a long way to making your website more intuitive.

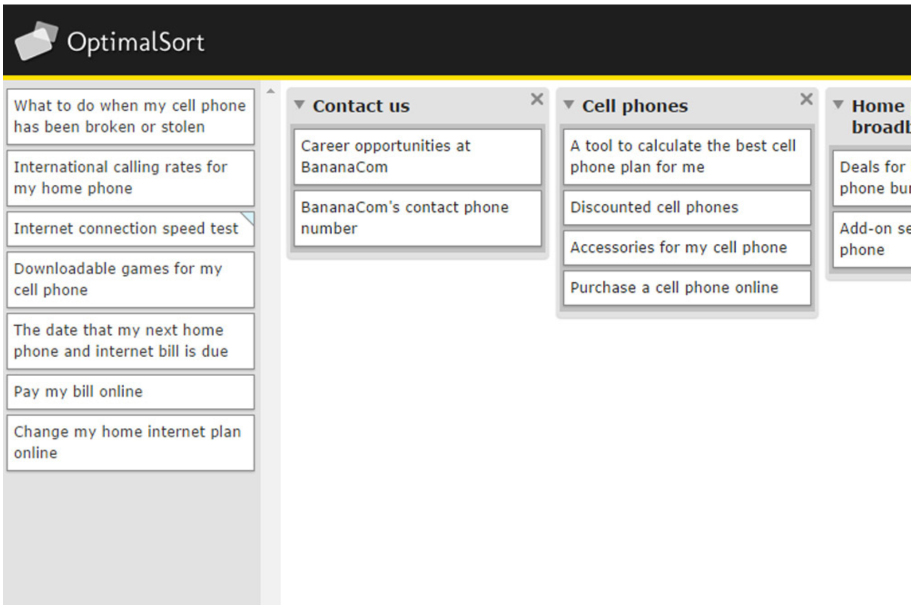
The alternative method, closed card sorting, is where the categories or labels are fixed. This is useful when you want to understand how users fit content into an existing structure. It's also used when new content needs to be added to a website.

As an example, consider an e-commerce website and the top-level categories they might have for their products, such as technology, home and garden, and sports and leisure. Now suppose that the store has started stocking a new range of products that have just been launched. Which top-level category on the website should these products be added to? Involving users in a closed card sort could help you to arrive at an answer.

Sometimes you can mix the two techniques. Run an open card sort with one group of users to define the top-level categories. Then run a closed card sort using these new categories, and see how easy it is for users to fit existing content into them.

THIS TIME, IT'S PERSONAL

Traditionally, card sorting is as low-tech as it gets, requiring no advanced technology or software. You simply write all of the items on pieces of paper or cards, spread them out on a table, and let your users have their way with them. This method is the most widely used because it's cheap, quick and intuitive. Being in the same room as your users means you'll be on hand to guide them through the process.



OptimalSort is an online tool for card sorting. (Image source: OptimalSort)

The focus of this article is offline sessions, but online sorting tools, such as OptimalSort[82] and ConceptCodify[83], present some key advantages. Recruiting participants is

82. http://www.optimalworkshop.com/optimalsort.htm
83. http://conceptcodify.com/

easier, which makes it easier to scale up. Many feature advanced reporting tools to identify correlations and patterns, which can take a lot of time when done manually. Free tools such as Trello[84] also work well for card sorting, but you lose the ability to generate reports.

The disadvantages of online services are that they are often a lot more expensive and you lose that personal touch. You'll gain unique insight by observing people's behavior and body language, which online sessions can't capture.

Step By Step

1. PREPARE

The first task in running an offline session is to prepare your cards. Create a document that lists all of the items you are testing, and give each one a number — spreadsheets are ideal for this. These items could be pages in a site map, product categories or labels in a taxonomy. Each item in this list then gets written on a single card, with the corresponding number written on the reverse. This numbering will help if you want to run more advanced analysis once the sessions are complete.

For the cards themselves, use actual cards instead of paper, which can get lost, worn out or torn easily. Also, don't test too many things at once. From experience, I can say that no more than 50 to 70 items per session is about right. If you're trying to organize a massive system, break

84. https://trello.com/

it up into chunks, and then run sessions for each chunk.

Choosing what to write on the cards can be challenging. Ideally, the labels should be short enough that they can be read quickly, but long enough to make sense and for participants to understand what is being represented. Short titles usually make sense only in the context of the group they belong to. Therefore, summarizing the content as briefly as possible could help, rather than simply using a title.

For example, a label like "More information about our phones" would be preferable to just "More information." The second item would make sense within an existing parent group named "Our phones," but on its own it doesn't make much sense.

In summary:

- Use a spreadsheet when preparing your cards.
- Get cards that are durable.
- Find a balance for labels between simple and intuitive.

2. WALK BEFORE YOU CAN RUN

If this is your first time using this technique, use it in a smaller project if you can. Organizing and analyzing the results will be easier, and it will be an opportunity to fine-tune your technique for next time. One decision you'll need to make early on is whether to run group or individual sessions. The answer usually depends on the complexity of the system, as well as your time and budget. If you're just starting out, get your feet wet with individual sessions first — you can always scale up later if you need to.

When you're organizing a lot of content, groups of three users will reach consensus faster. However, they will need more moderation, and they could cost you more time and money. You also run the risk of dealing with aggressive HIPPOs, which can skew the results.

How many users should you include in a session? For the data to be useful, you will need more users than for a typical usability test. Jakob Nielsen recommends about 15 users[85] to arrive at statistically useful results. Be wary of including more and more users in your tests, however, because the returns diminish as you go higher.

In summary:

- If this is your first go with card sorting, try it on a smaller project first.
- Groups reach consensus faster.
- Individual sessions are easier to moderate.
- Get around 15 participants to achieve useful results.

3. FIND PARTICIPANTS

The next step is to find participants. For best results, find actual users of the website, especially if it's a niche or specialized system. If you're trying to improve the organization of a student intranet, for example, find students. For

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85. http://www.nngroup.com/articles/card-sorting-how-many-users-to-test/

something more general, like a large e-commerce website, find users with a broad range of demographic indicators, such as age, income or technical ability.

If possible, involve your client in finding users. The client could even provide them directly — say, if you're redesigning a staff intranet. Offering a small financial incentive, like a gift voucher, also helps to make sure they turn up.

In summary:

- For niche websites or intranets, find existing users.
- For more general websites, find users from varied demographics.
- Clients are often helpful in finding participants.

4. PUT IT ALL TOGETHER

The final step in preparation is to get the meeting room ready. Get a large table or notice board — the bigger the better. You'll also need some kind of recording system in place. This could be anything from a camcorder to a smartphone, as long as it enables you to play back the audio and video from the session. Make sure enough drinks and refreshments are on hand, too.

Once you've prepared the cards and your users have arrived, it's time to run the sessions! Provide clear instructions, and let the users know you will be recording their sessions for later review. Explain that you want them to organize the cards into groups that make sense to them and that there is no right or wrong answer. If you're running an open card sort, get some blank cards for them to write their own names once the initial organization stage is over.

While you're running the sessions, you might need to act as a moderator. Be on hand if they get stuck (there will likely be a lot of "ums" and "ahs"), but explain that this isn't a problem. In fact, knowing where they are getting stuck is useful because it indicates a problem with labelling. If they find some cards difficult to classify at all, then leave them off to one side and note what they are. Also, be aware that the demands on you as a moderator will increase in group settings.

In summary:

- Record each session and take notes.
- There is no right or wrong answer.
- The demands on you as a moderator will increase with more participants.

5. WRAP UP

Once they have gotten as far as they can, feel free to ask some questions if you have time. You could ask them to explain their choices in more detail, what made them hesitate about this particular card, and so on.

Finally, record the arrangement they've made. The easiest way to do this is simply by taking a photo, but in a small room it can be hard to make sure that all of the cards are in the shot. Taking a photo isn't always feasible, so if you have numbered the cards, then you can note which numbers were grouped together. This will also help you when you do a more detailed statistical analysis of the groupings, which is out of scope of this article.

Once that's done, write the participant's name on your notes and photos. To reduce any potential bias, shuffle the cards for the next user, and then invite them in.

In summary:

- Taking photos is a quick way to record the arrangements.
- Ask questions if you have time.
- Shuffle the cards before each session to reduce bias.

FURTHER TIPS

- Offering a small incentive is a good way to encourage participation.
- When choosing what to sort, try to choose content from similar levels (i.e. category pages or individual help topics). Mixing child and parent categories is confusing.
- Provide clear instructions. Have an idea of what you want to say before you start.
- Provide blank cards and a marker pen for new suggestions — essential for open card sorting.
- Try not to interrupt participants unless they ask for help.
- It's OK if participants can't group everything. This is useful information.

- Set a time limit for each session, which will make scheduling much easier.
- In individual sessions, ensure that no one else is present. This would be distracting.
- Always record the sessions, and take notes!

Interpreting The Results

Congratulations! You've just run your first card-sorting sessions, and your notebook is full of fresh insights. The next step is to interpret the results. Because this is probably your first card-sorting session, you won't have mountains of results to sort.

For each participant, document two sets of observations for each session. The first step is to create a new document, and then transfer any notes that you made during that session. These should be qualitative observations, such as any new names that were suggested and whether the person hesitated on a particular card.

Next, note that participant's groupings. You could simply arrange the groupings in a bulleted list in your document or show the groupings in a spreadsheet. A spreadsheet is ideal if you want to perform some advanced statistical analysis later. Various methods and pieces of software can do this for you, and the specifics of this could fill another article by themselves. The important thing is to depict the hierarchy, the parent-child relationships, that each participant created.

WHAT TO LOOK FOR

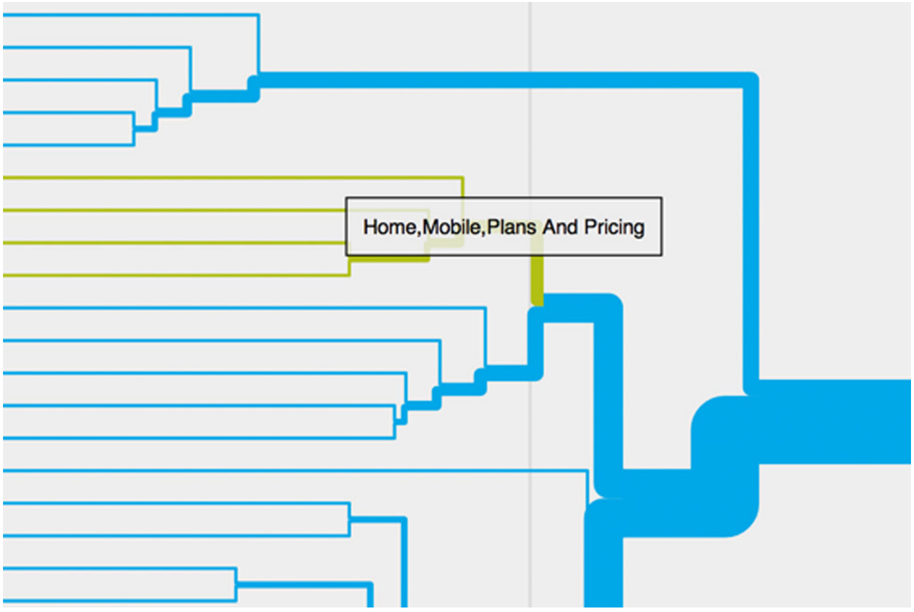
Once this is complete, it's time for analysis. This is as much art as science. The goal is to identify trends that correlate across different sessions, and to answer some of the following questions:

- Which items appeared together most often?
- Which items did participants struggle to classify?
- What new suggestions or labels were made?
- Were any items put in more than one grouping?
- Were any other items of interest brought up during the sessions?

If many users organized the cards in a similar way, then the job is fairly straightforward. It's a matter of applying that same organization to your content. If you have time, then follow up with further user testing to confirm that the new structure is superior to the old one.

For IAs that are complex, users often come up with wildly different structures. You might need to involve a larger group until broad trends emerge. This is the hard part, and it might take a couple of passes to sift through the chaff and get to the good stuff. After running a few sessions, you'll get the hang of it.

Online tools are a great help in these situations because they make statistical analysis much easier. Advanced techniques of analysis include creating dendrograms. These are tree-like diagrams that show the grouping of information within hierarchies and show how closely items are related. Some online services provide tools for making these, but they're quite onerous and out of scope for this article.



Dendrograms represent visual groupings of information, but they are tricky to create without specialized software.
(Image source: Optimal Workshop[86])

Example From A Real-World Project

BACKGROUND

Recently, the team at Decibel Digital[87] worked on the redesign of a major UK animal charity website. The existing website had a section simply named "A–Z," which contained hundreds of pages. A lot of the pages were genuinely useful and included varied content such as news,

86. http://www.optimalworkshop.com/
87. https://www.decibeldigital.com/

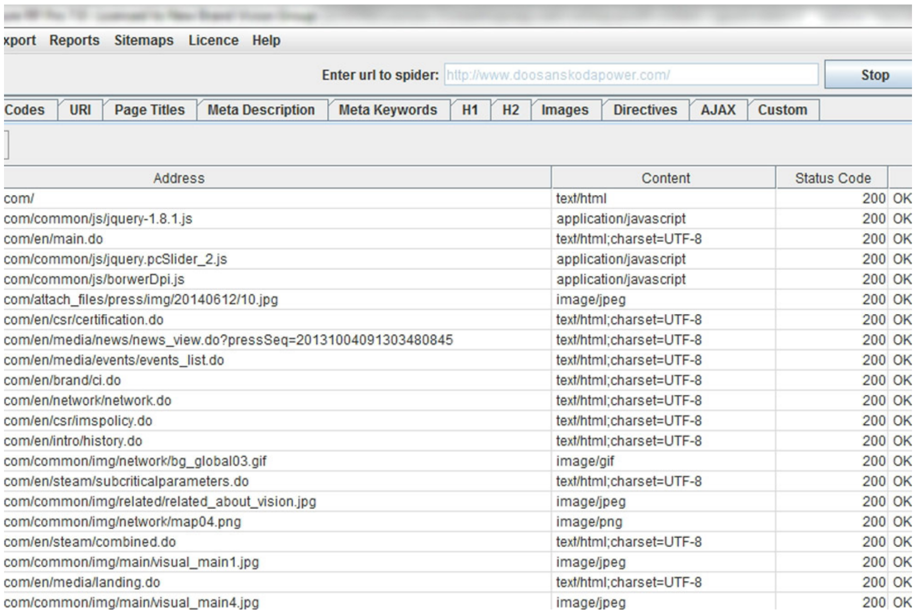
help, videos and downloads. The problem was that there was little to no structure. Everything was simply mixed together and then organized alphabetically. It was the largest section of the website by far, so locating what you needed without relying on search was incredibly hard.

Upon speaking with the digital team, we realized that part of the problem was a lack of oversight. Anyone in the company was able to upload new content to this section, and they would often upload duplicate content with a slightly different name. Over many years, the content in this section grew into a chaotic mess, like an asteroid belt — and just as difficult to navigate.

RUNNING A CONTENT AUDIT

Getting into the habit of auditing content before redesigning a website is a good thing. We gathered all of the website's pages and their URLs in a spreadsheet, along with a short description of the content — text, images, video, articles and so on. These URLs can be exported from an existing CMS, but we used a tool named Screaming Frog[88].

88. http://www.screamingfrog.co.uk/seo-spider/



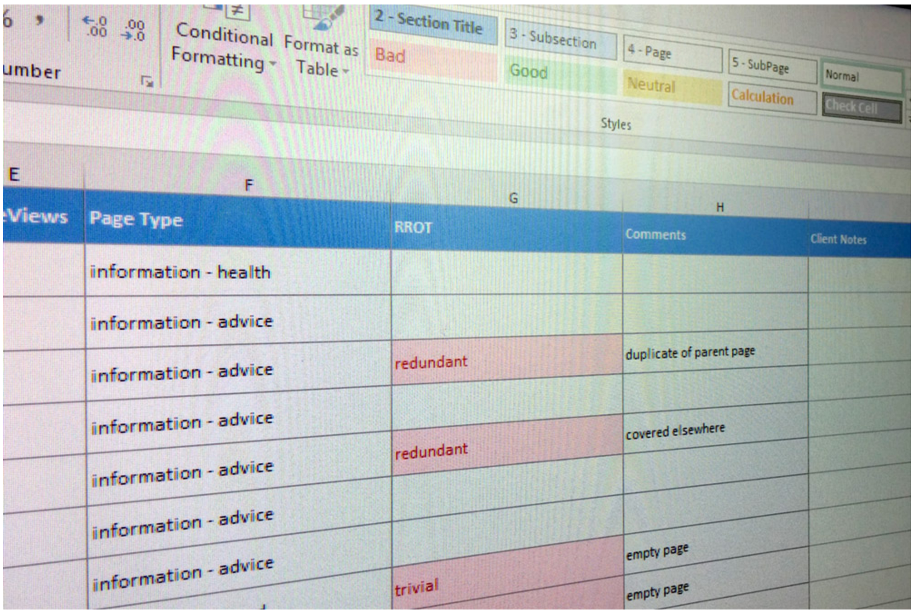
Address	Content	Status Code	
com/	text/html	200	OK
com/common/js/jquery-1.8.1.js	application/javascript	200	OK
com/en/main.do	text/html;charset=UTF-8	200	OK
com/common/js/jquery.pcSlider_2.js	application/javascript	200	OK
com/common/js/borwerDpi.js	application/javascript	200	OK
com/attach_files/press/img/20140612/10.jpg	image/jpeg	200	OK
com/en/csr/certification.do	text/html;charset=UTF-8	200	OK
com/en/media/news/news_view.do?pressSeq=20131004091303480845	text/html;charset=UTF-8	200	OK
com/en/media/events/events_list.do	text/html;charset=UTF-8	200	OK
com/en/brand/ci.do	text/html;charset=UTF-8	200	OK
com/en/network/network.do	text/html;charset=UTF-8	200	OK
com/en/csr/imspolicy.do	text/html;charset=UTF-8	200	OK
com/en/intro/history.do	text/html;charset=UTF-8	200	OK
com/common/img/network/bg_global03.gif	image/gif	200	OK
com/en/steam/subcriticalparameters.do	text/html;charset=UTF-8	200	OK
com/common/img/related/related_about_vision.jpg	image/jpeg	200	OK
com/common/img/network/map04.png	image/png	200	OK
com/en/steam/combined.do	text/html;charset=UTF-8	200	OK
com/common/img/main/visual_main1.jpg	image/jpeg	200	OK
com/en/media/landing.do	text/html;charset=UTF-8	200	OK
com/common/img/main/visual_main4.jpg	image/jpeg	200	OK

SEO Spider is a nifty little utility that crawls a website and lists all of its pages and elements. You can use this list to perform a content audit.

Once the spreadsheet was prepared, the next step was to evaluate the content. We used a method called a ROT analysis. We checked each piece of content using the following criteria:

- **R**: Is the content redundant?
- **O**: Is it outdated?
- **T**: Is it trivial?

Working through the website's content like this can seem laborious, but it was actually very therapeutic. The client felt relieved once they started unravelling the content monster that their old website had spawned, which made everyone feel better about the project. Using this ROT analysis made it faster to reach consensus on choosing pages to remove or archive. Pretty soon, the content was whittled down to manageable levels. The next step was to figure out how to organize this content. Enter card sorting!



A content audit is way more fun than a tax audit.

RUNNING A CARD-SORTING SESSION

Following on our content audit, we all felt that the existing A–Z section wasn't really fit for the purpose, despite a lot of the content being useful and valuable. We decided to run a card-sorting session to organize the content in a way that would inform the new website's navigation. The goal was to develop a structure that made the content browser-friendly and easily findable without the user having to rely on search.

WHAT TO TEST?

The website still had a lot of pages, so we had to decide which to include in the sessions. Having too many cards to sort becomes laborious and difficult, so we decided to include only first- and second-level pages to keep things manageable. We also didn't include utility pages, such as "Contact Us," "Privacy Policy" and the like, which are commonly found on many other websites. Once this was done, we had about 50 pages left, which we felt was ideal to begin the sessions.

FINDING USERS

The next step was to find users to test, for which we enlisted the help of the client. The users of the website tended to skew to an older female demographic, so having the client's input here was very useful. Some of the users we tested had already engaged with the client in offline marketing activity and were excited to help!

OPEN VS. CLOSED

We decided to run an open card sort because the content from the existing A–Z section was diverse, comprising news, videos, blog posts, help articles and advice. We wanted to rely on the users' input to create labels for these content types that made sense to them. As a result, we supplied plenty of blank cards and pens for them to write their own suggestions.

During each session, we took plenty of notes, particularly about the items that users found difficult to sort and any suggestions they made for new labels that we hadn't considered. We also recorded each session as a backup, so that we could go over the recordings later to observe anything we missed.

WHAT WE FOUND

At the conclusion of the sessions, we took photos of the groupings and updated our spreadsheets. We looked for quantitative data — were there any trends? Did multiple users make similar suggestions for new labels? Did any labels consistently cause users to struggle? We looked at qualitative data, too: specific comments that users made or what they said out loud as they struggled to categorize a particular card.

The results from your card-sorting sessions might surprise you.

Being a charity, the client relies a lot on donations and support from the public, so getting the labels for these sections right was important. We found some interesting points:

- The website offered annual paid memberships as a means of supporting the charity, as well as the ability to register a free account on the website. These were labelled as "Register an account" and "Become a member"; however, many users were confused by the difference. We ended up changing the wording of the membership call to action to eliminate the confusion.

- We had suggested the name "Knowledge Centre" as a label for the help content, but many users suggested alternatives. We ended up using "Help & Advice" on the website instead.

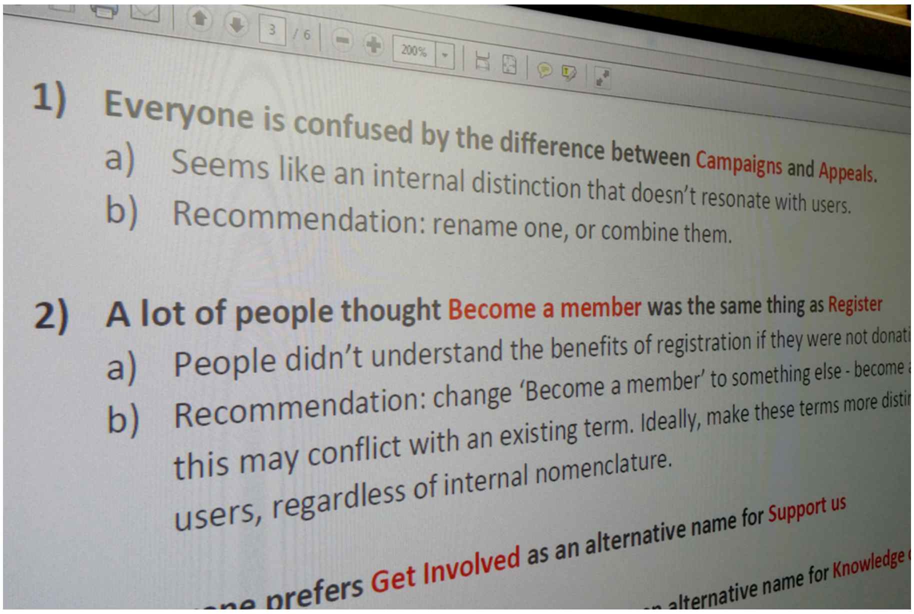
- The charity ran monthly "Appeals" as another means of getting donations, and it also campaigned on many issues that were listed in "Campaigns." Lacking any context, though, every user we tested struggled to differentiate these cards. We ended up incorporating the "Campaigns" section into another area of the website.

- To indicate a desire to support, nearly every user suggested the term "Get Involved" as a major category label. We noticed this convention on other charity websites, too.

After all this was done, we presented our findings in a report. We decided not to include masses of quantitative data. While it was useful to us internally, we felt the client would be unfamiliar with the quantitative data and wouldn't know how to interpret it without sufficient explanation.

Instead, we presented our key findings (like those listed above) in plain English, and we classified our findings as high, medium and low priority. We also included some recommendations on how to resolve the issues we found.

This made it much easier for the client to identify "quick wins" with their content's structure, and it made it easier for us to implement the required improvements.



The client doesn't always need to see the messy details. Putting your key findings into a clear report is often preferable.

Final Thoughts

Card sorting is a favored technique because it's cheap, reliable and easy to set up. It's a great way to become familiar with concepts such as information architecture and user-centred design. Remember that it's not a silver bullet, and it won't fix all of the problems on an existing website. A website might be performing poorly or be hard to use for many reasons, and improving the IA might address only some of them. However, when used in tandem with other user-centered design techniques, it can go a long way to starting off a project or redesign on the right foot.

Hopefully, you have enjoyed learning about card sorting. When implemented well, it results in a product that is intuitive and easy to navigate.

OTHER RESOURCES

- ConceptCodify[89]
  Online card-sorting tool
- OptimalSort[90]
  Another sorting tool, part of a suite of UX products.
- "The Difference Between Information Architecture and Navigation[91]," Jennifer Cardello, Nielsen Norman Group
  This article does a great job of explaining what IA is, and what it is not.
- *Information Architecture for the World Wide Web*[92], Peter Morville and Louis Rosenfeld
  The definitive book for those who want an in-depth look at IA. ❧

89. http://conceptcodify.com/
90. http://www.optimalworkshop.com/optimalsort.htm
91. http://www.nngroup.com/articles/ia-vs-navigation/
92. http://shop.oreilly.com/product/9780596527341.do

Content Knowledge Is Power

BY SARA WACHTER-BOETTCHER ❧

"Content matters!" "Comp with real copy!" "Have a plan!" By now, you've probably heard the refrain: making mobile work is hard if you don't consider your content. But content knowledge isn't just about ditching *lorem ipsum* in a couple of comps.

Countless organizations now have a decade or two's worth of web content — content that's shoved somewhere underneath their redesigned-nine-times home page. Content that's stuck in the crannies of some sub-sub-subnavigation. Content that's clogging up a CMS with WYSIWYG-generated markup.

Messy, right? Well, not as messy as it will be — because legacy content is the thing that loves to rear its ugly head late in the game, "breaking" your design and becoming the bane of your existence.

But when you take the time to understand the content that already exists, not only will you be able to ensure that it's supported in the new design, but you'll actually make the entire design stronger because you'll have realistic scenarios to design with and for — not to mention an opportunity to clean out the bad outdated muck before it obscures your sparkly new design.

Today, we're going to make existing content work *for* you, not *against* you.

What You Don't Know Will Hurt You

When you're working on something new and fun, ignoring the deep recesses of content is tempting. After all, you've got a lot to think about already: designing for touch, dealing with ever-changing screen sizes, adding geolocation features, maybe even blinging things out with a few badges.

But if content parity[93] matters to you (and it damn well should if you care one whit about the "large and growing minority of Internet users[94]" who always or mostly access the web on a mobile device), then at some point you'll have to deal with the unruly content lurking underneath your website's neat surface.

Why? Because chances are there'll be stuff out there that you've never thought about, much less designed for. And all that stuff has to go somewhere — too often, shoehorned into a layout it was never meant to inhabit, or perhaps not even migrated into a new template but instead left to wither in an outdated, mobile-unfriendly design.

Take navigation. As Brad Frost has written[95], designing small-screen navigation for small websites is simply tricky, any way you slice it.

Hard as it already is, it becomes downright impossible if you haven't dealt with your legacy assets first. You're sure to end up with problems, like a navigation system

93. http://bradfrostweb.com/blog/mobile/content-parity/
94. http://alistapart.com/article/uncle-sam-wants-you-to-optimize-your-content-for-mobile
95. http://bradfrostweb.com/blog/web/complex-navigation-patterns-for-responsive-design/

that only works for two levels of content when you actually have four levels to contend with, making all of that deeper information accessible only with hard to manage (and find) text links — or, worse, making it completely inaccessible except through search.

There's a better way.

In The Belly Of The Beast

Mark Boulton has written eloquently on content-out design[96] — the concept of determining how your design should shift for varying displays by focusing not on screen sizes, but on where your content naturally breaks down. It's excellent advice.

But if you're trying to work with a website with thousands of URLs — or anything more than a few dozen, really — you have to ask: *Which* content do I design with? Unless you're relying on infinite monkeys designing infinite layouts to create custom solutions for every single page, you're going to have to rely on representative content: a set of content that demonstrates the variety of information that the experience needs to support.

So, how do you know what's representative? You get your arms around the size, scope, structure and substance of your content.

Yup. It's time for the content audit.

People have been talking about content audits and inventories for more than a decade — in fact, Jeffrey Veen wrote about them on Adaptive Path back in 2002, calling

96. http://www.markboulton.co.uk/journal/theinbetween

them a "mind-numbingly detailed odyssey through your web site[97]." At the time, people were starting to yank their websites from static hand-coded pages and pull them into content management systems, and someone needed to sit down and sort it all out.

More than a decade later, I'd say content audits are more useful than ever — but in a slightly different way. Today, a content audit isn't just an odyssey through your website; it's a window into your content's nature.

WHAT TO LOOK FOR

You could audit content for all kinds of things, depending on what you want to learn and be able to do with the information. Some audits focus on brand and voice consistency, others on assessing quality or identifying ROT[98].

There's nothing wrong — and quite a lot right — with these priorities. But if you want to ready your content to be more flexible and adaptable, then you can't just look at each page individually. You need to start finding *patterns* in the content.

It's a simple question, really: What are we publishing? If your first answer is "a page," look again. What's the shape of this content? What is this content most essentially? Is it an interview, a feature story, a product, a bio, a recipe, an erotic poem, a manifesto? Asking these questions will help you see the natural pieces and parts that make up the content.

97. http://www.adaptivepath.com/ideas/doing-content-inventory
98. http://meetcontent.com/blog/rot-the-low-hanging-fruit-of-content-analysis/

When you do, you'll have a structural model for the content that matches your users' mental model[99] — i.e. the way they perceive what they're looking at and how they understand what it means.

For example, I recently worked with a large publicly traded company whose website dates back to the early aughts. After a couple of responsive microsites, they've caught the bug and want to update everything. Problem is, the existing website's a mess of subdomains, redirects and thousands of pages that are nowhere near ready for flexible layouts.

Our first step was to dig deep, like a geologist — except that instead of unearthing strata of shale and sandstone marking bygone eras, we identified and documented all of the forgotten templates, lost content and abandoned initiatives we could.

We ended up with a dozen or so content types that fit pretty much anything the company was producing. Sure, we still ended up with some general "pages." But more often than not, our audit revealed something more specific — and useful — about the content's nature. When it didn't, that was often a sign that the content wasn't serving a purpose — which put it on the fast track to retirement.

Once you've taken stock of what you have, gotten rid of the garbage and identified the patterns, you'll also need to decide which attributes each content type needs to include: Do articles have date stamps? Does this need a byline? What about images? Features? Benefits? Timelines?

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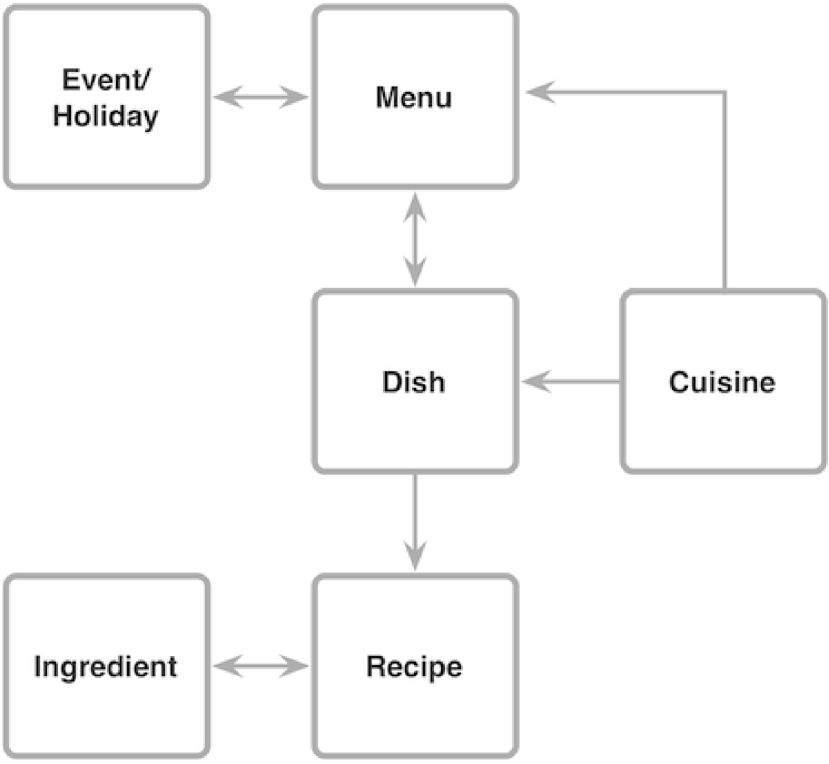
99. http://danieleizans.com/2012/03/mental-modeling-for-content-work-creation/

Ingredients? Pull quotes? This will enable you to turn all of those old shapeless pages — "blobs," as Karen McGrane has so affectionately labeled them[100] — into a system of content that's defined and interconnected:



This content model shows attributes for the "recipe" content type, and how recipes fit into a broader system.

Each bit of structure you add gives you options: new abilities to control how and where content should be presented to best support its meaning and purpose.

Regardless of what you want to do with your content — launch a responsive website, publish to multiple web-

100. http://contentsmagazine.com/articles/shifting-the-page/

sites simultaneously, extract snippets of content for the home page, reuse the content in an app, mash it up with a third party's content — this sort of structure will make it possible, because it enables you to pick and choose which bits should go where, when.

TOOLS FOR AUDITING CONTENT

The content audit may not be new, but some tools to help you get started are. Lately, I've been running initial reports with the Content Analysis Tool[101] (CAT), which, for a few bucks, produces a detailed report of every single page of content that its spiders can find across your website.

Using CAT's web interface, you can sift through the report and see details such as page types, titles, descriptions, images and even the content in `<h1>` tags — super-useful if you're assessing content of murky origin, because a headline often gives you at least a glimmer of what a page is about.

Here's an excerpt of what it found for Smashing Magazine's own "Guidelines for Mobile Web Development[102]" page (see first image on the next page).

While features such as screenshots of all pages and lists of links are useful for individual analysis, I prefer to export CAT's reports into a big ol' CSV file, where the raw data looks like this, with each row of the spreadsheet representing a single URL (see second image on the next page).

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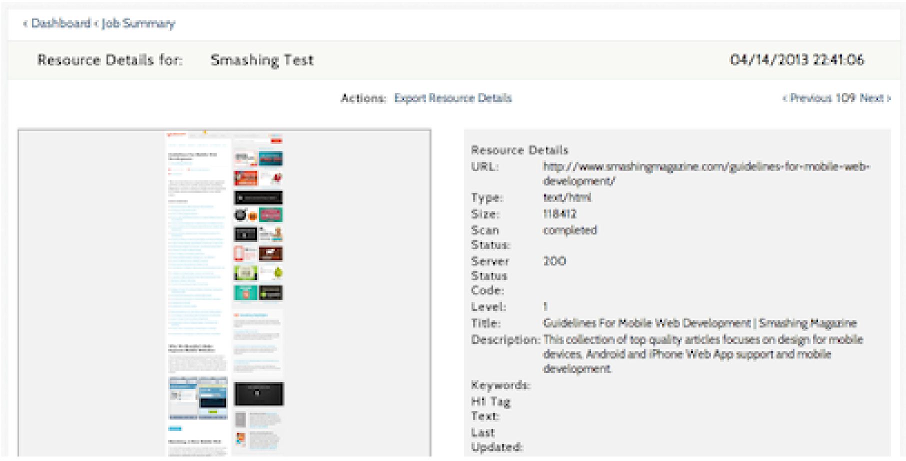
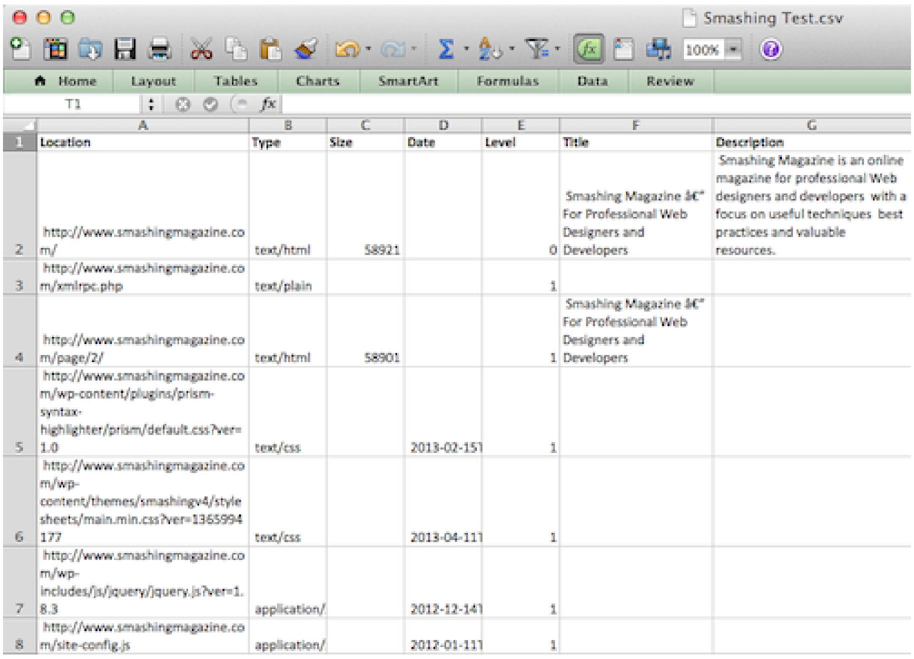
101. http://www.content-insight.com
102. http://www.smashingmagazine.com/guidelines-for-mobile-web-development/



The CAT report shows a thumbnail of the page, as well as some data about its content. See the full screenshot[103] for more.



	A	B	C	D	E	F	G
1	Location	Type	Size	Date	Level	Title	Description
2	http://www.smashingmagazine.com/	text/html	58921		0	Smashing Magazine â€" For Professional Web Designers and Developers	Smashing Magazine is an online magazine for professional Web designers and developers with a focus on useful techniques best practices and valuable resources.
3	http://www.smashingmagazine.com/xmlrpc.php	text/plain			1		
4	http://www.smashingmagazine.com/page/2/	text/html	58901		1	Smashing Magazine â€" For Professional Web Designers and Developers	
5	http://www.smashingmagazine.com/wp-content/plugins/prism-syntax-highlighter/prism/default.css?ver=1.0	text/css		2013-02-15T	1		
6	http://www.smashingmagazine.com/wp-content/themes/smashingv4/stylesheets/main.min.css?ver=1365994177	text/css		2013-04-11T	1		
7	http://www.smashingmagazine.com/wp-includes/js/jquery/jquery.js?ver=1.8.3	application/		2012-12-14T	1		
8	http://www.smashingmagazine.com/site-config.js	application/		2012-01-11T	1		

CAT also spits out detailed CSVs chockfull of raw data about all pages of a website. See the full screenshot[104] for all of the fields.

103. http://media.mediatemple.netdna-cdn.com/wp-content/uploads/2013/04/CAT-Tool-Example.png
104. http://media.mediatemple.netdna-cdn.com/wp-content/uploads/2013/04/CAT-CSV-Example.png

It's not perfect. For example, if content's been abandoned and removed from navigation but left floating out there in the tubes, CAT typically won't pick it up either. And if a website's headlines aren't marked up using `<h1>` (like Smashing Magazine, which uses `<h2>`s), then it won't scrape them either.

What it is great for, though, is getting a quick snapshot of an entire website. From here, I usually do the following:

- Add fields for my own needs, such as qualitative rankings or keep/delete notations;
- Set up filtering and sorting so that I can slice the data by whichever field I want, such as according to the section where it's located;
- Assess and rank each page according to whatever qualitative attributes we've settled on;
- Note any patterns in the content types and structures used, as well as relationships to other content;
- Define suggested meta-data types and tags that the content should have;
- Use pivot tables[105], which summarize and sort data across multiple dimensions, to identify trends in the content.

With this, I now have both the detailed information to drive specific page-level changes and the high-level pat-

105. http://en.wikipedia.org/wiki/Pivot_table

terns to inform structural recommendations, CMS updates, meta-data schema and other efforts to improve content portability and flexibility.

I like using CAT because it was designed by and for content strategists — and improved features are rolling out all the time — but you can also use a similar tool from SEOmoz[106] (although it tends to sell you on fancy-pants reporting features), or even grab a report from your CMS (depending on which one you use and how it collects information).

Any of these tools will help you quickly collect raw data. But remember that they're just a head start. Nothing replaces putting your eyes — and brain — on the content.

The Secret To Scale

You don't have to love auditing content. You certainly don't need to develop a sick addiction to pivot tables (but it's totally OK if you do[107]). What you will love, I promise, is what a deep knowledge of content enables you to do: create an extensible design system that doesn't devolve at scale.

For example, let's look at some of the larger websites that have started using responsive design. There's higher education, of course, where early adopters such as the University of Notre Dame[108] were quickly followed by a rash of college websites[109].

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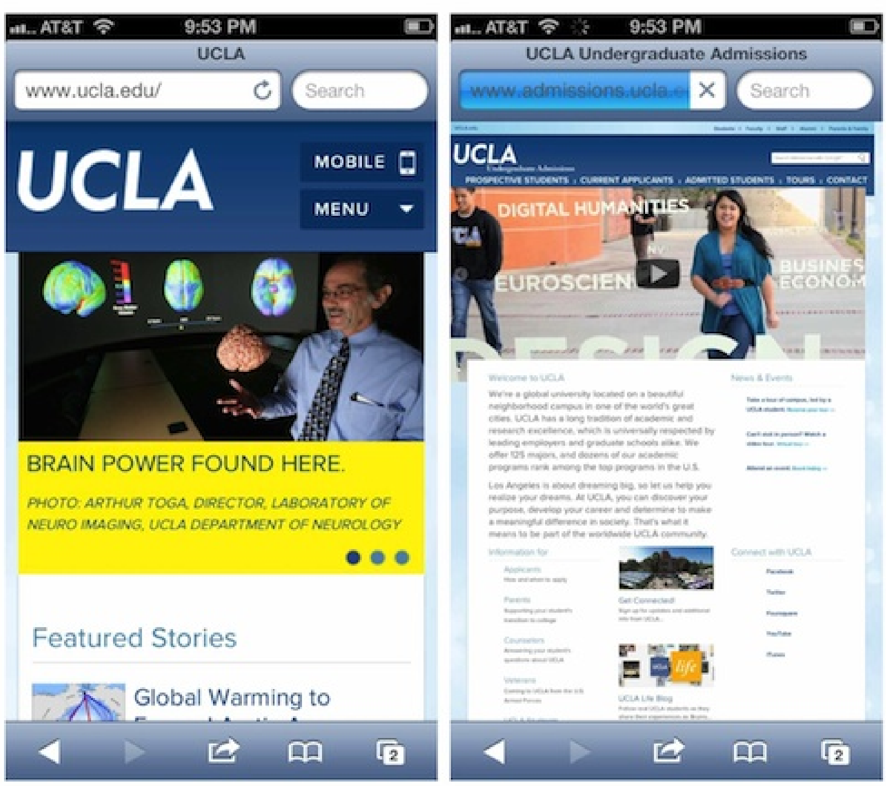
106. http://pro.seomoz.org/tools/crawl-test
107. https://twitter.com/redsesame/statuses/293749203841212416
108. http://nd.edu
109. http://weedygarden.net/highered-rwd-directory

What do most of these websites have in common? Two things: a lot of complex content and a responsive system that carries through to only a handful of pages, like the UCLA's website, where the home page and a few key pages are responsive, but the deeper content is not:



UCLA's home page is responsive, but most of the website, like this landing page, is not.

Why doesn't that design go deeper? I'd bet it's because making a responsive website scale takes work, as Nishant Kothary summed up brilliantly in his story of Microsoft's new responsive home page[110] from late 2012:

110. http://rainypixels.com/words/the-story-of-the-new-microsoft-com

> *"The Microsoft.com team built tools, guidelines, and processes to help localize everything from responsive images to responsive content into approximately 100 different markets… They adapted their CMS to allow Content Strategists to program content on the site."*

In other words, a home page isn't just a home page. You have to change both your content and the jobs of the people who manage it to make it happen.

But one industry has had some luck in building responsively at scale: the media — including massive enterprises such as Time, People and, of course, the Boston Globe. These organizations manage as much or even more content than Microsoft and universities, but as publishers with a long history of creating professional, planned, organized content, they have a huge leg up: they know what they publish, whether it's editorials or features or profiles or news briefs. Because of this, everything they publish fits into a system — making it much easier to apply responsive design patterns across all of their content.

Making Tough Choices

When you start breaking down your big, messy blobs of content and understanding how they really operate, you'll realize there's always more you could do: add more structure, more editing, more CMS customization. It never ends. That's OK.

When you understand the realities of what you're dealing with, you're better equipped to prioritize what you do — and what you choose not to do. You can make smart trade-offs — like deciding how much time you're willing to invest now in order to have the flexibility to do more later, or what level of process change the current staff can handle versus the amount of flexibility you could use in the content.

There are no right answers. All we can do is find the right balance for each project, team and audience — and recognize that some structure is going to serve us a whole lot longer than none will.

Everyone's Job

I get it. Going through endless reams of content ain't your thing. You're a designer, a developer, a project manager, damn it. You just want to get on with it, right?

We all do. But the more you seek to understand your content, the better your other work will be. The less often your project will go off the rails right around the time it's supposed to launch. The fewer problems you'll have with designs that "break" when real content gets inputted. The more the organization will be able to keep things in order after launch.

Best of all, the more your users will get the content they need — wherever and however they want it. ❧

Dealing With Redundant, Out-Of-Date And Trivial (ROT) Content

BY PAUL BOAG ❧

Publishing content to the web is expensive. I know what you're thinking: no, it's not; it costs nothing, especially when compared to print. And you would be right, from a certain point of view. The problem is that publishing is cheap. This seduces you, encouraging you to put more and more content online.

In fact, the cost is so cheap that many organizations let almost any employee put content online. They install a content management system and give staff free rein. Even those who enforce standards for consistency and accuracy still produce a lot of content. After all, somebody might find that piece of content useful.

But you will soon discover hidden costs. Costs that are crippling larger organizations.

The Hidden Cost Of Content

Although there is a cost to producing this content in the first place, there is a far higher cost in maintaining that content over time. It costs huge amounts of money and time to review content on a regular basis and ensure it is still accurate and relevant. This is especially true when some organizations have millions of pages online. In the end, many companies just give up. We often forget content once we hit "Publish", unless it is a particularly prominent piece.

The hidden cost is not just limited to maintenance. It also impacts the usability of sites. With so much content online it can be hard for users to find content that is useful. For example, at one point microsoft.com had over 10 million pages online[111], over 3 million of which a user had never visited. This clutter only succeeded in damaging findability and lowering customer satisfaction.

Large sites like microsoft.com have millions of pages, many of which are ROT.

But there is a final hidden cost: a cost to an organization's ability to evolve its site over time. Take, for example, a company that wants to make its site responsive. In theory

111. http://www.gerrymcgovern.com/new-thinking/removing-poor-quality-content-increases-customer-satisfaction

we can do this with some updates to the CSS or, at most, the templates in the content management system. But when you have millions of pages produced over an extended period of time this is often not the case. Content producers will have marked up content in a variety of different ways making design changes hard.

Many digital teams give up on the idea. Instead, they redesign the core site and leave legacy content alone. This leads to a fragmented experience as users struggle to adapt to the changing user interface across the site.

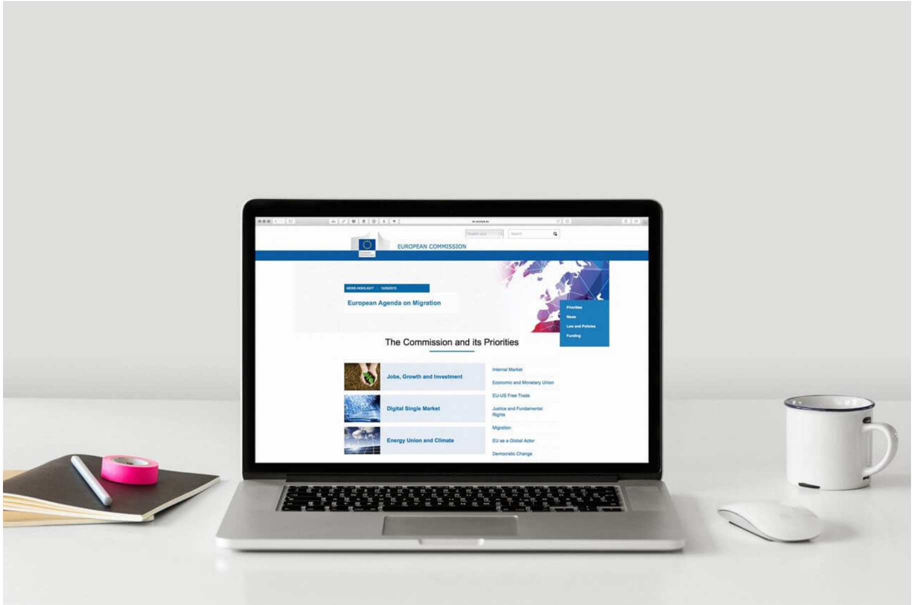
How can this enormous challenge be overcome? It begins by addressing the ROT on your site.

What Is ROT?

ROT stands for redundant, out-of-date and trivial. Much of the content on our sites falls into one of these three categories. ROT is a huge problem on many larger websites.

The European Commission recently undertook a content audit. It removed a staggering 80% of its online content because it was ROT. This created a better user experience while reducing costs. It also allowed them to evolve their digital offering.

Much of the content that organizations put online is trivial. It caters to edge cases that most users do not care about. Yet it takes time and effort to maintain and makes finding important content harder.



The European Commission removed a staggering 80% of its content.

But even important content can become ROT. As an organization evolves so should its online content. Yet it often doesn't and that content becomes redundant.

Finally, a lot of the content we put online has a limited shelf life. Events that have come and gone, or news stories from years ago that clutter up search results.

Sooner or later this ROT will need addressing. But how do you do that?

Start From A Clean Slate

Often the best solution is to start from scratch. On larger sites even auditing what content you have online is too expensive in both time and money. It is not uncommon for digital teams to be unaware of all the content that exists. In such situations the best they can do is migrate content. But that is like putting lipstick on a pig. It doesn't address the underlying issue.

Instead, many organizations are starting from scratch. They are beginning with user needs by identifying top tasks and producing content around those. This allows them to migrate only the relevant content, often rewriting it as they go.

This is exactly the approach adopted by the Government Digital Service[112] when working on the beta for GOV.UK. They translated the content on existing government websites into a user need, such as "I need to report a lost passport." They then passed these needs through a series of criteria to judge whether that need was worth addressing. They tracked this process through a small web app they created called the Needotron[113].

Unfortunately, in many organizations the digital team would be unable to take such radical action. They often do not own the content and so do not have the authority to remove it. I could argue that this shouldn't be the case but I doubt that would make any difference. Instead, let's look at some options that might be more possible.

Removing The Redundant

The first area to target is redundant content: products or services that no longer exist; campaigns that have long

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112. https://gds.blog.gov.uk/2011/09/19/introducing-the-needotron-working-out-the-shape-of-the-product/
113. https://github.com/gds-attic/need-o-tron

since ended. These are easy to spot, appearing in navigation, search results and analytics.

Addressing this content is often easy, too. Nobody much cares for redundant content and so you won't hear many complaints when you remove it. What is more, there is less of it so the digital team has the capacity to deal with it.

Out-of-date content is a trickier challenge.

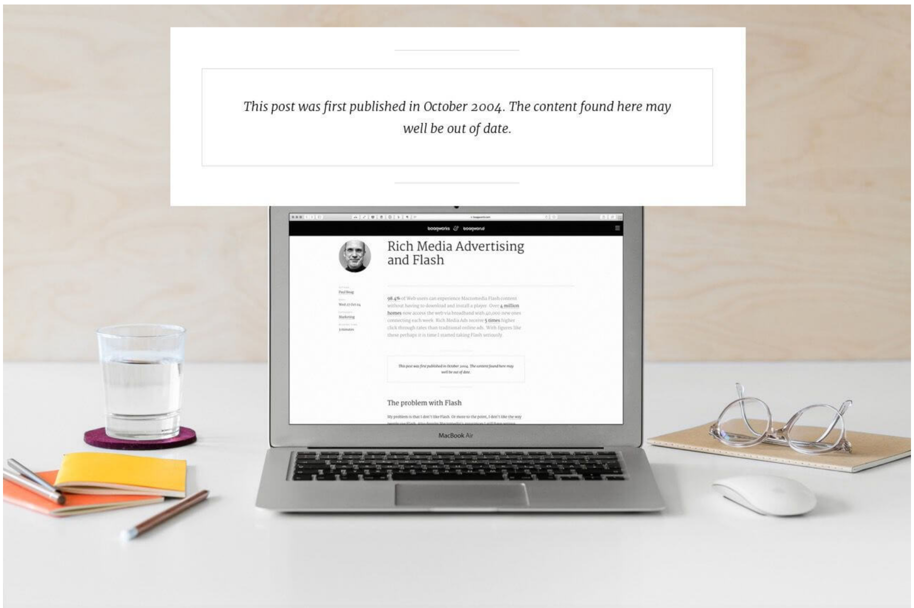
Dealing With The Out-Of-Date

Out-of-date content is harder to spot. It is that phone number that no longer works, or a reference to a member of staff who has left; it is that event buried in the events calendar, or a mention of a product that no longer exists. You can find this kind of content deep within pages or subsections on a site.

There is also a lot more out-of-date content than completely redundant content, too much for the digital team to track down. This is going to involve a degree of automation and the cooperation of content producers across the company.

One approach is to archive content such as news and events after an agreed amount of time. This removes the content from site search and navigation, but makes it available for those that want it. But what about content with a less obvious end date?

The best approach is to establish a policy to enforce content review. This will make sure content producers check their content to ensure it is not out of date. For example, this might need people to log in to the content management system once every six months to check their content.



If out-of-date content cannot be removed it should at least be marked as out of date.

Of course, there will need to be consequences if they don't do that, otherwise they just won't bother. This will involve removing the offending page from the main navigation and search results as well as adding a banner to the page; the banner will warn users that the content maybe out of date, a technique used by the BBC in the past.

It would be easy enough to use the last modified date in your CMS to trigger an email telling the person who created the page to check it. If that person has left the company and nobody else is supporting the content it needs flagging anyway.

You could go further and notify content producers if their content fails to reach a traffic threshold or a minimum dwell time. The possibilities are limitless. But be careful you don't chase a false metric. Traffic and dwell time are not always the best measure for all content.

But What About Trivial Content?

The hardest type of ROT to deal with is trivial content, because you will face disagreement over what is trivial. What you consider an edge case might be business critical to another member of staff.

To address this problem you need a set of criteria to assess the value of content. These should be:

- Analytics
- Users' top tasks
- Business objectives

First, you should look at the amount of traffic hitting a page. Falling below a certain traffic threshold should flag it for review. This does not mean that the content is trivial, it is just a way you can find content that *might be* trivial.

Next, you should compare that content with a list of top tasks[114] you know users want to complete. You do have a list like that, don't you? This should be the major

114. http://alistapart.com/article/what-really-matters-focusing-on-top-tasks

criterion for judging if something is trivial. If the content is not on that list then we have a potential problem.

Of course, a task might not be particularly important to the majority of users and yet be business critical to the organization. Only a fraction of users of a site go on to buy, but this is still considered an important action!

This means it is important to ask whether a piece of content supports one of the top two or three objectives of the business. Supporting some minor business goal is not enough.

If the content fails to meet any of these criteria then it is trivial. But that doesn't mean you should remove it. Some content needs to be online for regulatory reasons or is of crucial importance to a small but valid user group.

The key here is to ensure it does not interfere with the findability of more important content. You could make it only accessible via search or maybe remove it from the main site completely. It is often much easier to point people at a specific page via social media, email or other communication channel. Easier than expecting them to navigate through the hierarchy of a site to find an obscure page.

A Difficult But Important Challenge

Dealing with ROT can feel intimidating on a large site. In fact, it can feel impossible. But it isn't. Often it is just a matter of putting some processes in place to deal with it.

I would encourage you not to dismiss the clean slate approach out of hand. You may think it will be out of the question in your organization but you may well be wrong. If you create a prototype that gives people a sense of how much better the site could be, they are often more amenable than you think. Now is not the time to be timid. Now is the time to confront the ROT. ❧

About The Authors

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122. http://www.twitter.com/jbernbach
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About Smashing Magazine

Smashing Magazine[134] is an online magazine dedicated to Web designers and developers worldwide. Its rigorous quality control and thorough editorial work has gathered a devoted community exceeding half a million subscribers, followers and fans. Each and every published article is carefully prepared, edited, reviewed and curated according to the high quality standards set in Smashing Magazine's own publishing policy[135].

Smashing Magazine publishes articles on a daily basis with topics ranging from business, visual design, typography, front-end as well as back-end development, all the way to usability and user experience design. The magazine is — and always has been — a professional and independent online publication neither controlled nor influenced by any third parties, delivering content in the best interest of its readers. These guidelines are continually revised and updated to assure that the quality of the published content is never compromised. Since its emergence back in 2006 Smashing Magazine has proven to be a trustworthy online source.

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134. http://www.smashingmagazine.com
135. http://www.smashingmagazine.com/publishing-policy/