A quick guide to effective content

Biotext

Contact us:

Trevor Pearcey House (Block E) Level 1
34 Thynne St
Bruce ACT 2617
+ 61 2 6282 2280
www.biotext.com.au

Contents

What is content and why is it important?

Content is everything that goes on a website or page: the words, the headings and structure, the photos and diagrams, the graphs and infographics. This guide focuses on digital content, but the principles can apply to any content.

Great content – a logical structure, plain language and effective visuals – helps people to find what they need and understand the information easily.

But if the content is dense, muddled or confusing, users may get the wrong message or give up. They might spend time reading the information again, go to other information sources, or call or visit someone who has the information.

This costs the users – and the government or business they are trying to get information from – time, resources and money.

- Research into United States (US) government websites in 2020 found that, of the 10 billion visits to government websites each year, 1.2 billion visitors could not complete the task they came to do. Of the 1.2 billion, 372 million people (31%) called the agency, and 216 million people (18%) visited a local office. These calls and visits cost US$9.30 each. Making sure people could find what they needed in the first place would save almost US$5.5 billion each year.
- A study of United States naval officers who read a memo written in plain English or in bureaucratic language found that officers who read the plain memo had significantly higher comprehension, took 17–23% less time to read it and felt less need to reread it. The study estimated that, if everything the officers had to read in a year was plain English, the time savings would be worth US$53–73 million.

Good content is vital to effective communication, and effective communication is important for everyone. Whether you are talking to the public, stakeholders, industry or other government departments, good content is the way to get your message across, engage people and build your reputation.

Getting started

Starting with a content strategy

Planning a content project is not just about setting out the steps and engaging staff. It's also about thinking through what you are trying to achieve, who you want to reach and what the best way is to do that. This forms the basis of a content strategy.

A content strategy considers both business goals and user needs, and lays out everything you require to develop and maintain effective content. It moves away from short-term planning on 'how to get this report out the door', to look at the long-term communication needs of an organisation.

An effective content strategy can:

- increase impact by coordinating messages so that all content (web, print, etc) works towards the same goal
- cut costs by reducing wasted effort
- improve quality by reducing development rush and ensuring that content is kept up to date.

It involves:

- analysing – who are your audiences, what is the purpose of the content, what format should the content take, how does it fit in with existing or planned content from your organisation, and how does your existing content perform
- planning – where is content coming from, when is it needed, who needs to be involved, who needs to sign off, how will it be tested, how long do all the stages take, when will content need to be updated and how will updates be achieved
- producing – a documented strategy of content aims, audiences and formats, and a schedule to develop and update content.

A content strategy should be a living document. Update it as projects progress or are completed. A content strategy should also be tailored to your project, content and goals – it is not a 'one size fits all' document. Sections and headings in a content strategy may include:

Users

- key users
- key user tasks
- information needs

Current content analysis

- current content audit
- content gaps
- current content ecosystem
- analysis of similar or competitor content

Content governance

- workflow, including review processes
- roles and ownership
- editorial and branding guidelines
- agency partnerships
- template and sections policy

Vision

- business or product goals
- channel objectives or goals
- messaging hierarchy

Project

- scope
- budget
- problems to be addressed
- risk assessment
- activities, milestones, roadmaps and timelines
- success measures

New content

- content vision and principles
- recommended topics
- information architecture
- wireframes
- search engine optimisation and metadata
- visual components, including images, diagrams, data visualisation, infographics, data-rich content

Understanding content development, content strategy, content design and communication strategy

Content development, content strategy and content design are sometimes used as interchangeable terms. All are sometimes confused with communication strategy:

- **Content development** is the overall process, which includes all aspects of planning and producing content, including content strategy and content design.
- **Content strategy** describes your content system, and plans for the most effective workflow and outcomes. Content strategy provides a framework for effective content design – it is the plan, and content design is the implementation.
- **Content design** creates content – including to meet the user needs and other parameters defined in the content strategy. The content design process includes testing and iterations to make sure each piece of content is purposeful and effective for its audience.
- **Communication strategy** might include high-level organisational communications goals, promotional campaigns and product-specific communications plans. It works together with the content strategy.
  - The communication strategy outlines the ways to get the message out. It sets out the channels for getting information out, and the communication goals, risks and opportunities.
  - The content strategy outlines the ways to craft the message. It sets out how the key messages should be framed to meet audience needs and the goals of the communication strategy. It also provides guidance on how the content will be developed, published and maintained.

Content vision and principles

A key part of a content strategy should be your content vision and principles. Setting up a content vision and principles early in your project can provide a benchmark to check and align content to make sure you are achieving your goals.

The content vision is what you want the content to achieve. It's important to include not just what you want the content to do, but the outcome or impact you want. For example:

> Our content will help patients to understand their options in cancer treatment so that they can make informed choices.
>
> Our content will provide information about government programs so businesses can find appropriate support.

Content principles are the core things that content must address or achieve before it can be considered suitable for publication. For example:

> Content must be:
>
> - user focused; it uses clear language and terminology that users recognise
> - findable; it uses a simple structure based on user understanding to make content navigable and searchable
> - clear, consistent and concise; it is easy to read and understand, and presents similar information the same way every time
> - authoritative and trustworthy; it is scientifically rigorous, underpinned by data and references
> - in line with required standards; it complies with Level AA of the Web Content Accessibility Guidelines version 2 (WCAG 2.0) and departmental reporting requirements.

Choosing the right product

You may start a project with a firm idea of what you will produce – a website, a report, a fact sheet or a poster. Often, this idea is based on what a manager or someone on the team has said, what 'has always been done', or what seems the quickest and easiest.

But the product you want may not be the product you need. Taking a step back and thinking about your broader communication needs may suggest other strategies and products that would work better.

Sometimes you may need a different product; sometimes you may need a combination of products and approaches to reach different audiences.

So instead of a single, large report for several audiences, you might need a technical report and then a webpage in plain English. Instead of a poster, you might need an interactive online infographic. Instead of a fact sheet telling your staff about procedure changes, you might need an infographic for your intranet, and staff meetings that walk them through the new procedure step by step.

Planning for future needs

As well as planning content now, think about future needs:

- Will the content need to be repeated (eg is it a report that is published each year)?
- Will the information need to be updated (eg if guidelines change or new data are collected)?
- Will the content be expanded or cut (eg if new sections are added)?

If the answer to any of these questions is yes, you can start to plan now to make the process easier in the future. Consider:

- structure – a clear, logical structure will help you to repeat, update or expand content. It is particularly important to make sure web content has a robust information architecture (IA or structure) that can absorb additions without reducing navigability. Can you add, remove or change sections without having to heavily rewrite or rearrange other sections?
- process – think about how the process worked this time, and how it could work better next time
- schedule – make a schedule for when information will be collected, drafted, approved and published
- documentation – make sure you document every aspect of the process, especially for complex documents, so that others can follow in your footsteps. Your documentation should include
  - where information comes from
  - the writing and editing process
  - the approvals and publication process
  - key contacts for each stage of the process.

Your audience

Content developers often think about what they need to say, and not what the audience wants to hear. Think about what your audience needs to know, and consider their background and the language they will understand. By knowing your audiences, you can tailor content to meet their needs and increase their engagement.

You also need to listen to your audience. Testing will make all the difference – check the structure, words and visuals with members of your audience and adjust until they all work.

Meeting audience needs

There's no one right way to meet your audience needs. But thinking about a few key areas and the strategies you might use in them can help:

- Information – what do your audiences want to know? For example, if you are developing content about the government's immunisation programs
  - content for health professionals might include demographic information about the take-up of vaccines, and details about vaccine effectiveness and vaccine side effects
  - content for parents might be the ages at which their children should have each type of vaccination, the diseases that vaccines protect against and why vaccination is important.
- Voice and style – what should be the tone of your content? This can be
  - formal (abstract and impersonal), such as *Voting papers must be submitted by postal voters at least 5 working days before the election day*
  - neutral (familiar words, impersonal but direct), such as *Postal voters should send in their voting forms 1 week before the election*
  - conversational (simple language talking directly to the user), such as *If you're sending in a postal vote, don't wait until the last minute.*

  For government organisations, the best-practice guidance for most content is to use neutral or conversational voice and style.

- Pathways and products – do you need to present the same information to different audiences? You can
  - 'layer' the same information in different formats within the same piece of text (eg a summary box at the start of a chapter or webpage, and more detailed information further down)
  - develop separate documents (eg a fact sheet for the general public and a more detailed report for researchers)
  - develop separate navigation pathways (eg labelling online content as 'For patients' and 'For practitioners').

Push vs pull

When setting out to write content, your first thoughts are probably 'What do we want to tell the audience?' or 'What do we want them to know?'

That is of course a major part of the development process: you have to know what your topic and key messages are. This is the information you want to 'push'.

But if you only think about what you want to say, you miss a major part of the equation. The other side is 'What does the audience want to know?' This is the information the audience wants to 'pull'.

Putting yourself in the audience's shoes can shape what you include in the document or how it is structured. For example, you might want your audience to know that your project involved many organisations. But the audience wants to know more about what your project achieved. That doesn't mean you have to delete all mention of the collaborators, but it does mean that you have 'Achievements' as your first heading, and 'Participants' as a lower priority.

Documents that favour push over pull are particularly common in government. If you start talking about what the audience 'should' understand or what they 'have to' know, you are talking about push.

Instead, think about what the audience is interested in, what they are driven by, and what the questions are they really want answered.

For example, if you want to present information on healthcare regulation, audiences are not asking 'How does healthcare regulation work in Australia?'; they are really asking 'How do I know my hospital is safe?' You may cover similar material in your answer, but focusing on audience pull will enable you to talk to them directly and produce a document more relevant to their needs.

Balancing push vs pull is critical to producing information that will be well received by – and useful to – the audience.

Australian audiences

Australian audiences come from a wide range of cultural and educational backgrounds, and these should be considered when developing content.

For example, consider members of your audience who may have lower levels of English competency. Although Australia is officially an English-speaking country, English is not the home language in more than 20% of Australian families. In addition, the average level of literacy in Australia is lower than you might expect. On a scale of 0 to 5, almost half the population surveyed (45%) registered below level 3, the minimum comprehension level needed for adult everyday reading.

You may also need to consider whether members of your audiences have special needs. For example, you can adjust your text and visuals to better support people with visual impairment.

Checking readability

'Readability' just means how easy a piece of text is to read.

Content developers are sometimes asked to achieve a certain 'readability level', as provided by a readability checker. Readability checkers usually provide a rating in terms of the school grade required to read the text – the Australian Digital Transformation Agency recommends that information for the general public should be tailored to grade 7 or below.

Readability checkers often use word and sentence length in a text to judge readability. But this can be because these are easy to measure, not because they are a real indication of readability.

It is usually assumed that fewer letters per word will make the text easier for the reader to process. Yet words with the same number of letters may be easy or quite difficult: compare radio with diode. Similarly, it is assumed that short sentences are easier to understand. But variability in sentence lengths can actually help to engage readers.

Achieving real readability

A document's readability and the comprehensibility of its contents ultimately depend on the coherence of the whole text. It's about:

- how familiar the words are to the reader and whether key words are repeated to provide threads of meaning
- how familiar the sentence structure and grammar are to the reader
- how individual sentences connect within paragraphs
- how sections and headings are used to break text up into meaningful chunks
- whether meaning is developed through coherent structure and flow of information.

Content developers should pay attention to all of these – and test content with users – to ensure clarity and comprehension.

Taking care with checkers

Most readability checkers are built around common readability tools, such as the Flesch–Kincaid tool built into Microsoft Word and other checkers, or the SMOG tool (simple measure of gobbledegook).

But our research found that different readability checkers deliver different results for the same text. SMOG consistently rated texts as far more difficult to read than Flesch–Kincaid. Even more interestingly, different brands using the same tool also delivered different results. For example, different brands using the Flesch–Kincaid tool rated texts up to 2 grades different, and different brands using the SMOG tool rated texts up to 4 grades different.

This result highlights the need for benchmarking. You may need to test your content with members of your audience and align their needs to your checker ratings.

User research and testing

Whatever kind of content you are developing, getting input and feedback from people who will use it helps to ensure that it meets their needs. Listening to users allows you to check your ideas and approach in terms of what information should be included, how it should be structured, and the language and tone that you use.

You can research and talk to users before developing the content, to inform its development. You can also test developed content with users and continue to refine the content in an iterative process. User research and testing is commonly done for online content, but you can also use it for printed publications.

User research and testing doesn't need to be a laborious or time-consuming process. You can learn a lot from existing data sources and from small groups of people. And a small investment in user research and testing will save time and money by avoiding having to redo content, products or websites.

Exploring existing data

Depending on the topic and publication, user data may already be available in your systems or free online. You can find:

- site analytics from existing webpages, to see what users are searching for or bouncing off
- social media statistics, to see what users have liked and shared
- online search terms, to see the terms or phrases people are searching for
- other feedback, such as user queries, complaints and ideas.

Use existing data to identify key topics to include and the language to use.

Collecting new data

If you have specific questions about your content, you can collect new data.

At its simplest, targeted data collection can be asking your colleagues, friends or family for their opinions about your content. More usefully, talking to or surveying audience groups can provide feedback specific to their context and needs.

You can collect data through surveys (phone or online) or focus groups (usually with a facilitator), or from ongoing feedback (with questions and contact details on the product or website).

Usability testing

Usability testing, or user experience (UX) testing, is the process of testing a product, feature or prototype with real users. Most commonly, it is the process of testing different aspects of a website to ensure that users can find and understand content.

For usability testing to be most effective, the users should be members of the target audiences, and testing should be repeated as the content evolves.

At the beginning of the project, users can complete card sorting or tree testing exercises to inform the development of the structure of the publication or website.

When you have a preliminary draft or prototype, you can test it directly with users.

A common method of testing is using scenarios. You give the user a scenario (eg ‘You need to find out how to sell your house. Where would you go?’, ‘You are worried about a rash on your child. What do you select?’) and watch to see what the user does. If users have difficulty completing the task, this tells you that your structure may not work as well as expected (see Logical information architecture).

It is a good idea to include draft content in user testing, so that you can gain feedback on how clear and useful the content is. Ask questions to get feedback on all content features, including text, calls to action and visuals.

Great content

Effective structure and navigation

With any communication product, including websites, content isn't an optional extra. By considering content from the beginning of any project and developing it in line with policy needs, user research, and web and graphic design, you can make the whole product much more effective.

If the structure of your website or document is effective, users can easily find what they want. Like a good roadmap, pathways are clear, titles are understandable, and key destinations are signposted.

Effective structure is:

- logical – similar topics are grouped together, and the order of the sections and headings is meaningful to users
- understandable – headings use language that the users understand
- intuitive – the groupings, order and language all make sense to users, so they can easily find what they are looking for.

Logical information architecture

Information architecture (IA) simply means the structure of a website, including how information is grouped and labelled. Good IA is usually achieved through an iterative process of drafting, testing, updating and retesting.

Good IA and content should be built from 3 complementary perspectives:

- Users. This looks at who the main groups of users are, and at their
  - needs (ie what they want to know or what they want to do)
  - expectations and understanding (ie what they might already know about a subject)
  - behaviour (ie what pathways they are likely to use to find information); user behaviour is usually discovered through user testing.
- Content. This looks at whether
  - the groups and labels will work well for the content (ie whether they reflect the site's aims and messages, and the breadth, depth and meaning of the content)
  - there will be a good spread of content in each category (ie not 60 pages in one category and 2 pages in another)
  - the structure is robust enough to allow content to be expanded without decreasing navigability (eg if a heading is too general, it may be added to over time and become a long list of subsections that is harder for users to navigate).
- Context. This is about the goals and constraints for the site, such as
  - what the site owner wants to say or achieve with the site
  - whether there are any rules about content, such as accessibility guidelines
  - whether the site will be regularly updated or expanded.

Shallow and deep structures

Content structures can be shallow or deep:

- Shallow – many categories with fewer levels. The '3-click rule' suggests that no content should be more than 3 clicks away. Users will usually find a reasonably shallow structure easier to use, as long as category lists are not too long.
- Deep – fewer categories that go down through many levels. A deep structure can work for sites with extensive content. However, users may be sent down 'rabbit holes' as they click down through many levels, and these can be difficult to navigate out of. To manage larger websites, it can be useful to think of other navigation aids such as multiple menus or tagging.

Relatable categories

Categories are the headings placed on content pages. IA categories can be:

- topic based – these are usually nouns that break the main topic of the website into subsections (eg services, projects, news)
- task based – these are usually verbs that guide users to pathways about particular activities (assessing your home, designing for sustainability)
- audience based – these labels usually reflect groups of users (eg consumers, healthcare professionals, researchers).

You do not have to choose only 1 of these approaches – for example, you can use 2 sets of navigation lists (eg topics at the top of the page and tasks in the main menu bar).

When you are thinking of categories, put yourself in your users' shoes. Every user has a different perspective and different way of looking at the world. They are also likely to know less about the topic than the content authors. For example, they will not know an internal departmental structure, but will know the services they are looking for.

Categories are not 'right' or 'wrong', but rather depend on the needs and understanding of your users. Any category that helps the user to find what they need is 'right'.

Some useful tips when drafting categories are to:

- use general definitions and groupings, not technical (eg tomatoes go in 'Salads', not 'Berries')
- use common terminology, not technical (eg 'Rain', not 'Precipitation')
- use concrete terminology, not abstract (eg 'Patent applications' not 'Innovation')
- use categories that are specific enough not to become a dumping ground for content (eg 'Research projects', 'Training programs' and 'Community outreach', not 'Our work').

Drafting IA

The first step of drafting IA is sorting the content into logical category groups. There are various methods to achieve this, including:

- just thinking about your content, and then writing likely category headings and sorting your table of contents into a logical structure
- open card sorting – put example content on a set of cards and ask users to sort the cards into groups of similar content; label the groups once users have finished sorting
- closed card sorting – develop a set of categories and put example content on a set of cards; ask users to sort the cards into the predetermined categories.

Meaningful headings

The right headings within content can improve navigation. Shorter headings are usually better, especially for web content. However, headings should provide a meaningful description of the content to follow, so should be long enough to provide clear information on the section's contents.

Ideally, your headings will tell the 'story' of your content.

Rationale becomes Why is vaccination important?

Building sites becomes Safe building site management

Headings can help to break up text. In general, have at least 1 heading every 250 words (eg 2 or 3 headings on a page of text with about 500 words). However, if the text has a longer section that needs to be kept together – for example, a section that describes a process – you may not want to break up the text with extra headings.

Clear writing

Many books and guidelines have been written about how to make writing clear and engaging. You can go a long way towards achieving clear, engaging content with just 2 techniques: creating a narrative and avoiding the main pitfalls of writing.

If you are writing for the web, understanding how people use the web and using web writing principles can also help to make sure users can find and understand content.

Creating a narrative

Content developers often talk about the need for ‘narrative’, or storytelling. Making content into a story can better engage your audience. It can also make your messages more memorable.

For content developers who are dealing with government, policy or science information, it can seem hard to use narrative techniques. But there are a few key ways to bring narrative into information.

Adding flow and links

The easiest, and perhaps the most important, way to build narrative is simply to make links between your pieces of information, so that it turns into a story rather than a list of facts. Even short additions can improve the flow of your story. So:

> Mercury was used in various applications such as batteries and fluorescent lighting. Mercury poisoning causes severe neurological problems. Many uses of mercury are now being phased out.
>
> becomes
>
> Mercury was used in various applications such as batteries and fluorescent lighting. *However,* mercury poisoning causes severe neurological problems. *This is why* many uses of mercury are now being phased out.

Think about how each fact leads to the next, and use words to join concepts:

- Does the next fact add to the evidence? Use *and*, *also*, *further*.
- Is the next fact in opposition to the evidence? Use *however*, *but*, *although*.
- Does the next fact provide a reason for the evidence? Use *because*, *since*, *due to*.
- Does the next fact conclude or bring together the previous 2 facts? Use *this is why*, *this means*, *therefore*.

Curating the information

When you are making links in the information, you may find that a piece 'doesn't fit' – you can't link it to the other pieces. If it doesn't fit in the story, think about whether you really need it.

There can be a temptation to include information just because you have it. First consider what you are trying to achieve and what your audience wants to know, and then include the information that builds or supports that message.

For example, if your aim is to explain the process for making a noise complaint, you don't need to include descriptions of relevant legislation and management structures. If you are describing a new education program, you don't need to add descriptions of similar programs, unless you are making a specific point about how the new program relates to others.

Including comparisons

Content developers can also use comparisons to illustrate and strengthen their message. For example, which has the stronger message?

> The risk of serious blood clots from the AstraZeneca vaccine is 0.0004%.
>
> or
>
> The risk of serious blood clots from the AstraZeneca vaccine is 0.0004%. This is very low compared with other common medicines and activities: the risk of serious blood clots from the contraceptive pill is 0.05% to 0.12%, and the risk of serious blood clots from smoking is 0.18%.

The second point gives the same information, but it also gives context and allows people to compare the risk of vaccines with those of well-known medicines and activities.

User-focused language

Simply focusing on the user can make information into a story that relates to them. Take the audience on the journey by including them in the story. For example:

Application process:

1. Application submitted
2. Application reviewed
3. Application accepted or rejected

becomes

About the application process:

1. Submit your application online
2. We will review your application
3. We will be in touch to tell you whether your application has been accepted

Characters and case studies

Characters can help to bring content to life. For example, if you are explaining a process, you may present the list of steps and then a story box with imaginary characters to illustrate the steps.

Case studies of actual events or projects can also be used to provide real-world examples of the information.

Avoiding the main pitfalls

The idea that 'official' language needs to be wordy and stilted is still common. For governments, shifting to simple language makes your content more relatable to your stakeholders and the public, and helps them understand your message.

Avoiding a few key pitfalls will make your content more readable.

Long sentences

The ideal average sentence length depends on the audience. In general, the broader the audience, the shorter the sentences should be. Aim for an average of 15 words per sentence for content for a general audience and no more than 25 words per sentence for more technical content.

You can shorten sentences by:

- removing unnecessary words or replacing long phrases with simpler alternatives

  due to the fact that becomes because

- making clauses into sentences

  The national reserve system includes protected areas and reserves across Australia which provide long-term protection for examples of Australia's diverse ecosystems and plant and animal species.

  becomes

  The national reserve system includes protected areas and reserves across Australia. These provide long-term protection for examples of Australia's diverse ecosystems, and plant and animal species.

- changing lists within sentences to bullet points; this is especially useful for web content.

Jargon and unnecessarily complex words

Jargon and unnecessarily complex words can make meaning unclear. A few techniques can make your content more readable but still accurate:

- avoid grandiose words (eg *the committee performs a function analogous to = the committee has a similar function to*)
- replace technical and complex terms (eg *the drug is known to be fungitoxic but not phytotoxic = the drug is known to be toxic to fungi but not to plants*)
- add definitions (eg *these species are affected by increasing water temperatures and eutrophication (excess nutrients in the water)*).

Excessive passive voice

In an active sentence, the agent does something to a person or thing (eg *John developed the test*). In a passive sentence, the subject has something done to it by an agent (eg *The test was developed by John*).

The active voice has a strong, direct, clear tone, whereas the passive voice is weaker and subtler. Active language is often easier to understand, and also makes it clear who is doing what.

A passive sentence can be made active by adding an agent:

The textbook was written.

becomes

The professor wrote the textbook.

Indirect constructions

Indirect constructions express meaning in a roundabout way, and make writing longwinded and vague. Indirect constructions involve turning a direct verb into an indirect noun and an indirect verb. To fix it, you simply turn them back again:

> The council has *conducted* [indirect verb] a *review* [indirect noun] into the subcontracting of waste disposal.
>
> becomes
>
> The council has *reviewed [direct verb]* the subcontracting of waste disposal.

> The *development* [indirect noun] of the animal welfare code *was completed* [indirect verb].
>
> becomes
>
> The animal welfare code *was developed* [direct verb].

Writing for the web

Writing for the web follows the basic rules of clear, coherent writing. However, web content has some important differences in structure and format, mainly due to how people use the web.

How people read onscreen

Studies that track users' eyes as they read a webpage show that people tend to read in an 'F' pattern (see the following figure). They read the first paragraph or 2, then skim down the left-hand side of the content. Attention is also drawn to headings, bullet lists and hyperlinks.

This means that:

- the most important or summary information should be in the first 2 paragraphs (or at least be compelling enough to make people want to keep reading)
- headings, subheadings, paragraphs and lists should start with keywords (information-carrying words) that users will notice as they scan down the left-hand side.

Source: Nielsen Norman Group, www.nngroup.com/books/eyetracking-web-usability

Heat map from user eyetracking study, showing the typical 'F' shape

Web headings and structure

- Use an ‘inverted pyramid’ construction – load the most important information at the top of the page.
- Write clear and informative headings – headings and page titles are often displayed out of context on search engine results pages, so they need to contain enough information for users to identify the content. Delete leading articles (such as *the* or *an*) and start with keywords.

Online language and length

- Write in plain English – use the active voice and simple words that people can relate to (see Avoiding the main pitfalls).
- Summarise – online readers skim content, and will quickly abandon longwinded sites.
- Write for scannability – shorter paragraphs are easier to scan than long blocks of text. Even single-sentence paragraphs are OK because they can draw attention to key points that might otherwise be buried. Dot points are very useful.
- Use numerals (1, 2, 3), not words (one, two, three) – numerals help people scan and identify numbers. When reading online, users scan the page for clues that might answer their question. If the answer they seek is a number, the numerals stand out on the page and are easier to identify.

Actionable content

‘Actionable content’ means content that users can easily understand and use to take action. The content aims to prompt action, tell users how to go about a procedure, or tell them what they need to think about or do in a particular circumstance.

To make your content actionable, talk directly to users and suggest what they can do in a simple way:

> Medical professionals can provide guidance on the equipment available.
>
> becomes
>
> Talk with your doctor about equipment that could help you.

Engaging data and visuals

Part of content is information that is presented visually. Graphs that allow people to understand data at a glance, infographics that engage your audience, and designs that support and don't clash with your message will all help your audiences to understand and connect with your content.

Identifying the need for a visual

Every visual should be there for a reason. That reason is communication, usually persuasive or informative (or both). To create an engaging visual, begin with its reason for being.

What do you want to say?

Often your visuals will be based on data. When thinking about presenting some data as a visual – such as a graph or a map – imagine speaking directly to the audience, perhaps while standing in front of a PowerPoint presentation with your visual on it, and finish these sentences:

1. 'The one thing I really want you to remember about this is …'
2. 'Other things of interest include …'
3. 'You need to know this because …'
4. 'You should trust this information because …'.

This helps figure out (1) the main message, the one that *must* be communicated if the visual is to be worth having at all; (2) other things that the same visual can show (but not at the expense of the main message); (3) what value the audience will get out of the visual; and (4) what will make the visual trustworthy and influential.

Let's say we are looking at some data about applications to some program. We might come up with:

1. 'The one thing I really want you to remember about this is that all the increase in demand came from those younger than 35 years.'
2. 'Other things of interest include an apparent lack of variation with seasons.'
3. 'You need to know this because it's your job to ensure that this service is adequately resourced.'
4. 'You should trust this information because the trend is consistent over the year and shows no sign of slowing down (although there is some scatter in the data).'

Do you really need a picture?

A message like 'Applications to this program increased during the year' may not need a graph if detailed understanding is not required.

A graph can help you convince the reader – they can see the data for themselves – and can contain information beyond what the text says. But if nothing more need be said, is the graph pulling its weight?

Don't try to do too much

Visuals can become very complex, with several panels, many lines and columns, shaded regions and so on.

The more things in the visual, the less time the reader will spend on any single thing.

This means that you should focus on the message and throw away the rest. That can be hard to do, but it is an important part of clarity and communicating with influence.

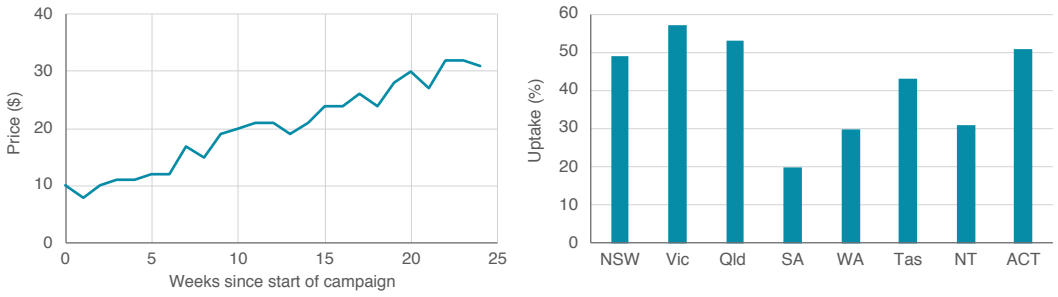
Matching the visual to the data

The visual must be chosen to suit the data. This means both meeting audience expectations of how data 'ought' to be presented, and presenting it in a way that follows agreed principles of how humans absorb information.

Be led by the data

Follow established data visualisation conventions. Most have solid research behind them.

For example, when a quantity varies continuously with time, represent it using a line graph, in which the continuity of the line reflects the continuity of the quantity, and time increases from left to right. When a quantity varies from category to category, do not plot with a line, because one category does not evolve into another – they are always separate. Use a column graph or similar.

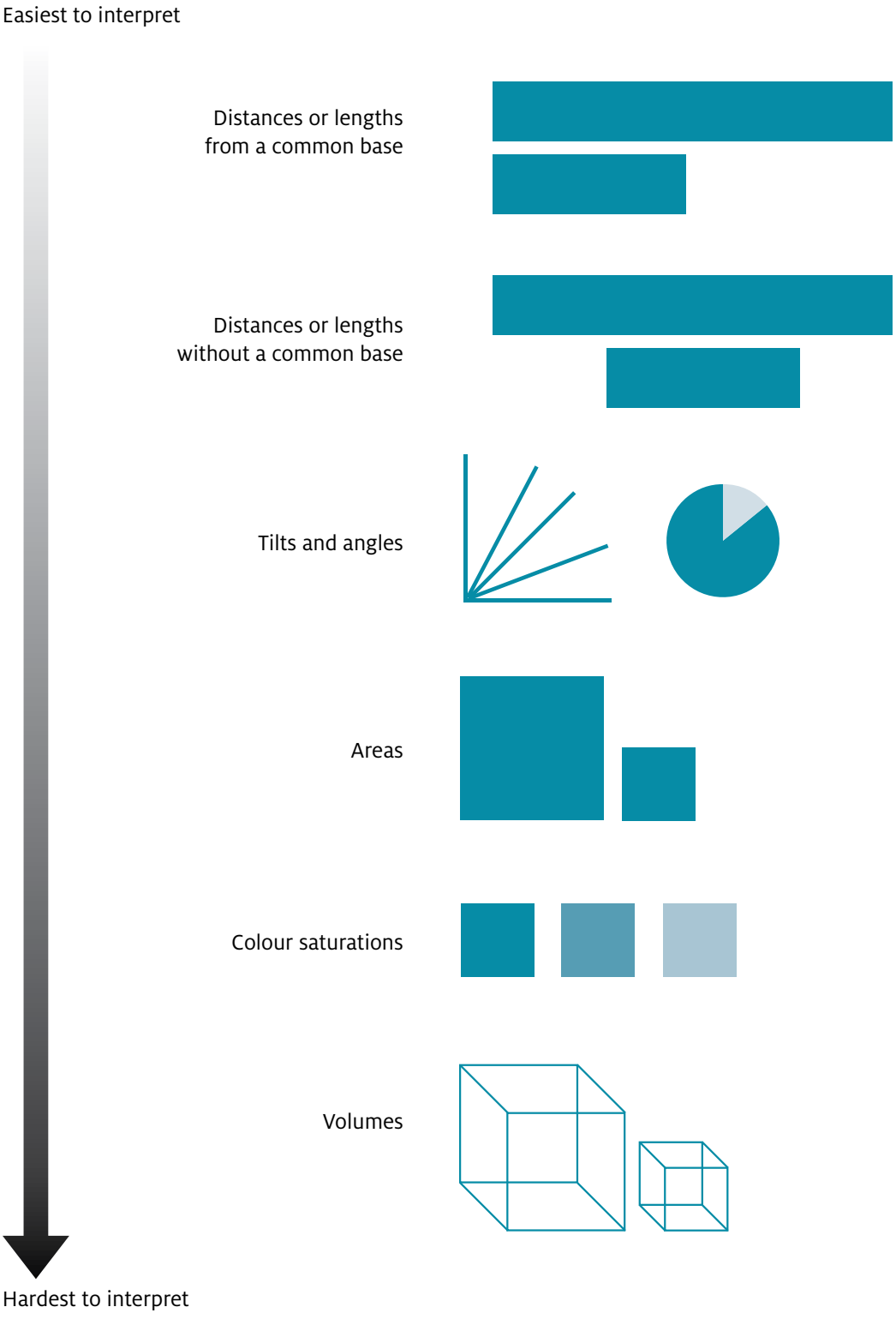


Price changes with time, which is a single, increasing quantity – drawn as a line; uptake varies with state, and states remain separate – as columns

Think about your audience

Just as an expert audience can understand jargon that a member of the general public may not understand, an expert audience can understand specialist graphs. The broader the audience, the simpler and more commonplace the visualisations should be.

The brain finds some comparisons easier to make than others. For example, data will often be more easily compared if presented as a column graph rather than a pie chart, because we tend to be better at comparing the size of rectangles than sections of a circle.



Source: Based on Munzner T (2017). Vizualisation analysis & design, data vizualisation masterclass: principles, tools and storytelling, https://www.cs.ubc.ca/~tmm/talks.html.

Visual properties that we perceive, from most to least readily

Using principles of good design

Once the form of the graph is known, it must be presented well. This means applying important principles of good graphic design; in particular:

- thoughtful use of colour (eg to highlight the key messages)
- a preference for simplicity (eg avoiding 3D effects and nonlinear axes)
- avoidance of clutter (eg placing the legend off the data area, and not using lines *and* points at once).

Creating infographics

One popular form of visual is an infographic. Infographics combine textual and visual representations of information to engage the audience and help them understand complex concepts. They go beyond a simple diagram to present a narrative or process.

Infographics might be:

- data based – used to show interesting data when a graph is not engaging enough or can't capture enough aspects of the data
- process based – used to explain a process, or a key part of the process
- message based – used to help users understand an idea or concept.

Effective and ineffective infographics

An effective infographic is clear and engaging:

Clear means it is accurate and easy to understand. An effective infographic means the audience says 'Now I get it!', not 'I don't know what that's supposed to mean'. Engaging means it sparks understanding, interest and action in the audience.

An ineffective infographic might be too detailed, too wordy, or just poorly designed:

- Too detailed means that it has too many messages and ideas. You can't capture everything in an infographic or include all the real-life details – you need to identify the key message and present it effectively, or design a linked set of infographics to walk users through the ideas.
- Too wordy means that it has too much text. Infographics are primarily visual. Extra details can always be added to the text that accompanies the infographic.
- Poorly designed means that the visuals don't suit the idea – maybe users don't understand the visual metaphor, maybe the colours attract attention to the wrong features, or maybe the tone of the design doesn't suit the content (eg cartoon characters may not be appropriate for an infographic about cancer treatments).

Tips for making effective infographics

Put most simply:

- Decide on 1 clear message for the infographic. You should be able to sum this up in 1 sentence. What would you say on Twitter; what would you show on Instagram?
- Cut out non-essential details. An infographic does not have to exactly mirror real life.
- Test the infographic with expert and non-expert audiences. The expert audience can identify what's wrong or missing; the non-expert audience can tell you if it's understandable.

Making effective infographics is an iterative process, involving a writer or editor and a designer working together. Stages include:

- gathering information and context
- finding the story (key messages)
- establishing visual structure
- working out the design
- testing and iterating, if required.

Effective processes

Web project steps

Web projects generally go through 4 phases:

- Discovery is about understanding the problem and opportunities. It involves user research to find out what they want and need, policy and stakeholder research to find out the context and parameters, and content audit and analysis to identify problems, gaps, and other related content products (see also Starting with a content strategy).
- Alpha is about testing possible solutions. It identifies key themes and messages, creates a potential topic list and drafts some initial content, develops an initial IA and wireframes, develops a design concept, tests all these, and iterates based on user feedback.
- Beta is about developing the real website while still testing solutions. It develops a beta version of the website, implements the findings and development from the Discovery and Alpha stages, and adds content. It tests the beta version with selected audiences and iterates based on user feedback.
- Live is when the website is made open to the public. But this doesn't mean the product is complete. Opportunities for continuous improvement should be built into processes to future-proof the site (see Planning for future needs).

Content steps

Content developers have a role at every step of the project.

During Discovery, the content deliverables are:

- content analysis (purpose, user analytics and desktop research, content audit and gap analysis, IA analysis, identification of content types and lifecycles, initial readability testing)
- any user research completed by the content experts, including interviews with internal and external stakeholders and users
- the initial version of the content strategy (see Starting with a content strategy).

During Alpha, the content deliverables are:

- content creation (writing or rewriting content elements, topics and metadata using best-practice web writing techniques; search engine optimisation; drafting visual displays; quality control – copyediting and proofreading)
- content IA and wireframes (low-resolution wireframes of webpages; prototypes using real content, in proposed layout, with typography, colour, branding and graphic elements; iteration)
- content testing (draft content reviews and revisions, readability testing of new content, visual display revisions)
- updated content strategy.

During Beta and Live, the content deliverables are:

- content delivery (agile delivery in increments, metadata, quality control, updates)
- updated content strategy.

Agile workflow

Web projects often talk about an ‘agile’ workflow, or ‘agile’ vs ‘waterfall’:

- An agile workflow is an incremental approach. It means that the content and website are developed through a series of iterative loops involving development, testing and feedback.
- A waterfall workflow is a linear approach. It means that the project progresses sequentially in set phases from research to development and completion.

One of the Australian Digital Service Standards is to use an ‘Agile and user-centred process’. In fact, an agile process underpins a user-centred process, because feedback from users and stakeholders, as well as the expertise of all members of the team, feeds into each stage. With an agile process, plans and decisions made at the start of the project are not set in stone; they can adjust to take account of this feedback or any other changes in the project landscape.

What an agile workflow looks like

Agile projects are usually completed in a series of ‘sprints’. At the beginning of a sprint, the team (see Digital team operation and roles) meets to discuss the goal for the sprint. Tasks to achieve the goal are discussed and assigned for this sprint, or put into a ‘backlog’. The backlog is reviewed in the next sprint meeting, to see if it gets moved into current sprint tasks.

There should be roles for most or all members of the team in each sprint. For example:

- Sprint goal – make sure users can find clear sign-up information.
- Tasks
  - Identify potential placement in IA (content/UX/web development).
  - Draft call-to-action button and step-by-step instructions (content).
  - Check draft (with policy stakeholders, if necessary) and sign off content for testing (policy).
  - Place call-to-action button on front screen (web development).
  - Add instruction page (web development).
  - Test IA and instructions with small-group usability testing (UX).
  - Adjust IA, call-to-action and page content based on user feedback (all).
  - Check and sign off final version (policy).

What an agile workflow means for content

In an agile workflow, content is not all written in a block, then edited, signed off and published, as in a traditional publishing model. Content is often developed as separate sections or pages, and may go through rounds of testing before being uploaded. Even when uploaded, content should be subject to revision based on user or stakeholder feedback.

Digital team operation and roles

One of the 13 criteria in the Australian Digital Service Standards is to 'Establish a sustainable multidisciplinary team to design, build, operate and iterate the service, led by an experienced product manager with decision-making responsibility'.

A multidisciplinary web team includes content, business or policy, user research, design and web development.

> **Each of these areas is essential to the process, and it is equally essential that they work together. Having everyone in the room means that understanding and challenges from one area can feed into another area, to strengthen overall development in an iterative process.**

You may have all the members of the team available inhouse, or you may need to go to market to procure external expertise. Start procurement early so you can bring people together from the start of a project.

Content experts

The role of content experts is to design and create great content, taking into account the policy, user, design and web development perspectives. Content acts as a pivot point between these essential perspectives. Content experts also design your content strategy to ensure that your product will achieve your goals now and in the future (see Starting with a content strategy.

The content expert in your team is sometimes called the 'content lead'.

Content deliverables include:

- content strategy
- content audits and analysis
- structure and IA
- new or redrafted content.

Business or policy experts

The role of business or policy experts is to provide the context for the project. They set overall goals, constraints, resources and deadlines, and keep the team updated with changes to these, as well as anything that might affect the project's progress or success.

Business or policy deliverables include:

- project budget
- project schedule
- procurement
- project reports.

User experience experts

The role of UX experts is to provide the user perspective and to test the product with users as it is being developed (see User research and testing). Gaining the user perspective is essential to meeting your users' needs.

UX deliverables include:

- desktop research
- surveys
- focus groups
- usability testing.

Design experts

The role of design experts is to ensure that the visual aspects of your website or product help to engage users, and support navigation and understanding. Design can influence the tone and usability of a whole product.

Design deliverables include:

- visual concepts
- wireframes
- diagrams and figures
- infographics.

Web development experts

The role of web development experts is to develop and deliver a robust website. They work closely with user research, content and design experts to ensure that everything works together to enhance the functionality and usability of a site.

Web development deliverables include:

- prototypes
- various web functionalities
- final websites
- performance analytics.

Standards and requirements

Content is often governed by various standards and requirements. Understanding these requirements helps you to build them into your processes, which is faster and easier than having to redevelop, reformat or retrofit later.

Guidelines affecting content

Some common standards and guidelines you may need to consider include the following:

- Style guides provide advice about recommended or mandatory writing styles, word use, punctuation and presentation. It's a good idea to choose 1 guide and stick with it to ensure that your content is consistent; however, a single style guide may not contain all the information and guidance you need. Below is an outline of the major style guides for government and scientific content, to help you decide which ones to use, and when.
  - Australian Government *Style manual* provides guidance focused on government content, particularly digital content. All Australian Government organisations follow this guide.
  - *Australian manual of style* provides guidance for anyone who writes, edits or designs content. It provides more detail than the Australian Government guide about the process of developing content and engaging audiences; it covers engaging audiences, and writing, editing and presenting information. It also covers specific subject areas such as health, mathematics, law and government. If your content is based on a specific subject area, especially in science or mathematics, this guide will help you present technical information in a clear and standardised way.
  - Inhouse style guides provide guidance specific to a particular department or agency – for example, the organisation's preferred terms and grammar for its common words and phrases.

- Readability targets are usually measured against school grades (see Checking readability). Many departments set a readability target depending on the audience or project (eg level 7 for the general public and level 10 for professionals).
- Accessibility standards aim to ensure that content can be found and understood by users with a wide range of abilities and technological capabilities. All Australian Government websites must meet the international standard of WCAG 2.1 AA (see Accessibility for web content).
- Digital Service Standard, which has 13 criteria for designing and delivering government services. Government website services for the general public are expected to conform to the standard.

Accessibility for web content

Web accessibility means that web content is available to anyone who wants to access it, including people with a disability (such as low vision), and people using limited or mobile technology. All government departments have to meet the WCAG 2.1 standard.

To create accessible content, you need to consider:

- web development, including
  - ensuring that the content is not too large or complex to be downloaded
  - ensuring that all elements on the page can be accessed and operated using the keyboard
  - ensuring that the content will work with different technologies and platforms
- writing, including
  - ensuring that the language is clear and easy to read
  - using styles to tag content and using headings in order (level 1, level 2, etc)
  - structuring content logically and consistently

- design, including
  - maintaining strong colour contrasts between foreground and background
  - increasing areas around a target for selecting
  - providing alt text for all images and diagrams.

Translation for multicultural audiences

More than 20% of Australian families do not speak English at home (see Australian audiences). Translation of government information ensures that everyone has access to the information they need. This is particularly important in areas such as public health and safety.

To ensure that translations are as accurate as possible, it's a good idea to:

- use a professional translator
- choose a translator who provides an editing round to check the translation against the original text
- engage the translator to recheck the text after it has been put on a website or designed (eg as a brochure)
- consider using specialist translators for specialist content (eg using expert health translators for medical information).

Web content formats

If any of your communication products will be online (see Choosing the right product), you will also need to think about what format you use.

Web content can be presented as HTML (webpages), Word or RTF documents, or PDFs. The main consideration in choosing your format is accessibility (see Accessibility for web content).

All these formats can be made accessible, but some are more accessible or easier to use than others:

- Webpages are the most accessible content. Content on a webpage can be found by search engines and read by screenreaders.
- Word and RTF documents are accessible if you have styled them in the right way (eg with tagged heading levels).
- PDFs are accessible if they have been designed that way, but some designed PDFs (eg produced from InDesign) may require additional work to make sure screenreaders read the information in the right order.

If you have information in a Word or PDF document that you want to put online, it can sometimes be tempting to simply put an accessible version of the file on the web. But this 'locks up' the content, because it often can't be seen by screenreaders.

It's a good idea to at least include an HTML summary of the information on the webpage itself. This will mean that users can find the information and read the key points before they decide whether to delve deeper into the document itself.

The Australian Government recommends that documents online should be presented as accessible HTML content, with an accessible PDF or Word file as optional extras.

Resources

If you would like help with content or processes:

- Biotext are content experts specialising in complex content, including health and biomedical science, environment and agriculture. We provide content strategy and design, writing, editing, information design, data visualisation and infographics.
- Biotext training courses are available in Writing and editing complex content and Fundamentals of data literacy and visualisation.
- The *Australian manual of style* is a comprehensive online resource that provides practical information on how to engage your audience, and write, edit and show information. This can be used alongside the Australian Government *Style manual* and your organisation's style guide to create clear and consistent technical content.