Write me some KISSes

Slide 2 – So, you love* writing reports?

* *Disclaimer: mild to moderate sarcasm*

- So, you started working in infosec due to an undying love for writing reports and smashing your head against a wall, right?
- Love it or loath it, communication is the thing that gives what we do purpose. It's the connection between the work we do and the things we know are important, and the rest of the world (or at least our non-security colleagues and leaders) paying attention and listening to what we have to say.
- Writing is a large part of what we do and it's how we share knowledge and information beyond the security bubble.
- This talk goes into the weeds of writing clear, plain language reports that have impact (and may save you time and energy too).

Slide 3 – The 'are you legit?' bit

- This is a bit of background about me.
- I own a massive cat some of you might know as horsey cat. (We also have a scaredy cat, but he believes the camera steals your soul.) When I'm not working, I spend an inordinate amount of time riding miles while going nowhere in Zwift.
- I've been working in security for 13 years. Most of that time in consultant roles both internal and external, specialising in security standards and risk management. In all the roles I've had during my career to date, report/document QA and peer review has always been a part.
- I'm a bit of an interloper in security. My background is in language and linguistics; I came into security via training and communications. My 'place' in security has always been one of translator: between technical specialists and their non-technical counterparts in the business.
- Now, I work as a plain language editor, copy editor and proofreader specialising in information security, cybersecurity and technology writing.
- We work in a highly technical field that has developed its own specialist language and jargon (not something that is unique to security). This serves us well within our own community: it's a form of identity, a sign we belong, and among our peers it may even be a symbol of authority and capability. Unfortunately, that is not the case when we exit the security bubble and can cause a surprising amount of harm.

Slide 4 – Write me some KISSes (agenda)

- In this talk I will share some examples of what not to do when we're writing and explain why we sometimes fall into these habits when we write.
- I'll introduce you to the KISS principles of writing and why it matters.
- Then I'll offer you some tips and techniques to help you write more simply, more clearly, and maybe more quickly too.
- I'll finish by sharing some additional resources that might be useful.

Slide 5 – 'We need a more contemporary reimagining of our homogenised transitional contingencies.'

- We're inadvertently trained to write in language that makes things sound more impressive than they are.
- Take this gobbledygook phrase as an example. 'We need a more contemporary reimagining of our homogenised transitional contingencies.'
- It's not hard to imagine something like this being spouted in any meeting in any organisation anywhere. It sounds familiar because we hear this kind of euphemistic (but ultimately meaningless) wording in so many places: from business meetings to boardrooms, and from marketing to politics. It has no real content, but it expresses … something … it's just that no one is quite sure exactly what.
- We emulate the language we hear around us, and it's easy to end up adopting this 'management-speak' phrasing in our own writing. It's what we hear, so it's what we write.

Slide 6 – 'A hand-held ground excavation tool was deployed to penetrate the mantle's super-substrate resulting in the formation of a vertically descending shaft.'

- We're also taught – most often through standard education and especially at university level – to choose language that is far more complex than we need to in order to sound more intelligent.
- There is a place for this style of writing, but it has very little value when we want to make sure we can be understood by as many people as possible. Even less so when we are suggesting action(s) to deal with critical vulnerabilities and security failures, or when we are trying to raise awareness of good security practices.
- The language we use doesn't even have to be that complex to make it hard to understand. When we come across unfamiliar terminology, jargon or acronyms it slows us down and can make a text inaccessible. And that's without considering someone's literacy level, whether they're reading in their second or third language, or if they have any reading or language difficulties.

- This example uses something called ‘passive voice’. We use passive sentence structures a lot in reports and formal writing.
- Just a quick aside so you can spot a passive sentence easily: If you can add ‘by zombies’ at the end of your sentence then it’s in the passive voice. So, as an example ‘a vulnerability in the firewall was exploited … by zombies.’ In the active voice, that would be ‘Zombies exploited a vulnerability in the firewall’. You’ll find zombies do a surprising amount in formal reports, so if there’s chance to knock a few out, do it. Your readers will thank you.
- To be clear, the passive can be very useful in placing distance between the situation being described, how it happened and who was responsible (or to put it another way, who was to blame). In incident reports, this is useful; it allows us to report on what happened (which is what matters most) rather than who did it. But in test reports or audit and assessment reports where you want people to grasp that any weaknesses you were able to exploit are a problem, it is more helpful to show that *you* did it. For example, ‘weaknesses in the server configuration were compromised and administrator privileges were obtained’ is a lot less punchy and easy to skim past than, ‘we exploited weaknesses in the server configuration that allowed us to obtain administrator privileges.’
- The passive voice is also a problem when we want other people to act. Passive is as passive does (to bastardise a phrase): it’s not very good at compelling someone to do something.
- If you can state who should take an action, do. And even if you can’t, you can still present a list of actions as instructions to avoid using a passive construction.
    - Instead of ‘[x, y, z] systems need to be patched’ you could have ‘the ops team need to apply patches to [x, y, z] systems.’
    - Instead of saying ‘multi-factor authentication should be implemented for all users accessing the network’, you could use ‘we should implement multi-factor authentication for all users accessing the network’.
    - You could use the construction, ‘our recommendations are: … and list the actions as instructions: ‘Our recommendations are to patch x, y, z systems and to implement multi-factor authentication for all users accessing the network’.
- Another problem with the passive voice is that it takes more time to absorb and interpret meaning than a more direct active sentence. If I take away the ridiculous vocabulary from the example on the slide, we’re left with ‘a spade was used to dig a hole’ (passive). To make this active, we could say ‘Bob and Anna (they’re diversifying) dug a hole with a spade’. The second is much faster for us to understand and we have a more complete picture of the situation because we know that it was Bob and Anna who did the digging. We don’t have to plug any information gaps.

- I don't want to tell you not to use passive sentences ever; that isn't helpful. But don't overuse them, and don't use them when you are recommending or expecting someone to take action.

Slide 7 – Write me some KISSes – principles

- We should generally assume at least two things when we're writing:
    - that the person reading has absolutely zero time to spend doing so, and
    - that they don't share the same vocabulary that we do. Even if they know the same words as us, their definition may not be the same as ours.
- I make no apology for using KISS (Keep it Simple, Stupid) or, if you prefer (Keep it Super Simple) to summarise the concept of plain language in my talk here. It's a widely understood acronym that was coined in 1960s by a US Navy aircraft engineer called Kelly Johnson. It defined a design principle that meant a jet aircraft could be repaired by an average mechanic using basic tools in the field. Those mechanics would have no specialist knowledge or equipment available to them.
- We can use this principle in writing by making sure that our language is clear and doesn't need the same specialist knowledge we have to understand.
- We do work in a technical field and sometimes we need to use specialist terminology, but where we can use an everyday word instead, we should.
- Sometimes that's not possible and we need to use technical or specialist terms. This is where I adapt KISS to 'Make everything as simple as possible, but not simpler'. (This is a phrase attributed to Einstein but whether he said it is another matter.) Where we do need to use specialist language, we should provide a brief explanation in everyday terms. Sometimes, using the 'correct' terminology is as important as making sure people understand what we are talking about.
- When we try to explain using everyday language, we might have to make a payoff between understanding and total accuracy. For example, a 'firewall' can refer to a myriad of technologies and solutions for IT and security professionals, but it's probably sufficient for most non-techies to explain it as 'a safety barrier to protect our internal systems'. That provides people with a simple concept to refer to, while allowing you to use accurate/correct terms where there isn't an alternative.

Slide 8 – Write me some KISSes – why it matters

- The information on this slide helps to demonstrate that, no matter who you are writing for, using more straightforward language and simpler sentence constructions helps everyone.
- The chart on the left of the screen shows levels of literacy for adults across Australia, the UK, the US and the Organisation for Economic Co-operation and Development (OECD) countries. It is taken from 2013 and 2019 PIAAC survey of adult competencies data. Each coloured bar shows the percent of the adult population of a given literacy level.

For some context, adults with a literacy level below level 1 cannot read a text or understand the structure of sentences or paragraphs. At level 1 they may be able to identify a single piece of information in a text *if* it is identical to information given in a question. It isn't until level 3 that adults are able to read and navigate longer texts, and this is the minimum level of literacy required for coping with everyday life. Navigating a bus timetable or reading a menu or recipe is off the table for many adults under that line. And in the UK, that line represents 49 ½% of the adult population.

- We assume that everyone we are working with has the same level of literacy that we do, but that couldn't be further from the truth and the more clearly and simply we can communicate important information, the more accessible it becomes.
- On the other hand, the statement on the right-hand side of the slide is a quote taken from a GOV.UK writing guide, specifically considering writing well for specialists. These are people that we can assume have high(er) levels of literacy and generally understand specialist terminology, jargon and acronyms specific to their field.
    - 'Research into use of specialist legal language[1] in legal documents found:
        - 80% of people preferred sentences written in clear English - and the more complex the issue, the greater that preference (for example, 97% preferred 'among other things' over the Latin 'inter alia')
        - the more educated the person and the more specialist their knowledge, the greater their preference for plain English
    - 'People understand complex specialist language, but do not want to read it if there's an alternative.'
- They are short on time and the reading demands required of them are high, so it helps them when they can take in the information they need to quickly. Plain language and simpler structures make that much easier to do.

Slide 9 – Write me some KISSes – how to

- Be concise. Say what you need to say, but without embellishing it. Use short sentences.
- The shorter your document overall, the more likely it is that someone will take the time to read it.
- Say who as well as what. This avoids the passive voice problem we spoke about earlier. Bob did x and Anna needs to do y has so much more impact than saying x happened

[1] https://ualr.edu/law/2018/08/01/professor-trudeau-publishes-the-first-international-study-on-the-publics-preferences-for-legal-communication | Direct link to journal article: http://onlinedigeditions.com/publication/?m=&l=1&i=531739&p=72&ver=html5

and y needs to be done. One drives action while the other probably gets ignored because no one has any direct responsibility to do anything.

- Use plain language as much as possible, avoid hyperbole and euphemism (say it as it is), and minimise jargon and acronyms. Straightforward, everyday language helps everyone. For those with no time, it's faster to read. For those reading in a second or third language, it's easier to interpret. And for those with reading difficulties, it's more accessible for them too.
- Explain any specialist terms in everyday language, even if that means compromising slightly on technical accuracy in your description. It gives your readers a familiar frame of reference that makes the rest of your writing easier to follow.
- Separate the summary from the detail. Most people will only skim the first few paragraphs of anything you write. Provide them with a summary to skim. Focus on describing the problem and why it matters and explain who needs to do what to address it.
- Include the details – of what you did, how you did it and the full details of your findings – for those that need it, but still follow the KISS principles. They might be more specialist or have a greater vested interest in a deeper understanding, but they're still short on time to take everything in, so stick to the point and only share what is necessary.

Slide 10 – For more information

- In this talk I've barely touched on all there is to say about writing with KISSes: using plain language for effective writing.
- I've focused on some of the basics: preferring everyday vocabulary and shorter, direct (active) sentences; offering summary information to help get your message across, even if someone doesn't read your whole document; and avoiding meaningless gobbledygook and complex sentence structures that can be ambiguous and hard to interpret. This makes our writing more accessible to more people, faster to read and easier to understand, and may save us time writing too.
- There is so much more that is relevant to plain language writing and effective writing. From the way that we write and the words we use; to the structure, format and layout choices we make; and the decisions we make around conscious and inclusive language choices. These are all talks for another day.
- If you want to ask about anything I've talked about today here, please get in touch. Twitter: @fairycakepixie and @affinityediting. Website: https://www.affinityeditorial.com. Email: anne@affinityeditorial.com
- For more information about using plain language, I've also included links to the Plain English Campaign in the UK (British English), and plainlanguage.gov in the US (US English).
- Thank you for your time today, and thanks to the Beer Farmers for organising and hosting BeerCon3, as well as all the behind the scenes support for all the speakers too.

Slide 11 – Copyright notice