



19 Oct 2012

## ENHANCE YOUR INFLUENCE BY MANAGING COGNITIVE LOAD

### Reduce cognitive load for improved influence

1. Humans have two information processing channels, auditory/verbal and visual. Each is limited, so maximise the use of both available channels for your messaging where possible.
2. You can decrease load by ensuring congruence between the channels. Avoid complete redundancy (by reading a presentation slide verbatim for example) because this adds to cognitive load.
3. Plan to use carefully selected images to reinforce messaging in the auditory/verbal channel. If you're using diagrams or charts, integrate the text with the graphic to reduce load.
4. When you're presenting a lot of complex material that is demanding on both channels, chunk the information. Allow people to fully process one concept before moving to the next.
5. If you need to get through a significant 'cognitive load' in a session, make material available for pre-reading to reduce the load. When you cover the material in the session it won't then be brand new. This should make it easier to integrate.

#### *Forget something recently?*

When last did you overlook something you'd carefully placed on your mental To Do list? What about omitting one or more key points you'd planned to use in an important discussion? Or, maybe you've forgotten a birthday or anniversary, even though it had been front of mind just a few days earlier?

#### *Complex brain circuits at work*

Memory lapses occur for a wide variety of reasons. After all, the human brain is exceptionally complex. Many specialist circuits are responsible for your cognitive (mental) processes. Four important processes in particular help you interface with your environment. Any of these might contribute to you not doing something you'd planned.

Some circuits collect the huge amounts of sensory data coming from within your body and also from your environment. Others make sense of that data you collect. This includes assessing whether you've encountered similar information before. Then, you respond with actions deemed most suitable in the context. Finally, any new learning is stored for quicker and/or more effective responses to similar situations in the future. Impressively, you do much of this automatically, without much or any thought at all!

#### *Near perfect technology*

If you were a marketing agency, you'd be ecstatic at landing a brief to market the cognitive capabilities of the human brain. First, data collection capability is second to none. It collects huge amounts of all kinds of data. In fact, more data is collected than will ever be able to be processed in detail. The kind of data gathered ranges from the bleeding obvious to the barely perceptible.

Another impressive feature is its ability to store information over the long term. A long memory comes standard. There are many deluxe models also, with even more extraordinary capabilities. One example is 'photographic' memory, where users are able to recall incredible detail a long time after initial events.

Less visible, but no less remarkable, is the brain's sheer information processing 'grunt'. It is able to process vast quantities of data in a very short time. One small limitation is that it tires but, after rest and recharge, it's back to high-performance functioning.

How easy is this job to market cognitive abilities? Almost a dream run, but you're not quite finished yet. There's one significant limitation an ethical marketer would reveal. Short term memory. It has an extremely limited capacity which creates a processing bottleneck. This seriously constrains overall performance of the cognitive system.

#### *Your weakest cognitive link*

Imagine that your short term (*working*) memory is like an elevator. It doesn't take much before it's full. When it's reached capacity, there's literally no room left. Before you can process newly-arrived information, you must clear some space. One way is to finish processing what's already there. Another is not to process what's in there and just let it disappear. It doesn't take long to vanish. That's why it's known as short term memory. This creates some difficulties, like forgetting things. But, imagine if you stored and always had to re-process all previous information you'd ever come across. Cognitive processes would move along at a snail's pace.

#### *Be mindful of cognitive load*

If you're trying influence someone, they need room in their working memory to process your messaging. Your communication creates a 'cognitive load' on short term memory. It's one among many competing for the person's very limited working memory space.

Psychologists and neuroscientists have identified three types of cognitive load on working memory. First, there is the (*intrinsic*) load created by the actual message itself. The ideas being presented in this briefing represent such a load. A lot of information at one time increases the load. So do complexity and new concepts.

Next, there's the load created by the 'packaging' or delivery mechanism that accompanies the message. It's known as *extraneous* load. In your case right now, the briefing sheet presents a cognitive load. Page size, font size, white space and colour all contribute to the size of the load. A presentation type situation, where there's no chance to read at your own pace or go over the previous sentence again, presents an even greater load.

Finally, there's the cognitive load from integrating incoming information with what you already know (*germane* load). If you're already familiar with cognitive functioning then the load from this briefing will be lower than if it's all fairly new information.

#### *Reducing cognitive load*

An important technique you can use to help 'cut through' and be more influential is to manage the cognitive load of your messaging. Remember, others' working memory is finite. More load in one area means they have less available elsewhere!

Start by reflecting on the actual content of your message. Is there too much information perhaps? Is it at the right level for the recipient? What about extraneous load? Is the timing right? How much competition do you have with other matters? Is the packaging/delivery mechanism clear? Finally, how well do you support integration of new information?