

Two heads may not be better than one

March 27 2005

In an age of e-mails, databases and online catalogues, two heads may no longer be better than one, according to new ESRC-sponsored research into the effects of information overload.

Problems are exacerbated when information is shared between people with different viewpoints, says a team led by Professor Tom Ormerod of Lancaster University, which revealed big variations in recall among married couples.

In a project aimed at finding better ways for us to organise and retrieve information for shared use, researchers investigated how couples catalogue and retrieve their digital photos now that the age of the shoebox full of prints and negatives is gone.

The team developed a novel digital photograph browser (TW3 - 'The Way We Were'), which restricted cataloguing and retrieval to 'Who', 'What', 'Where' and 'When', while allowing choice within these categories.

When couples had jointly catalogued photographs, it was found that working together to retrieve photos was fruitful. However, when they had catalogued pictures on their own, it was a very different story.

Conversations couples had about their respective memories for photographs were also highly revealing, showing that their memories of events were often completely different, even about shared and intimate moments such as the birth of a child or their own wedding day.



Professor Ormerod said: "As one of our researchers commented, we may have created the ultimate marriage guidance tool here."

He continued: "There is a widely held belief that people benefit from working together to remember details of things – for instance, film storylines.

"However, research has shown that when they try to recall information which they learned individually, the overall amount remembered is less than if the same people were trying on their own.

"People mentally organize information in different ways, and cues that help one person recall may inhibit another. So retrieving information from computer systems, such as a keyword search in a library catalogue, may be impaired by a mismatch between the user's mental organization and the cues provided by the system."

The tumbling cost of digital photography means that it is now the norm for family snapshots. Digital storage creates opportunities for more flexible cataloguing and greater sharing, including over the Internet.

But research shows that when using existing software for handling digital photos, people either fail to catalogue their pictures, or are unable to find them again when they have.

Professor Ormerod said: "Part of the problem is that, in shifting from physical to digital, visible signs of storage such as albums, frames, and shoeboxes under the bed are lost." Commercial browsers allow flexibility in the way photographs are archived but do not have prompts as to who was in the photo, what was happening, and when and where it was taken.

And despite TW3 being specifically designed to support people's shared memory of events, there was still evidence that collaboration impaired



recall.

The study found that the commercial browser gave better results when people worked on their own to catalogue and retrieve, so long as they found the photos they wanted at the first attempt.

This was because the browser allowed users to create highly specific labels for each photograph. These were really useful prompts, but only for the person who created them.

When people searched for photos which had been coded by others, results with TW3 were much better. And they were much more likely with that system to find photos they failed to get at the first attempt, whether using their own search words or someone else's.

Source: Economic & Social Research Council

Citation: Two heads may not be better than one (2005, March 27) retrieved 13 May 2024 from <u>https://phys.org/news/2005-03-two-heads-may-not-be.html</u>

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