

Ambient Personalisation & Rich Internet Mechanisms

(or how we learnt to love the cookie)

Chris Khalil
Senior Experience Architect, USiT
News Digital Media



So, what's going on?

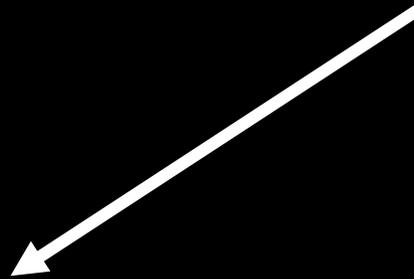
WHAT is Ambient Personalsalisation



WHY would you want to do it



HOW do you do it



What → Why → How

WHAT

What do we mean by Ambient?

“The surrounding environment coming into contact with the system or component in question. “

Another definition....

- 1. ass groove:** A depression in the cushion of a couch or chair formed by many hours of sitting. First known usage by Homer Simpson.

“Don't sit in my ass groove! You'll mess it up.”



What → Why → How

What do we mean by Personalisation?

“To adapt something to the needs of an individual “

What → Why → How

Think of a car

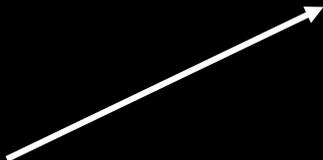
it's not just pimping it up....

It's making it comfortable

Environment

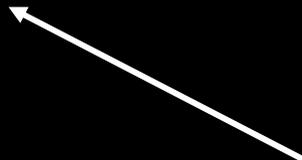


Entertainment



Steering wheel

Seat



What → Why → How

It's direct manipulation

no intermediate step

What → Why → How

It's easy

set & forget

Not Groundhog Day



shouldn't sites have a memory too?

Ambient Personalisation:

- Site works without personalisation
- Low barrier to use
- Direct Manipulation
- Footprint
- Invisible
- Effective

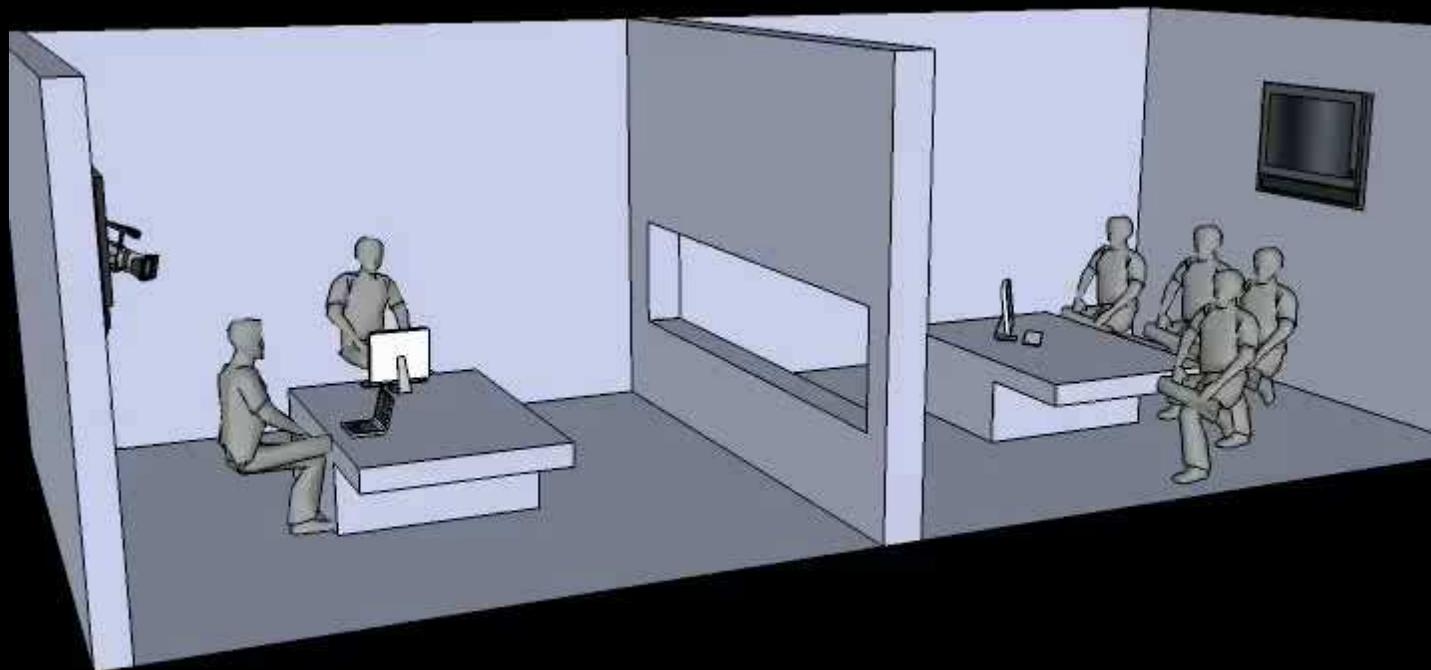
WHY

We talked to users



What → Why → How

In our lab



Thanks to Martin Jopson: <http://flickr.com/photos/level/2697777350/>

A personalised web..

“I only want to see the things I’m interested in “



What → Why → How

A personalised web

“I want it to be mine by just using it”



What → Why → How

Some experiences

of personalisation....

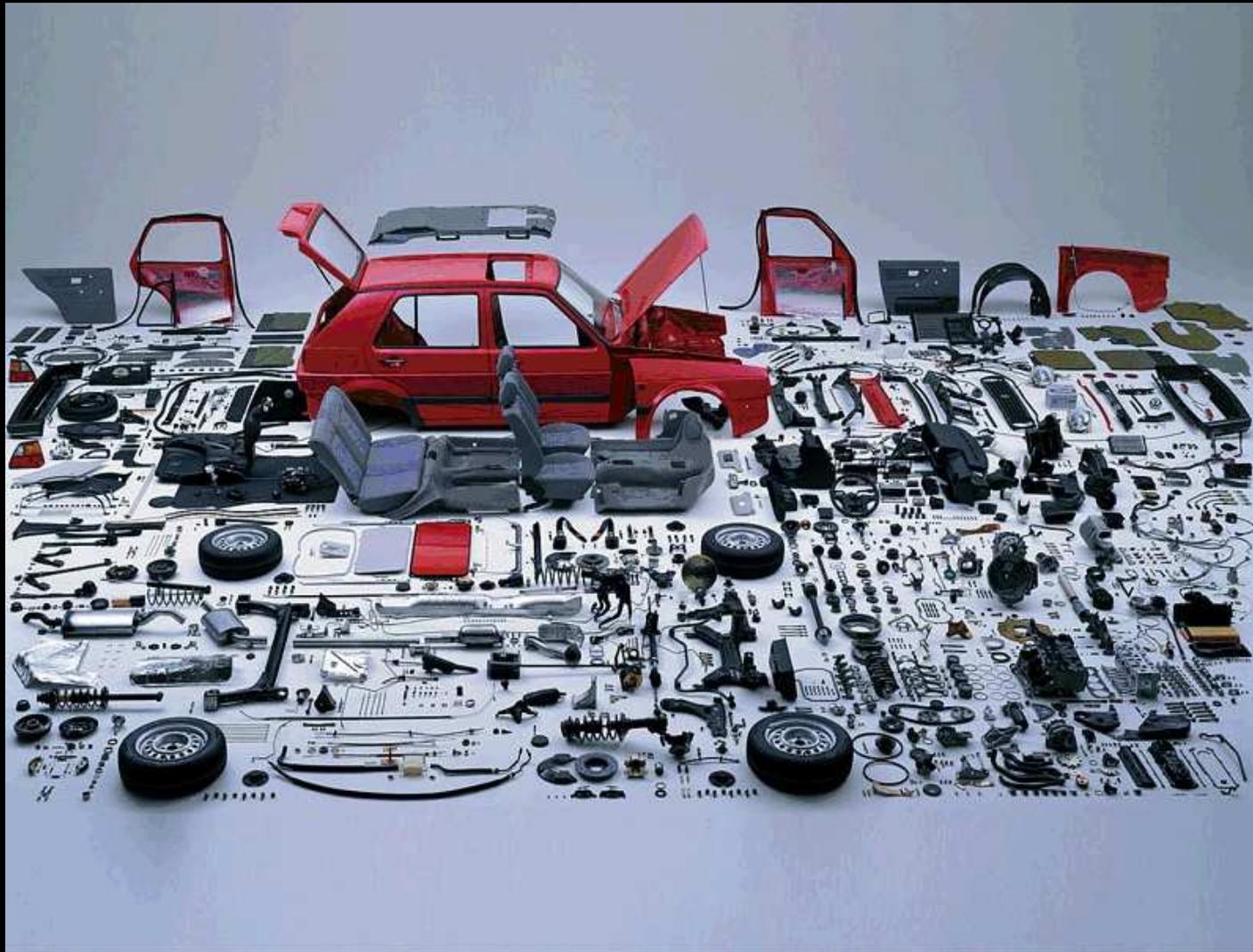
What → Why → How

What I'm sold



What → Why → How

What I get



What → Why → How

Upfront setup



What → Why → How

We asked users

“wouldn’t do it, had a bad experience in the past....”

“can’t be bothered, too time consuming...”

“I expect it will be difficult...”

What → Why → How

Yet they wanted it

Because

What → Why → How

A personalised web

news is personal

**ONE SIZE
DOESN'T
FIT ALL**

What → Why → How

news
world
entertainment
business
money
tech
travel
sport

What → Why → How



news

world

~~entertainment~~

business

money

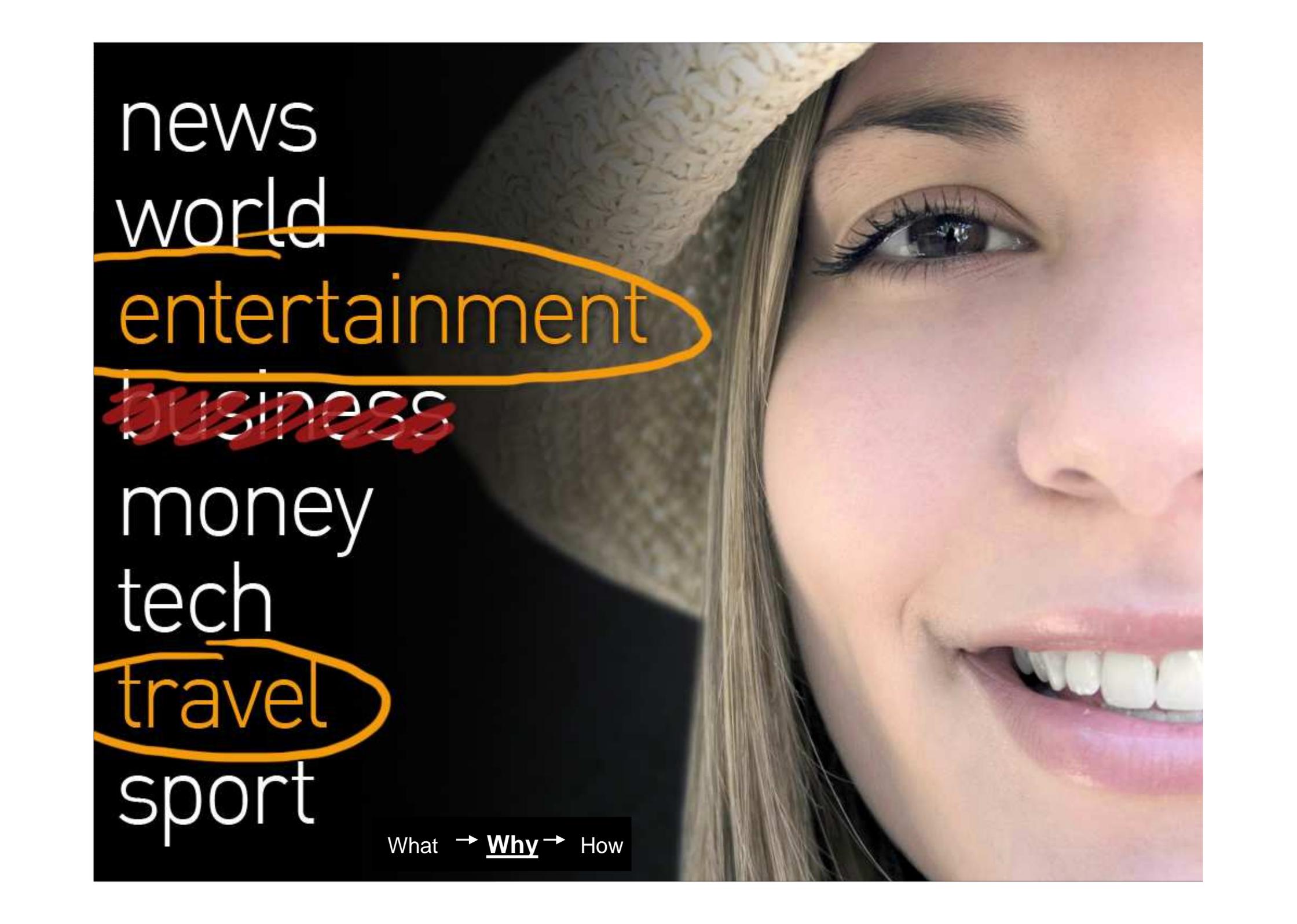
tech

travel

sport

What → Why → How





news
world

entertainment

~~business~~

money

tech

travel

sport

What → Why → How

A personalised web

users want

**CHOICE
CONVENIENCE
CONTROL**

What → Why → How

A personalised web

news is local

IT'S THINGS THAT AFFECT ME

“What’s on in Brisbane this week?
things for the family, etc.”

“I’d like state level news or
even news for my suburb – weather, fuel prices.”

What → Why → How

Summary

- One size doesn't fit all
- Missing goal in computing is invisibility
- Form & function intertwined
- Ambient doesn't require upfront work – the user just uses the site
- Personalisation = good
- Setting up Personalisation = bad

What → Why → How

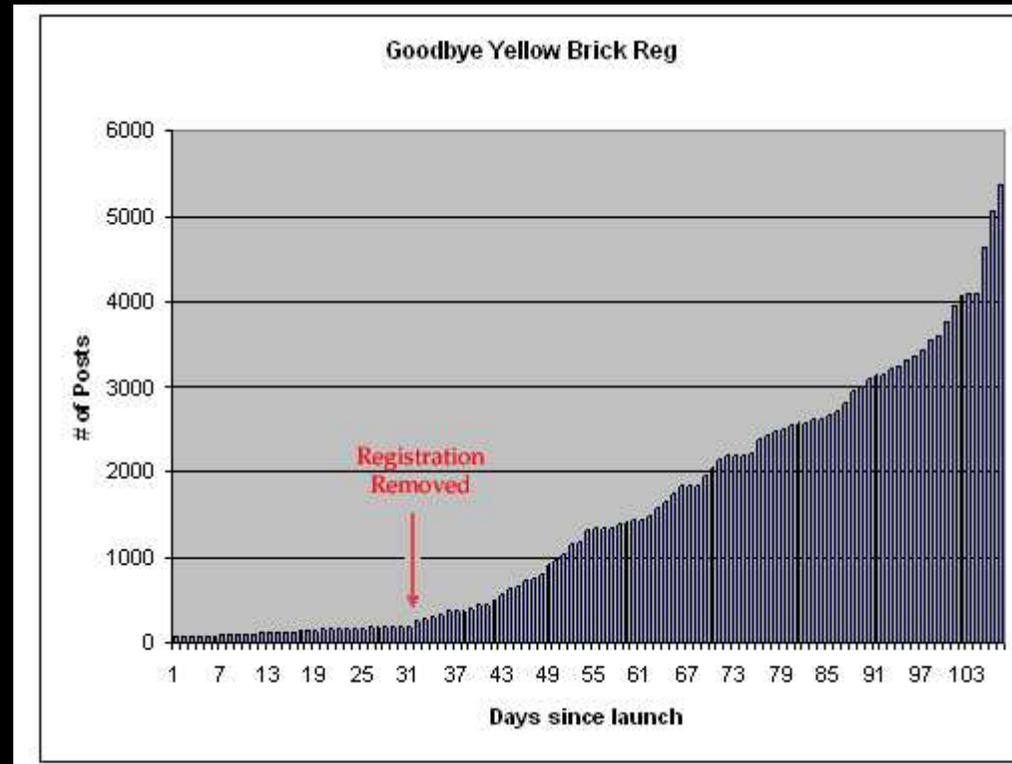
HOW

Works without personalisation



What → Why → How

Effects of removing registration/login



<http://blog.topix.com/archives/000106.html>

What → Why → How

Works without login



Uses cookies to store state

What → Why → How

news.com.au

This screenshot shows the news.com.au homepage from 2008. The layout is a dense grid of news articles. At the top, there's a navigation bar with the site's logo and various menu options. Below that, there are several large featured articles with images and headlines. The main content area is organized into columns and sections, including 'National', 'World', 'Business', 'Entertainment', 'Technology', and 'Multimedia and Games'. Each article has a small thumbnail image and a brief headline. At the bottom, there are sections for 'Today's Most Popular' and 'Free around the News Network'.



This screenshot shows the news.com.au mobile app interface. The layout is simplified and optimized for a smaller screen. At the top, there's a navigation bar with the site's logo and a search bar. Below that, there are several large featured articles with images and headlines. The main content area is organized into columns and sections, including 'National', 'World', 'Business', 'Entertainment', 'Technology', and 'Multimedia and Games'. Each article has a small thumbnail image and a brief headline. At the bottom, there are sections for 'Today's Most Popular' and 'Free around the News Network'.

Rich Mechanisms

Visual News

Headlines **News Visualiser**

News Visualiser
Explore by pictures the stories and events that have made headlines recently. Mouse over an image to view more, and click to check it out further.

Time

Editorial

Visual

User

news.com.au FOX SPORTS Newspapers CareerOne Carsguide TrueLocal Real Estate MySpace AU

news.com.au
FROM ALL ANGLES

DON'T MISS OUT
CLICK HERE
VisaEntertainment.com.au

News Business Money Entertainment Travel Technology Blogs Video AUSTRALIAN IT FOX SPORTS CLASSIFIED5 NEWS NETWORK

Breaking news National World Features Weird True Freaky Weather Multimedia Galleries Games Tools Archives Make this site your homepage Send us your news

November 28, 2008

Headlines **News Visualiser**

Three Aussies on list of dead
A SECOND Australian is feared dead as commandos storm hotels and rescue 39 people.
32 comments on this story
> **Alone, afraid:** Aussie's nightmare

• WHO DID IT: India points finger of blame at Pakistan

Satchwell angry at Government response
BROOKE Satchwell has criticised the Government for not helping Australians in Mumbai more.
92 comments on this story
> **Satchwell:** My terrifying ordeal

No hope of survivors in Air NZ crash
AN Air New Zealand Airbus, with seven on board, has fallen from the sky on a maintenance test.

Jodhi's brother bashed 'pimp' policeman
THE brother of Jodhi Mearns has been found guilty of assaulting a cop he thought was a pimp.
> **Model:** Miranda Kerr's ex arrested

Swayze 'says goodbye as cancer spreads'
ACTOR Patrick Swayze has reportedly started saying goodbye to family and friends after learning his cancer has spread to his liver.
15 comments on this story

Breaking News

- 10:26am Three Aussies killed in Mumbai - report
- 10:26am Share market opens 1pc higher
- 10:12am Teen injured during carjacking
- 09:49am World's oldest person dies
- 09:30am Briton tells of Mumbai terror before death
- 09:27am No hope of survivors in Air NZ crash
- 09:18am Commandos rescue 39 from Mumbai hotel
- 09:08am 'Expect the worst' - toll may rise

[More breaking news](#)

Personalisation options
[quick 4-step tour](#) [about the new site](#) [feedback](#)

Sydney More Cities

19C - 24C
Showers, increasing.
Thunderstorms.

Tomorrow
20C - 25C

View 5 Day Forecast Full Weather Section

Advertisement

Exclusive opportunities exist on
the class-leading X3

The BMW Runout Event
Ends November 30

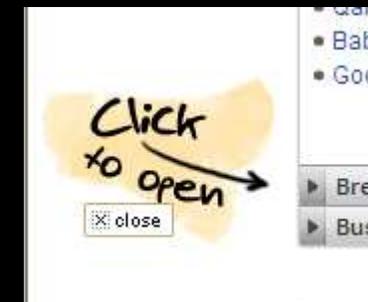
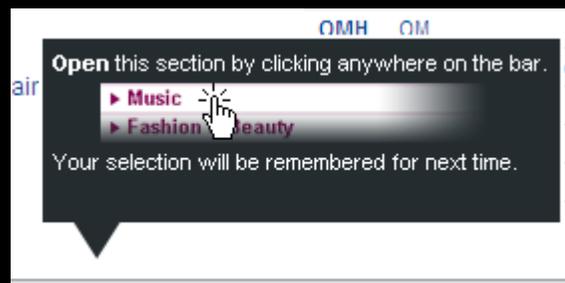
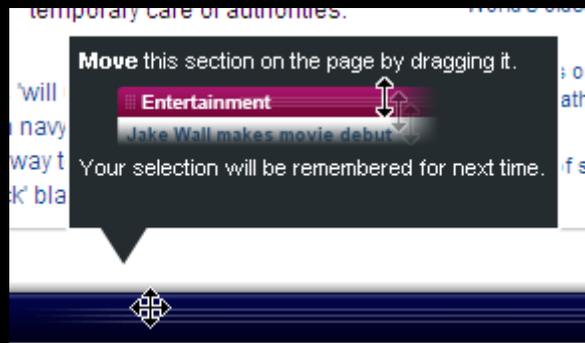
Most popular News Blogs

1. No hope of survivors in Air NZ crash
2. Swayze 'says goodbye as cancer spreads'
3. Facebook sticks knife into dodgy diners
4. Fresh fire as forces storm hotels
5. 'I've been shot' - son's desperate call t...
6. Family wants compo for \$50 note image
7. Australian trapped in Mumbai hotel
8. Satchwell angry at Government response

What → Why → How

Instructional Scaffolding

- Margin call outs attract attention
- Type/Shape designed to look less like an ad – more personal
- Degrades gracefully to nothing



What → Why → How

Tour

- Concept of real tour as a metaphor
- Maintain context allow people to play

• **News Visualiser** close tour

Explore today's news via pictures.

1. Click on the "News Visualiser" tab
2. Press the "start exploring" button
3. Mouse over images and/or click to view more

Previous tip 1 of 4 Next tip

• **Drag to reorder page** close tour

Make the page your own - click and drag the coloured title bar to move a section up or down. We'll remember your choice for next time.

- The price of dissent on global warming

Previous tip 2 of 4 Next tip

• **Your state news** close tour

Click on your state in the map to see the latest local stories on the homepage. We'll remember your choice for next time.

Previous tip 4 of 4 Start again

• **Click to read more** close tour

Want more on your favourite topics? Click on sub-sections to see more stories. We'll remember your choice for next time.

Previous tip 3 of 4 Next tip

What → Why → How

Drag'n'drop

Users create their own context

The screenshot shows a news website layout. At the top, there is a 'Business' section with a headline 'ABC kids could play at the YMCA' and a sub-headline 'ASX200 - Top Gainers & Losers'. Below this, there is a 'Money' section with a headline ''Tis season for credit' and a sub-headline 'Property >'. A mouse cursor is hovering over the 'Property >' sub-headline. The 'Money' section also includes sub-sections for 'Investing >', 'Banking >', and 'Superannuation >'. At the bottom of the page, there is an 'Entertainment >' section. The interface includes navigation links like 'Send to: Top | Bottom' and 'More business >'.

Use grip affordances to imply dragability

The image shows a vertical stack of seven horizontal navigation bars, each representing a different category. From top to bottom: 1. 'National & Local >' in a dark red bar with a white border and a 'Send to: Top | Bottom' link. 2. 'World >' in a dark red bar with a white border and a 'Send to: Top | Bottom' link. 3. 'Money >' in a teal bar with a white border and a 'Send to: Top | Bottom' link. 4. 'FOX SPORTS' in a blue bar with a white border and a 'Send to: Top | Bottom' link. 5. 'Business >' in a grey bar with a white border and a 'Send to: Top | Bottom' link. 6. 'Entertainment >' in a purple bar with a white border and a 'Send to: Top | Bottom' link. 7. 'Travel >' in a blue bar with a white border and a 'Send to: Top | Bottom' link. 8. 'Technology >' in a purple bar with a white border and a 'Send to: Top | Bottom' link. Each bar has a small icon on the left and a 'Send to: Top | Bottom' link on the right.

What → Why → How

Accordions

- Progressive disclosure
- Surreptitious discovery
- Breadth and depth
- Information scent
- Helps mental model of site
- Construct own IA's

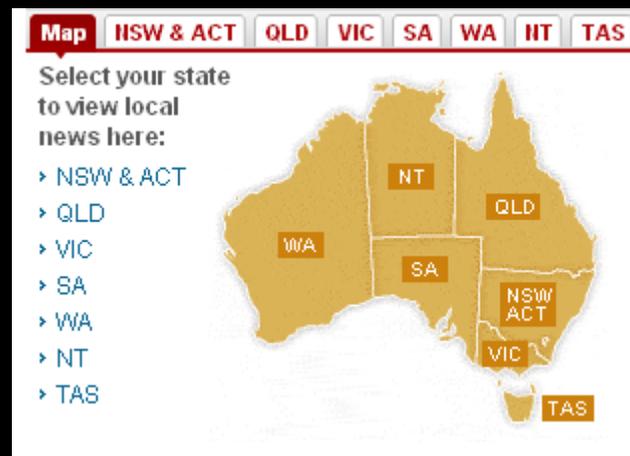
What → Why → How

This screenshot shows a website's 'Money' section. At the top, there is a navigation bar with 'Money' and 'Send to: Top | Bottom'. Below this, there are several article teasers. The first is titled 'Tis season for credit' and includes a list of bullet points: 'Grants, rate cuts boost house sales', 'Repo business booms as crisis bites', 'Saving the world vs saving money', and 'Rich suburbs on mortgage stress list'. To the right, there are teasers for 'Property', 'Investing', 'Banking', and 'Superannuation'. A 'More money' button is located at the bottom right of the main content area. A navigation bar at the bottom of the section shows 'Property | Investing' and 'Banking | Superannuation'.

This screenshot shows the same website's 'Money' section, but with the accordion menu expanded. The 'Property' and 'Investing' categories are selected. Under 'Property', there is a headline 'Prices, sales fall as gloom continues' with a sub-headline 'THE property gloom continues with auction clearance down and prices suffering the worst fall in 25 years in one capital city.' and a list of bullet points: 'Cheap rentals may be on the way', 'No-deposit loans dead as banks get tough', and 'House prices won't crash, says RBA'. Under 'Investing', there is a headline 'Market decline worse than 1987 crash' with a sub-headline 'THE current bear market is worse than the 1987 crash and could become the worst downturn in the post-war era.' and a list of bullet points: 'Digging deep to find joy in mining stocks', 'ANZ simplifies investing', and 'Fear index shows its time to buy'. Below these, there are sections for 'Banking' and 'Superannuation'. The 'Banking' section has a headline 'Rates tipped to fall to less than 3pc' and a list of bullet points: 'Credit card spending on the rise', 'Thorpe enters mortgage game', and 'Plastic not so fantastic for many women'. The 'Superannuation' section has a headline 'Super jargon confusing investors' and a list of bullet points: 'Regulators warn to super comparisons', 'Super to double' within 10 years', and 'How to prepare for retirement'. Each section has a 'More' button.

Local News

Map based UI



Reassurance of Persistence

Position saved



What → Why → How

What have we seen today

What



Why



How

Conclusion

- Explorable Interface somewhere between dictatorship and total freedom.
- Once setup, less browsing, scrolling, more immediate results
 - Allows hidden depth to be revealed (accordions)
 - Allows product to grow as users experience and knowledge grows (accordions)
 - More easily reflect users preferences and thought processes (set forget, footprint)
 - Augment user – do things humans are not good at (remembering information on the page, setting preferences – spatial awareness, short and long term memory)
 - Set and forget

Questions ?

Dr Christopher Khalil

Senior Experience Architect

News Digital Media

chris.khalil@newsdigitalmedia.com.au

christopherkhalil@yahoo.co.uk

www.chriskhalil.com