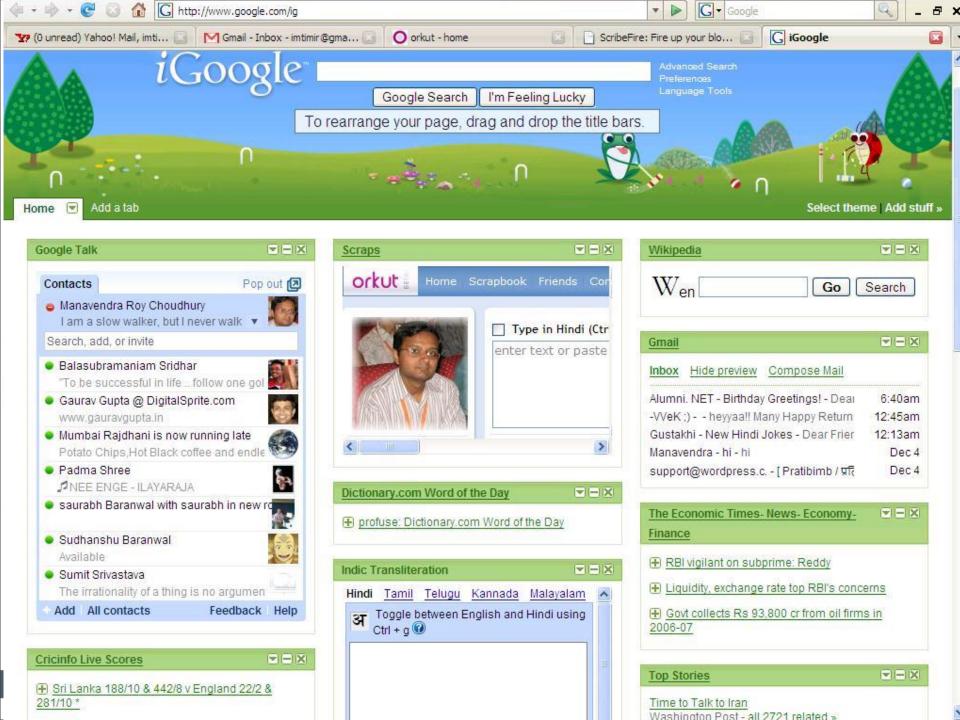


"The Changing Character of Customisation: Content Personalisation in the News"

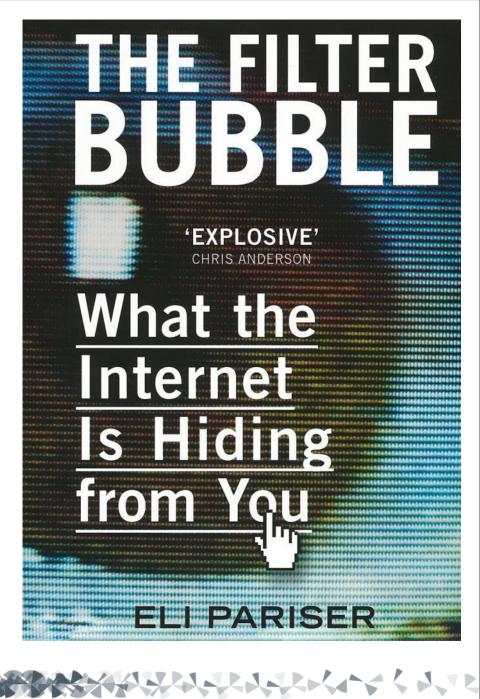
Google UK, London, 7 September 2011

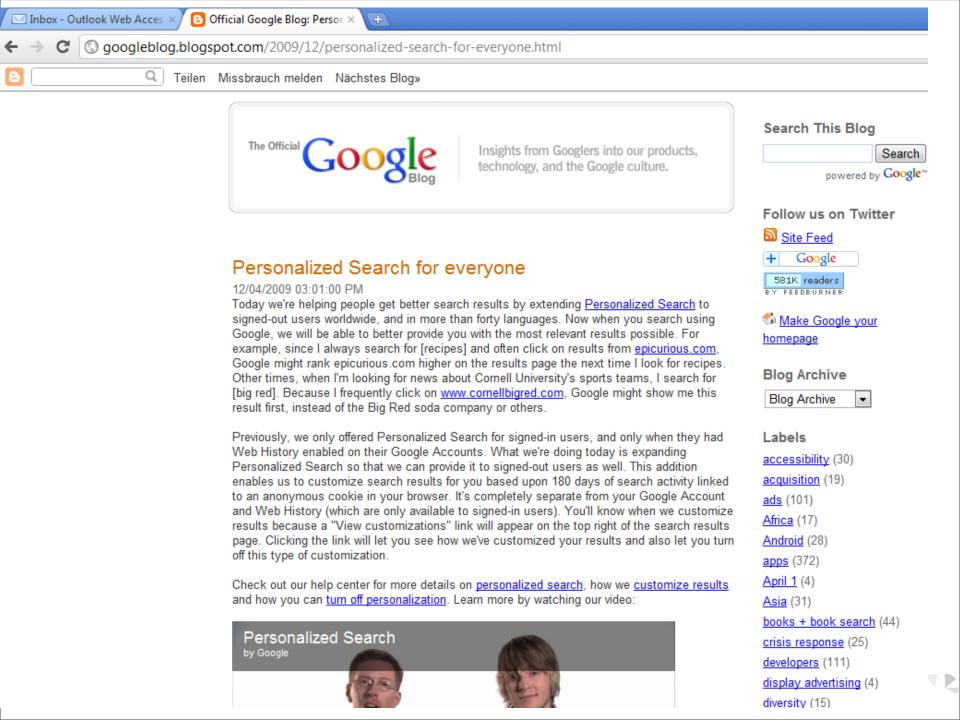
Neil Thurman





"the era of personalization has begun" - Eli Pariser.







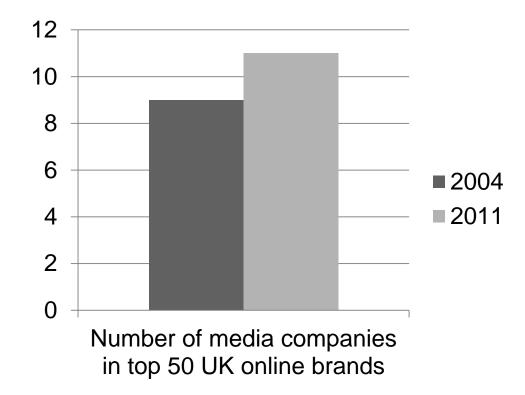
Media Companies in UK's 50 most-popular brands online

Growth principally coming from **TV broadcasters**:

- ITV
- Channel 4
- Sky

and national newspapers:

- Associated Newspapers
- News International
- The Telegraph



Source: Nielsen, Feb 2011

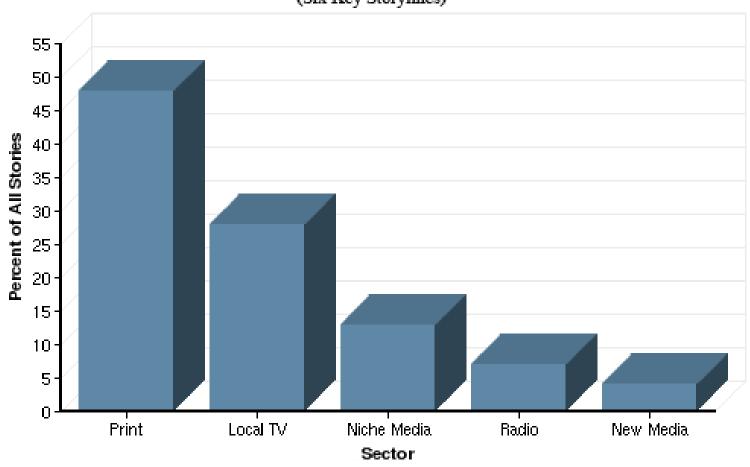
STANDARD CAR CAR





Who Reported New Information

(Six Key Storylines)



Note: For this and all related charts in this report, the sector includes the outlets' websites.



Qualitative Interviews















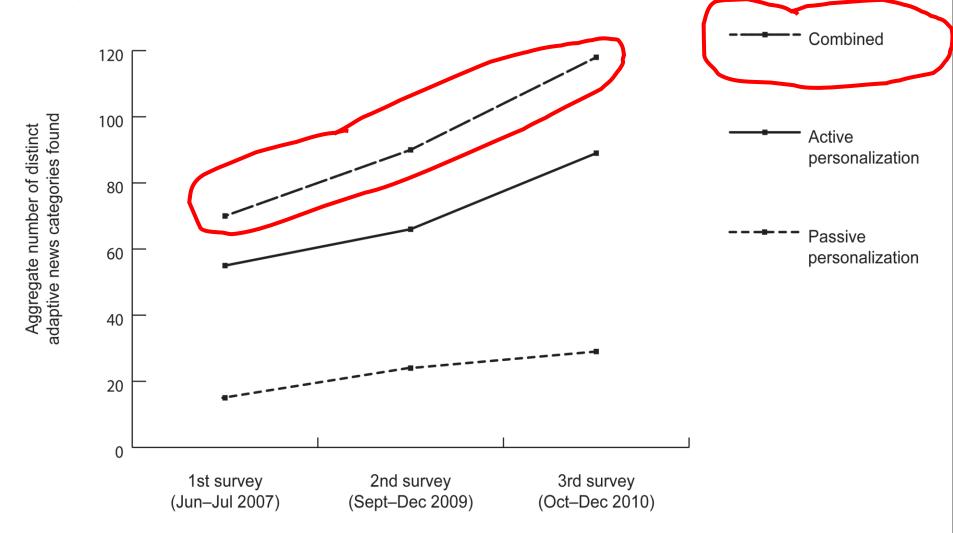




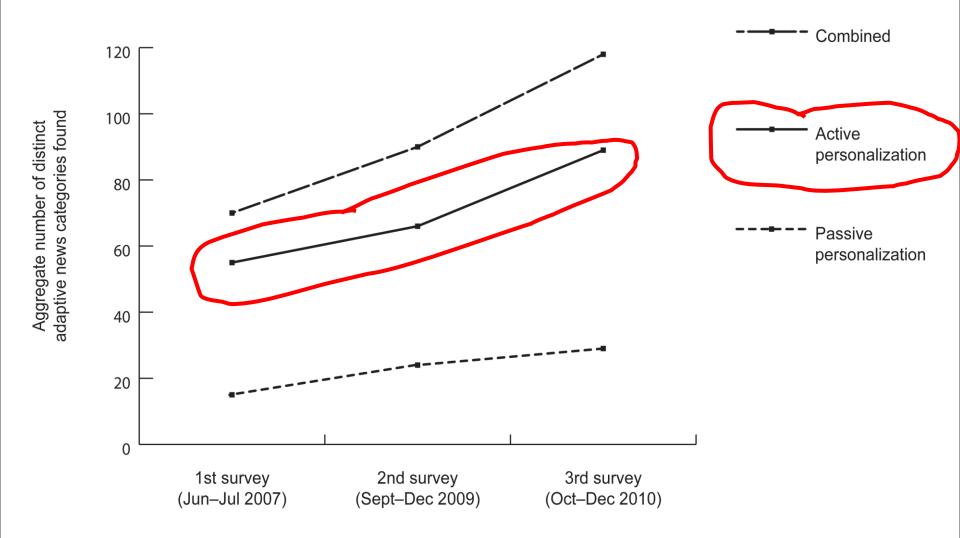
The Washington Post



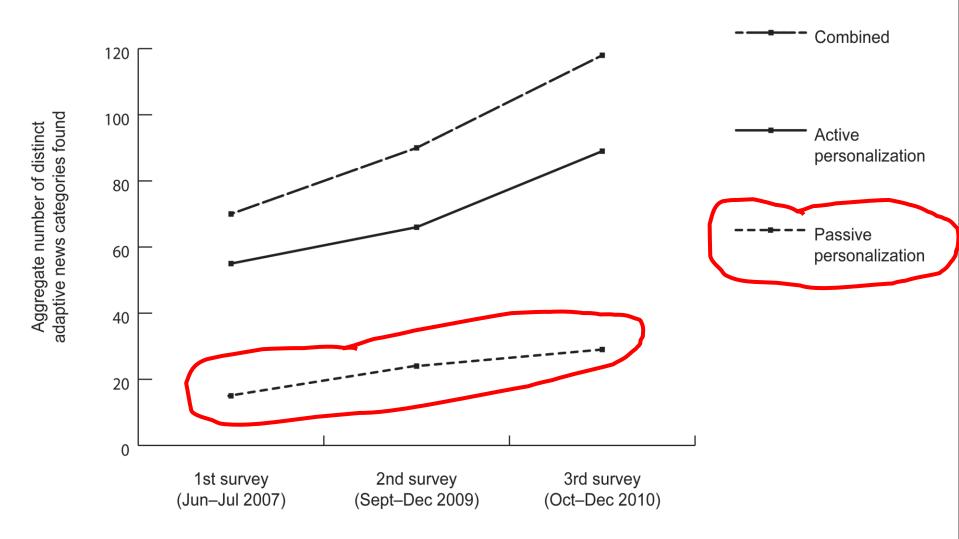




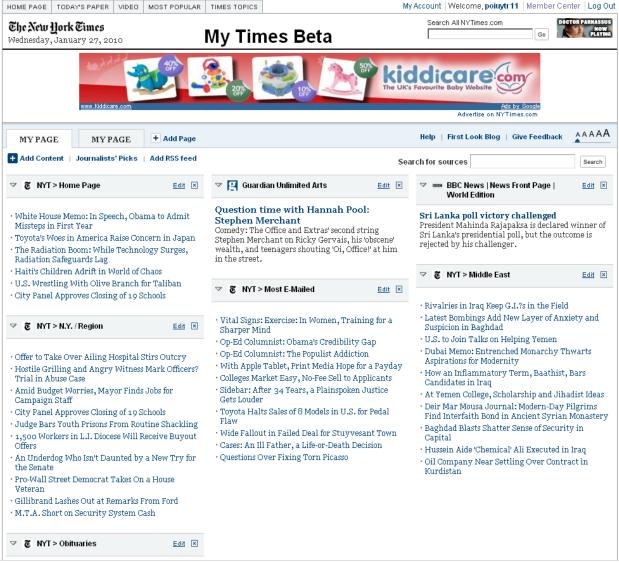












POWERED BY GOOGLE

Home

Video Nev

NewsPulse

U.S. World

Politics

Justice

Entertainment

Tech

Health

Living

- 3

Travel

Opinion

iReport

t I

Sports

H Feedback

updated 12:24 p.m.EDT, Thu April 22, 2010







Obama: Wall Street, Washington share b

President Obama said today the Street reform is to ensure that t have to pay for bailing out a firr "too big to fail." FULL STORY

- · Wall Street to abandon Der
- Fed profits from bailout Cl
- · Opinion: No bailout | The da

Latest News

- · Planes flying again in Euro
- · Airlines lash out | Latest u
- Burning rig leaks oil into G
- Thai blasts prompt emerg
- · Jobless claims fall CNNMo
- · Dozens hurt after cruise s
- · Missing mom, mystery ma
- . U.C. Maniana andinala a
- U.S., Mexican cardinals sur
- Why were CIA tapes destr
 Ticker: Cheney has big an
- Intriguing: Daddy of Earth I
- · What about a Facebook 'di:
- Franklin Graham cut from prayer day 🗐
- Painters dangle from building
- What's behind the 'Idol' ratings slide?
- NFL draft goes prime time today



Log in with Facebook to see your friends' activity | What's this? heyll do Mew more friends' activity | What's this?



Keirsun Scott recommended How Facebook won the web ' about an hour ago



Navy SEAL not guilty of charges in Iraq

1023 people shared this.



NASA unveils new images of the sun

9539 people shared this.









Hi, Leah Singer

settin

FRIENDS'ACTIVITY

Log in with Facebook to see your friends' activity | What's this? Mew more friends' activity | What's this?

1023 people shared this.



Keirsun Scott recommended How Facebook won the web ' about an hour ago



Navy SEAL not guilty of charges in Iraq



NASA unveils new images of the sun 9539 people shared this.

NEWSPULSE

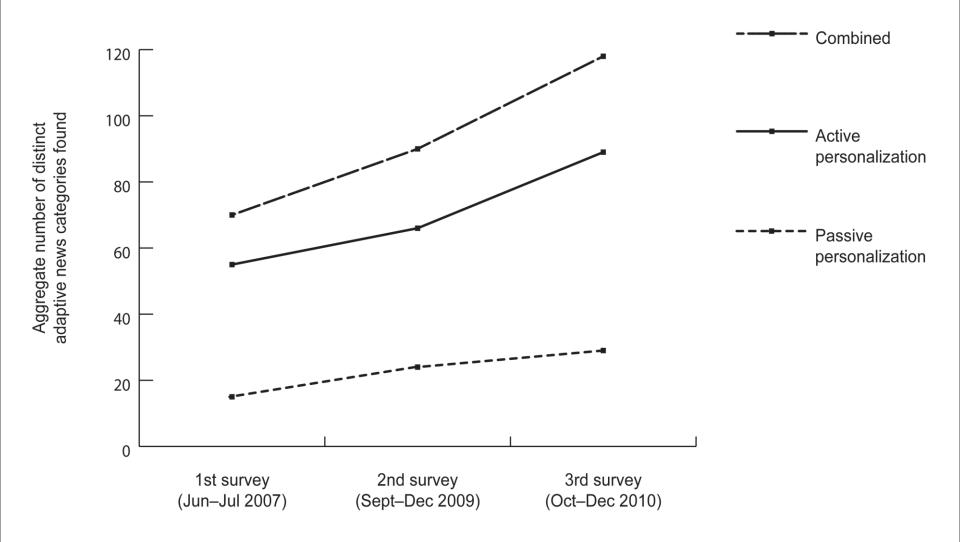
LOU. WEATHER & NEWS

SPORTS

ARKETS









- 'Contextual Recommendations / Aggregations'
- 'Geo-targeted Editions'
- 'Aggregated Collaborative Filtering'
- 'Multiple Metrics'
- 'Social Collaborative Filtering'

Table 2: Active Personalization Formats:

- 'Email Newsletters'
- 'One-to-one Collaborative Filtering'

- 'Homepage Customization'
- 'Homepage Editions'
- 'Mobile Editions and Apps'
- 'My Page'
- · 'My Stories'
- 'Non-linear Interactives'
- 'Other Explicit'
- · 'RSS Feeds'
- 'SMS Alerts'
- 'Twitter Feeds'
- 'Widgets'



- 'Contextual Recommendations / Aggregations'
- 'Geo-targeted Editions'
- 'Aggregated Collaborative Filtering'
- 'Multiple Metrics'
- 'Social Collaborative Filtering'

Table 2: Active Personalization Formats:

- 'Email Newsletters'
- 'One-to-one Collaborative Filtering'

- 'Homepage Customization'
- 'Homepage Editions'
- 'Mobile Editions and Apps'
- 'My Page'
- · 'My Stories'
- 'Non-linear Interactives'
- 'Other Explicit'
- · 'RSS Feeds'
- 'SMS Alerts'
- 'Twitter Feeds'
- 'Widgets'



- 'Contextual Recommendations / Aggregations'
- 'Geo-targeted Editions'
- 'Aggregated Collaborative Filtering'
- 'Multiple Metrics'
- 'Social Collaborative Filtering'

Table 2: Active Personalization Formats:

- 'Email Newsletters'
- 'One-to-one Collaborative Filtering'

- 'Homepage Customization'
- 'Homepage Editions'
- 'Mobile Editions and Apps'
- 'My Page'
- · 'My Stories'
- 'Non-linear Interactives'
- 'Other Explicit'
- · 'RSS Feeds'
- 'SMS Alerts'
- 'Twitter Feeds'
- 'Widgets'



- 'Contextual Recommendations / Aggregations'
- 'Geo-targeted Editions'
- 'Aggregated Collaborative Filtering'
- 'Multiple Metrics'
- 'Social Collaborative Filtering'

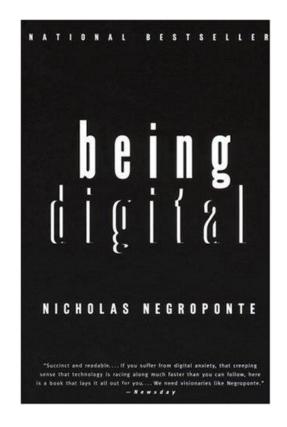
Table 2: Active Personalization Formats:

- 'Email Newsletters'
- 'One-to-one Collaborative Filtering'

- 'Homepage Customization'
- 'Homepage Editions'
- 'Mobile Editions and Apps'
- 'My Page'
- · 'My Stories'
- 'Non-linear Interactives'
- 'Other Explicit'
- · 'RSS Feeds'
- · 'SMS Alerts'
- 'Twitter Feeds'
- 'Widgets'





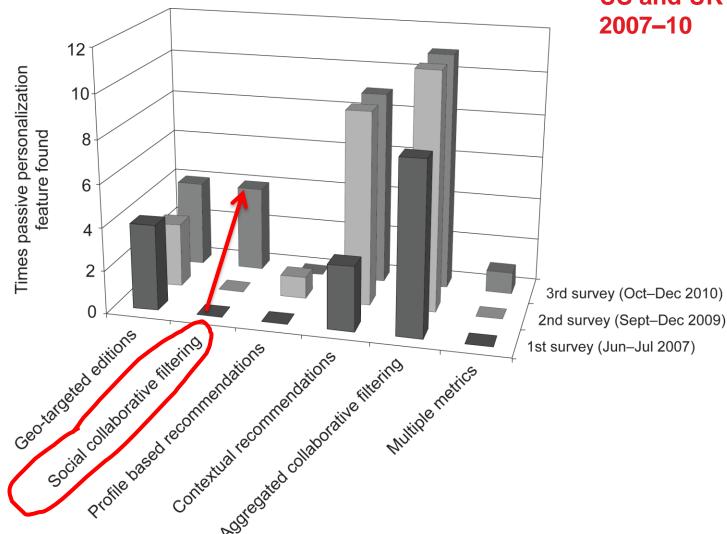


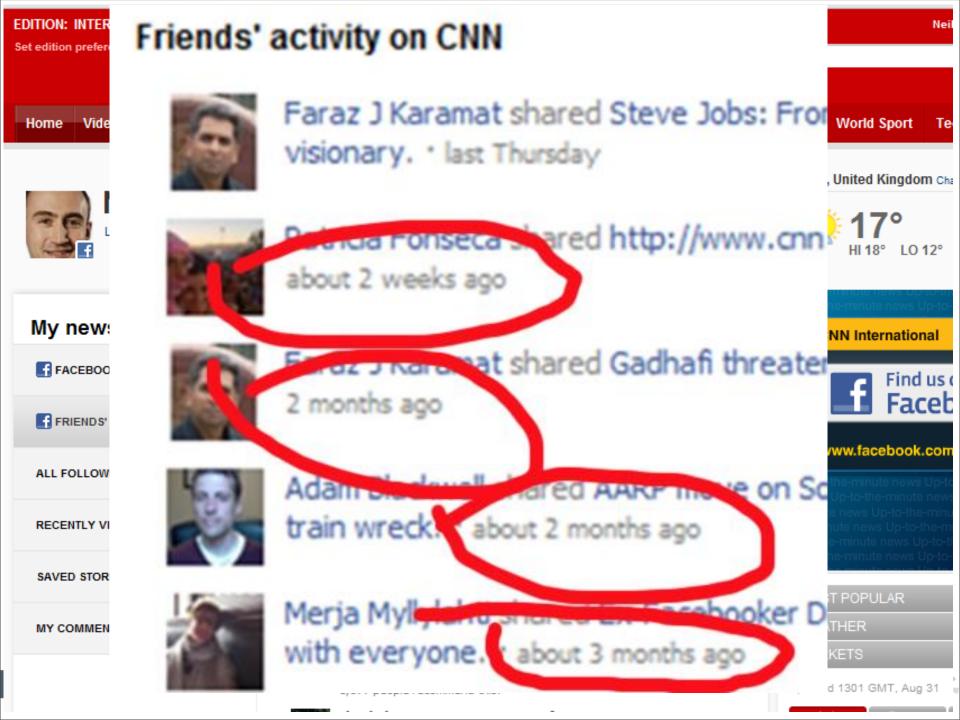
"Imagine a future in which your interface agent can [read / view / listen to everything], and construct a personalized summary. This kind of newspaper is printed in an edition of one. . . . Call it *The Daily Me*."

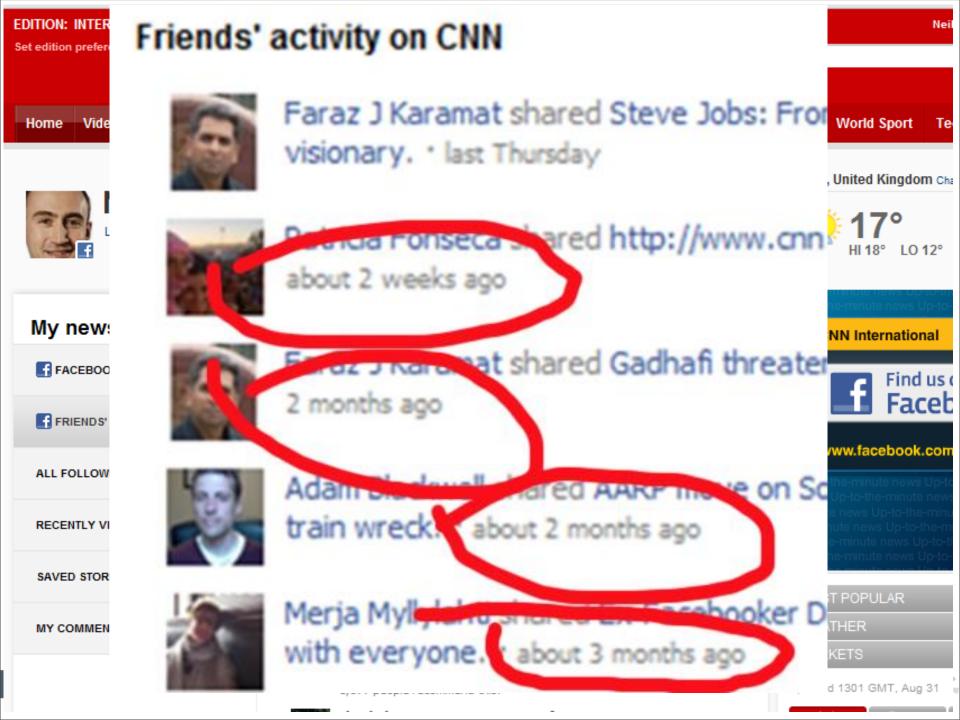
Nicholas Negroponte, Being Digital, 1995



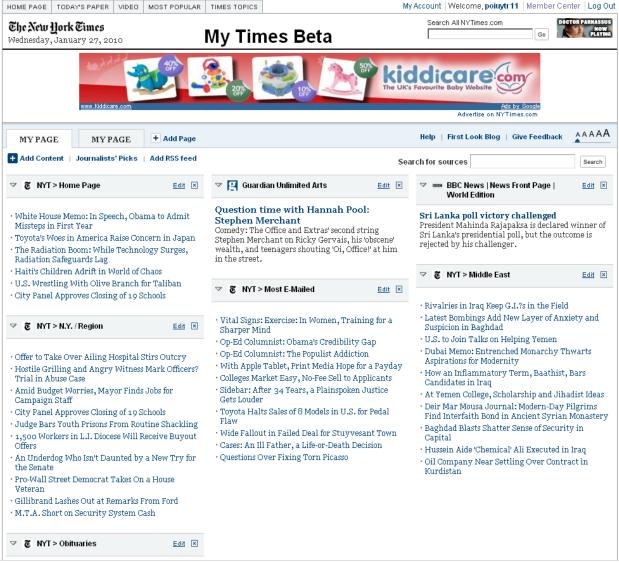


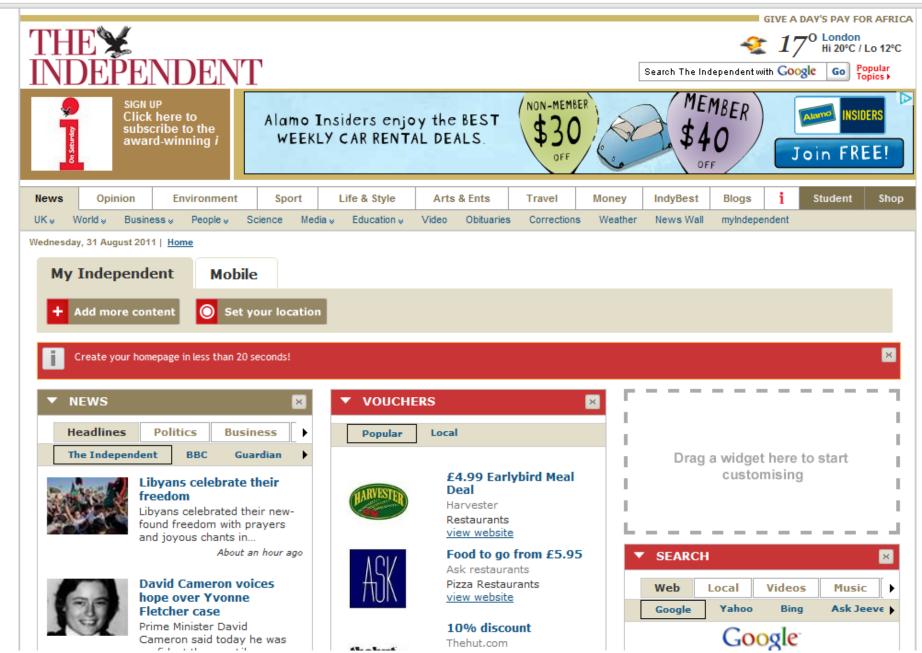


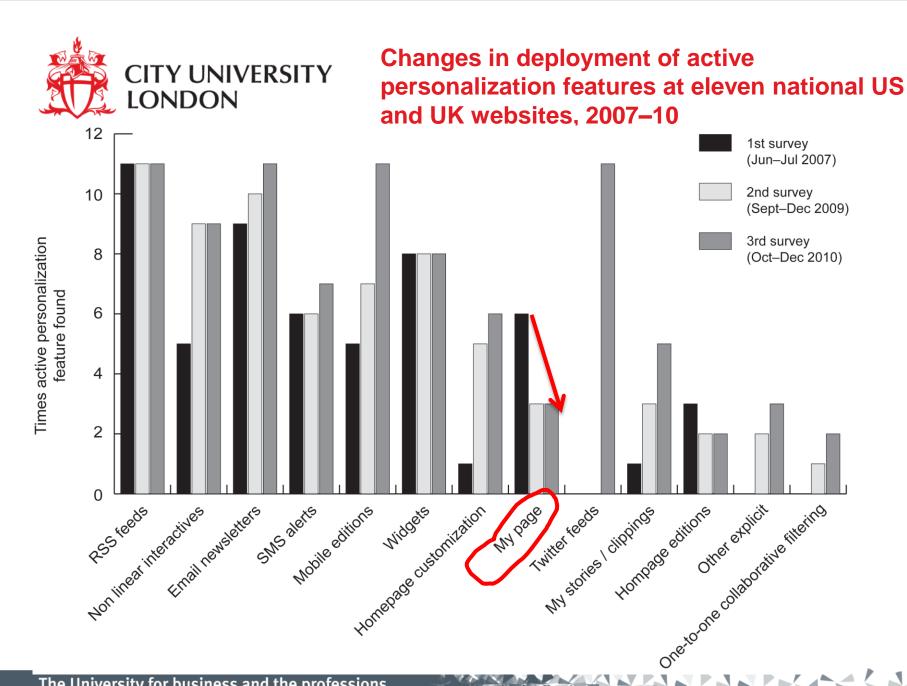














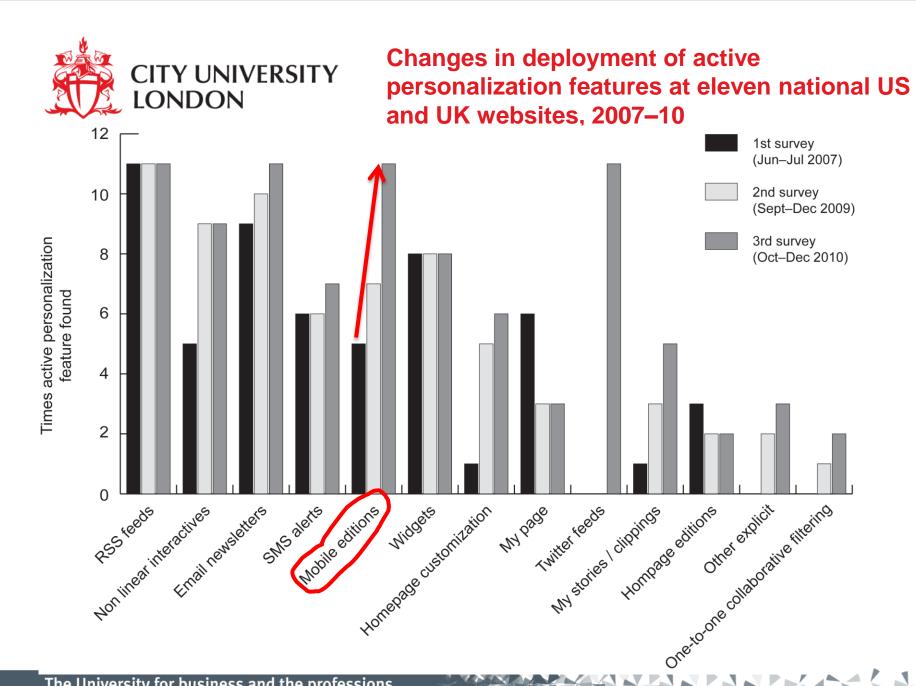
What the editors said:

"the time and effort to personalize something" would put off all but a "relatively small number of people"

—Steve Herrmann, editor, BBC News website

"If you determine in advance who 'The Daily Me' is . . . Then you may miss some of the important things that you didn't know you were"

—Rich Meislin, NYTimes.com





"fat finger problem"









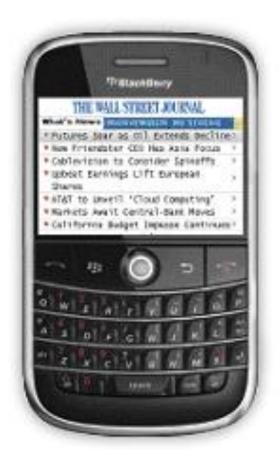






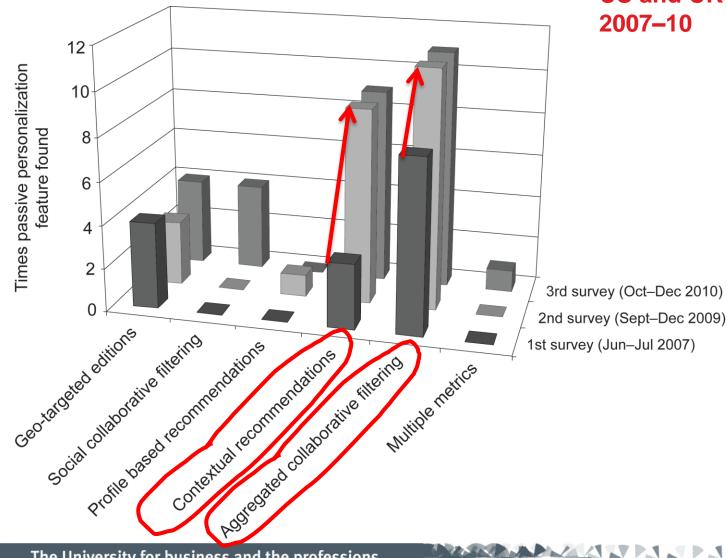
Table 3: Adaptive interactivity on different platforms compared.

	Mobile editions and 'apps'	Full web editions
Forms of personalization	1.7	22.54

Data from eleven news providers, Dec 2010









Passive Personalization: 'Aggregated collaborative filtering'





What the editors said:

"[the most read and most commended features have] gone down well . . . we don't do enough"

—Neil McKintosh, then Head of Editorial Development, Guardian.co.uk

"I think there is something very useful and informative about what people are email each other""

—Pete Clifton, then Head of BBC News Interactive

during the date of a major jobs speech to m House Speaker John Boehner. Row breaks e annual S consumer confidence slumps 'Anti-cancer vir

treat strokes is set to move to its

130 anged



death toll rises 'anti-terror' laws ails at killings ninister found guilty

oin admits US charges it over leaked cables rus' shows promise

Arteta in late moves

d Mikel Arteta are two of the y transfer deadline day, with ng the players to move.

Niagara Falls skipper calls it a day

Farah safely re

Madonna show

ne big names to switch clubs on an h Craig Bellamy, Joe Cole and Scott eaches 5,000m final Europe M charged over loan Croatian ex-PNving biopic at Venice

fi son vows to fight

Features & Analysis



Storage mania

Why do we pay to keep things we've no space for? = 60



Revolution retrospective

Memorable floments from Libya's six-month unising



Desperate to work

Portugal's jubless generation leaves for former colonies



Messi fever

Cricket-mad Indians go crazy for football superstar

Croatia's cave-dwellers

Development threatens to destroy ancient underground species NEWSNIGHT

Prize performers

Can Nobel winners help solve the present economic crisis?

In pictures

Behind the scenes with Japan's notorious Yakuza syndicates

Market Data

AST UPDATED AT 08:37 GMT Dow Jones 11613.5 53.58 0.46% Nasdag 2579.4 3.35 0.13% **FTSE 100** -18.33 -0.34% 5376.2 Dax -75.13-1.30% Cac 40 3233. -22.93 -0.70% **BBC Global 30**

5353.9

Marketwatch ticker

DATA DELAYED BY 15 MINS

5.68

0.11%

2

Most Popular

Read Shared

V deo/Audio

'Anti-cancer virus' shows promise

A life in storage

Graduates flee Portugar in search of work

ancient underground

present economic

otorious Yakuza

T UPDATED AT 08:37 GMT

0.46%

-0.70%

0.11%

53 58

-22.93

5.68

_	55.50	0.4070
A	3.35	0.13%
•	-18.33	-0.34%
•	-75.13	-1.30%

ATA DELAYED BY 15 MINS

/Audio

nise



Editorial judgement

"if there's anything we have it is our judgement about what people are interested in"

—Anna Spackman, then editor Timesonline.co.uk

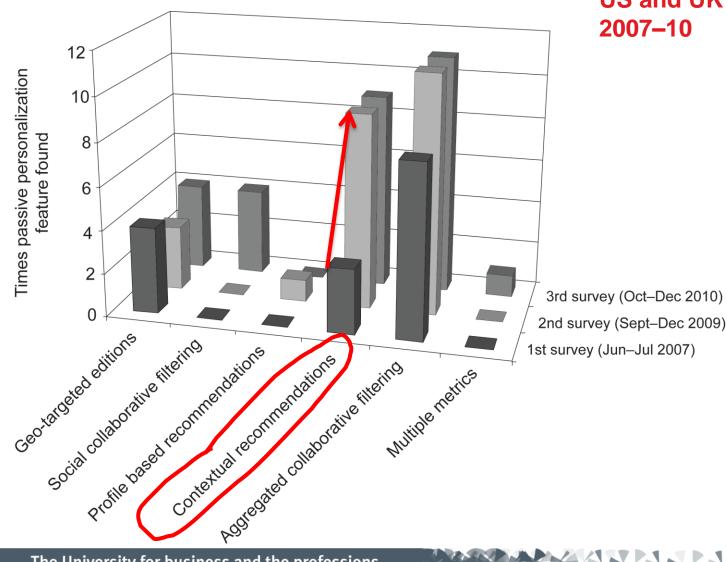
Readers "want someone to do some of the filtering work for them"

ASPANA PARA CALAR

—Neil McKintosh, then Head of Editorial Development, Guardian.co.uk









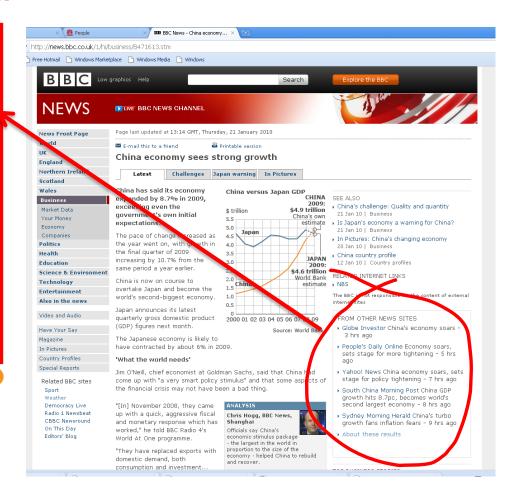
Passive Personalization: Contextual recommendations

FROM OTHER NEWS SITES Globe Investor China's economy soars -3 hrs ago People's Daily Online Economy soars, sets stage for more tightening - 5 hrs Yahoo! News China economy soars, sets stage for policy tightening - 7 hrs ago South China Morning Post China GDP growth hits 8.7pc, becomes world's second largest economy - 8 hrs ago Sydney Morning Herald China's turbo growth fans inflation fears - 9 hrs ago About these results



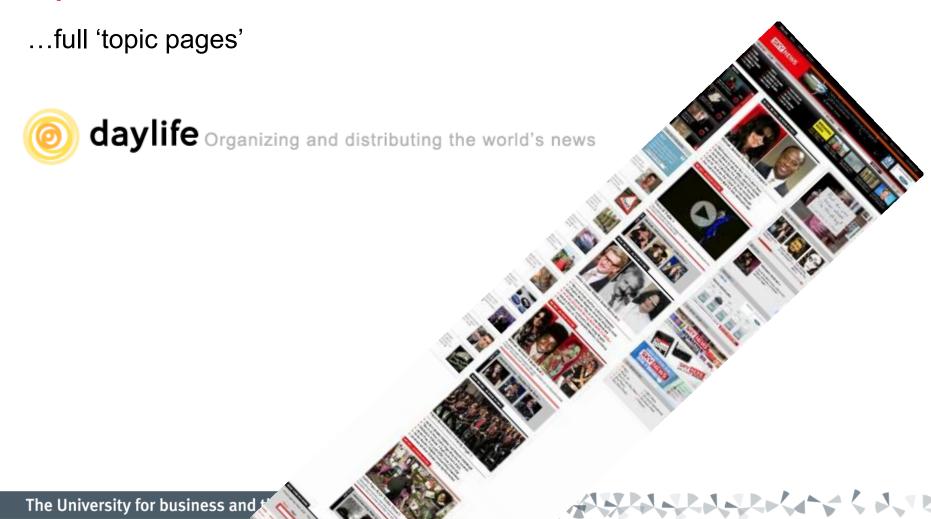
more news more social more often





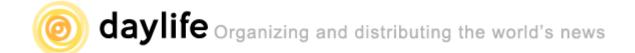


Implicit Personalization: Contextual recommendations





Implicit Personalization: Contextual recommendations























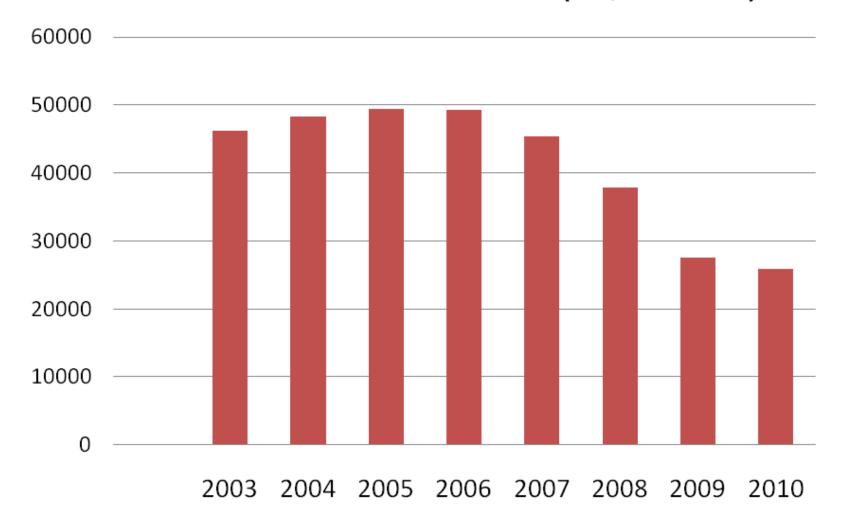


"Automatically direct users toward higher CPM ... content while maintaining recommendation quality and user engagement"

ASSESSED ASSESSEDA ASSESSED ASSESSED ASSESSED ASSESSED ASSESSED ASSESSED ASSESSEDA ASSESSED ASSESSED ASSESSED ASSESSED ASSESSED ASSESSED ASSESSEDA ASSESSEDA ASSESSEDA ASSESSEDA ASSESSEDA ASSESSEDA ASSESSEDA ASS

—Taboola website

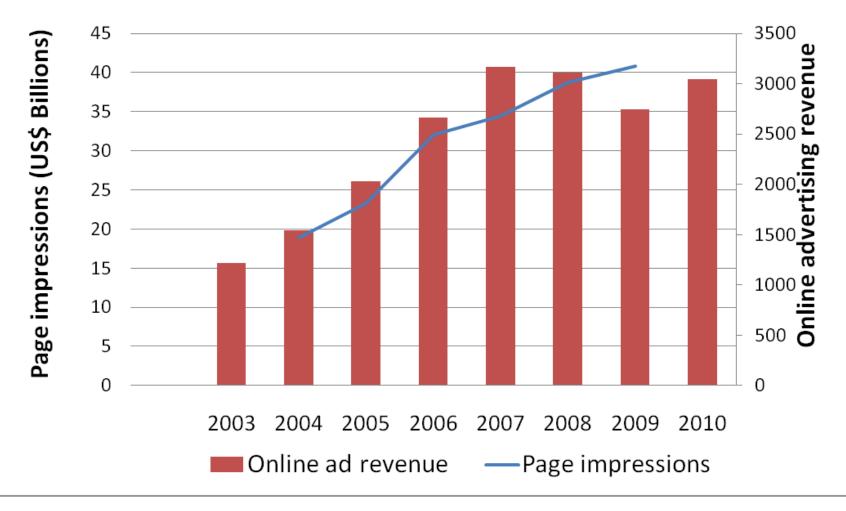
COMBINED US NEWSPAPER PRINT & ONLINE ADVERTISING REVENUES (US\$ BILLIONS)



Source: Newspaper Association of America

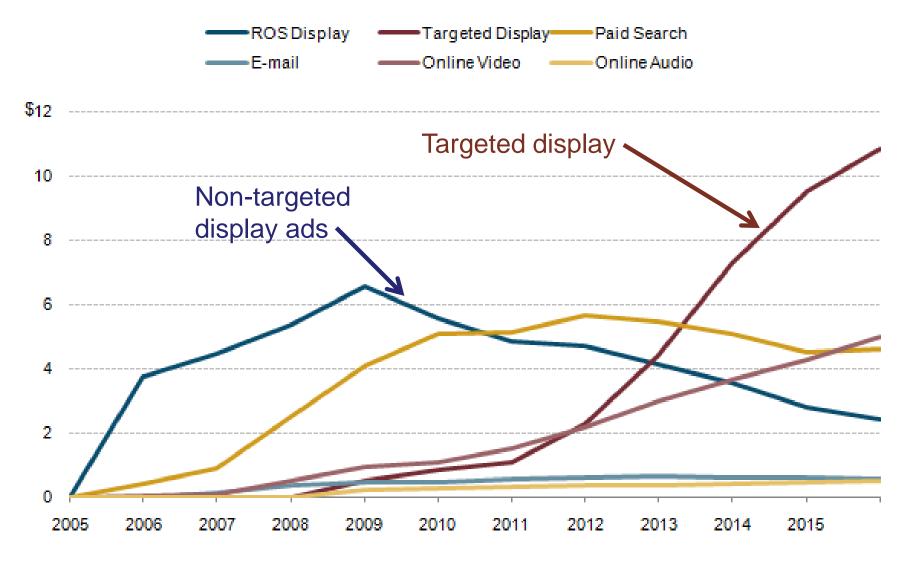
ASSESSED AND CONTRACTOR

COMBINED US NEWSPAPER ONLINE ADVERTISING REVENUES and PAGE IMPRESSIONS



Source: Newspaper Association of America

Targeted Display Expected to Dominate Local Online Advertising In Billions of Dollars



Source: Borrell Associates 2010 Compass Report, based on the first three quarters of 2010 Note: ROS Display refers to non-targeted display ads

PEW RESEARCH CENTER'S PROJECT FOR EXCELLENCE IN JOURNALISM
2011 STATE OF THE NEWS MEDIA





Coming land war for margin in the display ad delivery chain

Ad Delivery Players

CDNs





Display



Microsoft^{*}

Ad Serving





Rich Ads

point roll eyewonder

Video Nets





Ad Networks *BurstMedia ad.com

Publishers



Publisher margins get squeezed

Ad Targeting Players



OMNITURE'

quointcast









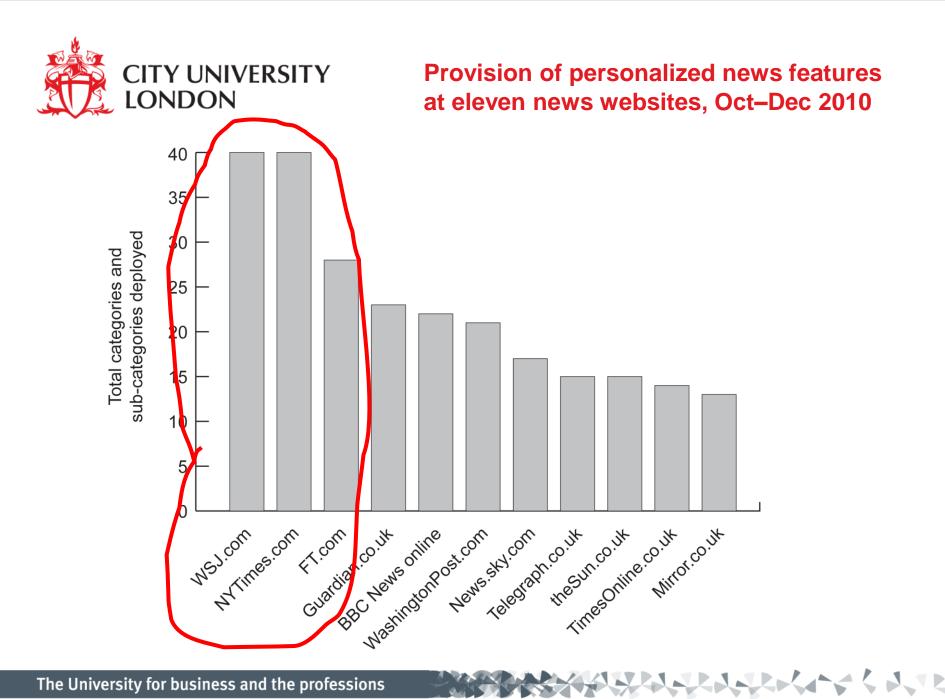


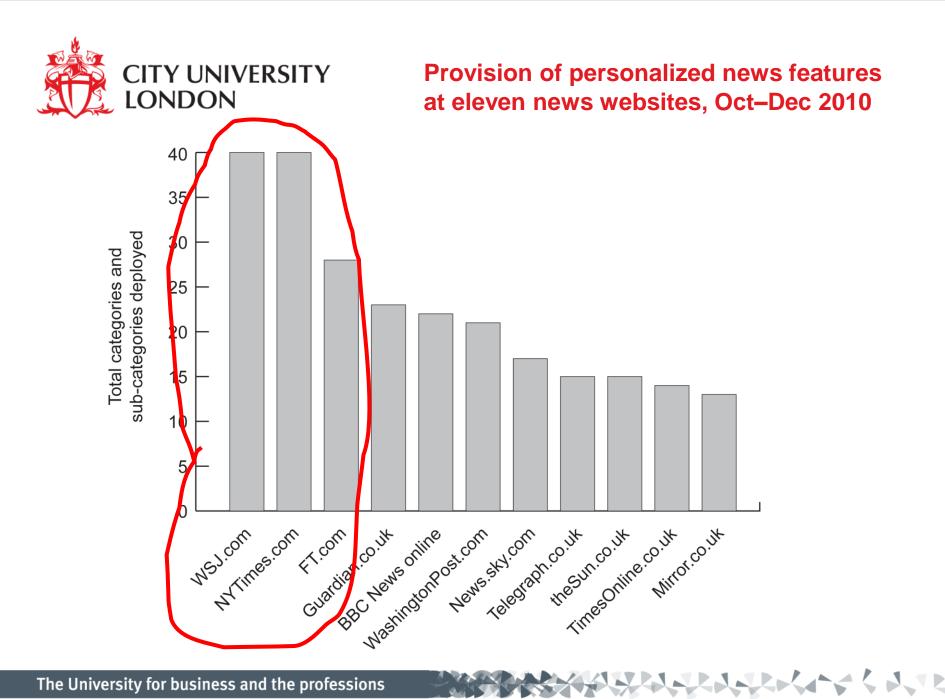


"Journalists should worry about creating the content and other people in technology should worry about bringing the content to the right group...by personalization"

"Once we get personalization working for news we can take that technology and make it available to publishers, so they can transform their website appropriately [to suit the interests of each visitor]"

—Krishna Bharat, Google (quoted in Pariser, 2011: 62-63)







Neil Thurman