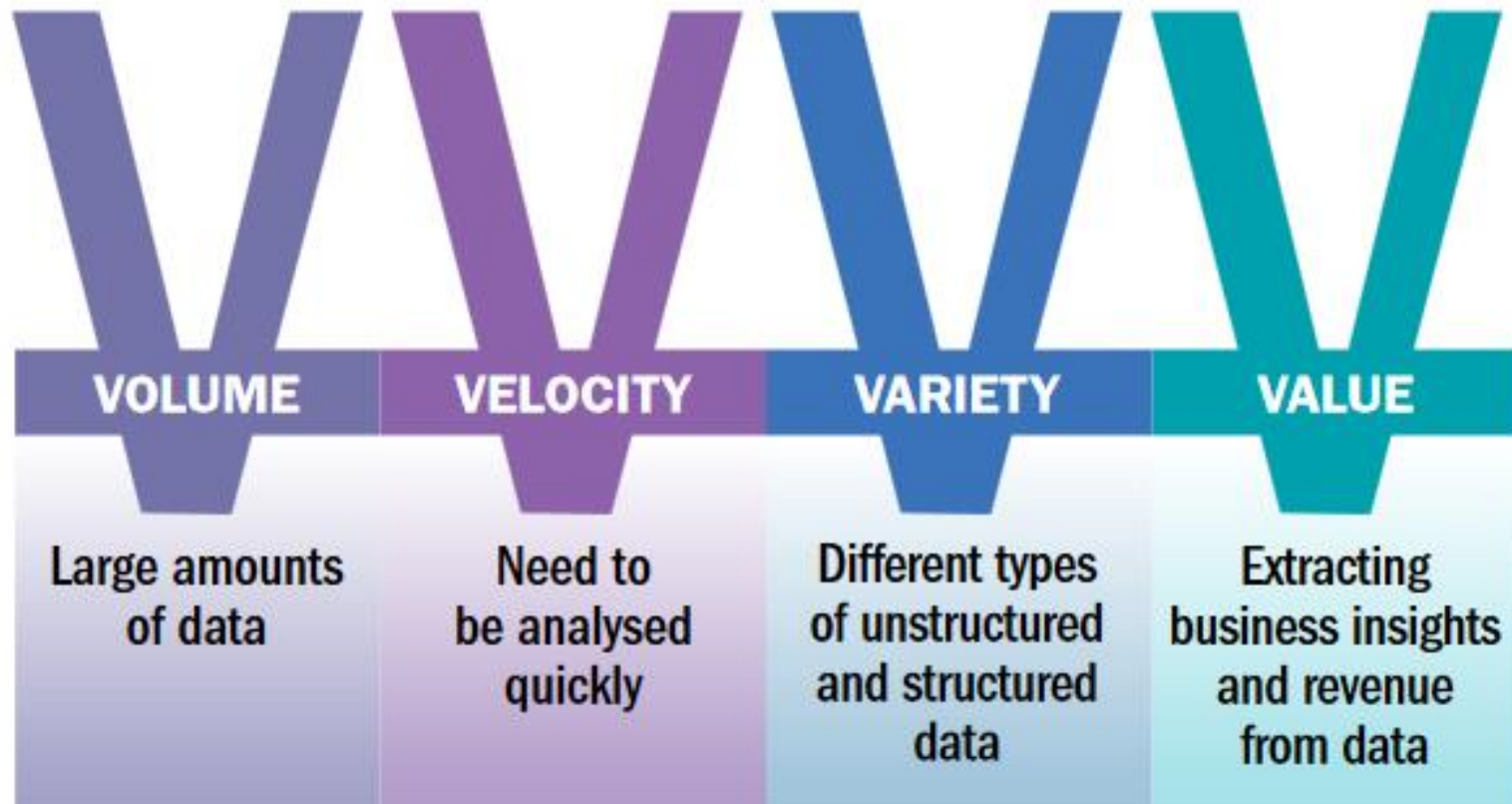


› **EXPLOITING BIG DATA IN THE MEDIA**

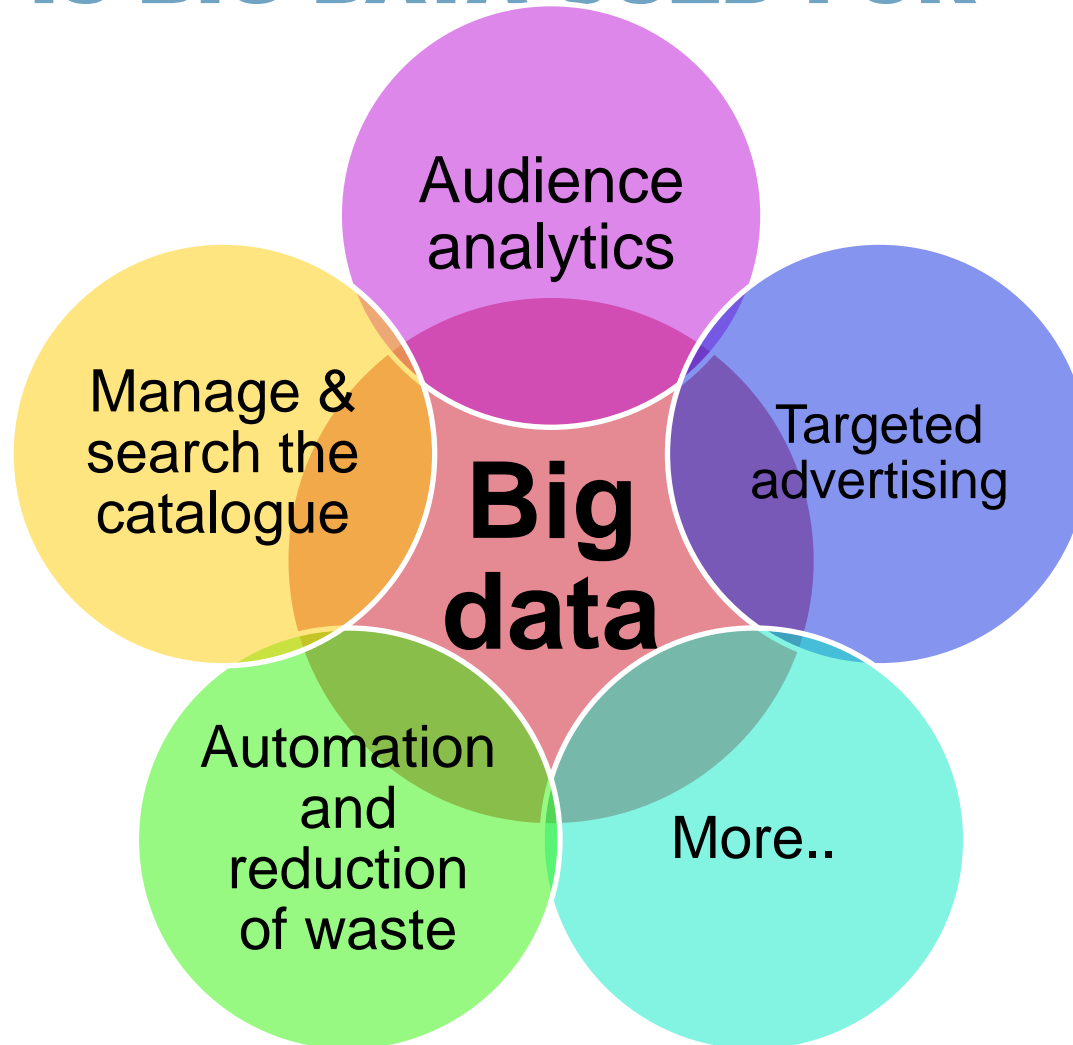
Lucia D'Acunto, TNO

TNO innovation
for life

WHAT IS BIG DATA



WHAT IS BIG DATA USED FOR



HOW DOES IT WORK?



User tracking
(getting info)



User profiling



Information filtering




Presentation

TRACKING USERS ON THE INTERNET – LOGIN



One account. All of Google.

Sign in to continue to Gmail









Lucia D'Acunto
lucia.dacun@gmail.com

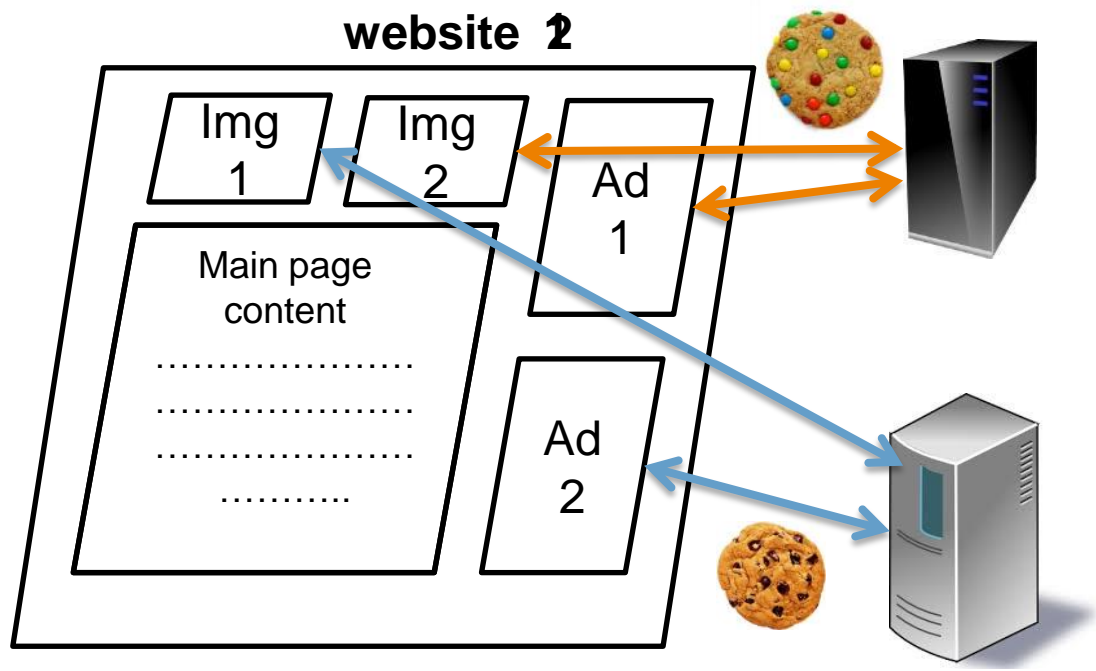
[Need help?](#)

Sign in

Sign in using your account with

 Facebook	 Google
 Twitter	 LinkedIn
 Windows Live	 Yahoo!

TRACKING USERS ON THE INTERNET – COOKIES



TRACKING USERS ON THE INTERNET – BROWSER FINGERPRINT


Panopticklick

How Unique – and Trackable – Is Your Browser?

Your browser fingerprint appears to be **unique** among the 6,194,002 tested so far.

Currently, we estimate that your browser has a fingerprint that conveys **at least 22.56 bits of identifying information**.

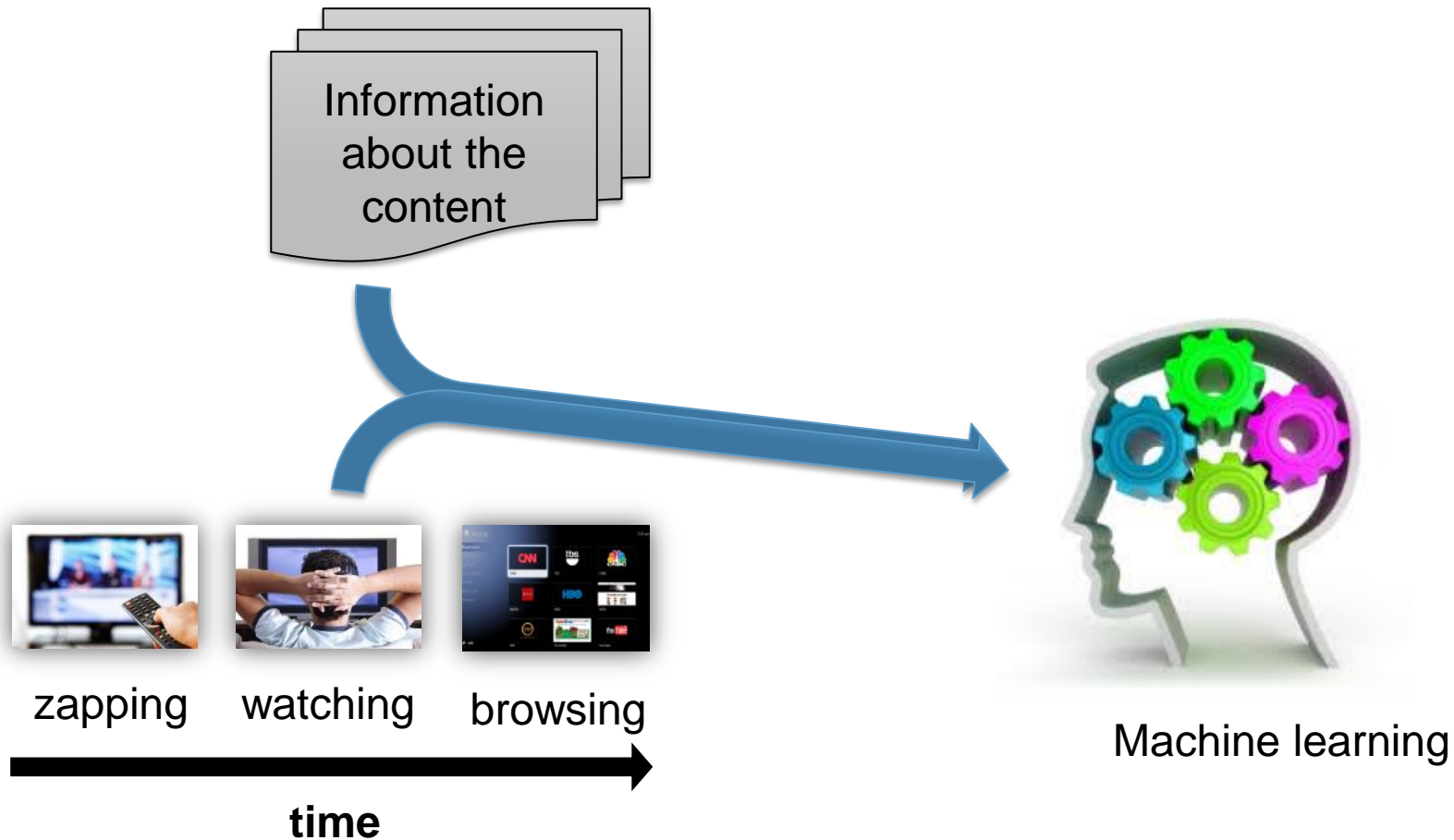
The measurements we used to obtain this result are listed below. You can read more about our methodology, statistical results, and some defenses against fingerprinting in [this article](#).

Help us increase our sample size: 

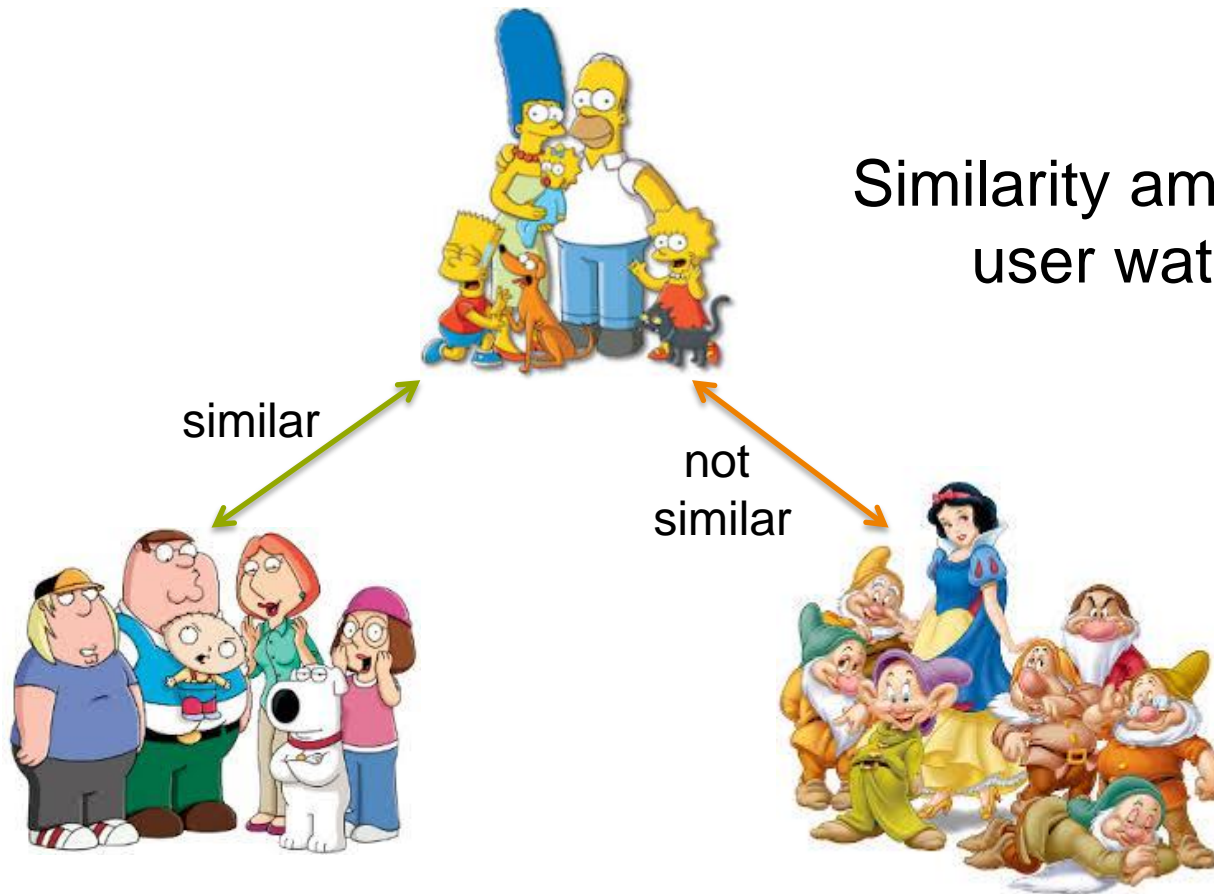
Browser Characteristic	bits of identifying information	one in <i>x</i> browsers have this value	value
User Agent	11.13	2236.91	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/43.0.2357.130 Safari/537.36
HTTP_ACCEPT Headers	5.57	47.49	text/html, */* gzip, deflate en-US,en;q=0.8
Browser Plugin Details	12.63	6352.82	Plugin 0: Chrome PDF Viewer; ; mhjfbmdgcfjbbpaeojofohoefgiehjai; (; application/pdf; pdf). Plugin 1: Chrome PDF Viewer; Portable Document Format; internal-pdf-viewer; (Portable Document Format; application/x-google-chrome-pdf; pdf). Plugin 2: Chrome Remote Desktop Viewer; This plugin allows you to securely access other computers that have been shared with you. To use this plugin you must first install the Chrome Remote Desktop webapp.; internal-remoting-viewer; (; application/vnd.chromium.remoting-viewer;). Plugin 3: Native Client; ; internal-nacl-plugin; (Native Client Executable; application/x-nacl;) (Portable Native Client Executable; application/x-pnacl;). Plugin 4: Shockwave Flash; Shockwave Flash 18.0 r0; pepflashplayer.dll; (Shockwave Flash; application/x-shockwave-flash; swf) (Shockwave Flash; application/futuresplash; spl). Plugin 5: Widevine Content Decryption Module; Enables Widevine licenses for playback of HTML audio/video content. (version: 1.4.8.823); widevinecdmadapter.dll; (Widevine Content Decryption Module; application/x-ppapi-widevine-odm;).
Time Zone	2.66	6.32	-60
Screen Size			

<https://panopticklick.eff.org/>

USER PROFILING



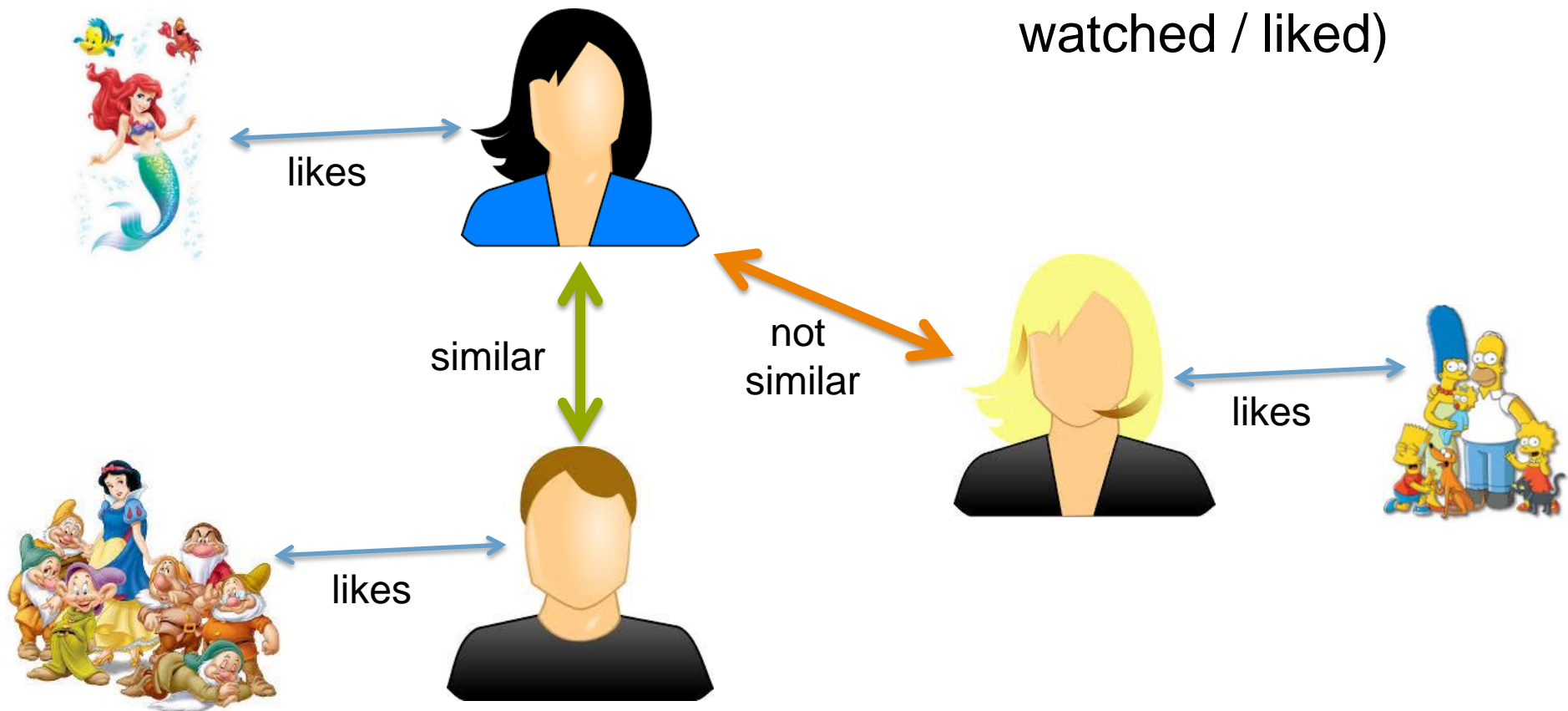
USER PROFILING



Similarity among the items a user watched / liked

USER PROFILING

Similarity among users
(based on the items they
watched / liked)



FILTERING



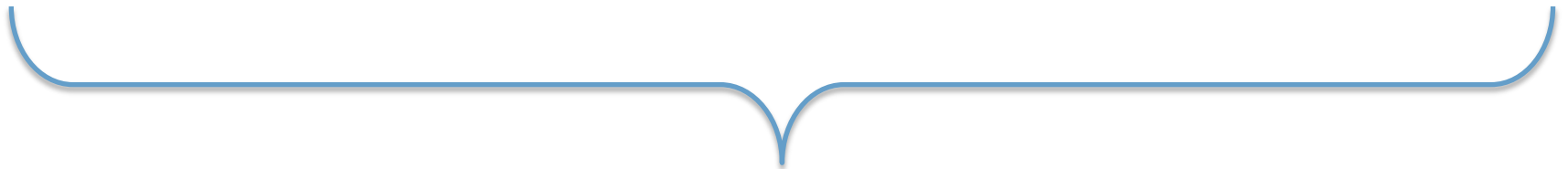
Content



User profile

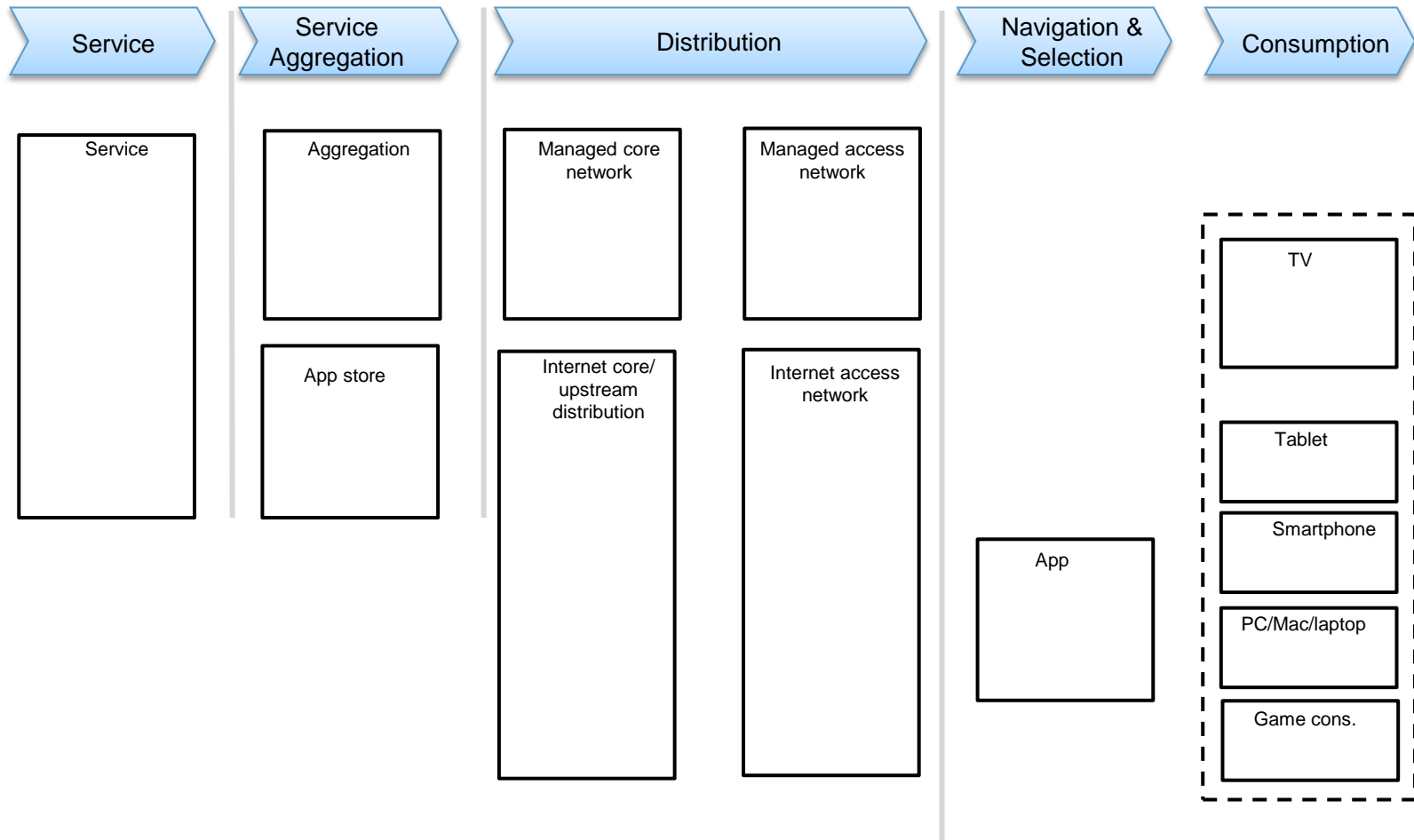


Business Rules

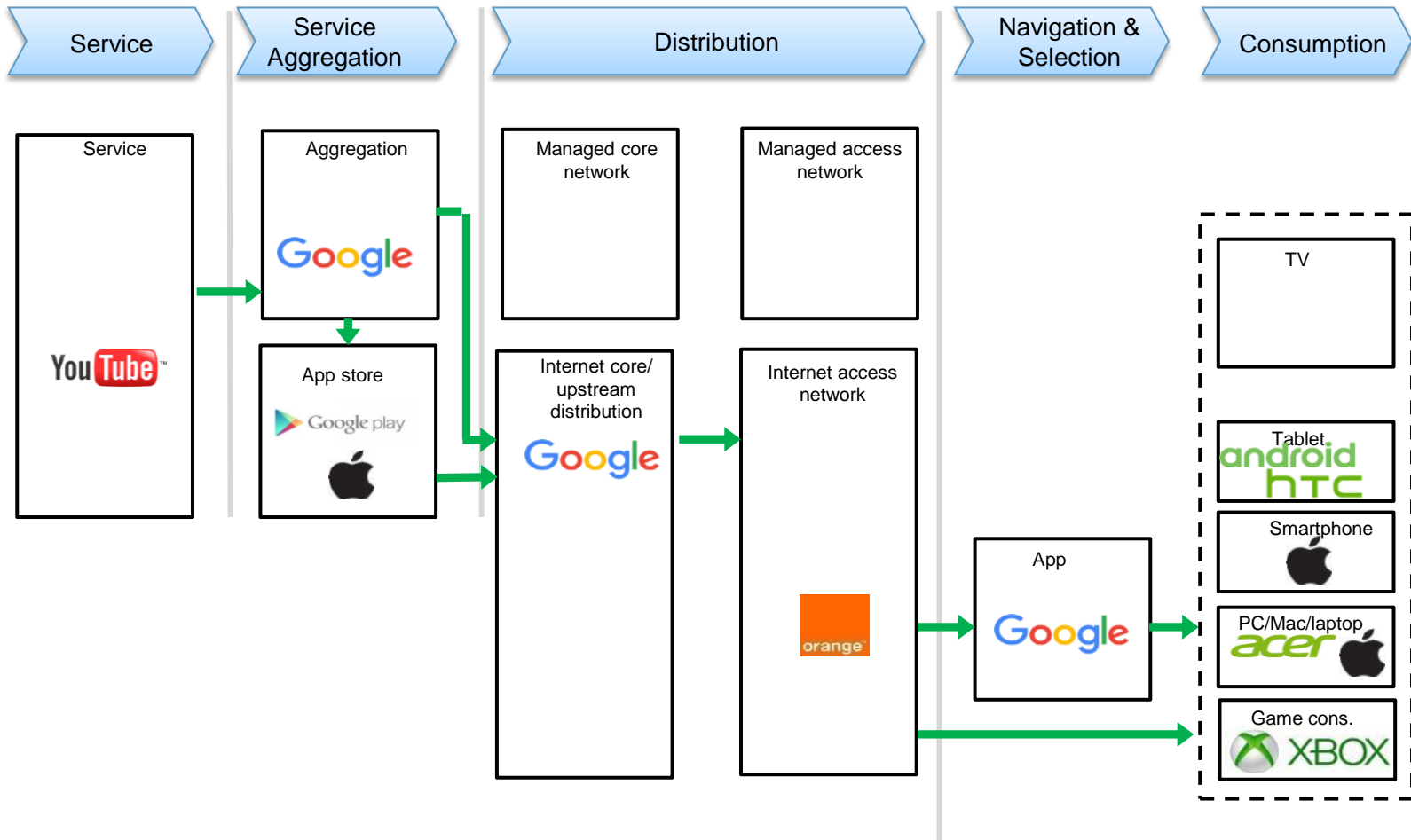


Content to present to the user

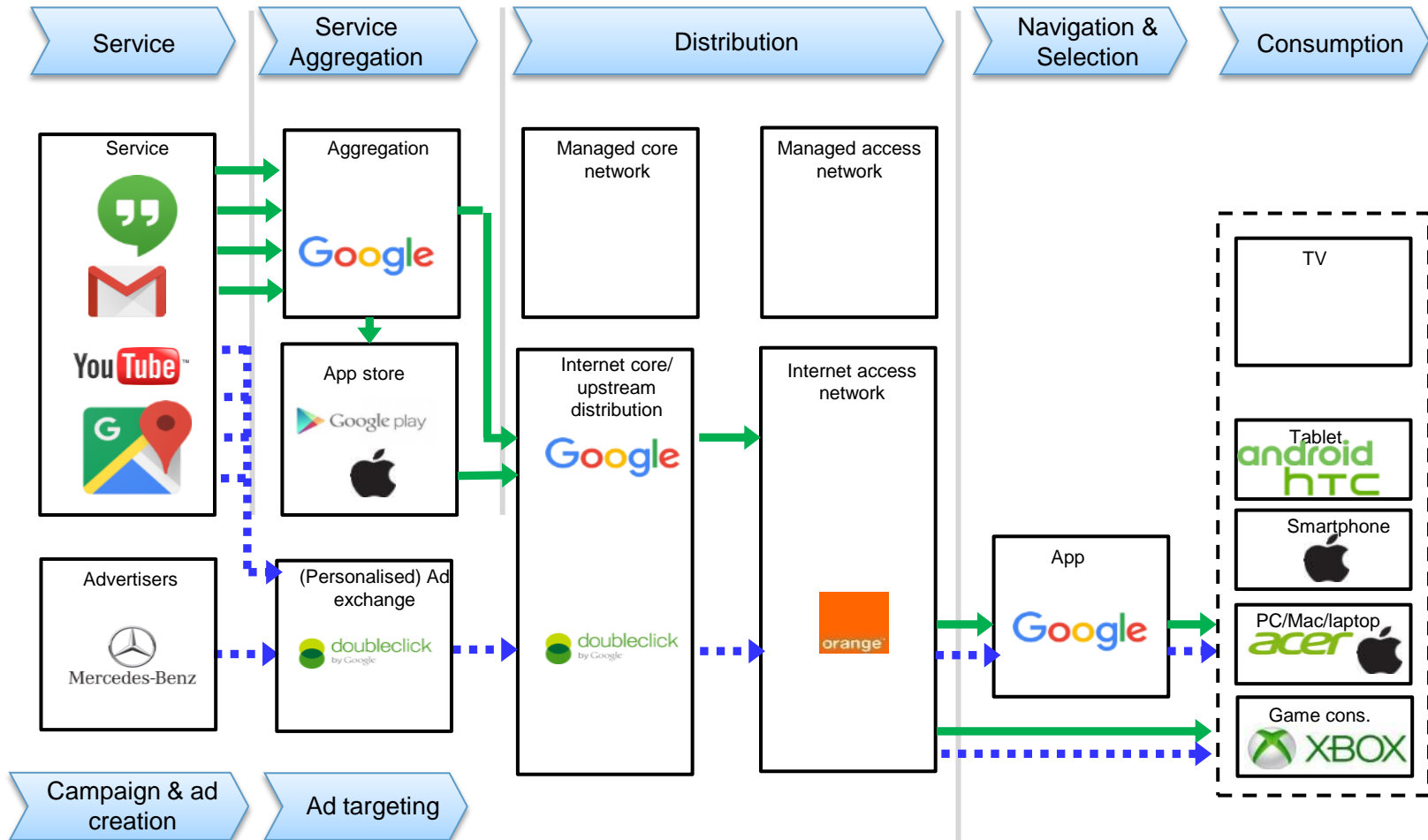
MEDIA DISTRIBUTION VALUE CHAIN



YOUTUBE VIDEO DISTRIBUTION VALUE CHAIN



YOUTUBE VIDEO ADVERTISING VALUE CHAIN



› **THANK YOU FOR YOUR ATTENTION**

Lucia D'Acunto, lucia.dacunto@tno.nl

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ALGORITHMS AND PROMINENCE OF EUROPEAN WORKS



User tracking
(getting info)



User profiling



Information filtering



Presentation

BIG DATA AND PLURALISM OF INFORMATION



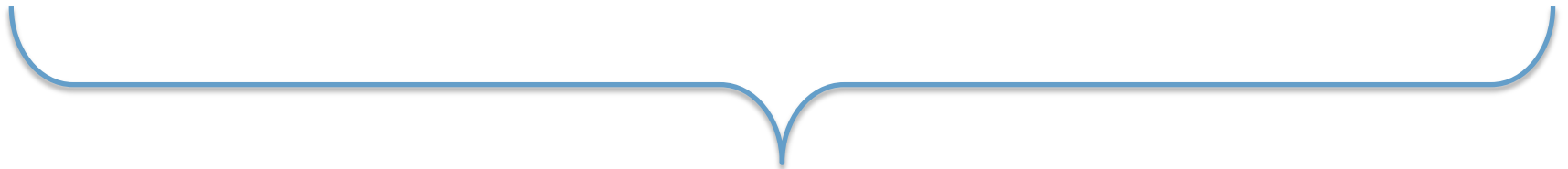
Content



User profile



Business Rules



Content to present to the user

PROFILING AND TARGETED ADVERTISING

