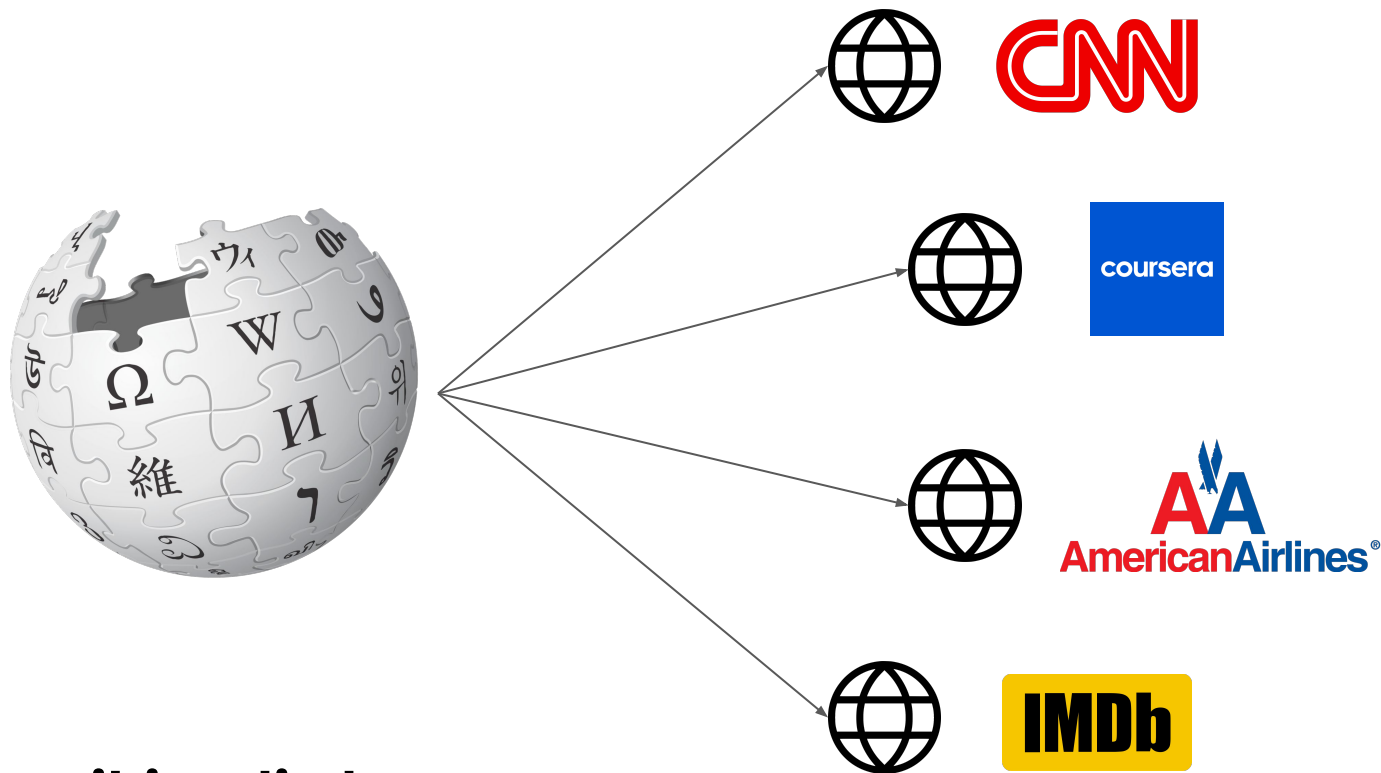


On the Value of Wikipedia as a Gateway to the Web

Tiziano Piccardi, Miriam Redi, Giovanni Colavizza, Robert West





English Wikipedia has more than 60M external links

Coursera

From Wikipedia, the free encyclopedia

1

2.8M links

Coursera, Inc.

Type of business	Privately held company
Type of site	Online education
Available in	Multilingual (40)
Headquarters	Mountain View, California, U.S.
Founder(s)	Andrew Ng Daphne Koller
Key people	Jeff Maggioncalda ^{[1][2][3]} (CEO)
Industry	E-learning
Revenue	▲ \$140 Million (2018) ^[4]
Employees	1,792 (June 2020)
URL	www.coursera.org 
Registration	Required
Users	73 million ^[5]
Launched	April 2012; 8 years ago
Current status	Active

2

External links and further reading

- [Coursera blog](#) 
- [The University of Michigan's Contract With Coursera](#) 
- ["Daphne Koller: What we're learning from online education", TED Talks, June, 2012](#) 
- ["MOOC pedagogy: the challenges of developing for Coursera"](#) 

24.9M links

3

References [edit]

- ↑ Das, Sejuti (2020-08-12). "IIT Roorkee Partners With Coursera To Offer AL, ML & Data Science Online Programs" . *Analytics India Magazine*. Retrieved 2020-08-25.
- ↑ "Sherry Coutu and Coursera step in to upskill UK's digital laggards" . *Sifted*. Retrieved 2020-08-25.
- ↑ Geron, Tomio (2020-07-28). "Jobless Workers Fuel Surge in Demand for Startups Offering Retraining" . *Wall Street Journal*. ISSN 0099-9660 . Retrieved 2020-08-25.
- ↑ Adams, Susan. "Online Education Provider Coursera Is Now Worth More Than \$1 Billion" . *Forbes*.
- ↑ "About Coursera" . *Coursera*. Retrieved 7 November 2020.
- ↑ de León, Riley. "Coursera files for IPO amid online learning boom" . *www.cNBC.com*. CNBC. Retrieved 11 March 2021.
- ↑ Tamar Lewin (17 July 2012). "Universities Reshaping Education on the Web" . *The New York Times*. Retrieved 24 March 2017.

35.3M links

Coursera, Inc.

Type of business	Privately held company
Type of site	Online education
Available in	Multilingual (40)
Headquarters	Mountain View, California, U.S.
Founder(s)	Andrew Ng Daphne Koller
Key people	Jeff Maggioncalda ^{[1][2][3]} (CEO)
Industry	E-learning
Revenue	▲ \$140 Million (2018) ^[4]
Employees	1,792 (June 2020)
URL	www.coursera.org  
Registration	Required
Users	73 million ^[5]
Launched	April 2012; 8 years ago
Current status	Active

Official links

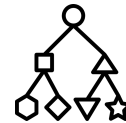
- In the infobox
- Official website of a company, a person, a party, etc...
- Typically unique for the entity

Republic of Slovenia <i>Republika Slovenija</i> (Slovene)	
 Flag	 Coat of arms
Capital and largest city	Ljubljana  46°03'N 14°30'E
Official languages	Slovene
Recognised regional languages	Italian Hungarian
Ethnic groups (2002 ^{[1][2]})	83.1% Slovenes 2.0% Serbs 1.8% Croats 1.6% Bosniaks 0.4% Romani 0.3% Hungarians 0.1% Italians 2.2% Other 8.9% Unspecified
Website	www.slovenia.si

Random Forest classifier

Features based on the label in the infobox and the similarity between the domain name and the article title

geohack.toolforge.org



Official link?

Yes

slovenia.si

No

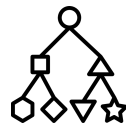
geohack.toolforge.org

Republic of Slovenia <i>Republika Slovenija</i> (Slovene)	
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Website	www.slovenia.si

Random Forest classifier

Features based on the label in the infobox and the similarity between the domain name and the article title

Precision 98.0%
Recall 98.3%



Official link?

Yes

slovenia.si

No

slovenia.si

Apple Inc.



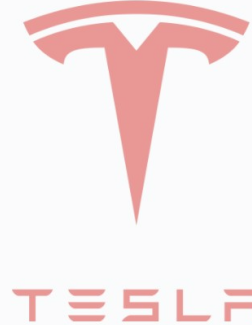
Formerly	Apple Computer Company ^[1] (1976–1977) Apple Computer, Inc. ^[2] (1977–2007)
Type	Public
Founded	April 1, 1976; 44 years ago
Founders	Steve Jobs Steve Wozniak Ronald Wayne
Headquarters	1 Apple Park Way Cupertino, California, U.S.
Number of locations	510 retail stores (2020)
Area served	Worldwide
Number of employees	147,000 ^[4] (2020)
Website	www.apple.com

Coursera, Inc.



Type of business
Type of site
Available in
Headquarters
Area served
Founder(s)
Industry
Employees
URL
Commercial Registration
Users
Launched

Tesla, Inc.



**506K
official
links**

École polytechnique fédérale de Lausanne



Other name	Swiss Federal Institute of Technology in Lausanne, French: <i>le Poly</i> (colloquially)
Type	Public
Established	1853; 168 years ago (École spéciale de Lausanne) 1969 (Federal status) ^[1]
Budget	1056 MCHF ^[2]
President	Martin Vetterli
Academic staff	3,971 (2016) ^[3]
Administrative staff	1,195 (2016) ^[3]
Location	Écublens (near Lausanne), Canton of Vaud, Switzerland 46°31′13″N 6°33′56″E
Campus	Urban
Language	French, English (only Masters and upwards)
Colours	Swiss red ^[4]
Website	www.epfl.ch



**What is the role of
Wikipedia in driving traffic
to these websites?**

RQ1 :

What is the **level of engagement** with external links?

RQ2 :

What are the **patterns of engagement** with official links?

RQ3 :

What is the **economic value** of the traffic generated by official links?

Data Collection

- Client-side instrumentation
- 4 weeks (*April '19*)
- English Wikipedia
- Privacy constraints:
 - *All data comes from non logged-in users only.*
 - *We stored only anonymised summaries.*
- 96M events collected
 - *external clicks*
 - *hover popups*
 - *jump to footnote*

43M
external
clicks

RQ1 :

What is the
level of engagement
with external links?

Click-through rate

*number of times the
link was clicked*

*number of times the link
was displayed*

Click speed

*number of seconds from the
page-load event to the click
(each link described with its median)*

Coursera, Inc.

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Revenue	▲ \$140 Million (2018) ^[4]
Employees	1,792 (June 2020)
URL	www.coursera.org 
Registration	Required
Users	73 million ^[5]
Launched	April 2012; 8 years ago
Current status	Active

0.90%

18.6s

External links and further reading

- [Coursera blog](#) 
- [The University of Michigan's Contract With Coursera](#) 
- ["Daphne Koller: What we're learning from online education", TED Talks, June, 2012](#) 

0.14%

35.4s

References [\[edit \]](#)

1. [^] Das, Sejuti (2020-08-12). "IIT Roorkee Partners With Coursera To Offer AL, ML & Data Science Online Programs" . *Analytics India Magazine*. Retrieved 2020-08-25.
2. [^] "Sherry Coutu and Coursera step in to upskill UK's digital laggards" . *Sifted*. Retrieved 2020-08-25.
3. [^] Geron, Tomio (2020-07-28). "Jobless Workers Fuel Surge in Demand for Startups Offering Retraining" . *Wall Street Journal*. ISSN 0099-9660 . Retrieved 2020-08-25.

0.03%

51.8s

Coursera, Inc.

Type of business	Privately held company
Type of site	Online education
Available in	Multilingual (40)
Headquarters	Mountain View, California, U.S.
Founder(s)	Andrew Ng Daphne Koller
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Registration	Required
Users	73 million ^[5]
Launched	April 2012; 8 years ago
Current status	Active



9.8M clicks

Official links CT Rate

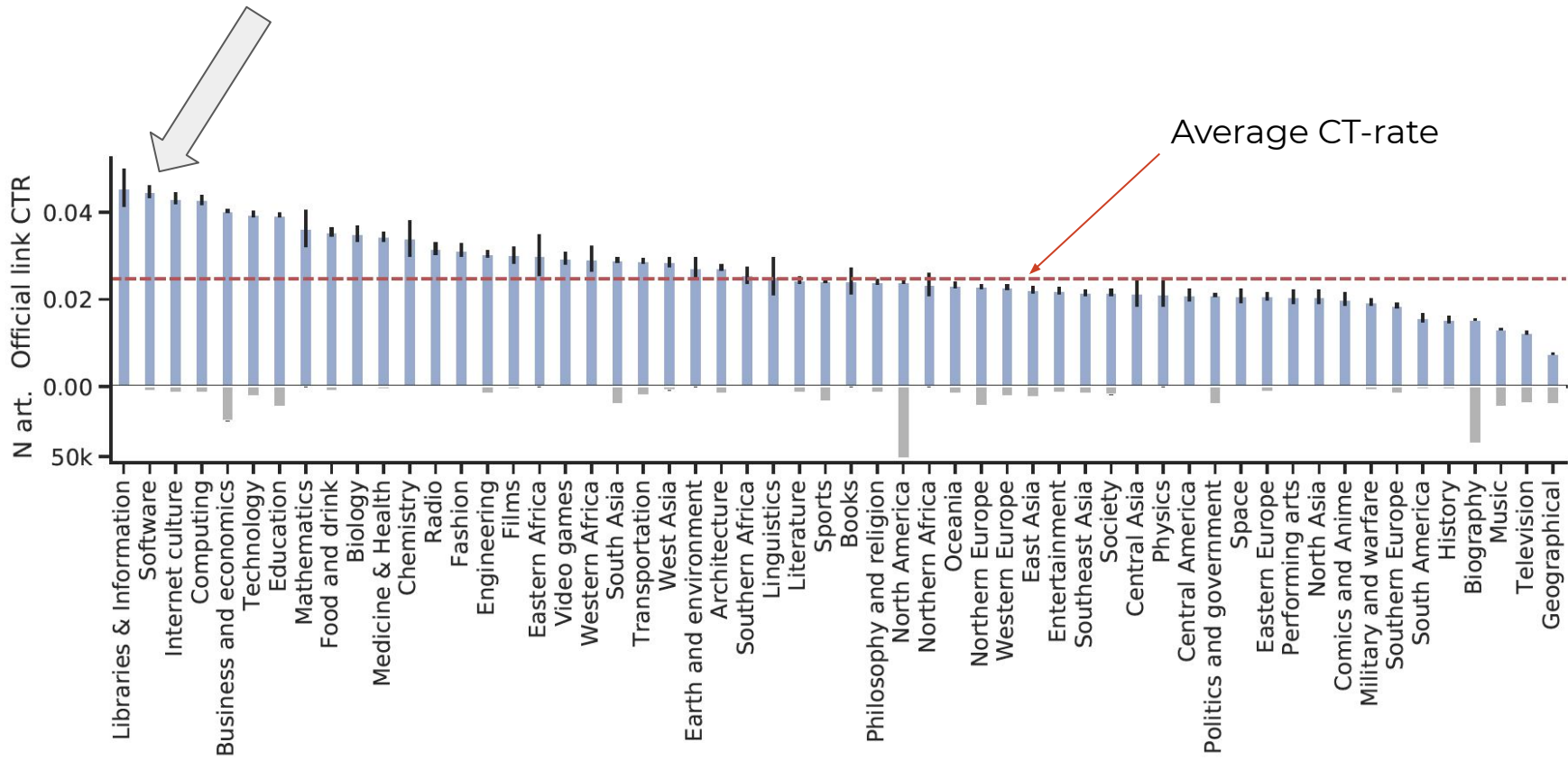
2.47%

or

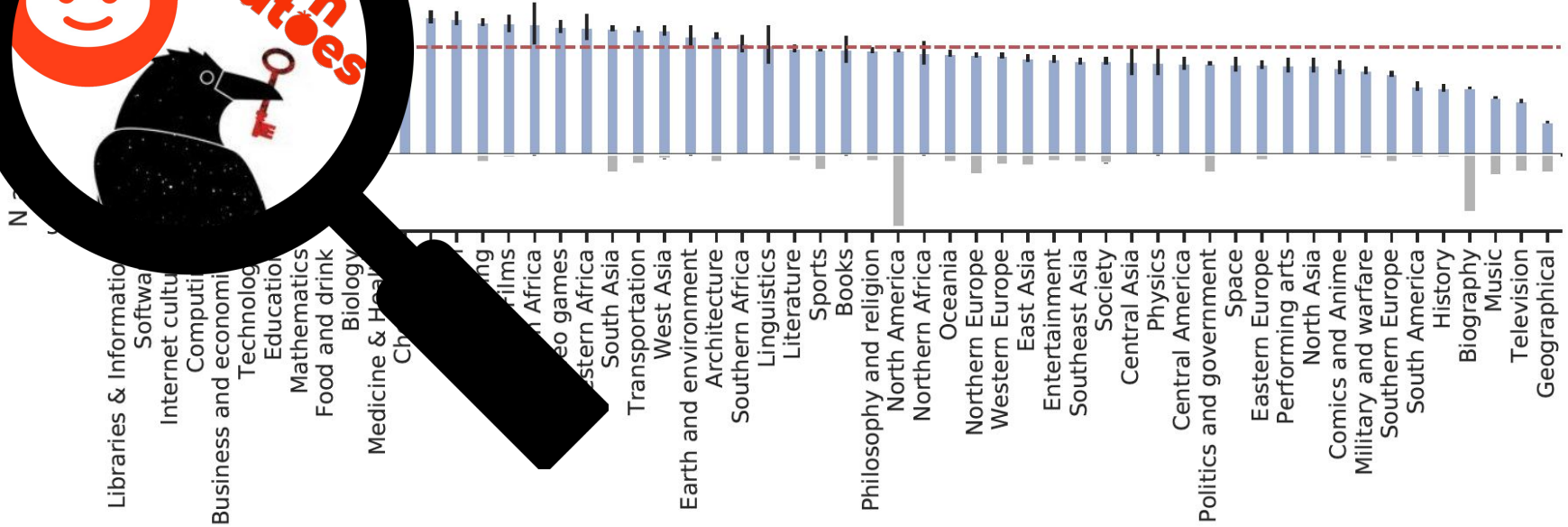
1 in 40

RQ2:

What are the
patterns of engagement
with official links?



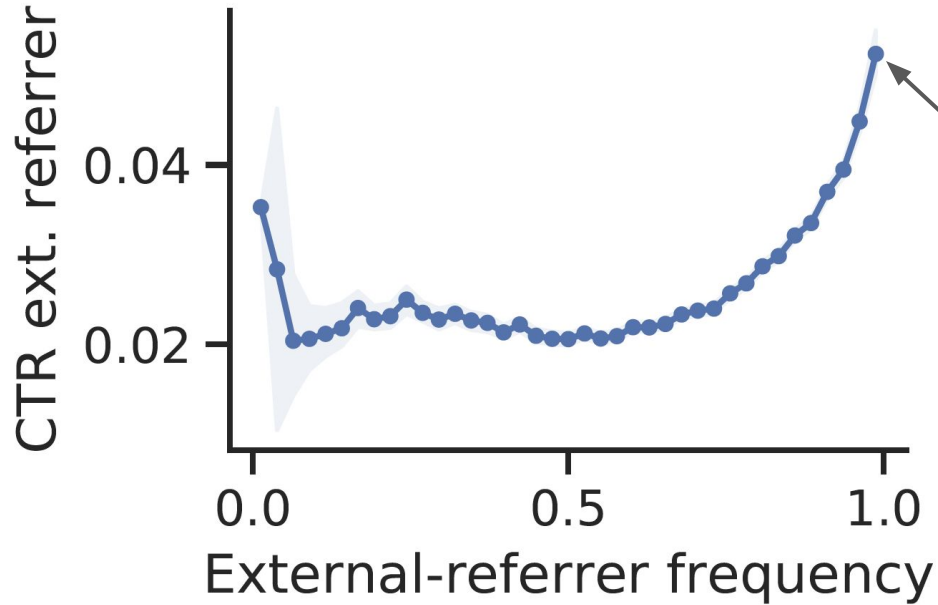
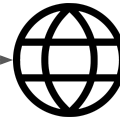
Some pages act as stepping stone to the actual destination



External



External

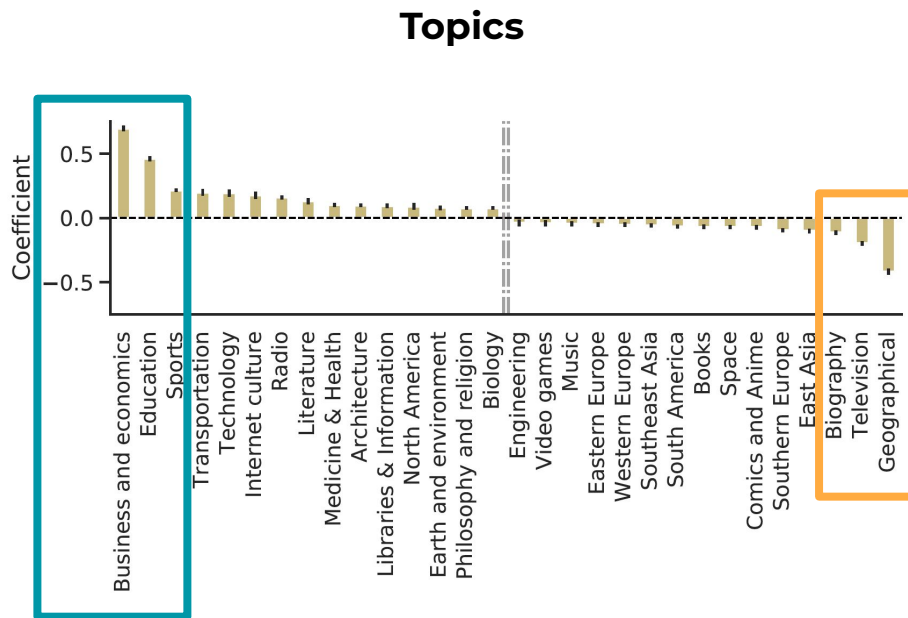


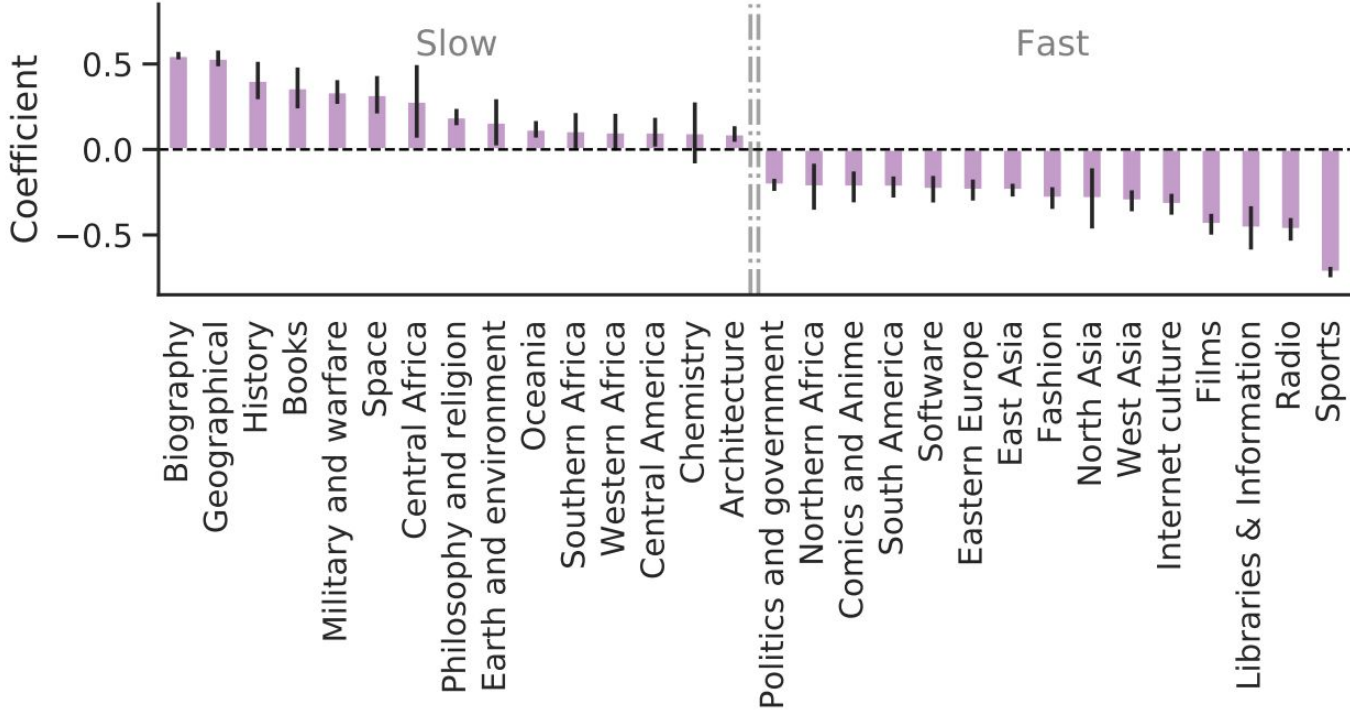
Where the referrer is almost only external the CT rate is high

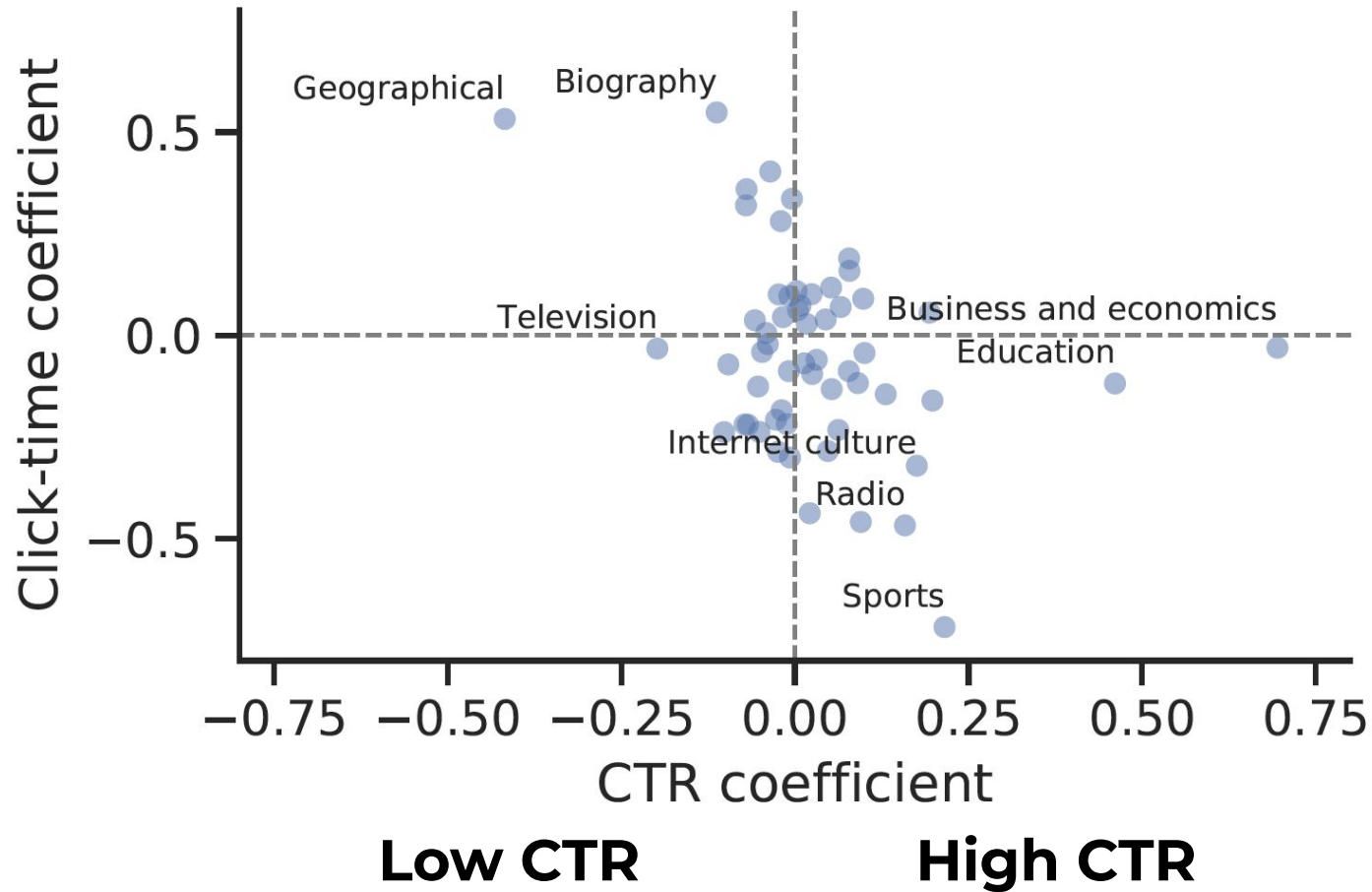
Matched dataset

Length and popularity

Balanced on: High or low CT Rate - threshold on median







RQ3 :

What is the
economic value
of the traffic generated by
official links?

Keyword Planner



online courses
online colleges
online classes
moc online
learning free
online courses
online degrees
open university courses
online education
online universities
...

Forecasting tool

Top 10 + article title

online courses
online colleges
online classes
moc online
learning free
online courses
online degrees
open university courses
online education
online universities
coursera

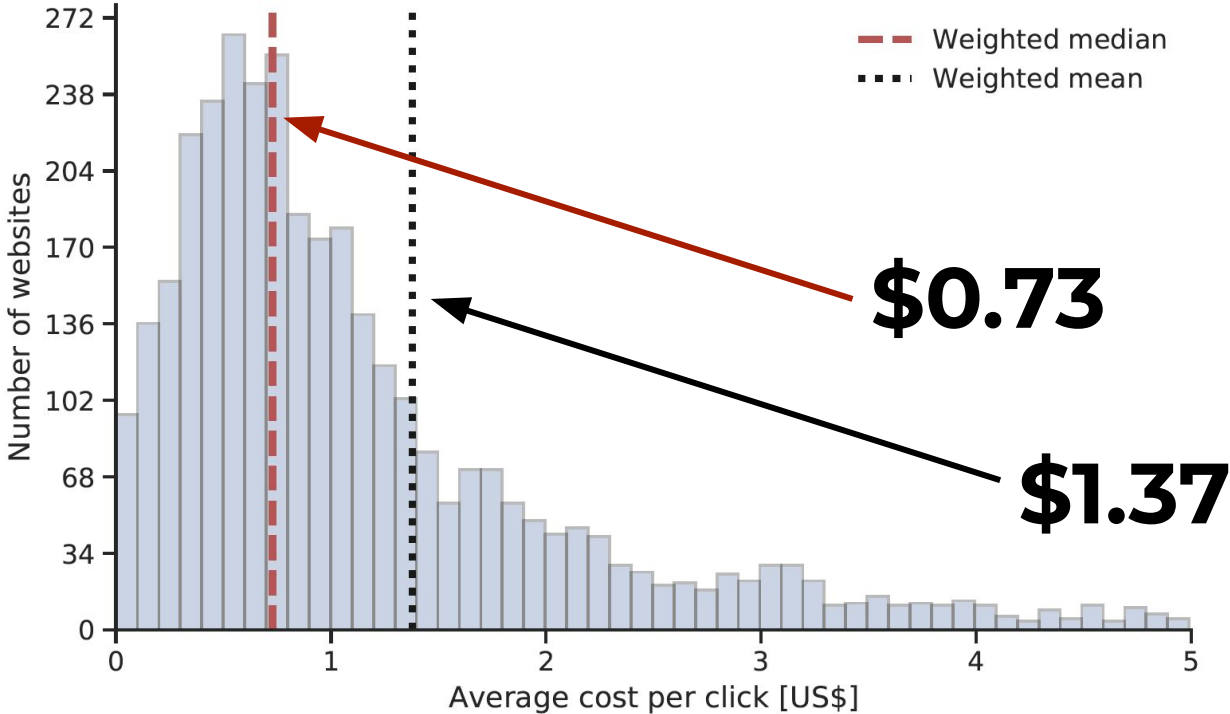


Google Ads



\$0.79

3600 websites



**\$7M-\$13M
month**

**Only on English
Wikipedia**

What we learned

- **RQ1 :** When the official link is present, 1 in 40 page-views has clicks on it.
- **RQ2 :** The official links associated with Business, Education and Sport have the highest CT rate. Some articles acts as stepping stone to the actual destination.
- **RQ3 :** The website owners would need to pay a total between \$7 and 13 million per month to obtain the same volume of traffic via sponsored search.

Thank You

From Wikipedia, the free encyclopedia

"Thank you" is a common expression of [gratitude](#).

 tiziano.piccardi@epfl.ch

 [@tizianopiccardi](https://twitter.com/tizianopiccardi)