

Reciprocity & Donation

Rafal Kocielnik, Oliver Keyes, Jonathan Morgan, Dario Taraborelli, David McDonald, **Gary Hsieh** University of Washington & Wikimedia Foundation





design: use: build: university of washington



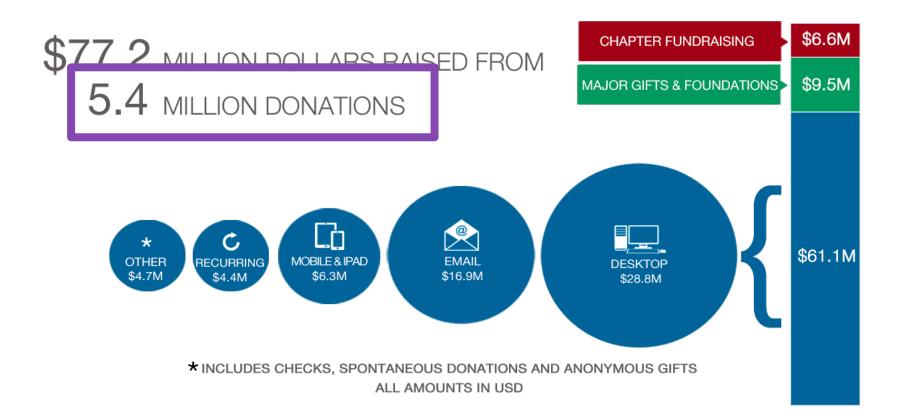
Wikimedia Depends on User Donations



NOTE: ALL AMOUNTS ROUNDED IN USD. THE CONTINENT TOTALS MAY EXCLUDE ANONYMOUS DONATIONS.

Reciprocity & Donation | Hsieh

PROSOCIAL





Dear readers, We'll get right to it: This week we ask you to help Wikipedia.

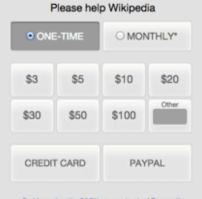
VS.



To protect our independence, we'll never run ads. We survive on donations averaging about \$15. Only a tiny portion of our readers give. Now is the time we ask.



If everyone reading this gave \$3 right now, our fundraiser would be done within an hour. That's right, the price of a cup of coffee is all we need. If Wikipedia is useful to you, please take one minute to keep it online and ad-free another year.



Problems donating? | Other ways to give | Frequently asked questions | By donating, you are agreeing to our donor privacy policy. The Wikimedia Foundation is a nonprofit, tax-exempt organization. "If you make a recurring donation, you will be debited by the Wikimedia Foundation until you notify us to stop. We'll send you an email receipt for each payment, which will include a link to easy cancellation instructions.

Solution Not logged in Talk Contributions Create account Log in

Search Wikipedia Read View source View history

Q

Kim Kardashian

Article Talk

From Wikipedia, the free encyclopedia

Main page Contents Featured content Current events Random article Donate to Wikipedia Wikipedia store

 Ω

TA

WikipediA The Free Encyclopedia

Interaction

About Wikipedia Community portal Recent changes Contact page

Tools What links here Related changes Upload file Special pages Permanent link Page information Wikidata item Cite this page

Print/export Create a book Download as PDF Kimberly Kardashian West^[1] (born October 21, 1980) is an American reality television personality and socialite. Kardashian first gained media attention as a friend and stylist of Paris Hilton, but received wider notice after a 2003 sex tape with her former boyfriend Ray J was leaked in 2007. Later that year, she and her family began to appear in the E! reality television series Keeping Up with the Kardashians. Its success soon led to the creation of spin-offs including Kourtney and Kim Take New York and Kourtney and Khloé Take Miami. Kardashian's personal life soon became subject to widespread media attention.^[2]

In recent vears, Kardashian has grown an influential online and social media presence, including tens of millions of followers on Twitter and Instagram.^{[3][4][5]} She has released a variety of products tied to her name, including the successful 2014 mobile game Kim Kardashian: Hollywood, a variety of clothing and products, and the 2015 photo book Selfish. Her relationship with rapper Kanye West has also received significant media coverage; the couple married in 2014 and they have three children together.^[6]

Time magazine included Kardashian on their list of 2015's 100 most influential people,^[7] while Vogue described her in 2016 as a "pop culture phenomenon."^[8] Critics and admirers have described her as exemplifying the notion of being famous for being famous.^{[9][10][11]} She was reported to be the highest-paid reality television personality of 2015, with her total earnings exceeding US\$53 million.^[12]

Contents [hi	ide]
--------------	------

1 Early life 2 Career

2.1 2007-2009: Breakthrough with reality television 2.2 2010: Early endorsements and retail ventures 2.3 2011-2015: Legal issues and focus on social media 2.4 2016-present 3 Fashion ventures 4 Personal life 4.1 Marriages 4.2 Wealth

Kim Kardashian



Years active 2007-present



4.3 Advocacy 5 Filmography

Help

Dear readers, We'll get right to it: This week we ask you to help Wikipedia.

VS.



To protect our independence, we'll never run ads. We survive on donations averaging about \$15. Only a tiny portion of our readers give. Now is the time we ask.



If everyone reading this gave \$3 right now, our fundraiser would be done within an hour. That's right, the price of a cup of coffee is all we need. If Wikipedia is useful to you, please take one minute to keep it online and ad-free another year.



Problems donating? | Other ways to give | Frequently asked questions | By donating, you are agreeing to our donor privacy policy. The Wisimedia Foundation is a nonprofit, tax-exempt organization. 'If you make a recurring donation, you will be debited by the Wikimedia Foundation until you notify us to stop. We'il send you an email receipt for each payment, which will include a link to easy cancellation instructions.

Solution Not logged in Talk Contributions Create account Log in

Search Wikipedia

Read Edit View history

Q

Ð

するの

Main page

Featured content

Current events

Random article

Interaction

About Wikipedia Community portal

Recent changes

What links here

Related changes

Upload file

Special pages

Permanent link

Wikidata item

Cite this page

Page information

Contact page

Help

Tools

Donate to Wikipedia Wikipedia store

Contents

WIKIPEDIA The Free Encyclopedia

Article Talk

Alan Turing

From Wikipedia, the free encyclopedia

"Turing" redirects here. For other uses, see Turing (disambiguation).

Alan Turing DE FRS

Turing in 1927 Born 23 June 1912 Maida Vale, London, England Died 7 June 1954 (aged 41) Wilmslow, Cheshire, England Cause of Cyanide poisoning death

Alan Mathison Turing OBE FRS (/tjoern/; 23 June 1912 – 7 June 1954) was an English computer scientist, mathematician, logician, cryptanalyst, philosopher, and theoretical biologist.^[2] Turing was highly influential in the development of theoretical computer science, providing a formalisation of the concepts of algorithm and computation with the Turing machine, which can be considered a model of a general purpose computer.^{[7][8][9]} Turing is widely considered to be the father of theoretical computer science and artificial intelligence.^[10]

During the Second World War, Turing worked for the Government Code and Cypher School (GC&CS) at Bletchley Park, Britain's codebreaking centre that produced Ultra intelligence. For a time he led Hut 8, the section which was responsible for German naval cryptanalysis. Here he devised a number of techniques for speeding the breaking of German ciphers, including improvements to the pre-war Polish bombe method, an electromechanical machine that could find settings for the Enigma machine. Turing played a pivotal role in cracking intercepted coded messages that enabled the Allies to defeat the Nazis in many crucial engagements, including the Battle of the Atlantic, and in so doing helped win the war.^{[11][12]} Counterfactual history is difficult with respect to the effect Ultra intelligence had on the length of the war.^[13] but at the upper end it has been estimated that this work shortened the war in Europe by more than two years and saved over fourteen million lives.^[11]

After the war, Turing worked at the National Physical Laboratory, where he designed the ACE, among the first designs for a stored-program computer. In 1948 Turing joined Max Newman's Computing Machine Laboratory at the Victoria University of Manchester, where he helped develop the Manchester computers^[14] and became interested in mathematical biology. He wrote a paper on the chemical basis of morphogenesis,^[3] and predicted oscillating chemical reactions such as the Belousov–Zhabotinsky reaction, first observed in the 1960s.

Turing was prosecuted in 1952 for homosexual acts, when by the Labouchere Amendment, "gross indecency" was a criminal offence in the UK. He accepted chemical castration treatment, with DES, as an alternative to prison. Turing died in 1954, 16 days before his 42nd birthday, from cyanide poisoning. An inquest determined his death as suicide, but it has been noted that the known evidence is also consistent with accidental poisoning.^[15] In 2009, following an Internet campaign, British Prime Minister Gordon Brown made an official public apology on behalf of the British government for "the appalling way he was treated." Queen Elizabeth II granted him a posthumous pardon in 2013.^{[16][17][16]} The Alan Turing law is now an informal term for a 2017 law in the United Kingdom that retroactively pardoned men cautioned or convicted under historical legislation that outlawed homosexual acts.^[16]

Contents [hide]

Print/export Create a book

RQ: Do donation rates differ systematically across pages? How?



Donation Behaviors RELATED WORK

PROSOCIAL Reciprocity & Donation | Hsieh

Can Different Pages Attract Different Users/ Uses?

People read what they value [Hsieh et al., 2014]

- Universalism value -> Environment-related articles
- Achievement value -> Work-related articles

People have different motivations for using Wikipedia [Singer et al. 2017]

- For school/work: War&History, Mathematics, Technology, Biology&Chemistry, Literature&Arts
- Out of boredom: Sports, 21st Century, TV, Movies, and Novels

Do Different Users/Uses Lead to Different Donation Rates?

Why do people donate:

- Peer pressure
- Reputation concerns
- Improve self-esteem
- Positive emotional feeling (warm glow)
- Income/tax benefits

...but these would not explain why donations would differ across pages

[Andreoni, J. 1990; Ariely, D., Bracha, A. and Meier, S. 2009; Dawson, S. 1988.; Lacetera, N. and Macis, M. 2010.]

ROSOCIAL Reciprocity & Donation | Hsieh

Do Different Users/Uses Lead to Different Donation Rates?

Reciprocity: people should respond in-kind to others

"they have benefited from the charities' activities in the past or anticipate the need for their services in the future"

[Cialdini, R.B. 2009; Dawson, S. 1988; Fehr, E. and Gachter, S. 2000; Gouldner, A.W. 1960; Hoffman, E., McCabe, K.A. and Smith, V.L. 1996; Kagel, J.H. and Roth, A.E. 2016]



Indebtedness Strengthens Reciprocity



Reciprocity & Donation | Hsieh

Pages Differ in Value?

1 - 574 - 0						Solution Not logged in Talk C	contributions Create account	t Log in
	Article Talk			Read View source	View history S	earch Wikipedia		Q
WIKIPEDIA The Free Encyclopedia	Kim Karda	shian						
	B San W						Solution Not logged in Talk	Contributions Create account Log in
Main page Contents Featured content		Article Talk			Rea	d Edit View history	Search Wikipedia	Q
Current events Random article Donate to Wikipedia	WIKIPEDIA	Alan Turing						œ
Wikipedia store	The Free Encyclopedia	From Wikipedia, the free encyclopedia						
Interaction	Main page	"Turing" redirects here. For other uses, see Turing	g (disambiguation).					
Help About Wikipedia Community portal Recent changes Contact page	Contents Featured content Current events Random article Donate to Wikipedia		912 – 7 June 1954) was an English computer scientis the development of theoretical computer science, pr considered a model of a general purpose computer. ^[7]	oviding a formalisati	on of the concep	ts of algorithm and	ical	Alan Turing OBE FRS
Tools	Wikipedia store	During the Second World War, Turing worked for the	Government Code and Cypher School (GC&CS) at E	lletchley Park, Britai	in's codebreaking	g centre that produced	i Ultra	
What links here Related changes	Interaction	intelligence. For a time he led Hut 8, the section which of German ciphers, including improvements to the pro-	h was responsible for German naval cryptanalysis. H					
Upload file Special pages Permanent link Page information Wikidata item Cite this page	Help About Wikipedia Community portal Recent changes Contact page Tools	played a pivotal role in cracking intercepted coded m and in so doing helped win the war. ^{[11][12]} Counterfac has been estimated that this work shortened the war After the war, Turing worked at the National Physical	essages that enabled the Allies to defeat the Nazis in tual history is difficult with respect to the effect Ultra i in Europe by more than two years and saved over fo	many crucial engag ntelligence had on tl urteen million lives. [[] first designs for a st	gements, includir he length of the v 11] ored-program co	ng the Battle of the Atl war, ^[13] but at the uppe pomputer. In 1948 Turin	antic, er end it g joined	The second
Print/export	What links here Related changes	mathematical biology. He wrote a paper on the chem	ical basis of morphogenesis, ^[3] and predicted oscillat	ng chemical reactio	ns such as the B	elousov–Zhabotinsky	reaction,	NY/E
Create a book Download as PDF Printable version	Upload file Special pages Permanent link	first observed in the 1960s. Turing was prosecuted in 1952 for homosexual acts, castration treatment, with DES, as an alternative to p	when by the Labouchere Amendment, "gross indece rison. Turing died in 1954, 16 days before his 42nd b	-		-		Turing in 1927
In other projects	Page information	as suicide, but it has been noted that the known evid	ence is also consistent with accidental poisoning.[15]	n 2009, following ar	n Internet campa	ign, British Prime Mini	ster Born	23 June 1912
Wikimedia Commons	Wikidata item Cite this page	Gordon Brown made an official public apology on be pardon in 2013. ^{[16][17][18]} The Alan Turing law is now	half of the British government for "the appalling way h an informal term for a 2017 law in the United Kingdo					Maida Vale, London, England 7 June 1954 (aged 41)
Languages 🗘	Print/export	historical legislation that outlawed homosexual acts.						Wilmslow, Cheshire, England
Español	Create a book Download as PDF	Contents [hide]					Cause of death	Cyanide poisoning
tps://en.wikipedia.org/wiki/M	Printable version	1 Early life and education 1.1 Family					Resting place	Ashes scattered near Woking Crematorium ^[1]
	In other projects	1.1 Family 1.2 School					Residence	Wilmslow, Cheshire, England
PROS	Wikimedia Commons	1.3 Christopher Morcom					Education	Sherborne School ^[2]
	Wikinews Wikiquote	1.4 University and work on computability2 Career and research						King's College, Cambridge, (BA) Princeton University (PhD)

Hypotheses

H1. Pages on more task-oriented topics attract more donations

H2. Pages on which users spent more time attract more donations

H3. Pages of higher quality attract more donations

How did we analyze this? **METHODS**

PROSOCIAL **Reciprocity & Donation | Hsieh**

Data from Wikimedia

Language	#Pages	Impressions	Donations
English	830,695	Min: 100 Max: 13,210,276 Mean: 1,579 Median: 407	Min: 0 Max: 71,318 Mean: 2.04 Median: 0
French	174,207	Min: 101 Max: 2,608,374 Mean: 570 Median: 243	Min: 0 Max: 5,604 Mean: 0.57 Median: 0



H1: Assessing the (Task-Oriented vs. Non-Task-Oriented) Topics

Downloaded the latest version of the page before the end of the donation campaign

Used Wikipedia provided topic categories; traversed up to parent categories [Yu et al. 2017]

Category	Topics from Singer et al.	Equivalent Wiki Categories
Task-Oriented	War & History	History & Events
	Mathematics	Mathematics & Logic
	Technology	Technology & Applied Sciences
	Biology & Chemistry	Natural & Physical Sciences
	Literature & Arts	Painting, Photography, Sculpture, Drawing,
		Poetry
Non-Task-Oriented	Sports	Sports
	21st century	No directly equivalent mapping
	TV & Movies & Novels	Film, Television, Publishing

Reciprocity & Donation | Hsieh

0 S 0 C I A

H2: Assessing Page Dwell Time

Calculated median dwell time per page relying on users' sessions from [Halfaker et al. 2014]

Used page view data from December 2017 *86% of English pages; 57% of French pages



H3: Assessing Content Quality

Objective Revision Evaluation Service (ORES)

Category	Reader's Experience based on Wiki
Featured Article (FA) / Article de Qualité (ADQ)	Professional, outstanding, and thorough; a definitive source for encyclopedic information.
Good Article (GA) / Bon Article (BA)	Useful to nearly all readers, with no obvious problems; approaching (but not equaling) the quality of a professional encyclopedia.
B / Article Avancé (A)	Readers are not left wanting, although the content may not be complete enough to satisfy a serious student or researcher.
C / Article bien construit (B)	Useful to a casual reader, but would not provide a complete picture for even a moderately detailed study.
Start / Bon début d'article (BD)	Provides some meaningful content, but most readers will need more.
Stub / Ébauche (E)	Provides very little meaningful content; may be little more than a dictionary definition. Readers probably see insufficiently developed features of the topic and may not see how the features of the topic are significant.

H3: Assessing Content Quality (Start/ Stub)

Subcategories of Start/Stub

Category	Reader's Experience based on Wiki
Redirect	A page that serves as an intermediary link to refer to the article page. User may end up on a redirect page e.g., in case of misspelling.
Disambiguation (explicit)	A page that offers only a list of links to other pages that are likely related. It is also denoted by a title with "(disambiguation)" appended at the end.
Disambiguation (implicit)	A page that offers contents related to the most likely topic of interest and a number of additional links for similar pages. It does not have explicit "(disambiguation)" in the title.
Category description	Internal Wiki page with description of a topic category useful mostly for editors.
List page	A list of items, e.g. list of songs on an album.
May refer to page	A page with minimal contents and small "may refer to" link to similar titled pages.

0.50

What did we find? RESULTS

PROSOCIAL Reciprocity & Donation | Hsieh

Negative Binomial Model (predicting number of donations)	Exp(B)
Page length (characters) ¹	.913***
Number of page views ¹	2.625***
Language version (ref: English)	
Language: French	.753***
Dwell time (seconds) ¹	1.158***
Topic category (ref: other topics)	
Task: War & history	1.121***
Task: Mathematics	1.679***
Task: Technology	1.469***
Task: Biology & Chemistry	1.307***
Task: Literature & Arts	1.254***
Non-Task: Sports	.557***
Non-Task: TV & Movies & Novels	.648***
Quality categories (ref: highest quality (FA/ADQ))	
Quality (GA/BA)	.866***
Quality (B/A)	1.014
Quality (C/B)	.964***
Quality (Start/BD)	.827***
Quality (Stub/E)	.778***
Redirect	.202***
Disambiguation (explicit)	.578***
Category description	.019***
List page	.543***
Disambiguation (implicit)	.919**
May refer to	1.008
Other uses	.942**
Other pages	.705***
Number of observations	811,812
$\Delta \chi^2$ change against baseline (df)	48,673 (21)***
McFadden R ²	.305****

¹log-transformed

PROSOCIAL Reciprocity & Donation | Hsieh

Negative Binomial Model (predicting number of donations)	Exp(B)
Page length (characters) ¹	.913***
Number of page views ¹	2.625***
Language version (ref: English)	
Language: French	.753***
Dwell time (seconds) ¹	1.158***
Topic category (ref: other topics)	
Task: War & history	1.121***
Task: Mathematics	1.679***
Task: Technology	1.469***
Task: Biology & Chemistry	1.307***
Task: Literature & Arts	1.254***
Non-Task: Sports	.557***
Non-Task: TV & Movies & Novels	.648***
Quality categories (ref: highest quality (FA/ADQ))	
Quality (GA/BA)	.866***
Quality (B/A)	1.014
Quality (C/B)	.964***
Quality (Start/BD)	.827***
Quality (Stub/E)	.778***
Redirect	.202***
Disambiguation (explicit)	.578***
Category description	.019***
List page	.543***
Disambiguation (implicit)	.919**
May refer to	1.008
Other uses	.942**
Other pages	.705***
Number of observations	811,812
$\Delta \chi^2$ change against baseline (df)	48,673 (21)***
McFadden R ²	.305****

¹log-transformed

PROSOCIAL Reciprocity & Donation | Hsieh ----

Negative Binomial Model (predicting number of donations)	Exp(B)
Page length (characters) ¹	.913***
Number of page views ¹	2.625***
Language version (ref: English)	
Language: French	.753***
Dwell time (seconds) ¹	1.158***
Topic category (ref: other topics)	
Task: War & history	1.121***
Task: Mathematics	1.679***
Task: Technology	1.469***
Task: Biology & Chemistry	1.307***
Task: Literature & Arts	1.254***
Non-Task: Sports	.557***
Non-Task: TV & Movies & Novels	.648***
Quality categories (ref: highest quality (FA/ADQ))	
Quality (GA/BA)	.866***
Quality (B/A)	1.014
Quality (C/B)	.964***
Quality (Start/BD)	.827***
Quality (Stub/E)	.778***
Redirect	.202***
Disambiguation (explicit)	.578***
Category description	.019***
List page	.543***
Disambiguation (implicit)	.919**
May refer to	1.008
Other uses	.942**
Other pages	.705***
Number of observations	811,812
$\Delta \chi^2$ change against baseline (df)	48,673 (21)***
McFadden R ²	.305****

¹log-transformed

PROSOCIAL Reciprocity & Donation | Hsieh

.......

H1:Task vs. Non-Task (supported)

Negative Binomial Model (predicting # of donations)	Exp(B)
Topic category (ref: other topics)	
Task: War & history	1.121***
Task: Mathematics	1.679***
Task: Technology	1.469***
Task: Biology & Chemistry	1.307***
Task: Literature & Arts	1.254***
Non-Task: Sports	.557***
Non-Task: TV & Movies & Novels	.648***



H2:Dwell-Time (supported)

Negative Binomial Model (predicting # of donations)	Exp(B)
Dwell time (seconds) ¹	1.158***

¹log-transformed



H3:Quality (partially supported)

Negative Binomial Model (predicting # of donations)	Exp(B)
Quality categories (ref: highest quality (FA/ADQ))	
Quality (GA/BA)	.866***
Quality (B/A)	1.014
Quality (C/B)	.964***
Quality (Start/BD)	.827***
Quality (Stub/E)	.778***
Redirect	.202***
Disambiguation (explicit)	.578***
Category description	.019***
List page	.543***
Disambiguation (implicit)	.919**
May refer to	1.008
Other uses	.942**
Other pages	.705***

Differences in Task-Oriented Support?

May refer to: 1.008

VFR

From Wikipedia, the free encyclopedia

This is an old revision of this page, as edited by GB fan (talk I contribs) at 16:19, 18 Februa

(diff) ← Previous revision | Latest revision (diff) | Newer revision → (diff)

VFR may refer to:

- · Visual flight rules, a set of aviation regulations
- · Variable frame rate, a feature of some video container formats in which the frame
- · Honda VF and VFR, a series of motorcycles
- · Verein für Raumschiffahrt (German: "Spaceflight Society"), an association of amat
- Visits to Friends and Relatives, a term used in the study of international travel

This disambiguation page lists articles associated with the title **VFR**. If an internal link led you here, you may wish to change the link to point directly to the inte

Categories: Disambiguation pages

Disambiguation explicit: 0.578

Flood (disambiguation)

From Wikipedia, the free encyclopedia

This is an old revision of this page, as edited by Doug Weller (talk I contribs) at 16:30, 29 August 2015 (it's under the heading 'religion is a permanent link to this revision, which may differ significantly from the current revision.

- (diff) ← Previous revision | Latest revision (diff) | Newer revision → (diff)
- A flood is an overflow or accumulation of an expanse of water that submerges land.

Flood(s), The Flood, Flooded or Flooding may also refer to:

Computing

- Flood fill, an algorithm that determines the area connected to a given node in a multi-dimensional array
- Flooding algorithm, a network routing algorithm
- Internet Relay Chat flood, a form of denial-of-service attack
- MAC flooding, a technique employed to compromise the security of network switches
- · Network flood, a denial-of-service attack on a network

Media and entertainment

Film

- The Flood (1958 film), a Czech film
- The Flood (1962 film), an American television film narrated by Laurence Harvey
- Flood!, a 1976 American television film
- The Flood (1994 film), a French-Russian film
- Flood (film), a 2007 disaster film
- The Flood (2010 film) or Mabul, an Israeli film

Gaming

- Flood (Halo), fictional creatures in the Halo game series
- Flood (video game), a game for Amiga and Atari ST

Literature

- Flood (Baxter novel), a 2008 novel by Stephen Baxter
- Flood (Doyle novel), a 2002 novel by Richard Doyle; basis for the 2007 film
- The Flood (novel), a 1986 novel by Ian Rankin
- The Flood (novella), an 1880 novella by Émile Zola

PROSOCIAL Reciprocity & Donation | Hsieh

What does this mean? IMPLICATIONS

PROSOCIAL Reciprocity & Donation | Hsieh

Monetization of the Internet



PROSOCIAL Reciprocity & Donation | Hsieh

Theoretical Implications

A reciprocity mechanism: higher utility pages attract more donation

- Task-oriented topics
- Higher dwell time
- Higher quality
 - Non-linear ORES relationships
 - Pages facilitate may be more valuable (may refer to, implicit-disambiguate)
- Page length -> fewer donations?

Two Potential Mechanisms

Pages attracting different types of users

or

Users are getting different types of values from the different pages

pre vs. post use?

OSOCIAL Reciprocity & Donation | Hsieh

Design Implications: Reinforce Indebtedness

Highlight potential for task-oriented utility: "Did you know that reading about science-fiction can boost your creativity?"

Highlight quality on task-oriented pages:



This is a featured article. To help sustain the high quality content...

Offer more task-oriented features/support?

Design Implications: Triggering Anticipated Reciprocity

For low quality articles or stubs, highlight potential of the pages...

Trajectory: this article grew by 2000 words in the past year

Comparable: this article could be like X



Donation complete

Hi Gary H, Thank you for your donation to Wikimedia Foundation.





Thank you! Questions?

H1. Pages on more task-oriented topics attract more donations (supported)

H2. Pages on which users spent more time attract more donations (supported)

H3. Pages of higher quality attract more donations (partially supported)

Email: garyhs@uw.edu







