Fame and fate: Why is global success so unpredictable?

Last updated: 2023/08/22, 11:48:25 EDT

Principles of Complex Systems, Vols. 1, 2, & 3
CSYS/MATH 6701, 6713, & a pretend number,
2023–2024| @pocsvox

Prof. Peter Sheridan Dodds | @peterdodds

Computational Story Lab | Vermont Complex Systems Center
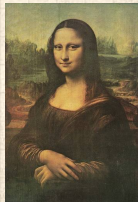Santa Fe Institute | University of Vermont

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
1 of 31
Superstars
Superspreading
References

These slides are brought to you by:
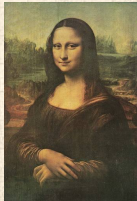

Sealie & Lambie Productions

The PoCSverse
Fame and fate:
Why is global
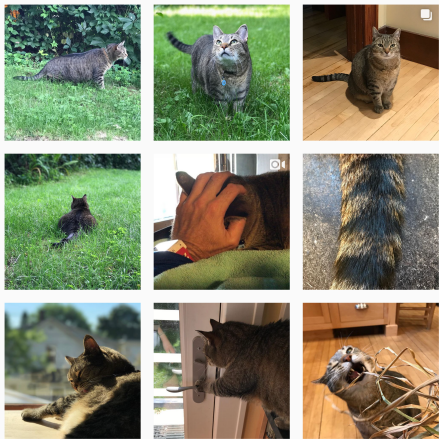success so
unpredictable?
2 of 31

Superstars

Superspreading

References

These slides are also brought to you by:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
3 of 31

Special Guest Executive Producer

On Instagram at pratchett_the_cat
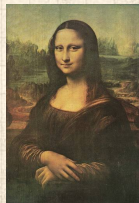
Outline

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
4 of 31

Superstars

Superspreading

References

THE STORIES
CONTAGIOUS

THE SUN
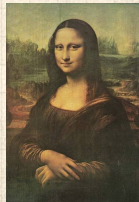
The most famous painting in the world:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
6 of 31
Superstars
Superspreading
References

The dismal predictive powers of editors ......

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
7 of 31

Superstars

Superspreading

References

Twelve ...

The completely unpredicted fall of Eastern Europe:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
8 of 31
Superstars
Superspreading
References

Timur Kuran: [3] "Now Out of Never: The Element of Surprise in the East European Revolution of 1989"

We understand bushfire stories:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
9 of 31

Superstars

Superspreading

References

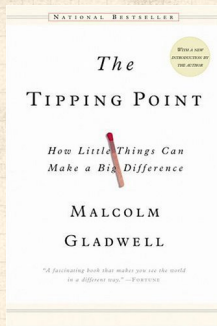1. Sparks start fires.

We understand bushfire stories:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
9 of 31

Superstars

Superspreading

References

1. Sparks start fires.
2. System properties control a fire's spread.

We understand bushfire stories:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
9 of 31

Superstars
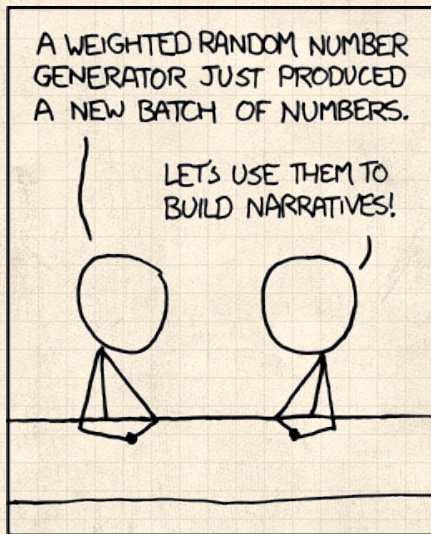
Superspreading

References

1. Sparks start fires.
2. System properties control a fire's spread.

3. But we make two mistakes about Social Fires...

We understand bushfire stories:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
9 of 31

Superstars

Superspreading

References

1. Sparks start fires.
2. System properties control a fire's spread.

3. But we make two mistakes about Social Fires…

Reason 1—We are Homo Narrativus.

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
10 of 31

Superstars

Superspreading

References

http://xkcd.com/904/

Reason 2—"We're all individuals!" 🎞️☍

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
11 of 31
Superstars
Superspreading
References

Brian! Brian!
Brian! Brian!

🎲 Archival footage.

🎲 Individual narratives do not describe distributed, networked minds.

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
12 of 31

Reason 3—We are spectacular imitators ⊞↗

BBC/David Attenborough

Mistake 1:
Success is due to intrinsic properties

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
13 of 31

Superstars

Superspreading

References

See "Becoming Mona Lisa" by David Sassoon ⎋

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
13 of 31

Superstars

Superspreading

References

Mistake 1:
Success is due to intrinsic properties

it's just so disappointingly small

See "Becoming Mona Lisa" by David Sassoon ⬀

Mistake 1:
Success is due to intrinsic properties

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
13 of 31

Stolen in 1913, recovered in 1915.

See "Becoming Mona Lisa" by David Sassoon ⎋

Mistake 1:
Success is due to intrinsic properties

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
13 of 31

Superstars

Superspreading

References

Hidden during WWII.

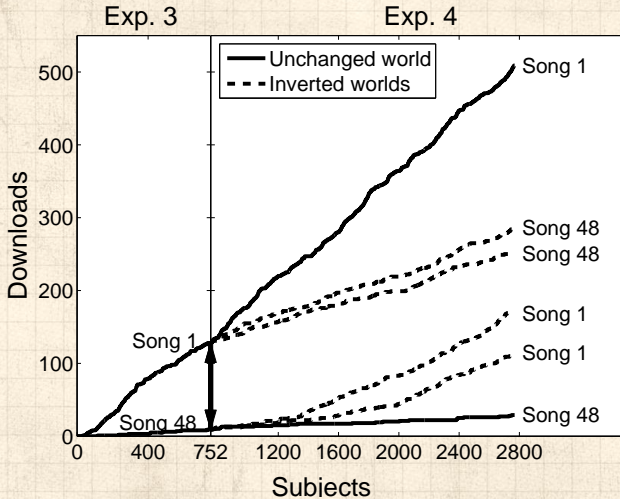See "Becoming Mona Lisa" by David Sassoon ⬀

Mistake 1:
Success is due to intrinsic properties

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
13 of 31

Superstars

Superspreading

References

Repeatedly vandalised and attacked. ⎘

See "Becoming Mona Lisa" by David Sassoon ⎘

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
14 of 31

48 songs
30k participants

Exp 1— weak social

Exp. 2—strong social

"An experimental study of inequality and unpredictability in an artificial cultural market" ☐

Salganik, Dodds, and Watts,
Science, **311**, 854–856, 2006. [4]

Resolving the paradox:
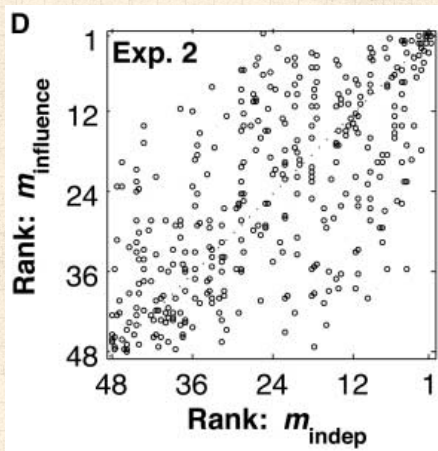
The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
15 of 31

Superstars

Superspreading

References

Increased social awareness leads to
Stronger inequality + Less predictability.

Payola/Deceptive advertising hurts us all:
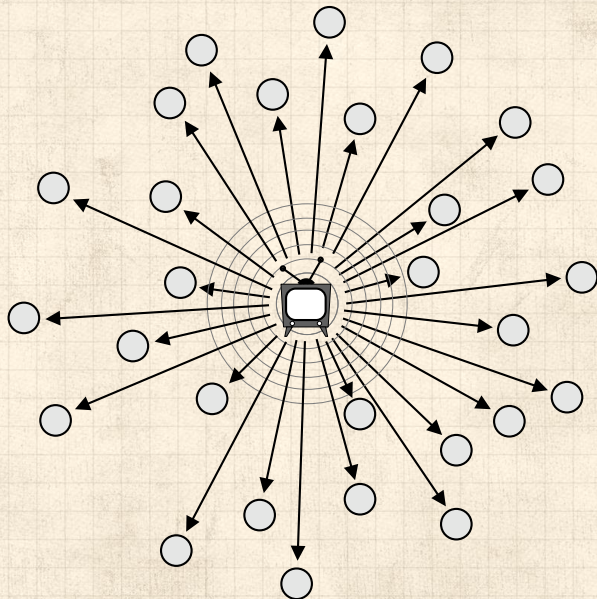
The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
16 of 31

Superstars

Superspreading

References

The PoCSverse
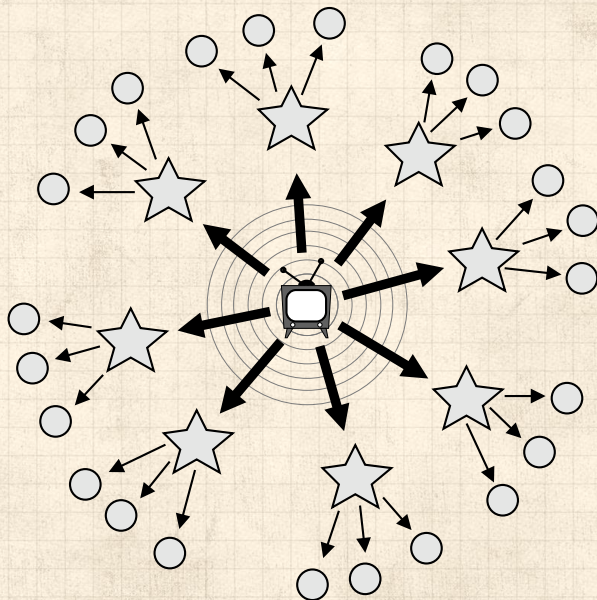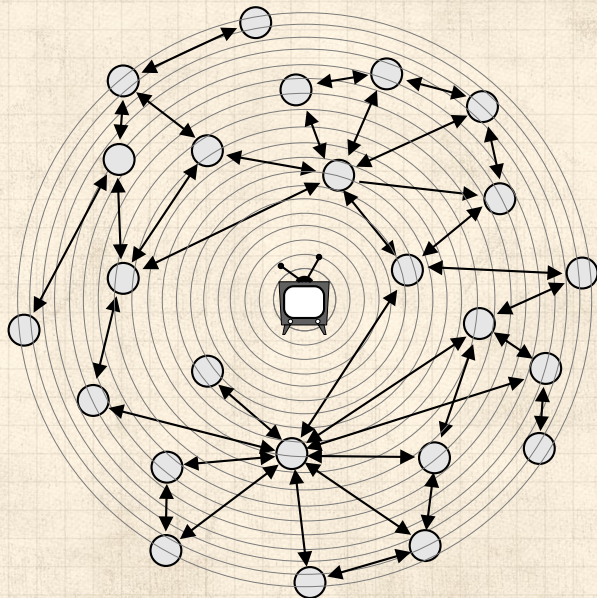Fame and fate:
Why is global
success so
unpredictable?
17 of 31

Mistake 2:
Seeing success is 'due to social' and wanting to say 'all your interactions are belong to us'

The hypodermic model of influence:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
18 of 31

Superstars

Superspreading

References

The two step model of influence: [2]

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
19 of 31

Superstars

Superspreading

References

The network model of influence:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
20 of 31

Superstars

Superspreading

References

The network model of influence:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
21 of 31

Superstars

Superspreading

References
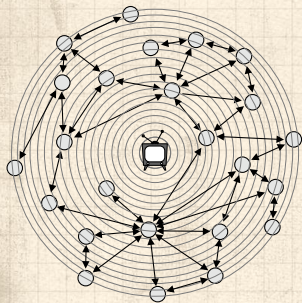
How supersreading works:

Many interconnected, average, trusting people
must benefit from both
receiving and sharing a message
far from its source.

"Influentials, Networks, and Public Opinion Formation" ☐
Watts and Dodds,
J. Consum. Res., **34**, 441–458, 2007. [5]

Things that spread quickly:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
22 of 31
Superstars
Superspreading
References
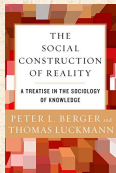
:-p

LOL win omg cute geeky trashy fail wtf

+ News ...

buzzfeed.com⧉:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
23 of 31

Superstars

Superspreading

References

"The social construction of reality: A treatise in the sociology of knowledge" ⓐ, ☑
by Berger and Luckmann (1991). [1]

Reality is socially constructed ☑,
to some hard-to-measure degree.

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
23 of 31

Superstars

Superspreading

References
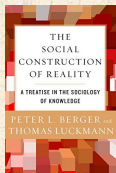
"The social construction of reality: A treatise in the sociology of knowledge" 🅰, ⬀
by Berger and Luckmann (1991). [1]

Reality is socially constructed⬀,
to some hard-to-measure degree.

People do and don't see this: Fate versus Fortune.

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
24 of 31

Superstars

Superspreading

References

Etymological clarity:

🎲 Fate—from the Latin *fatus*: meaning "spoken".

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
24 of 31

Superstars

Superspreading

References

Etymological clarity:

⬡ Fate—from the Latin *fatus*: meaning "spoken".

⬡ Fate is talk that has been done.
"It is written", fore-tell, pre-dict.

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
24 of 31

Etymological clarity:

- 🎲 Fate—from the Latin *fatus*: meaning "spoken".

- 🎲 Fate is talk that has been done.
  "It is written", fore-tell, pre-dict.

- 🎲 "There is no such thing as fate, only the story of fate." ➹

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
24 of 31

Etymological clarity:

- ♧ Fate—from the Latin *fatus*: meaning "spoken".
- ♧ Fate is talk that has been done.
  "It is written", fore-tell, pre-dict.
- ♧ "There is no such thing as fate, only the story of fate." ⬀
- ♧ Destiny is probablistic.

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
24 of 31

Etymological clarity:

- Fate—from the Latin *fatus*: meaning "spoken".
- Fate is talk that has been done.
  "It is written", fore-tell, pre-dict.
- "There is no such thing as fate, only the story of fate." ↗
- Destiny is probablistic.
- Fame—from the Latin *fāma*: meaning "to talk."

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
24 of 31
Superstars
Superspreading
References

Etymological clarity:

- ⬡ Fate—from the Latin *fatus*: meaning "spoken".
- ⬡ Fate is talk that has been done.
  "It is written", fore-tell, pre-dict.
- ⬡ "There is no such thing as fate, only the story of fate." ↗
- ⬡ Destiny is probablistic.
- ⬡ Fame—from the Latin *fāma*: meaning "to talk."
- ⬡ Fame is inherently the social discussion about the thing, not the thing itself.

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
24 of 31

Superstars

Superspreading

References

Etymological clarity:

- Fate—from the Latin *fatus*: meaning "spoken".

- Fate is talk that has been done.
  "It is written", fore-tell, pre-dict.

- "There is no such thing as fate, only the story of fate." ↗

- Destiny is probablistic.

- Fame—from the Latin *fāma*: meaning "to talk."

- Fame is inherently the social discussion about the thing, not the thing itself.

- Renown ↗: Repeatedly named, talked about. Old French renon, from re- + non ("name").

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
24 of 31

Superstars

Superspreading

References

Etymological clarity:

- Fate—from the Latin *fatus*: meaning "spoken".
- Fate is talk that has been done.
  "It is written", fore-tell, pre-dict.
- "There is no such thing as fate, only the story of fate." ⬀
- Destiny is probablistic.
- Fame—from the Latin *fāma*: meaning "to talk."
- Fame is inherently the social discussion about the thing, not the thing itself.
- Renown ⬀: Repeatedly named, talked about. Old French renon, from re- + non ("name").
- Réclame ⬀. "Clamo"—Proto-Indo-European: "to shout" (again).

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
24 of 31
Superstars

Superspreading

References

Etymological clarity:

- Fate—from the Latin *fatus*: meaning "spoken".
- Fate is talk that has been done.
  "It is written", fore-tell, pre-dict.
- "There is no such thing as fate, only the story of fate." ⬈
- Destiny is probablistic.
- Fame—from the Latin *fāma*: meaning "to talk."
- Fame is inherently the social discussion about the thing, not the thing itself.
- Renown ⬈: Repeatedly named, talked about. Old French renon, from re- + non ("name").
- Réclame ⬈. "Clamo"—Proto-Indo-European: "to shout" (again). Connected to "lowing".

Oscar Wilde, The Picture of Dorian Gray

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
25 of 31

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
25 of 31
Superstars
Superspreading
References

Oscar Wilde, The Picture of Dorian Gray

"There is only one thing in the world

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
25 of 31
Superstars
Superspreading
References

Oscar Wilde, The Picture of Dorian Gray

THIS NUMBER CONTAINS

The Picture of Dorian Gray.

By OSCAR WILDE.

COMPLETE.

JULY, 1890

LIPPINCOTT'S

MONTHLY MAGAZINE

CONTENTS

PRICE TWENTY-FIVE CENTS

J. B. LIPPINCOTT CO. PHILADELPHIA:
LONDON: WARD, LOCK & CO.

"There is only one thing in the world

worse than being talked about,

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
25 of 31

Superstars

Superspreading

References

Oscar Wilde, The Picture of Dorian Gray

"There is only one thing in the world

worse than being talked about,

and that is

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
25 of 31

Oscar Wilde, The Picture of Dorian Gray

"There is only one thing in the world

worse than being talked about,

and that is

not being talked about."

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
26 of 31

Spreading in the social wild:

The Dark Social Web
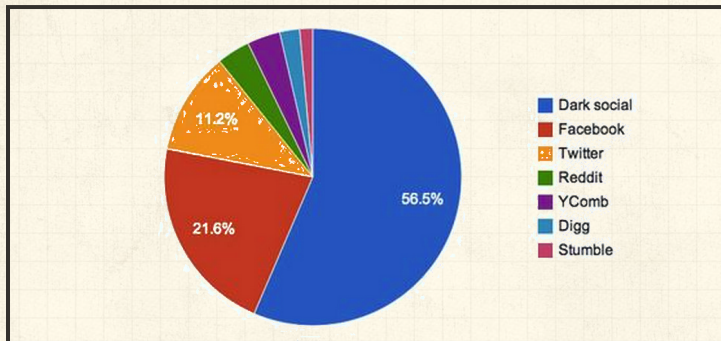
"The only real way to optimize for social spread is in the nature of the content itself. There's no way to game email or people's instant messages. There's no power users you can contact. There's no algorithms to understand. This is pure social, uncut. [sic]"

Dark Social: We Have the Whole History of the Web

A completely made up pie chart:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
27 of 31

Superstars

Superspreading

References

Real
Dark
Social

Measurable
Web
Stuff

How to make things spread deeply
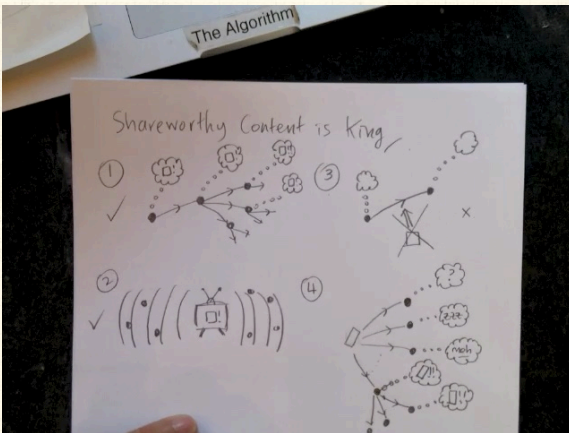
The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
28 of 31

Superstars

Superspreading

References

And how to stop things spreading?

Story wars:

Shareworthy content:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
29 of 31

Superstars

Superspreading

References

Story wars:

Shareworthy content:

1. Build entities/messages/stories that have intrinsic and social value out in the Social Wild.

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
29 of 31

Superstars

Superspreading

References

Story wars:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
29 of 31

Superstars

Superspreading

References

Shareworthy content:

1. Build entities/messages/stories that have intrinsic and social value out in the Social Wild.

2. Advertise but lay off the social interactions.

Story wars:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
29 of 31
Superstars
Superspreading
References

Shareworthy content:

1. Build entities/messages/stories that have intrinsic and social value out in the Social Wild.

2. Advertise but lay off the social interactions.

3. Just keep trying.

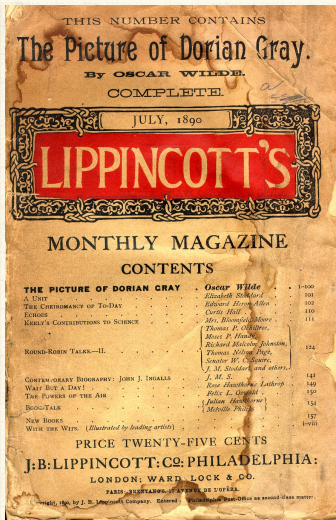# Story wars:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
29 of 31

Superstars

Superspreading

References

Shareworthy content:

1. Build entities/messages/stories that have intrinsic and social value out in the Social Wild.

2. Advertise but lay off the social interactions.

3. Just keep trying.

Stopping bad shareworthy content:

Story wars:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
29 of 31

Superstars

Superspreading

References

Shareworthy content:

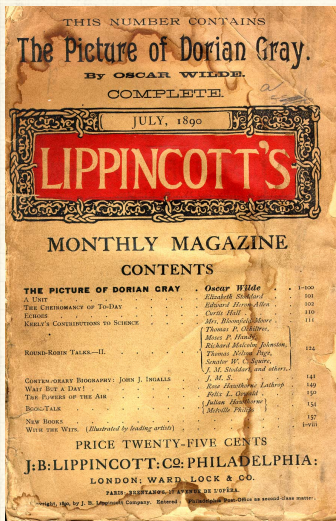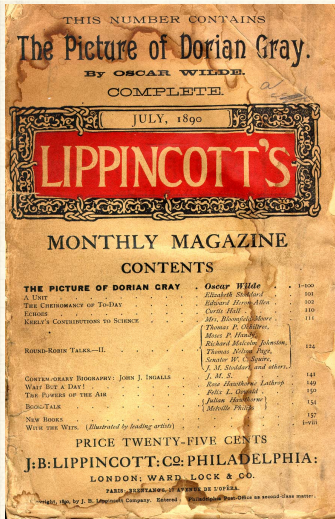1. Build entities/messages/stories that have intrinsic and social value out in the Social Wild.

2. Advertise but lay off the social interactions.

3. Just keep trying.

Stopping bad shareworthy content:

1. The truth is against an infinitude of adjacent narratives.

Story wars:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
29 of 31
Superstars

Superspreading

References

Shareworthy content:

1. Build entities/messages/stories that have intrinsic and social value out in the Social Wild.

2. Advertise but lay off the social interactions.

3. Just keep trying.

Stopping bad shareworthy content:

1. The truth is against an infinitude of adjacent narratives.

2. Build better spreading true stories.

Story wars:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
29 of 31

Superstars

Superspreading

References

Shareworthy content:

1. Build entities/messages/stories that have intrinsic and social value out in the Social Wild.

2. Advertise but lay off the social interactions.

3. Just keep trying.

Stopping bad shareworthy content:

1. The truth is against an infinitude of adjacent narratives.

2. Build better spreading true stories.

3. Defend social interactions ("do you know who[1] your friends have been imitating?")

Story wars:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
29 of 31

Superstars

Superspreading

References

Shareworthy content:

1. Build entities/messages/stories that have intrinsic and social value out in the Social Wild.

2. Advertise but lay off the social interactions.

3. Just keep trying.

Stopping bad shareworthy content:

1. The truth is against an infinitude of adjacent narratives.

2. Build better spreading true stories.

3. Defend social interactions ("do you know who[1] your friends have been imitating?")

4. Just keep trying.

Story wars:

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
29 of 31

Superstars

Superspreading

References

Shareworthy content:

1. Build entities/messages/stories that have intrinsic and social value out in the Social Wild.
2. Advertise but lay off the social interactions.
3. Just keep trying.

Stopping bad shareworthy content:

1. The truth is against an infinitude of adjacent narratives.
2. Build better spreading true stories.
3. Defend social interactions ("do you know who[1] your friends have been imitating?")
4. Just keep trying.

---

[1] The whomists are followers of MGGA

References I

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
30 of 31

Superstars

Superspreading

References

[1] P. L. Berger and T. Luckmann.
The social construction of reality: A treatise in the
sociology of knowledge.
Penguin UK, 1991.

[2] E. Katz and P. F. Lazarsfeld.
Personal Influence.
The Free Press, New York, 1955.

[3] T. Kuran.
Now out of never: The element of surprise in the
east european revolution of 1989.
World Politics, 44:7–48, 1991. pdf

[4] M. J. Salganik, P. S. Dodds, and D. J. Watts.
An experimental study of inequality and
unpredictability in an artificial cultural market.
Science, 311:854–856, 2006. pdf

The PoCSverse
Fame and fate:
Why is global
success so
unpredictable?
31 of 31
Superstars
Superspreading
References

References II

[5] D. J. Watts and P. S. Dodds.
Influentials, networks, and public opinion
formation.
Journal of Consumer Research, 34:441–458, 2007.
pdf ☑