Trolls: The Cost of Doing Nothing

Chris Priebe

CEO, Two Hat Security

GAME DEVELOPERS CONFERENCE® | FEB 27–MAR 3, 2017 | EXPO: MAR 1–3, 2017 #GDC17

UBM

“hello world”

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hi game developers!
hi game developers!
hi game developers!
hi game developers!
300M+
Stuff
Michael562952
Kooldude233
Babycrier
Pen50gi
Tigerwolf

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7m
You just made a shitty game nobody liked. That's it. Nobody wil lcare when you die.
7m
I hope you enjoy your last moments alive on this earth. You did nothing worthwhile with your life.
8m
If you have any kids, they're going to die too. I don't give a fuck. They'll grow up to be feminists anyway.
8m
Your mutilated corpse will be on the front page of Jezebel tomorrow and there isn't jack shit you can do about it.
9m
How's that for terrifying you stuck up cunt? I'm sick of you fucking feminist asshats.
9m
I'm going to rape your filthy ass until you bleed, then choke you to death with your husband's tiny Asian penis
10m
I've got a K-Bar and I'm coming to your house so I can shove it up your ugly feminist cunt.
11m
Guess what bitch? I now know where you live. You and Frank live at

Follow
If I meet you for real I'd anal rape you with a huge chainsaw. Stop being the bitch you are.
Reply
Retweet
Favorite
More

Follow
@JulieDiCaro One of the Blackhawks player should beat you to death with their hockey stick like the WHORE you are. CUNT

Leslie Jones
@Lesdoggg
Follow
Exposing
@Lesdoggg big lipped coon
big lipped coon
big lipped coon
big lipped coon
big lipped coon
big lipped coon
big lipped coon
big lipped coon
7/18/16, 7:18 PM

Feb 10
SHES A FILTHY SLAVE AND A SCUMBAG WOMAN SHE SHOULDNT BE ALOUD TO BREED HER HORRIBLE KIND!!

Lily Allen quits Twitter after trolls attack her over son's death

"My timeline is full of the most disgusting, sexist, misogynistic, racist shit." (84KB)

when I lay in a hospital bed with my deceased son stuck between my legs halfway out of my body for 10 hours.

57 11 54

@lilyalleri not to be a but I very highly doubt it was 10 hours

14 1 71

Lily @lilyallen · 3h

you are a And it was. I was there , you weren't .

15 8 106

maybe if you didn't pump your body full of drugs you wouldn't have miscarried

19 13 39

Lily @lilyallen · 2h

didn't miscarry ,I went into early labour and by son died from his chord wrapped round his neck.

62 10 72

Follow

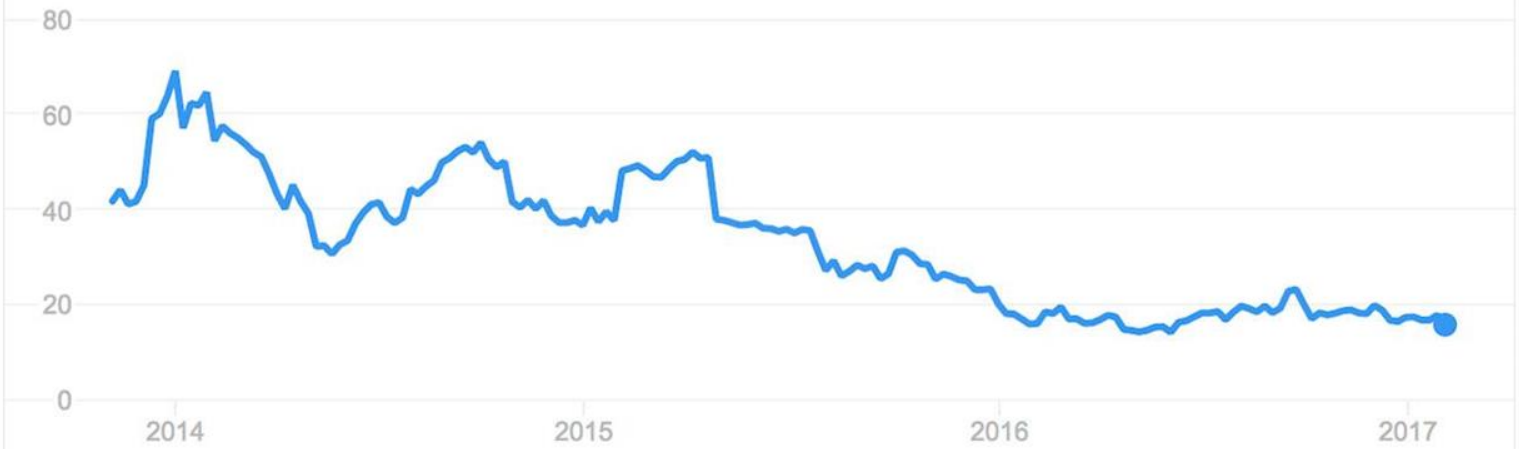
@lilyallen The baby knew you were going to be such a horrible mother so it decided to go out on its own term

Twitter Inc

NYSE: TWTR - Feb 10, 4:33 PM EST

15.58 USD ▼0.83 (5.06%)

1 day | 5 day | 1 month | 3 months | 1 year | 5 years | max



TWITTER INC
Last $16.620
▲0.270 (1.65%)
Volume 14,188,254
TWTR
FB
173%
144%
120%
96%
72%
48%
24%
0%
-24%
-48%
-62%
2014
2015
2016
2017

“A user who experiences toxicity is 320% more likely to quit.”
Jeffrey Lin, Riot Games, 2014
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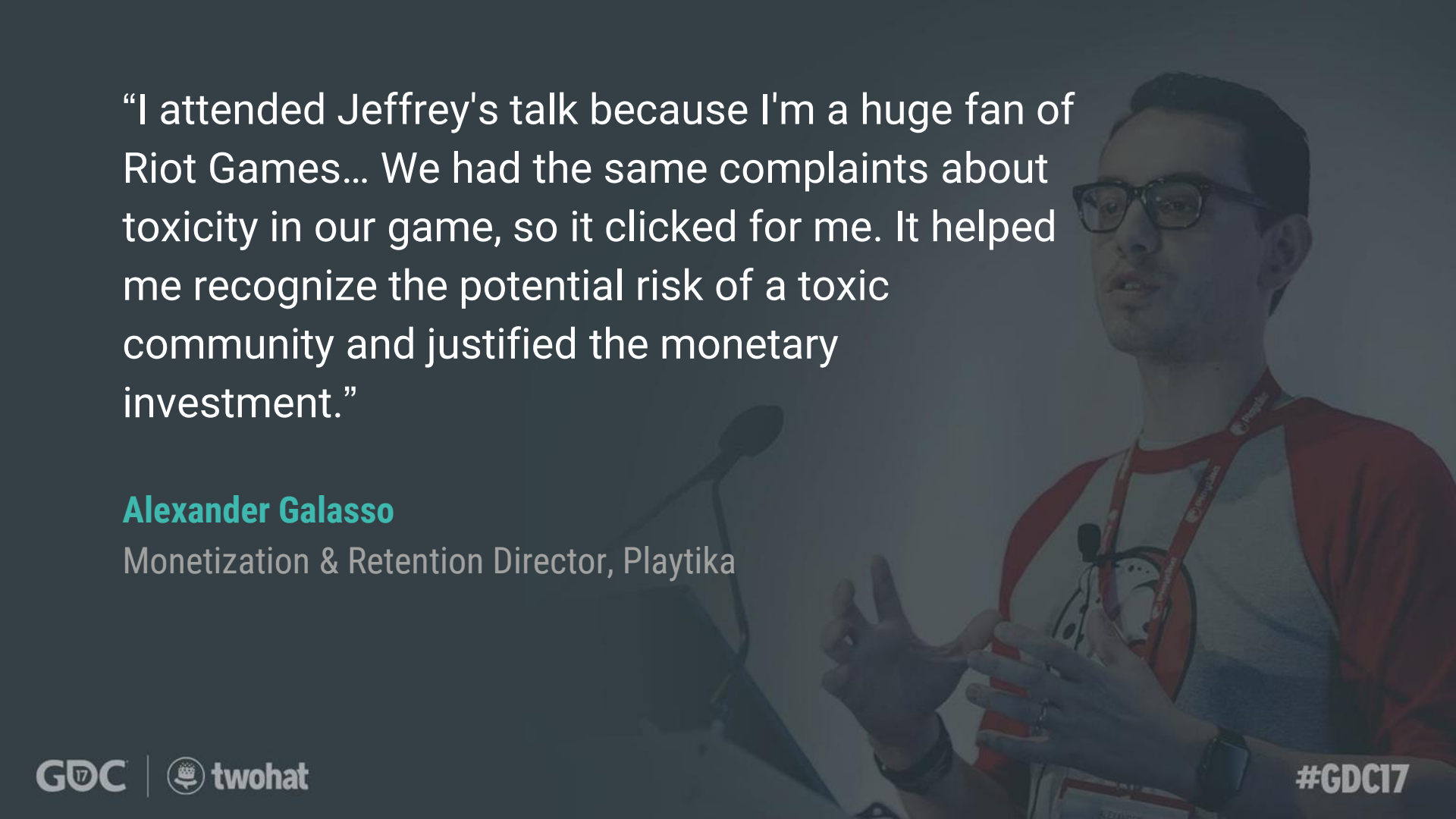
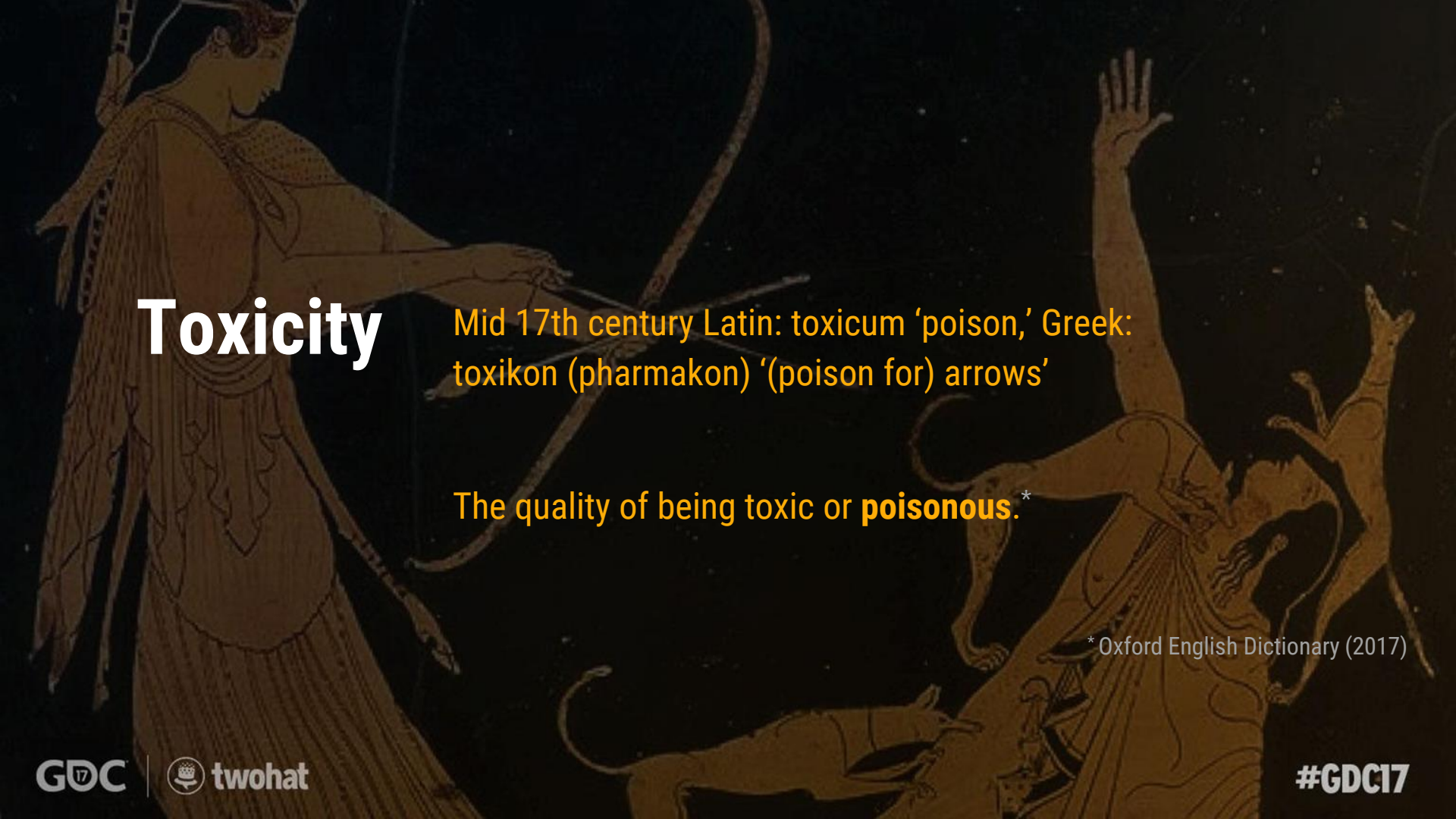
“I attended Jeffrey's talk because I'm a huge fan of Riot Games… We had the same complaints about toxicity in our game, so it clicked for me. It helped me recognize the potential risk of a toxic community and justified the monetary investment.”

Alexander Galasso

Monetization & Retention Director, Playtika





Toxicity

Mid 17th century Latin: toxicum ‘poison,’ Greek: toxikon (pharmakon) ‘(poison for) arrows’

The quality of being toxic or **poisonous**.*

* Oxford English Dictionary (2017)

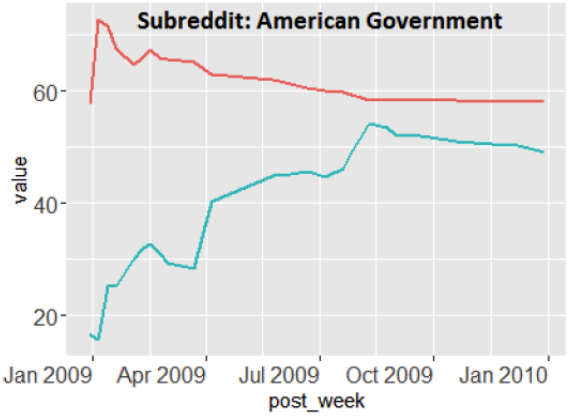
Troll

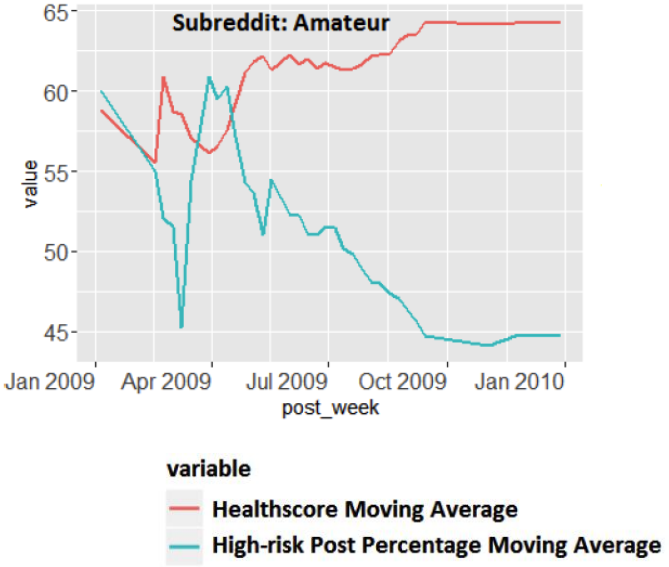
Orig. Old Norse, 1610s: ‘not of the human race, evil spirit, monster’

A person who makes a deliberately offensive or provocative online post.*

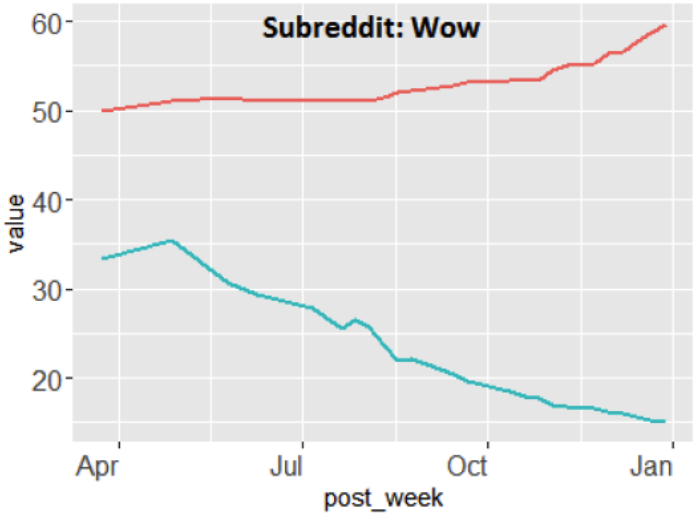
* Oxford English Dictionary (2017)

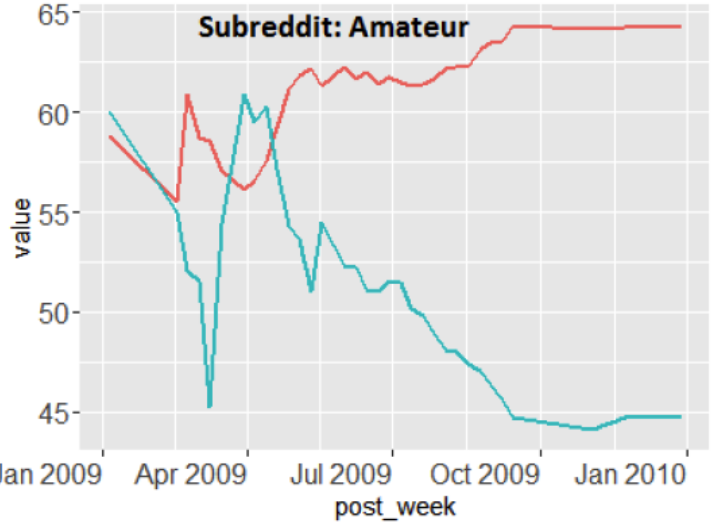
“Small increases in toxicity *may* sometimes lead to growth.
But large increases in toxicity always lead to health decline.”





The Impact of Toxic Language on the Health of Reddit Communities
Shruthi Mohan, Simon Fraser University (2017)





The Impact of Toxic Language on the Health of Reddit Communities

Shruthi Mohan, Simon Fraser University (2017)

variable

Healthscore Moving Average

High-risk Post Percentage Moving Average

“**52%** of MMORPG players reported that they had been cyber-victimized, and **35%** said they had committed cyberbullying themselves”
Virtual Warfare: Cyber Bullying and Cyber-Victimization in MMOG Play
Ballard and Welch (2015)
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A TALE OF
TWO COMMUNITIES
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AI
WARZONE
TRIALS OF
SERATHIAN
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SIMILARITIES

COMPETITIVE MMOs

13+ TOU	**61% M / 39% F**

WARZONE
BASELINE
TRIALS OF SERATHIAN
1 MILLION USERS
$2.78 CAC*
$13.51 LTV
5% CHURN
* Source: Fiksu Index, 2017
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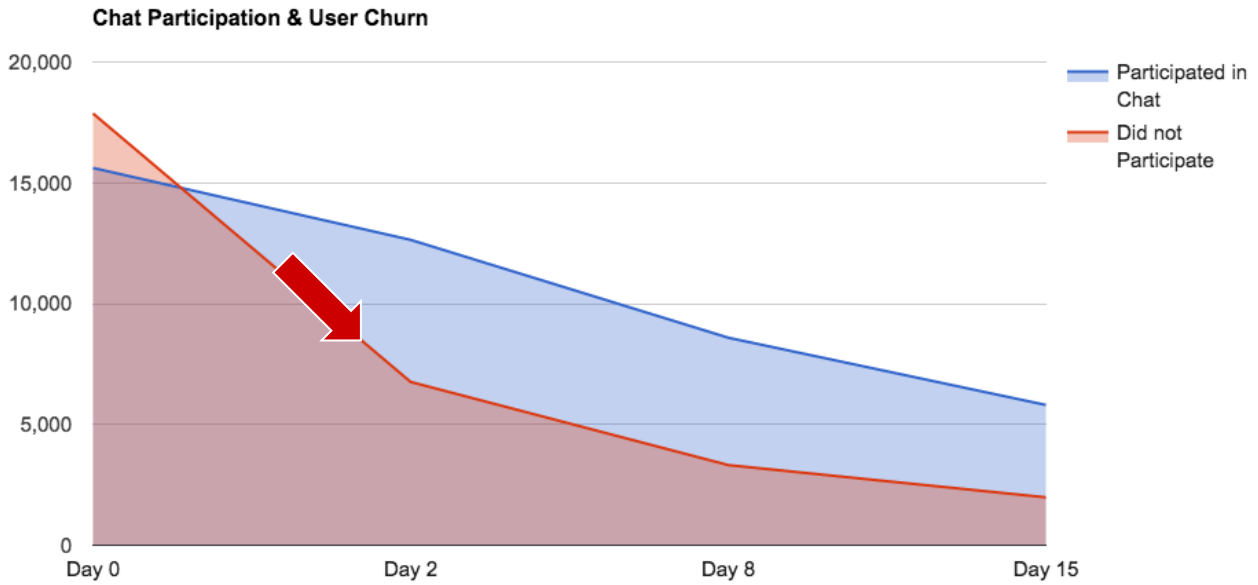
TARGETS

10%

Monthly Growth (MoM)

$21M

Annual Revenue

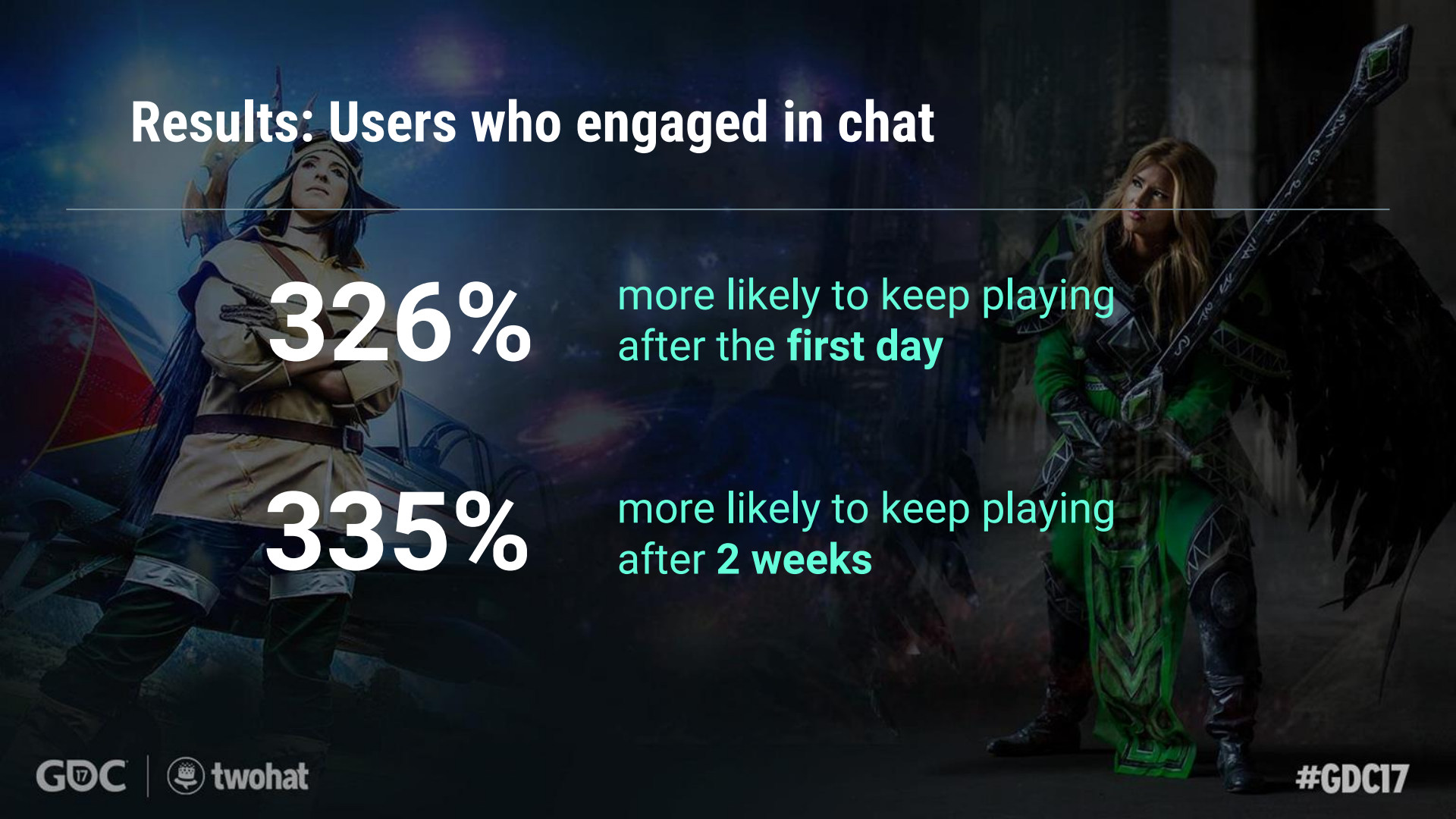


	Day 0	Day 2	Day 8	Day 15	Total Users %
Participated in Chat	**15,615**	12,639	8,589	5,806	37.18%
Did not Participate	**17,870**	6,759	3,318	1,982	11.09%

Results: Users who engaged in chat

326% more likely to keep playing after the **first day**

335% more likely to keep playing after **2 weeks**



THE FORMULA

Loss rate with 10%
toxicity = 6.6%

Loss rate with 30%
toxicity = 9.8%

$$U' = U - (U * Loss) + Acquired$$

MODERATION

"We'll incorporate moderation from the start"

"We'll let our users deal with it themselves"

Q1

PATHS DIVERGE

WARZONE

TRIALS OF SERATHIAN

218,460

Users Lost

10% toxicity

-$1,527,498

Acquisition Cost

-$60,000

Moderation Cost

$234,457

Difference

30% toxicity

324,380

Users Lost

-$1,821,956

Acquisition Cost

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End of Year 2

Total Profit

$47,177,580

User Attrition

-5,840,824

The 7 Million Dollar Difference:

+$7,392,722

Total Profit

$39,784,858

User Attrition

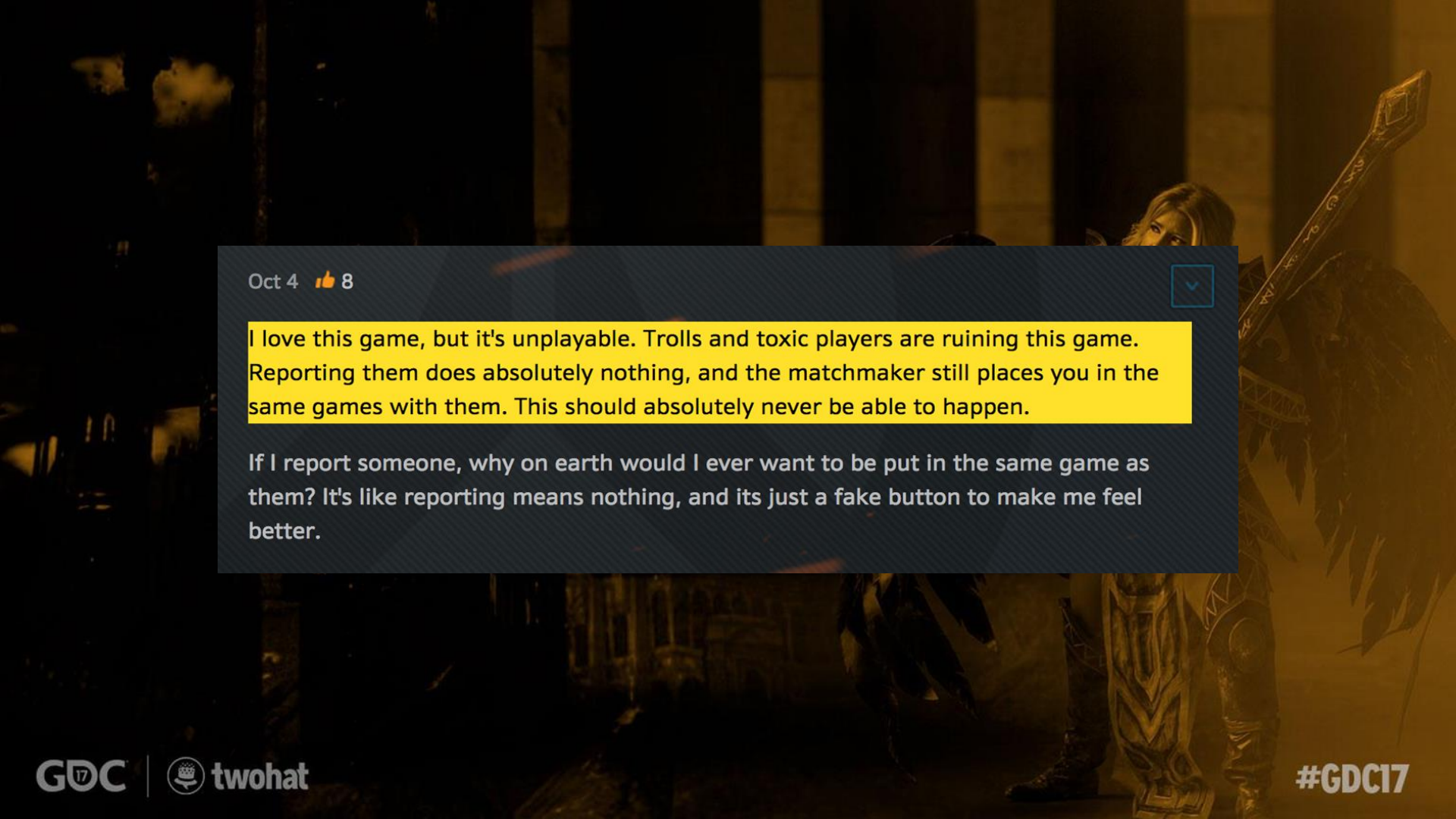
-8,672,738

POST MORTEM

Strategies That Didn't Work

Crowdsourced Everything

Muted


Oct 4 8
I love this game, but it's unplayable. Trolls and toxic players are ruining this game. Reporting them does absolutely nothing, and the matchmaker still places you in the same games with them. This should absolutely never be able to happen.
If I report someone, why on earth would I ever want to be put in the same game as them? It's like reporting means nothing, and its just a fake button to make me feel better.

POST MORTEM

Strategies That Worked

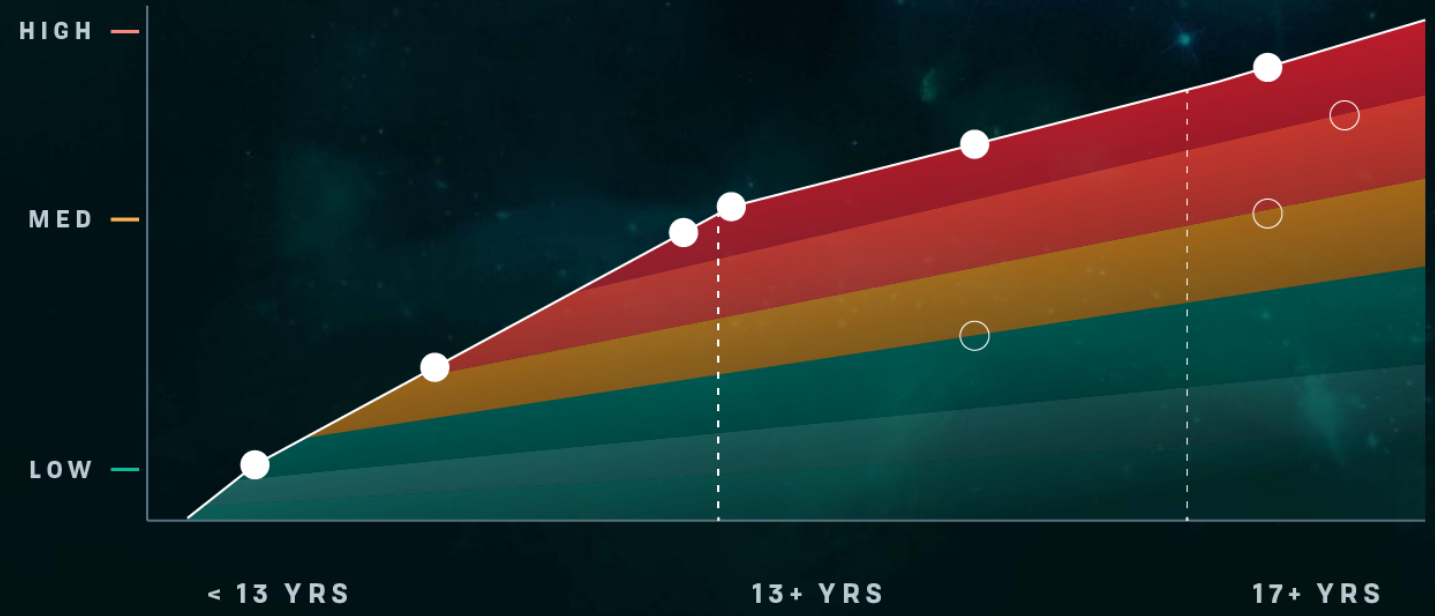
Knew the Resilience of Their Community

Divided Users into Quadrants

Used AI + Human Moderation

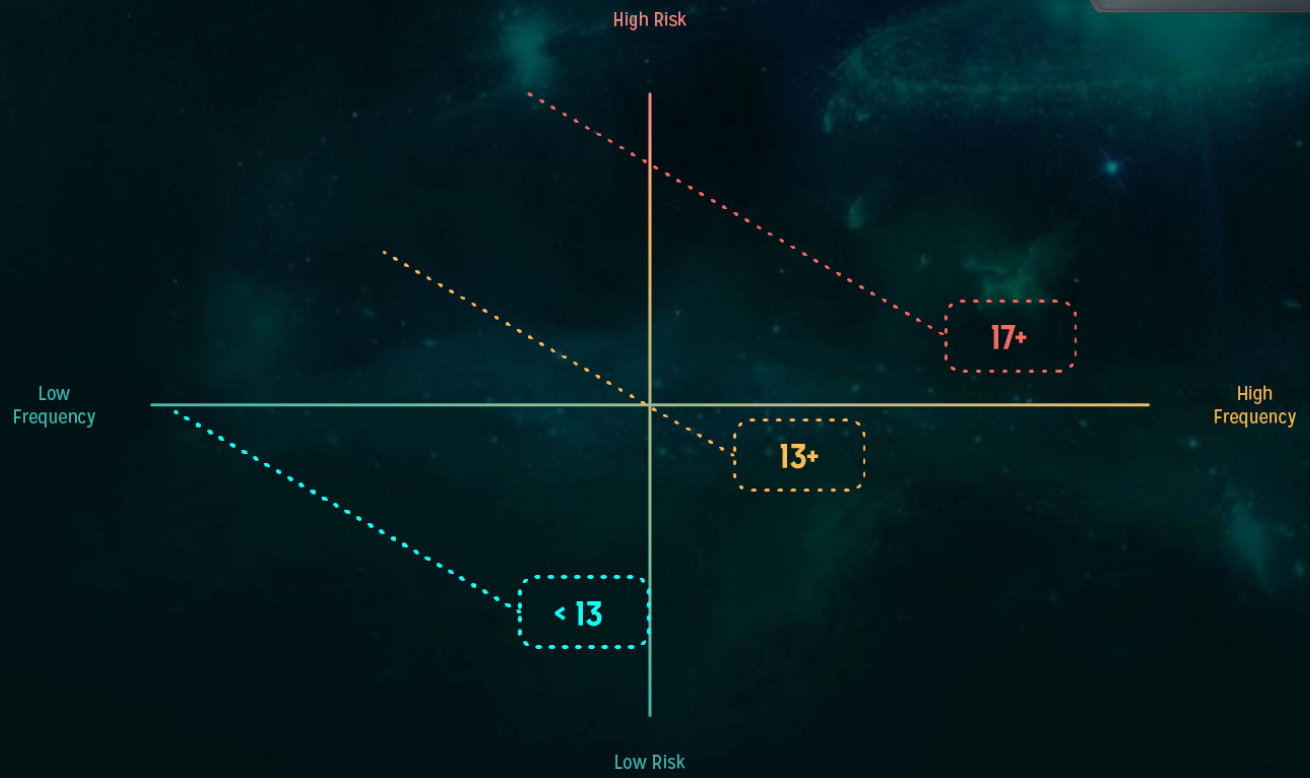
POST MORTEM | Strategies that Worked

Community Resilience



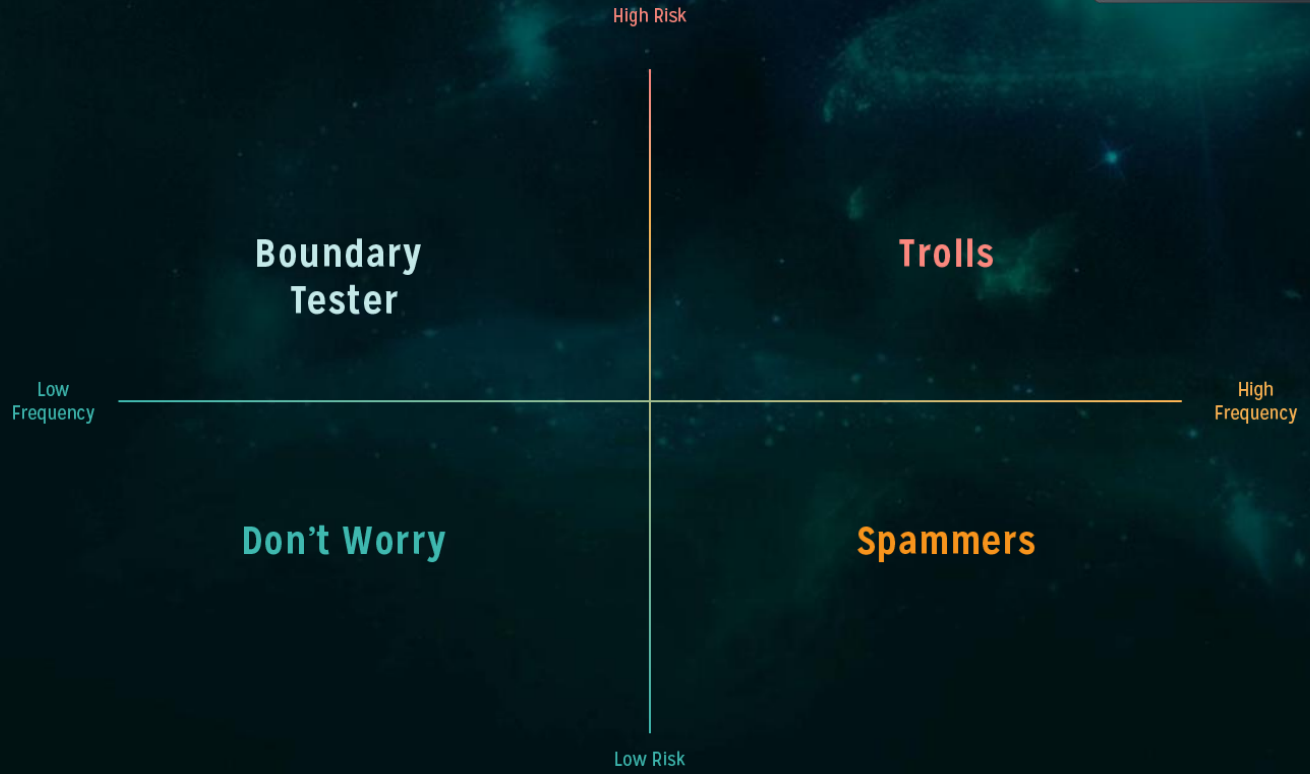
POST MORTEM | Strategies that Worked

Community Resilience



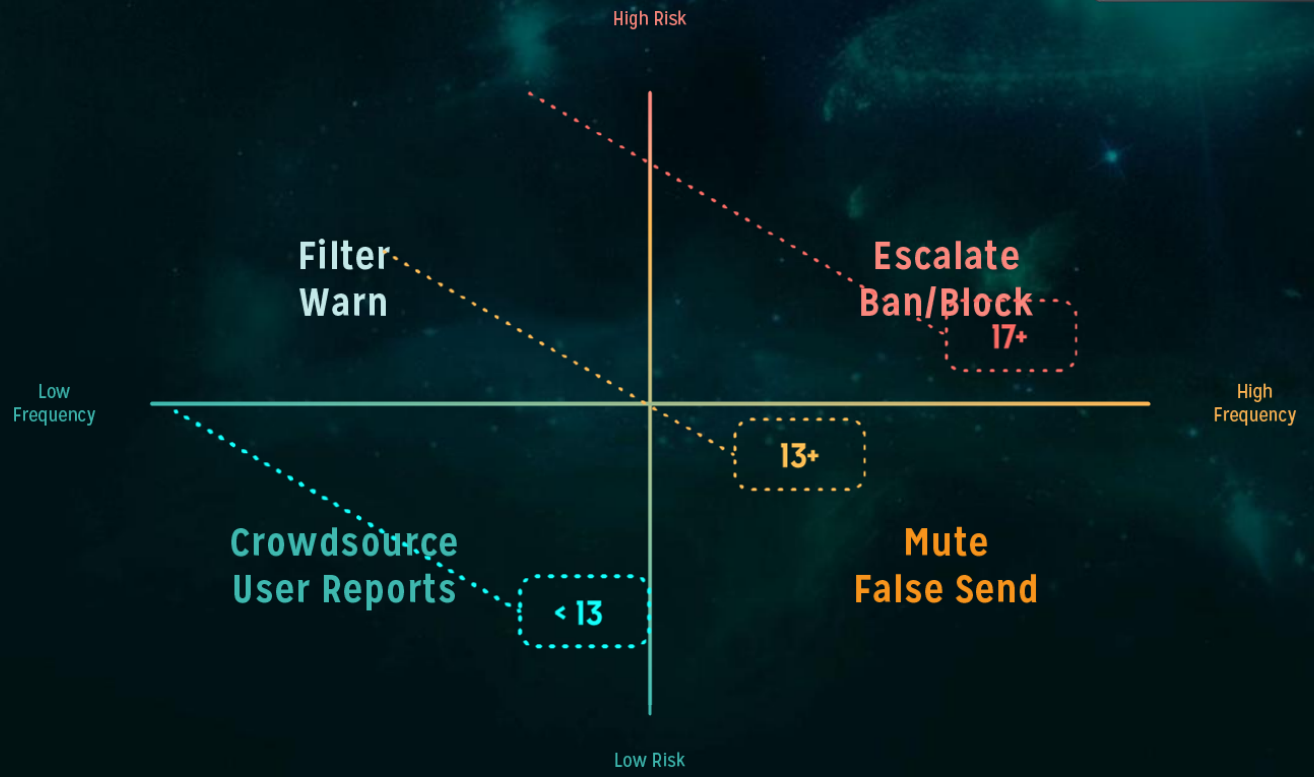
POST MORTEM | Strategies that Worked

Prioritized Risk Groups

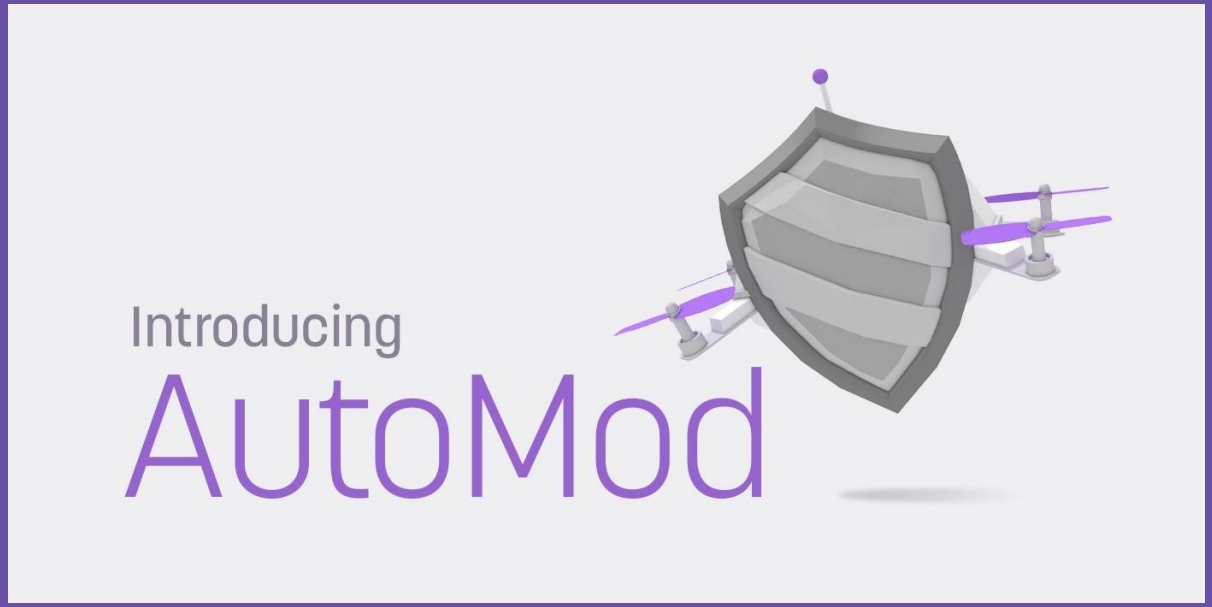


POST MORTEM | Strategies that Worked

Defined Action Plans



Moderation + AI



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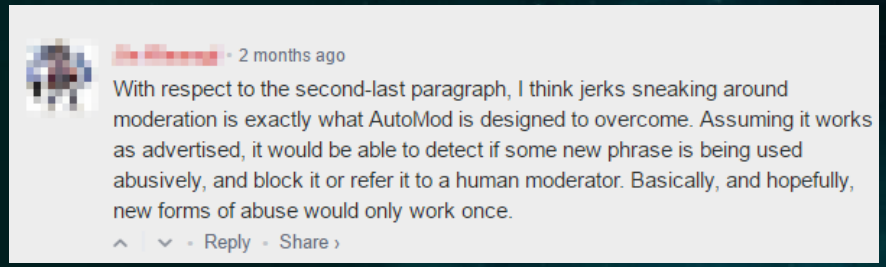

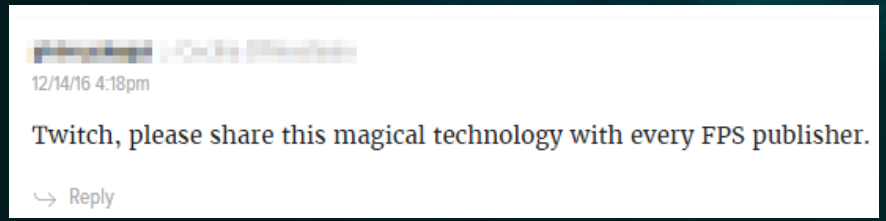

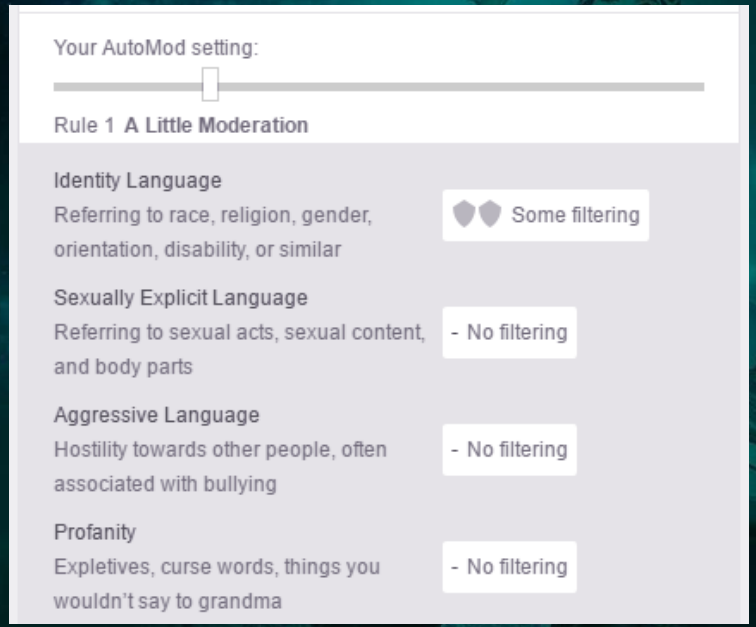

What are the Benefits of Doing Something?

Financial - Higher ROI

Brand - Protect Your Reputation

Community - Encourage Better Future Behavior

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Thank you!
Chris Priebe
CEO, Two Hat Labs
a research division of Two Hat Security
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