



Beat it. A Retrospective of Need for Speed: Hot Pursuit

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Criteriongames



Hello!



Criterion Games



10 Years. 7 Titles. 50m Players.

Criterion Games

CORE PILLARS

ACCESSIBILITY

INTENSITY

QUALITY

CONNECTED

INNOVATION



What are you doing here?

- Taking you behind the curtain on Criterion's 2010 **Need for Speed: Hot Pursuit**.
- Showing you how Autolog* was great and why you should build more asynchronous gameplay into your games. (*That's the bit I worked on ☺)



Why revisit Hot Pursuit?

- Focused, well executed core.
 - Huge budget AAA struggling with huge, sprawling scope
 - Hot Pursuit's Clarity, Focus & Execution still stand tall today.
- Let's talk **Autolog**.
 - More than just rivalries & friends' Leaderboard
 - Async play that puts friends before strangers
- Lessons still apply today.



Hot Pursuit Refresher

Exotic Cars. Epic Drives. Cops.

- Arcade Racing
- Play as Cop or Racer
- Exotic Licensed Cars
- 14th entry in Need for Speed
- Dual Cop/Racer event progression
- Racing, Chasing, Weapons, Takedowns, Boost
- XP based ranking system on each side
- XP unlocks Vehicles (56 Racers / 50 Cop cars)
- Autolog - Connect. Compare. Compete. A suite of connected social features and personalised Recommendations based on how your friends play.



A LITTLE OVER

**6 YEARS
AGO...**



Criterion does Need for Speed

PILLARS



Exotic Cars



Epic Drives



Cops

...back to it's roots

+ *Criterion Special Sauce*

Beautiful **Vehicle Control**

Cinematic **Spectacle**

Friends at the heart of the game

Friends at the Heart

- Play with/against real people offers longevity
 - A player won't learn the patterns of a human opponent
 - No limit to a improving your skill (unless you're world #1)
 - Synchronous Online Multiplayer is one way to achieve this
- Play with/against Friends is more memorable
 - Interactions are more meaningful when attributed to someone you know - it's more fun with mates.
 - Competition can spill over into real world conversations

Friends at the Heart

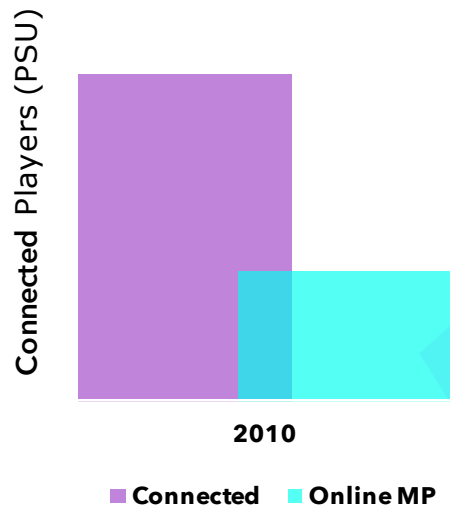
...But real friends lead real lives - it's hard to co-ordinate to be online at the same time



Mind the Gap

- More players connected, but not playing multiplayer.
- Synchronous Online isn't the only way to interact with other players

The Connected Gap

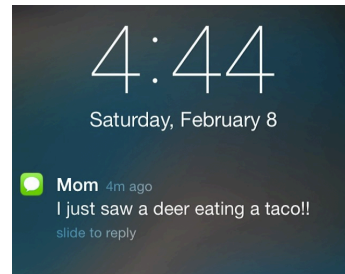


Asinkro-wha?

Synchronous



Asynchronous



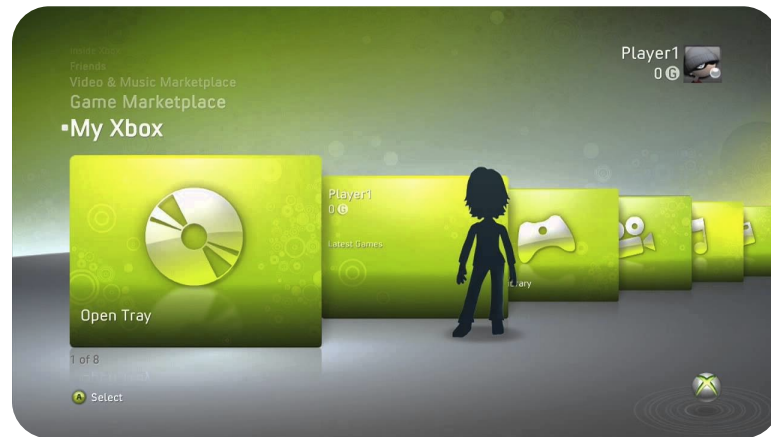
DISCOVERING AUTOLOG



Autolog v1: Friends in the Game

Getting social on console

- In 2009, Console social features were limited
- Most players < 2 friends
- We wanted Friend Discovery, to make it easier to find friends
- We wanted Sharing, Commenting, Profile pictures



Autolog v1: Friends in the Game



Built in Web:

- Same functionality available out of game.
- Rapid Prototyping - worlds ahead for iteration speed.

Social Fundamentals:

- A social network, a personal profile, a wall
- Sharing photos - 'Dreamshots' & 'Realshots'
- Growing friends network

Autolog v2: Do the work for the Player

Automatic Story Generation

- Human Stories
 - Game Actions -> Human stories
 - Game mode Feeds
 - Aggregated multiple events
 - Timelines
- Relevant Comparisons
 - Tracking leaderboard changes
 - Adding flavour with rich Stats:
 - Vehicle used, # Attempts, when record was set



Autolog v2: Do the work for the Player

Play It. Direct from the Feed.

- Call to action.
- Shortcut directly to the event.
- Web driven event starts. We put them everywhere.



Autolog v2: Do the work for the Player

The RAPID RESPONSE Feed

- Each event attempt was recorded.
- Actions tracked, comparisons made, shared back to a player and out to their friends.
- A feed per event type, split by Cop or Racer.

The screenshot shows a user interface for a game's 'RAPID RESPONSE' system. At the top, a player profile for 'PETE LAKE' (VODKABOYPETE, SERGEANT) is displayed with a progress bar. To the right are tabs for 'WALL' and 'PHOTOS', and an 'UPDATE 12s' indicator. The main area is divided into three sections: 'RESPONSE RECORD' showing a police badge and 'SGT. PETE LAKE'; a central 'BRIDGER ROAD' event window with a 'GO AGAIN' button; and a 'Fox Lair Pass' event window. Below these is a 'RESPONSE TIMES' table for the 'Bridger Road' event, listing four players and their times. To the right of the table is a 'Report' section with a text update. At the bottom is a '# TICKER' section.

RESPONSE TIMES	
[Bridger Road]	
1 - Pete Lake	1m 51.3s
2 - Iain Angus	1m 51.6s
3 - Thomas Belmont	1m 52.5s
4 - Steve Cuss	1m 53.2s

Report

Sgt. Lake sets new Personal Best time of 1:51.3 on Bridger Road.
3rd Attempt in the RB Interceptor.
Up 3 places to 1st on the Bridger Road SpeedWall

TICKER

Autolog v2: Do the work for the Player

- Hooray! We've created Need for Speed: Social 😊
 - The game was presented through the lens of a social network
 - Loads of features to share the story of how you & your friends play the game
- Who wanted Need for Speed: Social? ☹️
 - Engaging, but not fun.
 - Feature Creep. Signal to noise ratio was hiding the fun.



Autolog v3: Beat It.

- How are these Social Features in service to the Game?
 - We took the automated feed & **curated it. Automatically.**
- Most compelling motivation: **Someone Beat You.**
 - '[A Friend] Beat You' became play **Recommendations**
 - Be Faster. Time is the most natural comparison.
 - Rich stats and comparisons used to flavour every choice.



Autolog v3: Beat It.

- Dedicated Recommendations Feed
 - Every Recommendation worded as a BEAT IT
 - Balanced Signal:Noise ratio - never more than 5 cop & 5 racer recommendations
 - Prioritise Fresh BEAT YOU stories
- New, responsive UX
 - Rebuilt Website as Web-driven, Console oriented UX



ANATOMY OF A SESSION



LIVE, CONNECTED FRONT END

Social Functionality, simple UX

CONNECT.








WALL

MattWebster



TOTAL BOUNTY: 1,406,255



WANTED LEVEL 16 17 18 19

WANTED III





dizee_rascal22 - 12 days ago - 2 comments



 "banana"

Recent Contributors:  MattWebster  dizee_rascal22



MattWebster - 3 days ago




 "Fun to play with FX"

MattWebster - 3 days ago

 "Ghosts..."

dizee_rascal22 - 4 days ago


 I just took on ThomasBelmont's Recommendation on ULTIMATELY OPEN and beat it by 1.77s. No...





PREVIEW


ULTIMATELY OPEN


POWERED BY
AUTOLOG

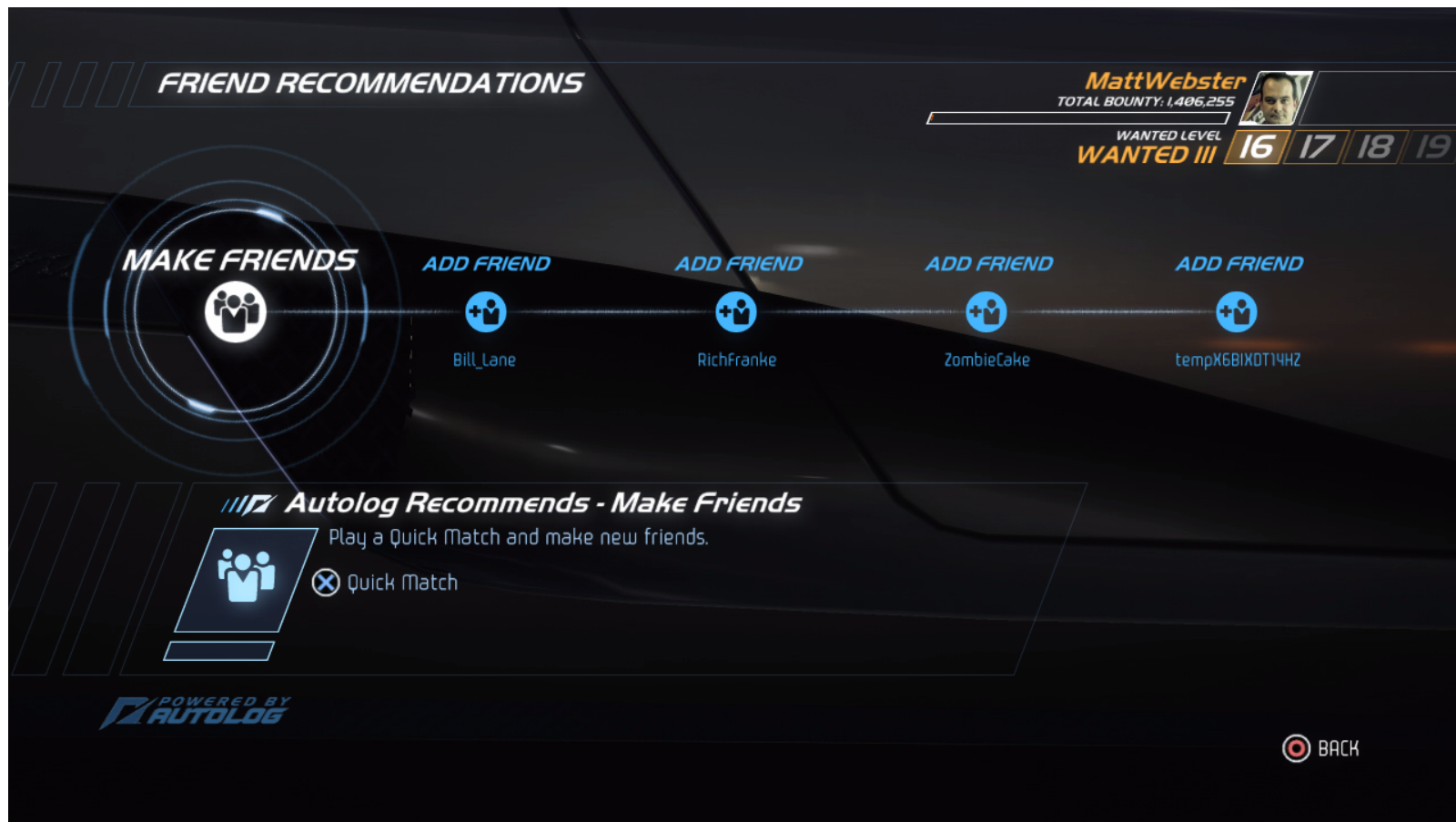
 NEW POST

 REPORT POST

 VIEW PLAYER

 BACK

 EXPAND



FRIENDS AT THE HEART OF THE GAME

Friend comparisons everywhere

COMPARE.



SELECT EVENT

EAST GORGE CANYON

VANISHING POINT

PREVIEW

ESCAPE LANE

HOT PURSUIT

STAMPEDE

HOT PURSUIT

JET SET

RACE

POWER STRUGGLE

HOT PURSUIT

CALM BEFORE THE STORM

HOT PURSUIT

MattWebster

WANTED LEVEL

WANTED III

16

17

18

19

VANISHING POINT

SPEEDWALL

		TIME
1	Matt_Follett	1:12.65
2	MattWebster	1:12.71
3	dizee_rascal22	1:12.80
4	alexb	1:13.01

POWERED BY AUTOLOG

DRIVER DETAILS

SCROLL SPEEDWALL

VIEW PLAYER

VIEW 5 WALL POSTS

BACK

SELECT

VANISHING POINT: Finish time was 39.15s slower

SELECT EVENT

EAST GORGE CANYON

MattWebster

WANTED LEVEL 16 17 18 19

VANISHING POINT

SPEEDWALL

TIME

1		Matt_Follett	1:12.65
2		MattWebster	1:12.71
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POWERED BY AUTOLOG

DRIVER DETAILS

SCROLL SPEEDWALL

VIEW PLAYER

VIEW 5 WALL POSTS

BACK

SELECT

VANISHING POINT: Finish time was 39.15s slower

SELECT EVENT

EAST GORGE CANYON

MattWebster

WANTED LEVEL
WANTED III 16 17 18 19

VANISHING POINT

FRIENDS COMPARE

2 days ago

Finish time was 39.15s slower than your Personal Best. You remain in 2nd place, 0.08s ahead of dizee_rascal22. Matt_Follett is 0.07s ahead.

POWERED BY
AUTOLOG

VANISHING POINT: Finish time was 39.15s slower

DRIVER DETAILS SCROLL SPEEDWALL

VIEW PLAYER VIEW 5 WALL POSTS BACK SELECT

SELECT EVENT

EAST GORGE CANYON

MattWebster

WANTED LEVEL 16 17 18 19

VANISHING POINT

SPEEDWALL

ATTEMPTS

1		Matt_Follett	14
2		MattWebster	39
3		dizee_rascal22	1375
4		alexb	18

3		dizee_rascal22	1:12.80
4		alexb	1:13.01

POWERED BY

AUTOLOG

VANISHING POINT: Finish time was 39.15s slower

DRIVER DETAILS

SCROLL SPEEDWALL

VIEW PLAYER

VIEW 5 WALL POSTS

BACK

SELECT







THE RECOMMENDS LOOP

Nudge for Competition and see it through

COMPETE.





AUTOLOG RECOMMENDS

ADD FRIENDS

Matt_Follett BEAT YOU

DUEL

dizee_rascal22 BEAT YOU

Matt_Follett BEAT YOU

dizee_rascal22 BEAT YOU

CHALLENGE FRIEND

MattWebster
 BOUNTY TO NEXT RANK: 75,480
 SCPD COP RANK **SERGEANT III** 13 14 15 16

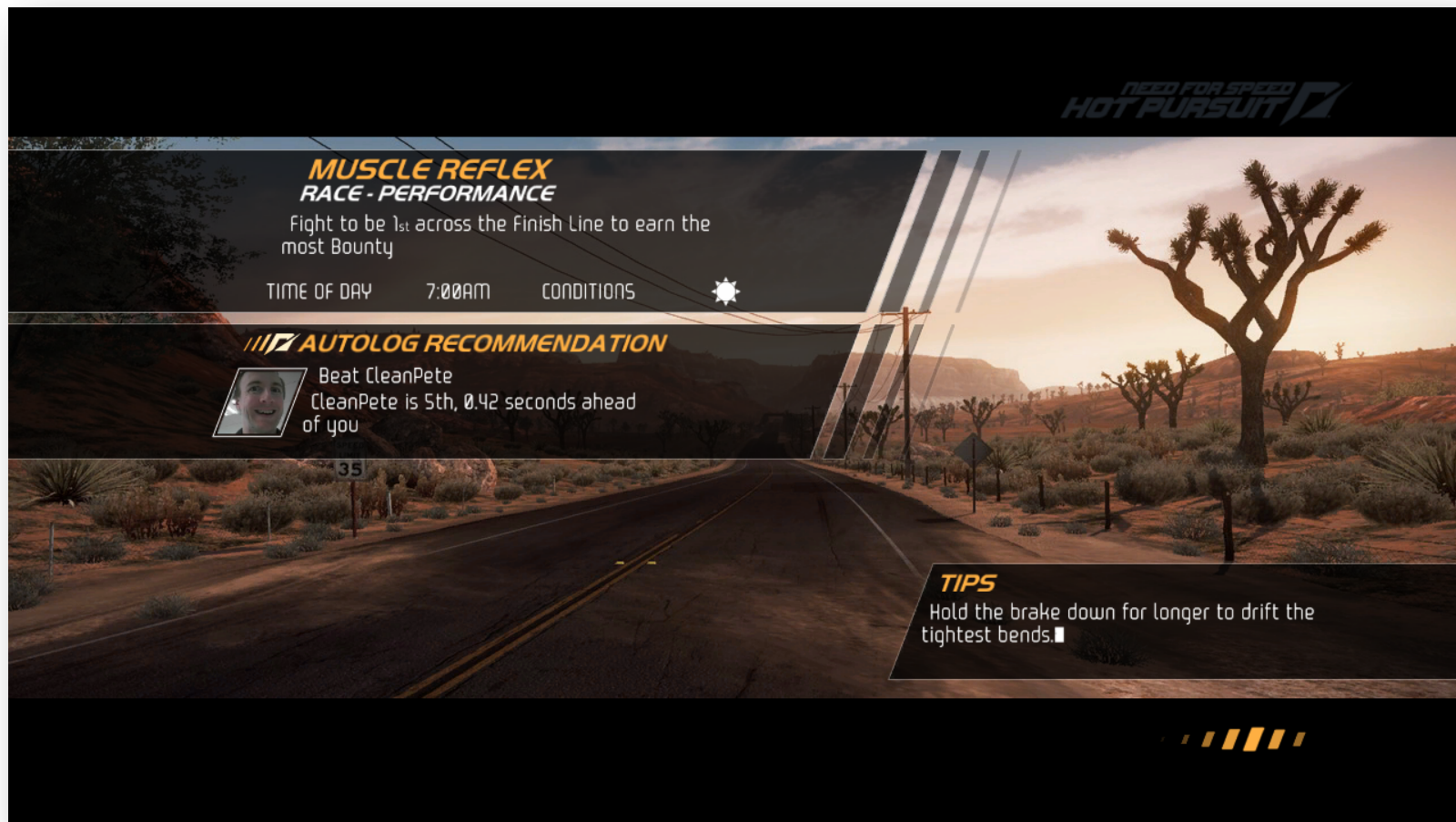
TWIN TURBO
 Play now to take 1st from Matt_Follett
 Matt_Follett beat you in TWIN TURBO with time 22.22 seconds faster than you.
 Set New PB 3:46.24 1,000

TWIN TURBO SPEEDWALL

		TIME
3	Craig Sullivan	3:44.32
4	Matt Webster	3:46.24
5	Hamish Young	3:46.59
6	Steve Cuss	3:54.42

POWERED BY AUTOLOG
☐ VIEW PLAYER

SCROLL SPEEDWALL **BACK** **SELECT**





The Recommends Loop







AUTOLOG RECOMMENDS

ADD FRIENDS

Matt_Follett BEAT YOU

DUEL

dizee_rascal22 BEAT YOU

Matt_Follett BEAT YOU

dizee_rascal22 BEAT YOU

CHALLENGE FRIEND

MattWebster
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5	HamishYoung	3:46.59
6	Steve_Cuss	3:54.42

POWERED BY AUTOLOG

VIEW PLAYER

SCROLL SPEEDWALL BACK SELECT

THE OUTCOME



Reception.

- "Did Hot Pursuit's Autolog Just Save the Racing Genre?" - Kris Graft, Gamasutra
- "Hot Pursuit's new competition engine is one of the coolest additions to game design in a long time" - Ryan Geddes, IGN
- "Closes the gap between single-player & multiplayer experiences like no other game before it." - Nick Chester, Destructoid
- "...creates a beautifully seamless sense of competitive multiplayer action, even if you're never all online at the same time" - Keith Stuart, The Guardian

Quality



At Launch was the highest rated*
Need for Speed game

*according to Metacritic

Data.

- **45%** of events were started because of a recommendation
- On average, a player took **5 attempts** to beat a recommendation
- **17%** of event starts were through the Autolog Recommends page

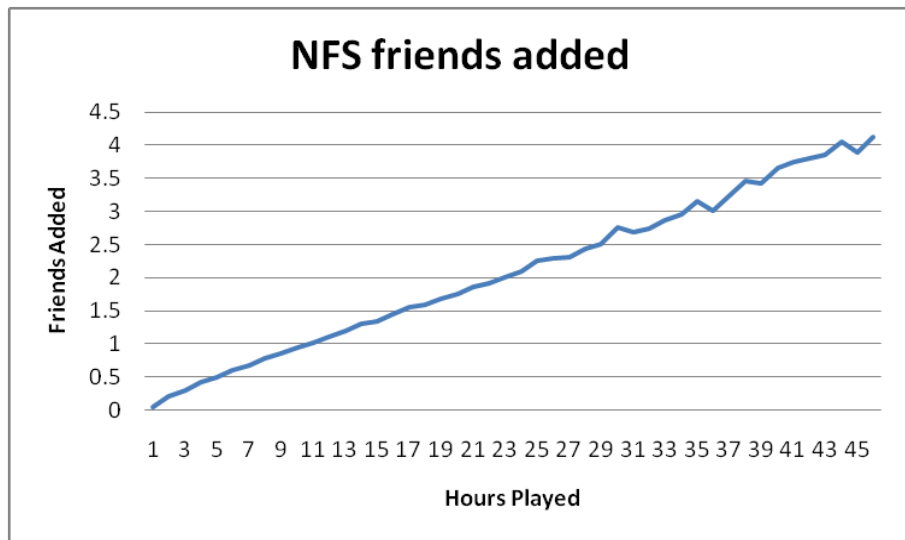


More Data.

- The most competed over event was **Vanishing Point**
 - Low barrier to entry - early in the progression
 - Simplest of tracks - two turns to really master the vehicle
 - Looked Amazing
 - 'Preview event' - Showcased fast, fun car with depth of handling (Pagani Zonda)



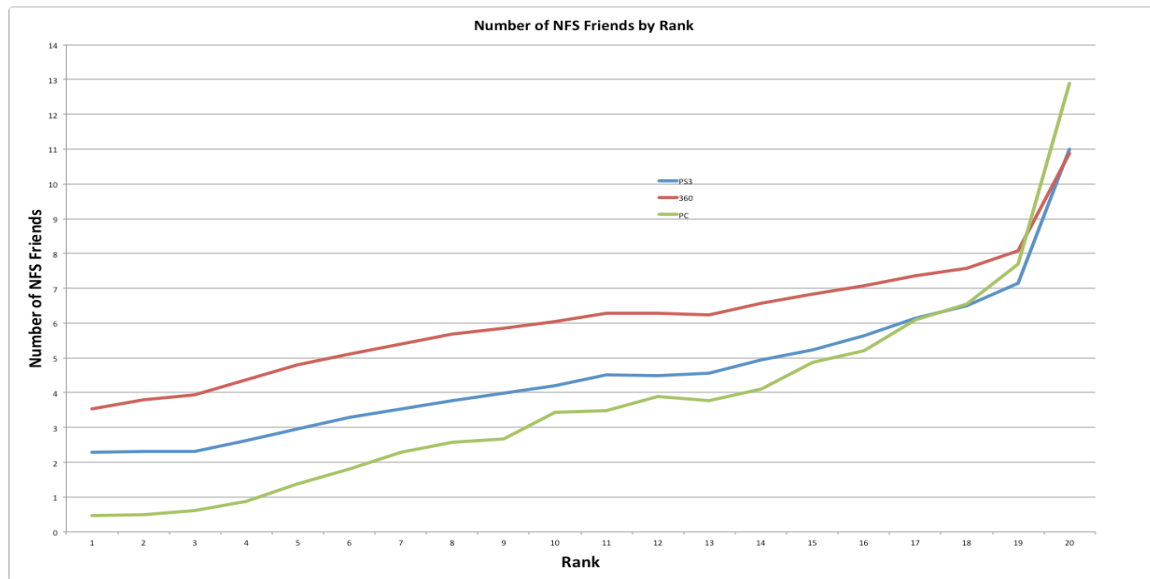
Data Data Data!



A straight line?

- The longer players played, the more NFS friends they had.
- The more NFS friends a player had, the longer they played.

But wait, there's More! Data.



- Even after reaching the top rank, players kept adding friends, squeezing further play through Autolog

Trash Talk

- Real world impact
 - Competition spilled over into real life.
 - People continuing the conversations the game started for them



Tom K. @TheCapnAwesome · 6 Jan 2011

@jwDriggs How in the world did you get 8.56 seconds on that **Hot Pursuit**?? I must have tried 50 times to **beat** you! #Autolog #HotPursuit



iamadamsullivan @iamadamsullivan · 30 Oct 2010

NFS: **Hot Pursuit's Autolog** is going to be really addictive- @RJFestejo and @MvdMbladiebla you have some times to **beat**! ;)



MC Powers @BoothNinja81 · 1 Dec 2010

a fellow racer **beat** 4 of my NFS **Hot Pursuit** times. I promptly logged on and slapped him down in all 4 events. love. this. game. #autolog



Scary SpaceSlug Levi @LeviTriumphant · 12 Feb 2011

Asynchronous gameplay is my ideal method of multiplayer. Console games need to get on that tip. (**Hot Pursuit** was a nice start) #autolog #dog



Numbers.

To date, over

10 Million

players served.

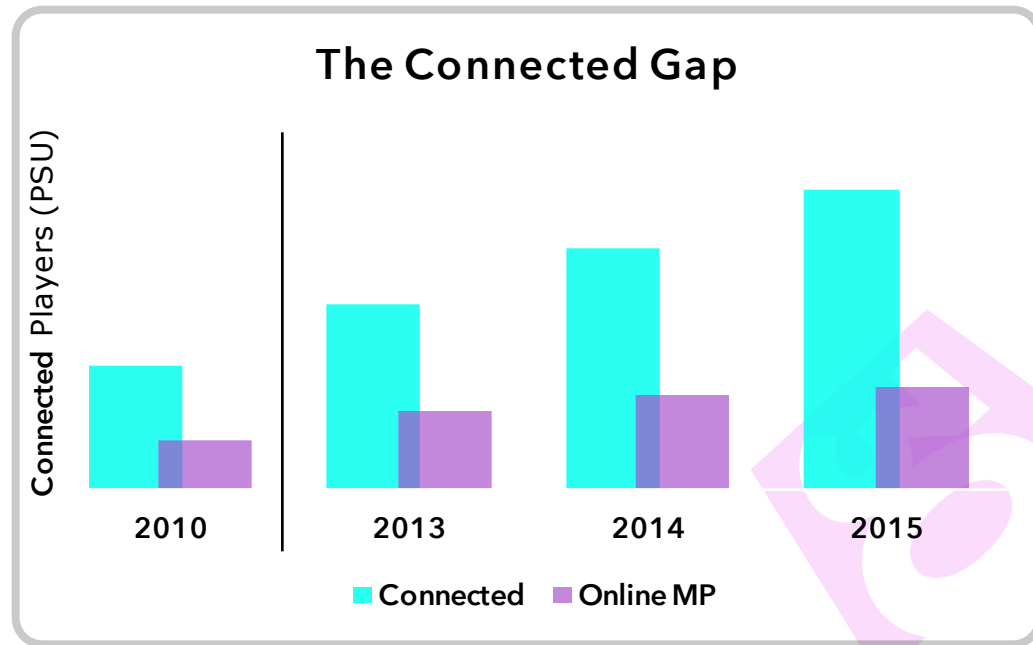


TODAY



Mind the Gap (still)

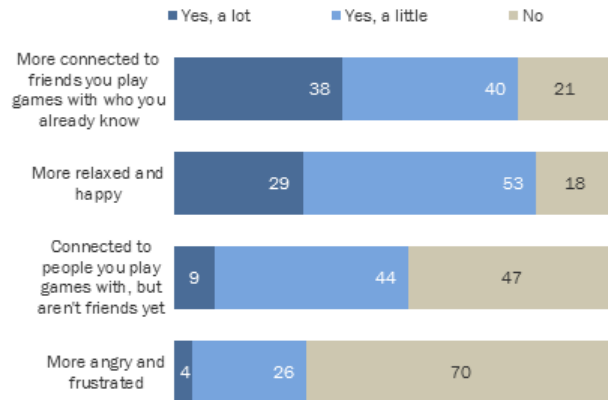
- More Players are Connected, but the synchronous gap still exists.



Real Friends still Better

Online Gaming Builds Stronger Connections Between Friends

% of teens who play online with others and feel...

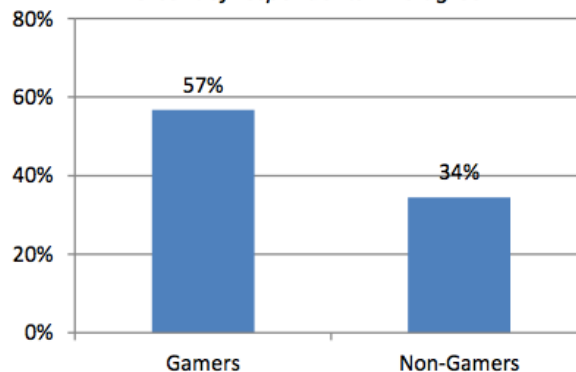


Source: Pew Research Center Teens Relationships Survey, Sept. 25-Oct. 9, 2014, and Feb. 10-March 16, 2015. (n=567 teens who play games with people online).

PEW RESEARCH CENTER

"My friends are the most important thing in my life."

Percent of respondents who agree



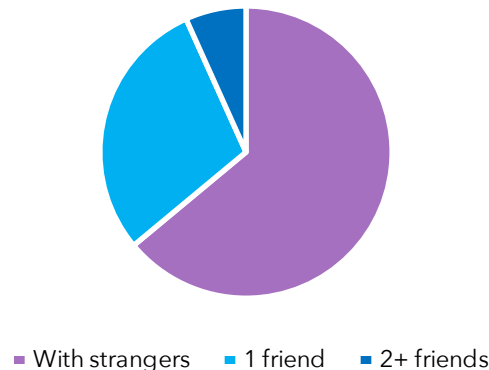
Source: LifeCourse online survey (2014)

...but still get hard to friends together

Still hard to all be online at the same time. Even harder with regular patches & updates!

Majority of players are playing synchronous online with Strangers

Matchmaking in NFS: Most Wanted 2012



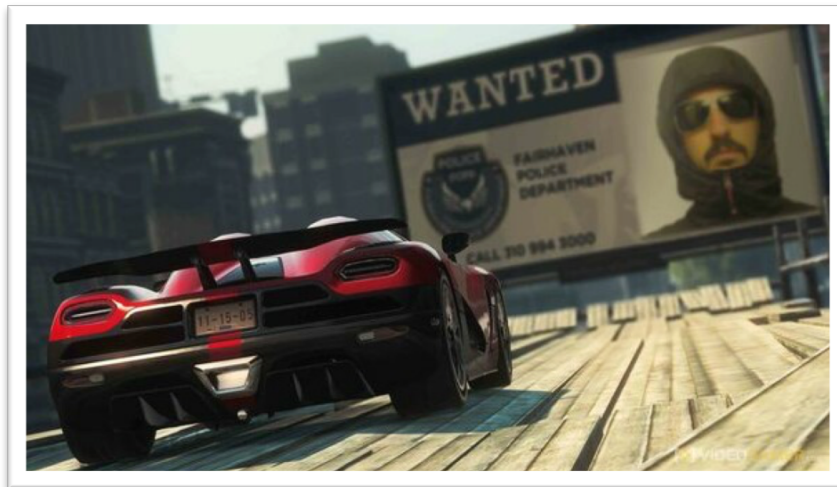
The Opportunity is still there

- Async play with friends drives engagement & enjoyment.
 - More approachable & accessible than Online Multiplayer
 - Interactions with Friends more Meaningful
- What other types of Asynchronous social play are there?



Async Play on Console

- The Race is on...
 - Need for Speed: **Most Wanted**
 - **Forza** Drivatar
 - **Drive Club** Rewards & Challenges
 - **Real Racing** Physical Ghosts



Async Play on Mobile

- Mobile
 - Iterative releases with Telemetry about how people play
 - Accessible, short & flexible playtime, Synchronous never worked well
 - All the friends are right there in the Contacts
 - Always connected. Can always give a 'nudge'



Async Play in Tabletop

- Board Games
 - Social mechanics - Trust, Deception, Peer pressure, Collaboration



Play play play!

- Play everything. Try everything. Think invention, not evolution.
- Use real world conditions.
 - Don't just test all sitting together, at the same time.
 - Playtest across multiple sessions
- *The Connected Gap* represents a huge space for Innovation.

In Summary

- Autolog focused & intensified the core of Hot Pursuit
 - Hot Pursuit is a pure arcade racer, with Criterion Special Sauce
 - In 2009, we saw Asynchronous play as a big opportunity
 - The game automatically generated rich comparisons with friends
 - We pared it back to BEAT REAL FRIENDS, amplifying the core racing experience
- The outcome was people were adding more friends, and playing with real friends, with more replay value

In Summary

- The *Connected Gap* is still there
 - More players are online, but still not playing synchronously
 - There's great Async play out there, but not much on console
- Get Social, invent new asynchronous Mechanics
 - Big opportunity, primed for breakthroughs



BEAT IT



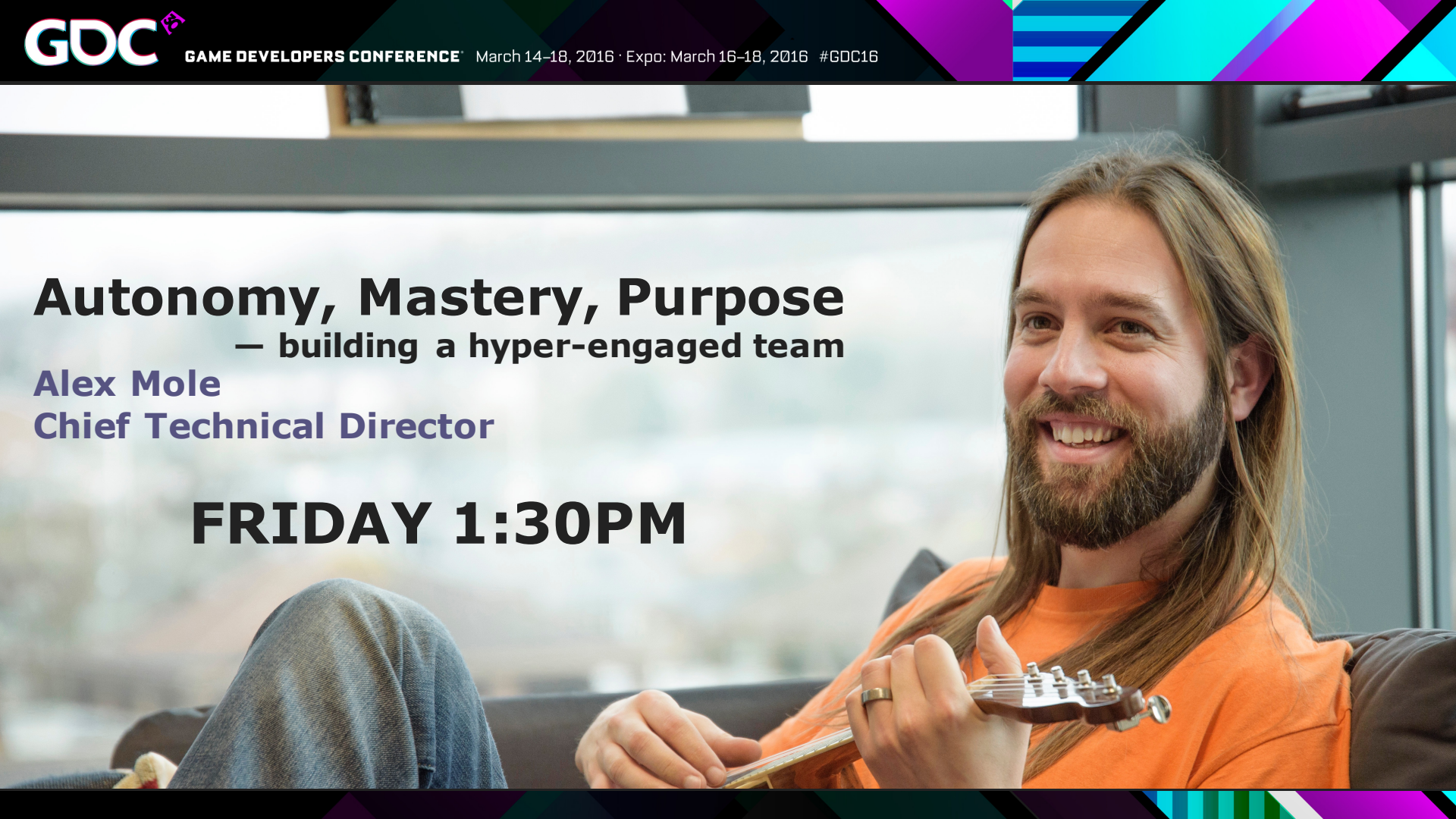
Autonomy, Mastery, Purpose

— building a hyper-engaged team

Alex Mole

Chief Technical Director

FRIDAY 1:30PM



...but first

Q&A

Criteriongames



*Psst... We're hiring. Check open positions at
www.criteriongames.com*