



March 20-24, 2023
San Francisco, CA

Game Designer's Notebook

Go Make a Merge game!

Jason Mai

#GDC23

POKER
WORD MINE
MERGE

FABRIANO

2022-23

FABRIANO

FISH
2022

2021-22

Neon
em-st/
Tom Wizard

SIC /
BASIC

FABRIANO

WORD
SLINGER

BEAT POET /
COOKIES

TEXAS 2-STEP

FABRIANO

2021-22

2014-2020

Pro-Am,

Pop Caps,

SPARJES

Background

- New **VP of Creative** at BigFish – yay!
- Lifetime of casual game development – nice
- Worked on word games, board games, card games, **Bejeweled**, **Zuma**, **Plants vs. Zombies**, **Solitaire**, **Sims 4** – good for me
- Never worked on a Merge game – so?
- **EverMerge** is our biggest hit – uh-oh
- How do I steer this? – hmmm...



Game Designer Reflex

- **Fake It!**
 - Talk about characters, narrative, visuals, surface impressions
- **Apply Transferable Skills**
 - Tear down a game, critique its usability, play thru the FTUE, build a spreadsheet, deconstruct core loop, do design stuff
- **Try Lenses**
 - Explore player motivations, layers of overlapping goals, etc.
- **Read Studies**
 - Segmentation, player surveys, competitive analysis
- **Get Deep**
 - Introspection, speculation, discussion with other Designers

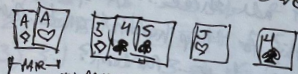


A Few Insights

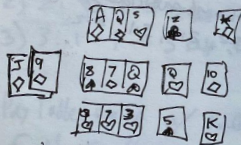
"that feeling when you peek at your cards
and see pocket aces."

→ pay the player as they go.

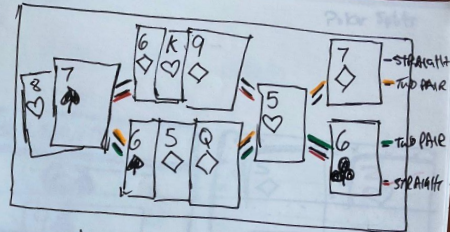
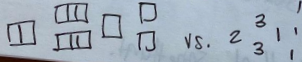
Like a slot machine when the first
real or two show WILD or BONUS !!
It only goes UP from there... More \$



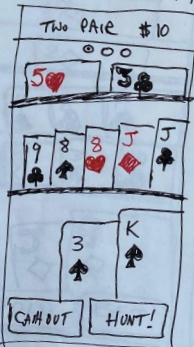
Is it like paylines? Bet Max line, Two, Five
Same pay for each hand, but x2, x3, x4



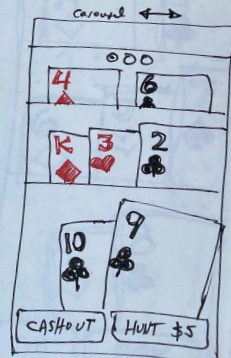
Use Nick Borley's poker math for # cards in hand
to figure payouts / # dealt



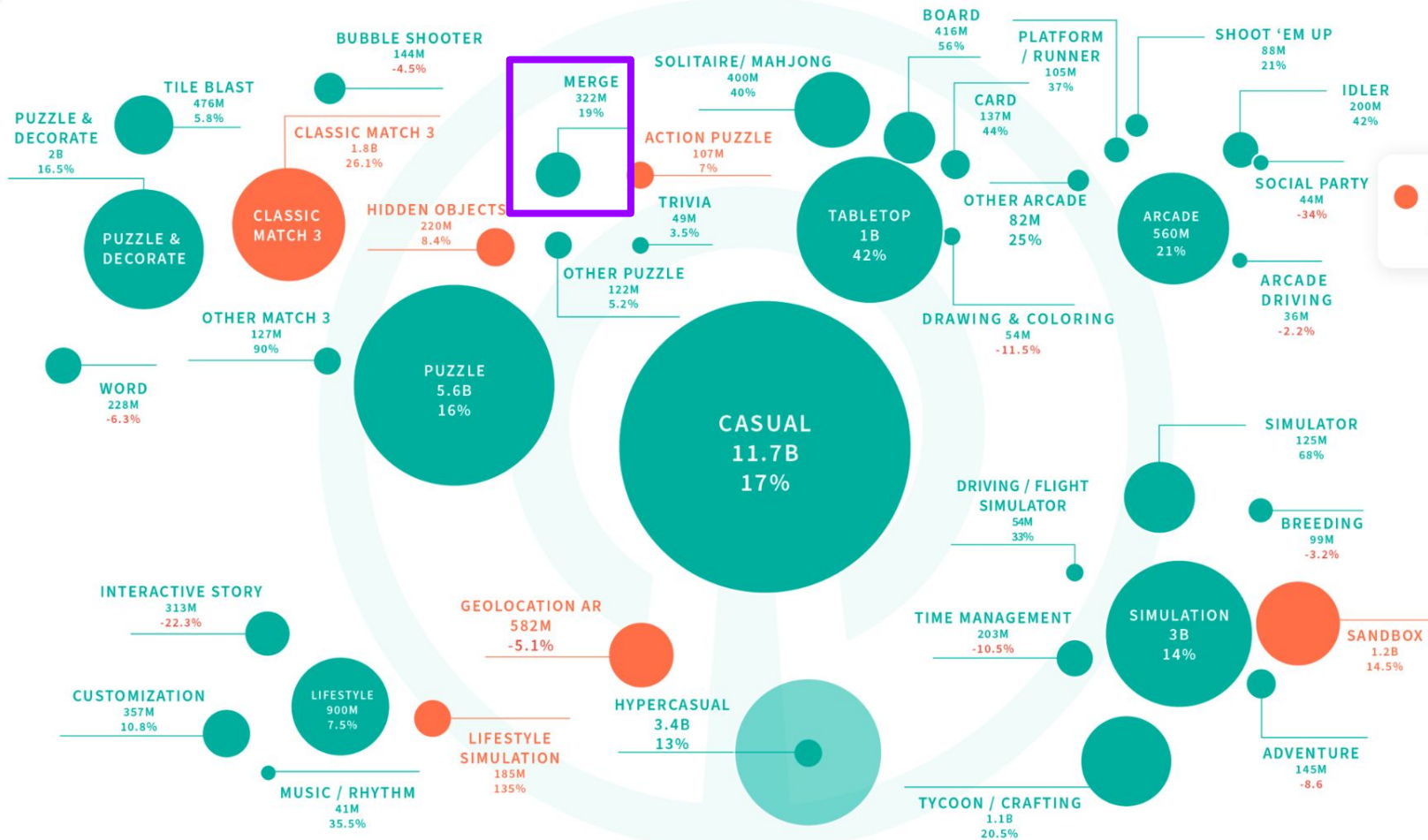
2 splits - 4 paylines



Roth/Hunt - 3.1x

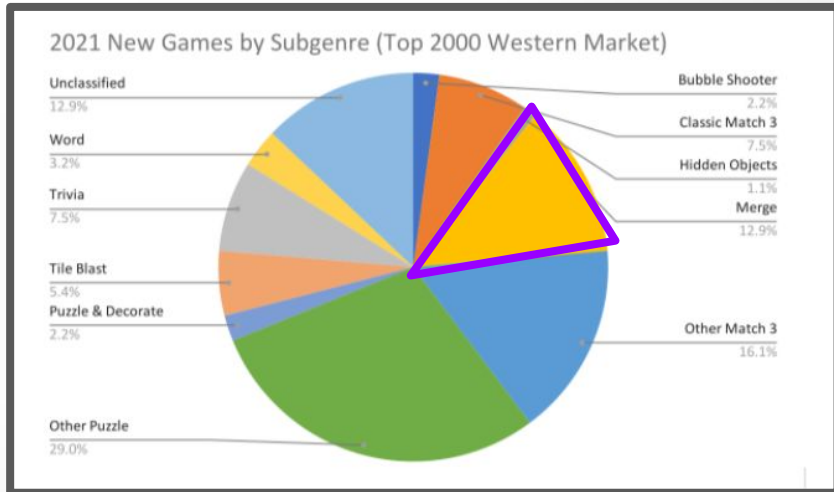


TEXAS HOLD'EM POKER



Merge Games

- Merge Dragons
- EverMerge
- Merge Mansion
- Love & Pies
- Merge Magic
- Merge Gardens
- Merge Inn
- Merge Villa
- Merge Design
- Merge Adventure
- Merge Friends
- etc.



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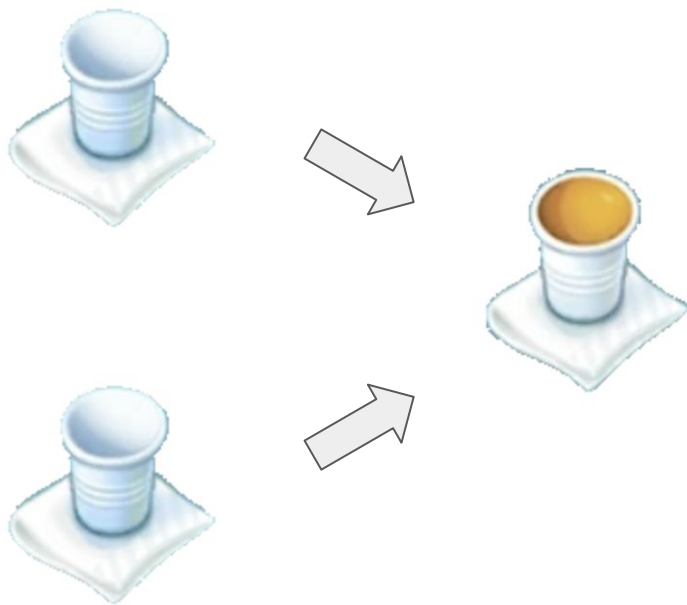


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Built on Pyramids of Consumption

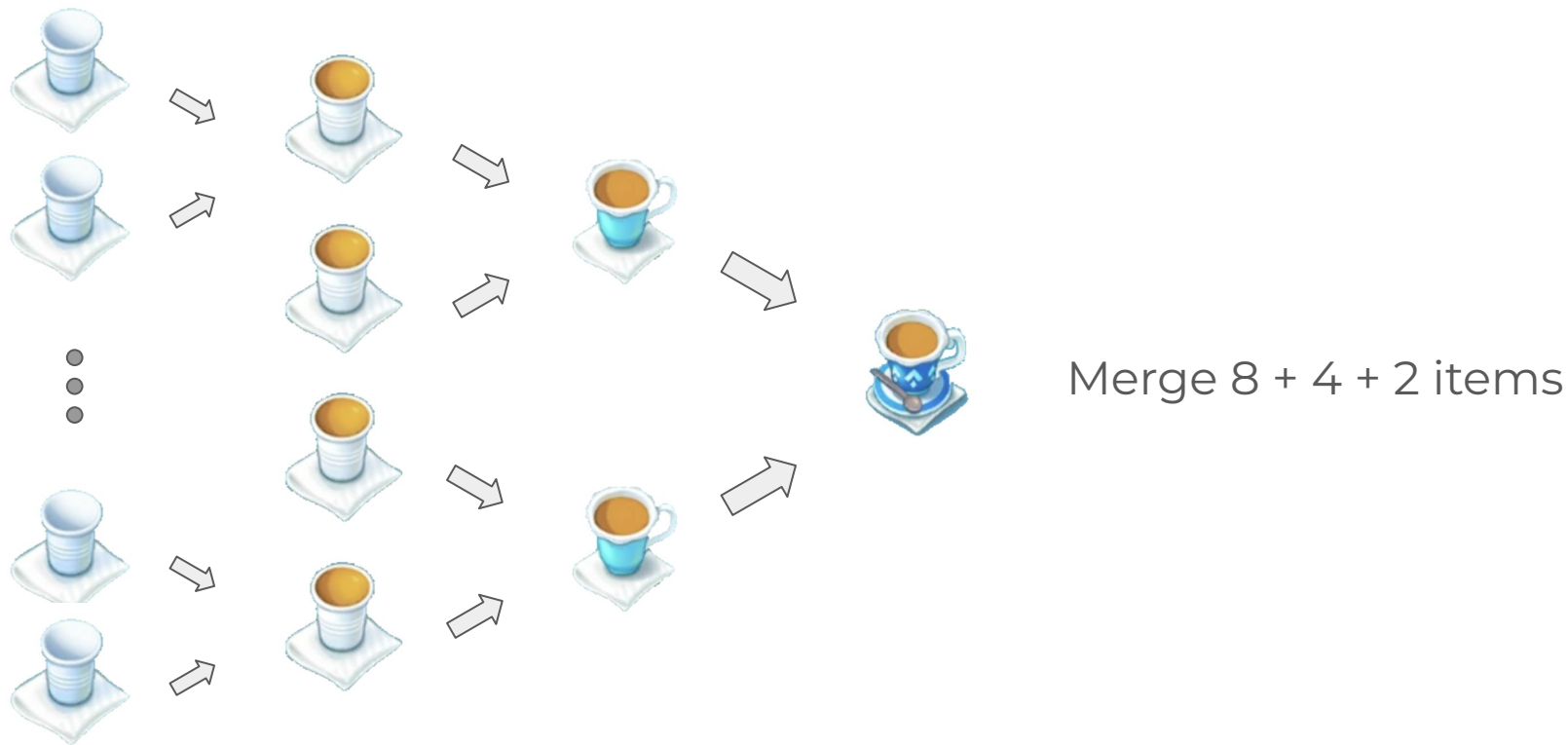


Merge 2 items to get 1

Built on Pyramids of Consumption

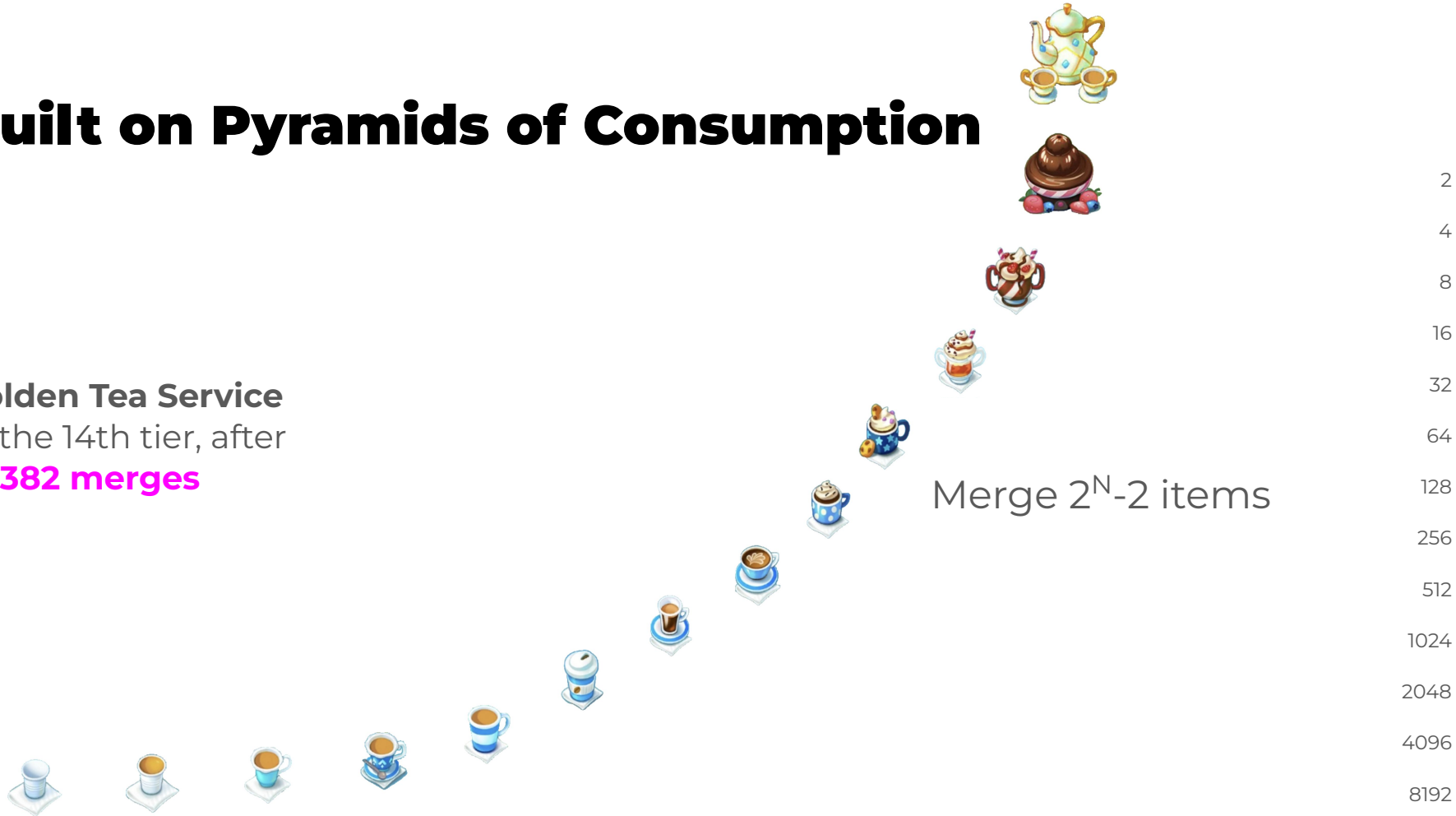


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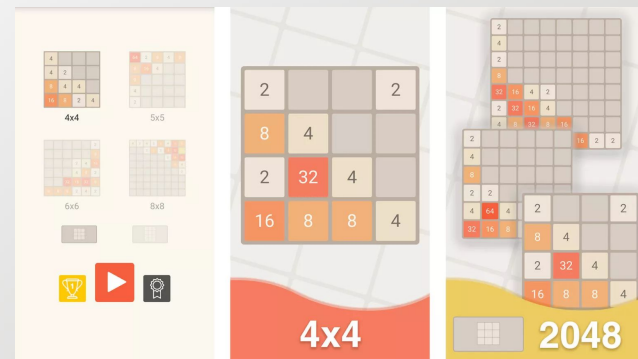
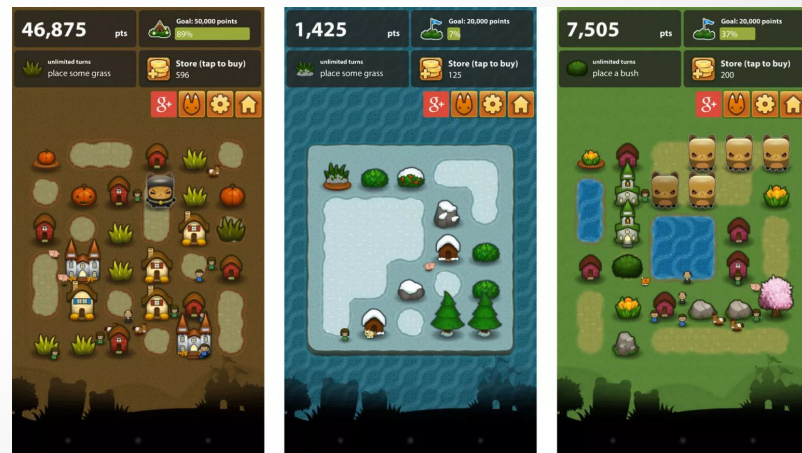
Built on Pyramids of Consumption

Golden Tea Service
at the 14th tier, after
16,382 merges



Merge Comes in Flavors

- First, our ancestral lineage
 - Threes, 2048, Triple Town, et al




Merge Comes in Flavors

- First, our ancestral lineage
 - Threes, 2048, Triple Town, et al
- Now, Grid vs. Camp
 - The fixed board, seen as a top down **grid** usually portrait
 - vs
 - A scrollable **camp** seen in isometric view usually landscape



Merge Camp is really about Relaxing

- Meditative and calming
 - Tap-tap-tap-tap-tap-tap-tap; merge-merge-merge
 - Such long sessions! **~1 hour**
 - Player **focus rotates**:
 - Energy
 - Resources
 - Inventory
 - Sorting & organizing
 - **Expand territory**
and make layout choices
- 



Merge Grid is more about Juggling

- Too many merge chains, too few grid squares
- **Trade-offs! Decisions!**
- Achieve objectives
- Feel clever and accomplished
- Suited to storylines & ensemble **cast of characters**
- Often paired with progression **off-board** in the meta game



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Merge as a Metaphor for the “American Dream”

fortune resources gold mine splendour^{UK} happy days clover good life bed of roses lap of luxury life of ease life of Riley
a place in the sun Fat City profitability material comfort welfare hog heaven easy street comfort luxury the good life
deep pockets Godspeed richness plenty good fortune well-being opulence richdom success gravy train
comfortable circumstances thriving boom wealthiness security affluence exorbitance ease prosperousness abundance
wherewithal privileged circumstances successfulness contentment life of luxury prosperity good times means plenteousness
profit leisure satisfaction growth health effectiveness milk and honey riches luck pile life's work joyfulness
relaxation serenity fruitfulness advantage repose enjoyment possessions assets property tidy sum merit good luck
tranquillity^{UK} weal tranquillity^{US} sufficiency restfulness calmness product of working life paradise splendor^{US} lifework mint
good calm rest easiness content gratification idleness happiness joy laurels wad wealth reward indulgence

*“John felt he was living the **American dream**. He was free to live where he wanted and improve his station in life through hard work and perseverance.” – WordHippo*

Merge as a Metaphor for the “American Dream”



Merge as a Metaphor for the “American Dream”

- A tale of abundance, amidst **never-ending supply**
- **Rags to riches**, bootstrapping from garbage items to luxury goods
- Buffet of opportunity, social mobility, **upward progress**
- A tale of **pioneering**, taming a wild landscape, shaping it into a civilization
- You win by combining a **materialistic impulse** with **organizational skills**
- It's a naive tycoon game, **fantasy capitalism** in a growth economy
- The delight of every **Etsy / Pinterest / Houzz** crafter

⇒ Game every day, organize things, and get rich doing it

What do I *DO*
with all that?



How should I steer new Merge games?


1. Interrogate Gameplay – to evolve

- What delights in the moment-to-moment? Amplify that.
- What drives the player to return? Offer more of that.
- What's dissatisfying / disappointing in current leaders? Ameliorate that.

2. Vary Parameters – to innovate

- Decisions – make a list, keep the fun ones, drop the dull ones
- Space & Time – introduce rules about *proximity, layout, terrain, weather, seasons, duration*
- Dependencies – add complexity, decouple systems

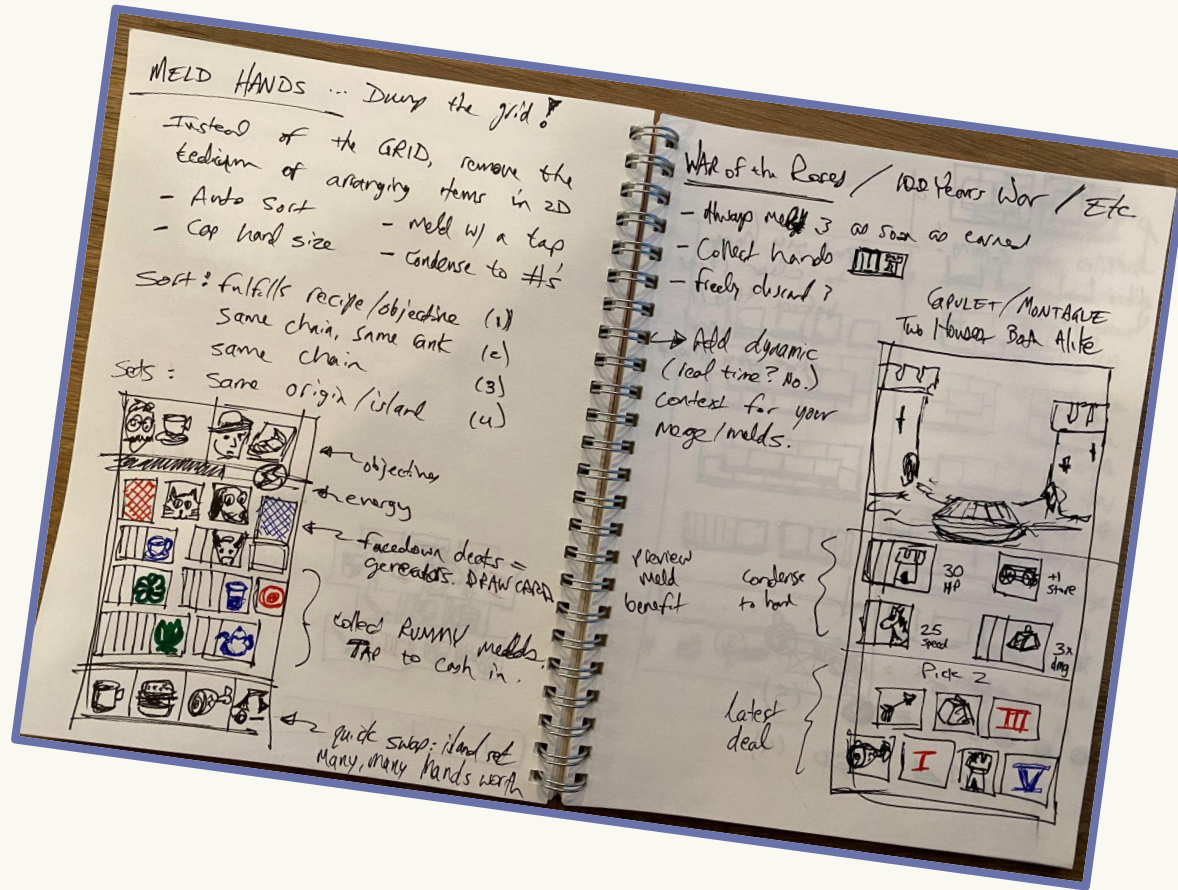
3. Catalyze Insights – to disrupt

- Where I spend my time 

Interrogate Gameplay

To Evolve Existing Product

+1



What Delights Moment-to-Moment?

+1

First, I think about actual the game play...

- What polish, animations, juiciness, doobers, **rewarding visuals** are key?
- What **pace of acquisition**, growth, expansion, tycoon-like enrichment works?
- What control scheme, **snap-to-it-ness**, visual confirmation, haptics, SFX?
- How could you simplify, clarify, intensify, focus the player's **decision making**?
- How much memory / **cognitive load** is required?
- How many micro-decisions, where do players look, what am I thinking about?

E.g. 5-tiered Haptics. Highlights on matching items. Surprise bonus payouts.

What Drives the Player to Return?

+1

But also, the meta game...

- What stories, narratives, characters, or **dramas resonate** most strongly?
- What **unfinished goals** remain, nagging at their brains?
- What **success awaits** the player? What stored up potential ready to tap?
- How easily can players **pick up where they left off** and remember the plan?
- What **nudges** in real-life, or advertised changes to the meta-game, or social obligations, influence their return?

E.g. **Mystery**. **Nemesis**. **Timers ready**. **Holiday decorations**. **Happy hour**. **Recap**.

What's Dissatisfying about Existing Games?

+1

Go negative, and make it a positive...

- What need is left unmet?
- What **quality-of-life** feature would make game sessions **less frustrating**?
- When you look back at your hours, what do you **regret**?
- How do you feel about the **aesthetics**, dynamics, narrative?
- What kind of **power inflation** would be most welcome?
- Where do you **sag, slow, dry, bore, grind**?

E.g. Undo Button. Merge Confirmation.

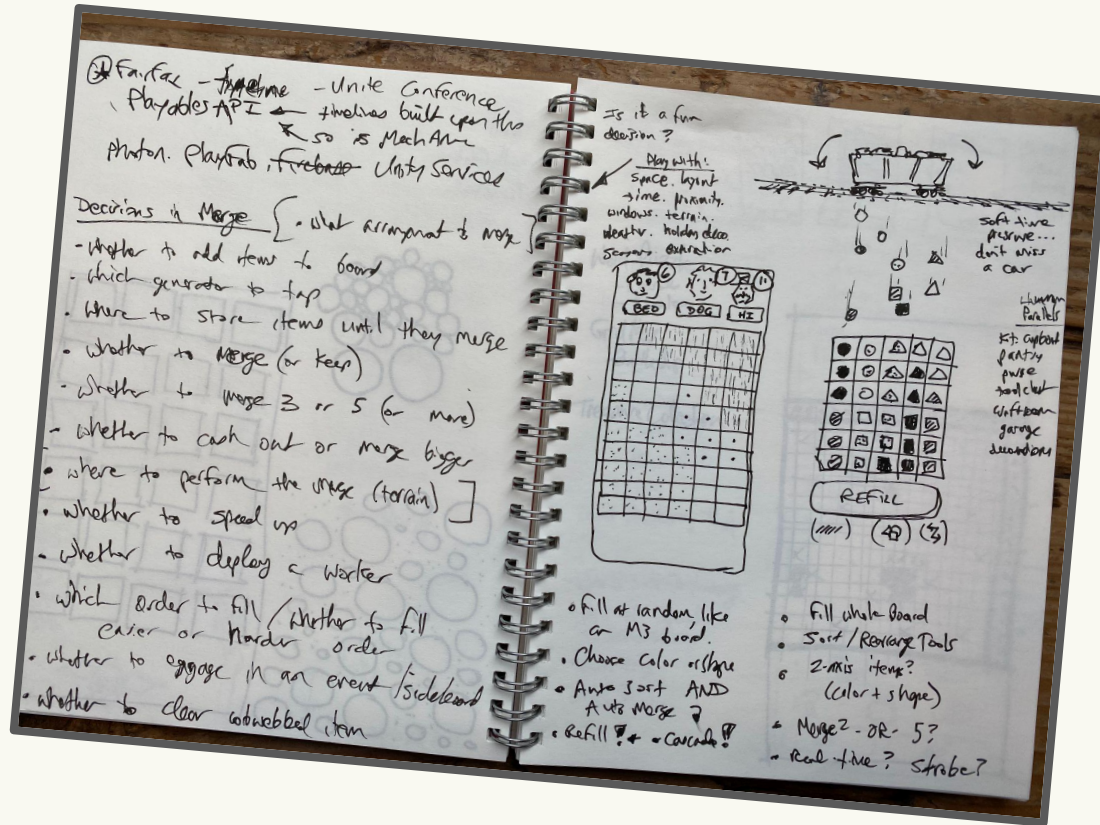
Merge Magnet. Bag of Holding. Spotlighter.



Vary Parameters

To Innovate a New Product

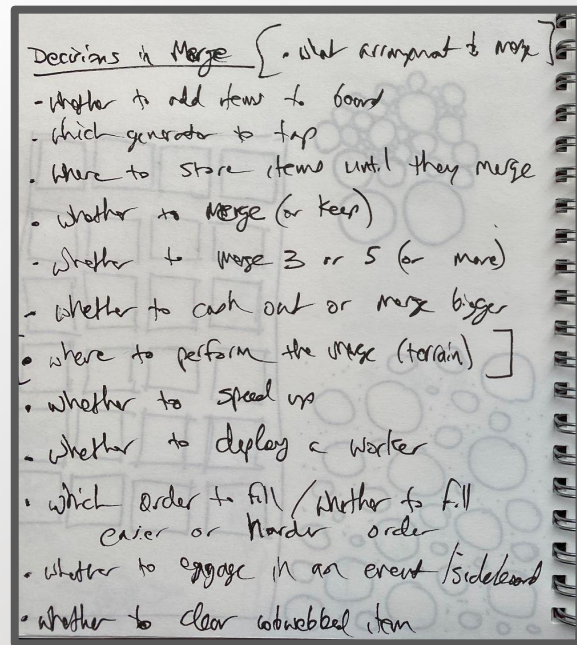
x2



Curate the Decisions Players Make

x2

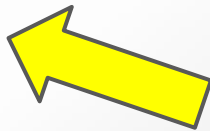
- How many new items to add to the board
- Which generator to tap
- Where to store items while waiting to merge
- Whether to merge now, or keep for later
- Whether to cash out, or merge bigger
- Whether to deploy a worker
- Whether to speed up building
- Which customer order to fill
- Whether to engage in an event / sideboard
- Whether to clear a cobwebbed item



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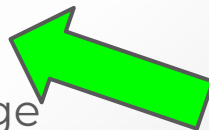
E.g. Is this fun? An interesting decision?

Tap-tap-tap-tap-tap.

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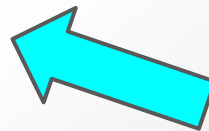
Combine these two decisions into one.



Curate the Decisions Players Make

x2

- Which recipe to pursue → spill out max pieces



- Where to store items while waiting to merge
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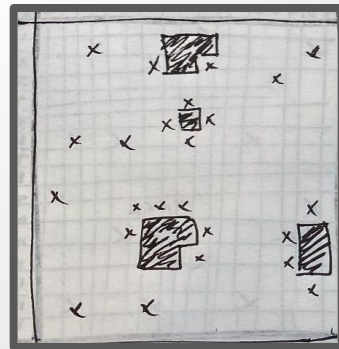
Tap a generator ONCE to fill the whole board with enough items to reach the next merge

Introduce Rules About Space & Time

x2

Change the outputs of the Merge board based on:

- **Proximity** - between items
- **Layout** - of items
- **Terrain** - of grid itself
- **Weather** - random at the moment
- **Seasons** - predictable over time
- **Duration** - expirations & opportunity windows & elapsed time



E.g. After the fog is clear, an **area-of-effect boost** near any building

E.g. Vegetables merge better during Fall Harvest; **flowers only during Spring**

E.g. Plants wither, milk sours, cats walk off the board – **more action in the camp**, without player input

Play with Dependencies

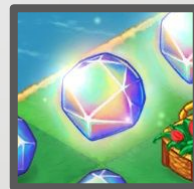
x2

- Increase complexity
- Add character classes / differentiated roles + social obligations
- Introduce meta ↔ mechanic dependencies
- -OR- decouple systems

E.g. Introduce **tech-tree dependencies**, so that merge chain **A** branches into merge chain **B** -or- **C** at the player's discretion

E.g. Add weak **Wildcard** items, usable on just a few merge chains

E.g. Eliminate the **game board**. Just meld from a hand of cards, and let players decide when to meld them.



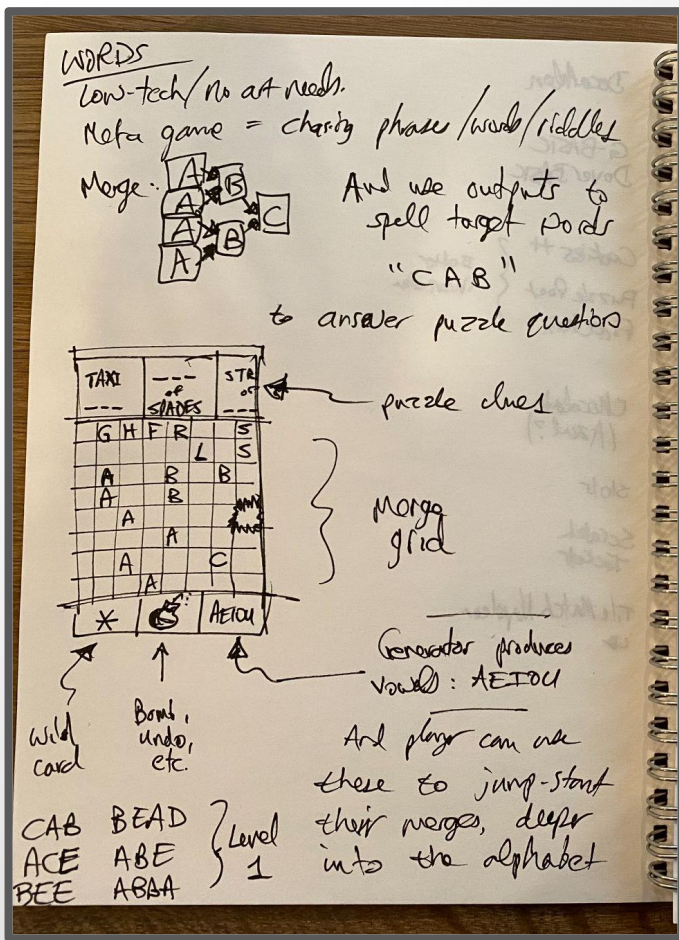
Mash-Up / Hybridize

x2

- Cross-pollinate two genres
- Pair the mechanic with a different meta
- Add a new motivation

E.g. **Merge + Word** = each "recipe" is a word

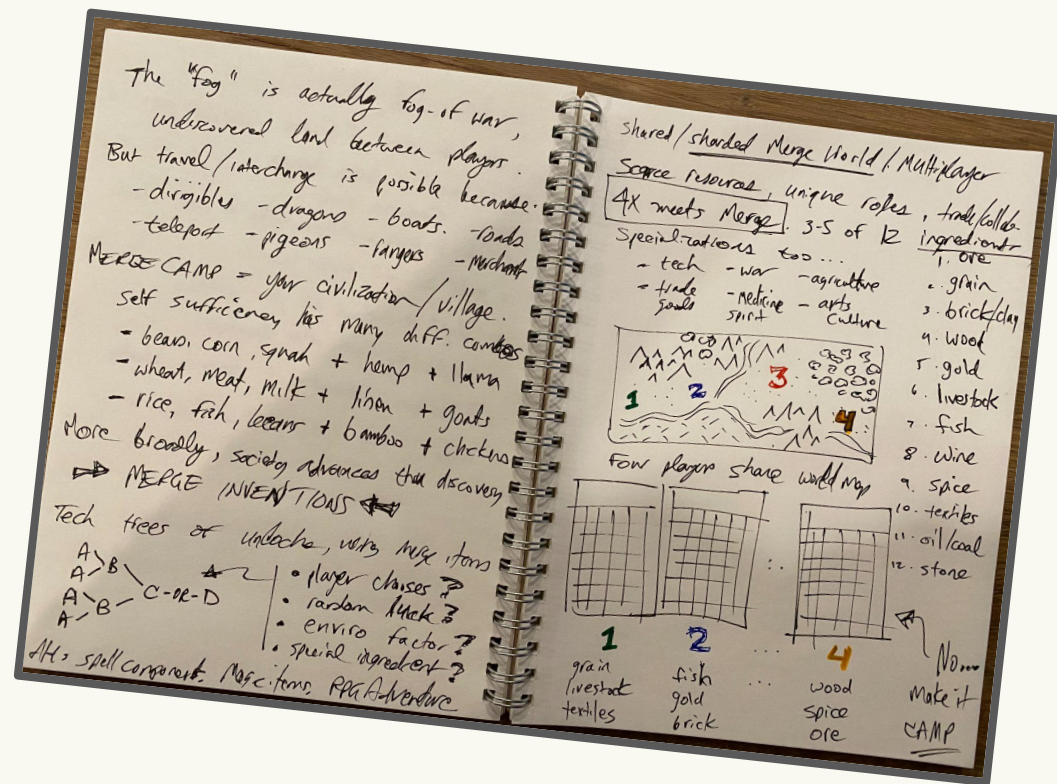
- Start with _____s on the grid
- Merge **A** >> >> **D** >> etc.
- Use them _____s to a puzzle:
 - "Can _____"
 - "Play the _____ of Spades"



Catalyze Insights

To Disrupt a Genre

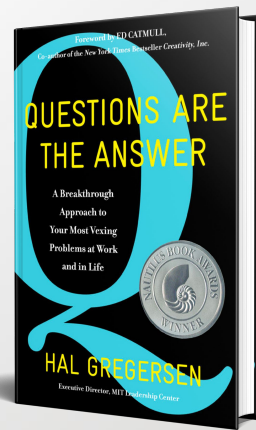
^3



Craft Some “Catalytic Questions”

A technique to inspire innovation and solve bigger problems:

1. Pick a topic (e.g. *Disrupting the Merge genre*)
2. Force yourself to ask no-less-than 40 questions about it
3. Don't try to answer them! Just keep asking
4. Prioritize the 3-4 questions that would yield most impact



“Talk to creative problem-solvers and they will often tell you, the key to their success is asking a different question.”

HAL GREGERSEN

Executive Director, MIT Leadership Center



“Getting the right question is **key** to getting the right answer.”

JEFF BEZOS

Founder & CEO of Amazon



Everything changed for the better when I realized that I was asking the wrong question ... the best way to get to a better answer is to start with a better question.”

ARIANNA HUFFINGTON

Founder & CEO, Thrive Global & Founder, The Huffington Post

My Catalytic Questions...

1. What story / theme best matches Merge mechanics?
2. What is the purest expression of joy in the Merge mechanic itself?
3. What constraints of “puzzle games” did Merge games relax in the first place?
4. What’s **the ONE IDEA that embodies** the spirit of Merge Games?
5. What is the player chasing – what pleasurable drip, what escapist fantasy?
6. What’s the nearest genre, in terms of player motivation?
7. How could we reduce the cost of the content pipeline?

...

31. **What if Merge delivered even MORE** of the “American Dream” fantasy?
32. **What if Merge RESISTED indulging** the “American” fantasy so readily?
37. **What if Merge taught players HEALTHY** ways to live out the fantasy?

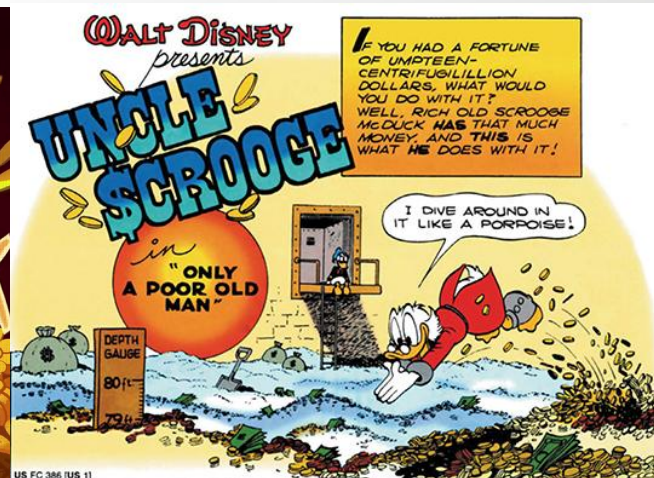
Deliver MORE American Dream

- Lean into a casual gratification of the player's fantasy
 - GREED
 - PIONEERING
 - COUNTRY
 - etc
- Help players manage the scope & scale of their fabulous wealth

Deliver MORE American Dream



Deliver MORE American Dream



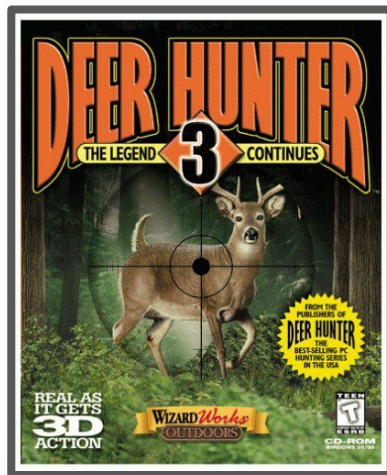
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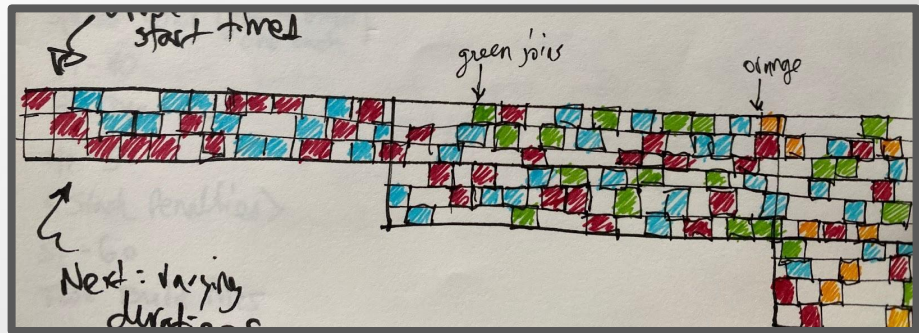
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- Example Outcomes
 - **Scrooge McDuck** - stockpiling coins and precious items in a [Treasure Vault](#)
 - **40 Acres and a Mule** - pioneers merging the wilderness in a [Sprawling Prairie](#)
 - **MAGA** - Merge America Great Again, with guns & ammo – or [Quilts & Mason Jars](#)

RESIST Indulging So Easily

My 17th Life:
Carpenter

Imagine a **Rogue-like Merge game**

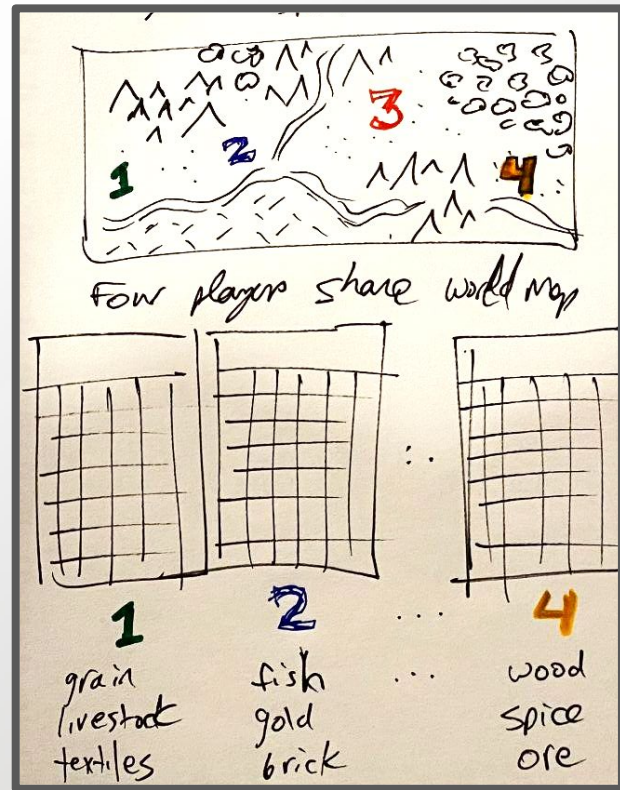
- Repeatable, one “life” per session
- Get as far as you can **and then die**
- Make the most of what you’re dealt
- Work to unlock better roles
- 1st life: **Hunter** or **Gatherer**
- 100th: **Tinker, Tailor, Butcher, Baker, Nobleman, Thief**



RESIST Indulging So Easily

Imagine a **sharded Merge world**

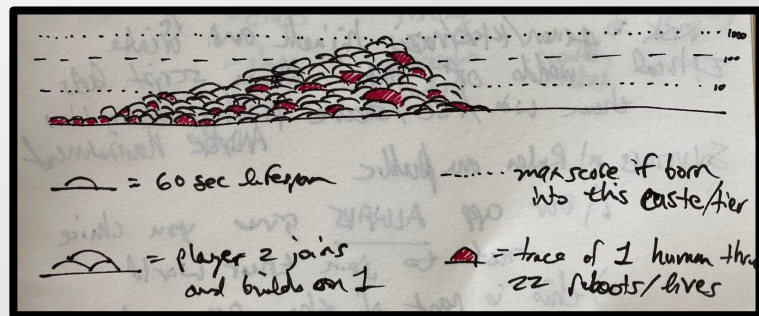
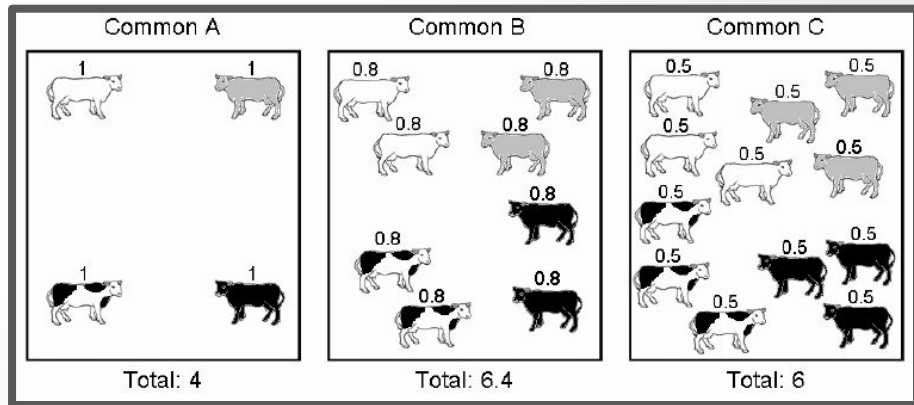
- Scarcity
- Joint struggles
- Tragedy of the Commons vs. Personal Sacrifices
- “Merge 5” lives for double progress towards a shared community goal
- A heap of human history



RESIST Indulging So Easily

Imagine a **sharded Merge world**

- Scarcity
- Joint struggles
- Tragedy of the Commons vs. Personal Sacrifices
- “Merge 5” lives for double progress towards a shared community goal
- A heap of human history



Make it **HEALTHY**

- Help players learn to juggle
 - Wants & needs
 - Budget & time
- Lean into responsible, healthy, civic-minded themes
- Connect to real-world guidance & benefits

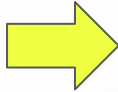
Make it HEALTHY



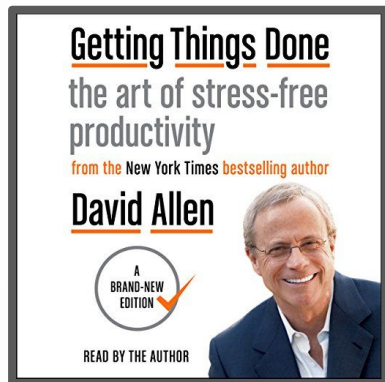
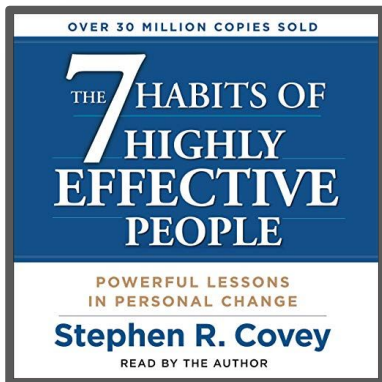
Make it HEALTHY



Make it HEALTHY





Make it HEALTHY

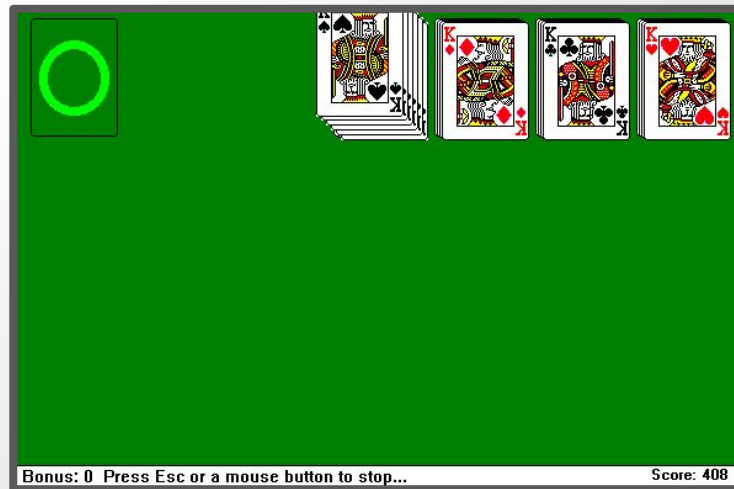
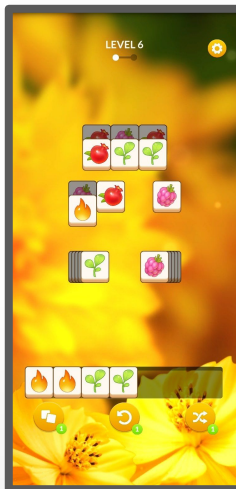


Inbox Zero

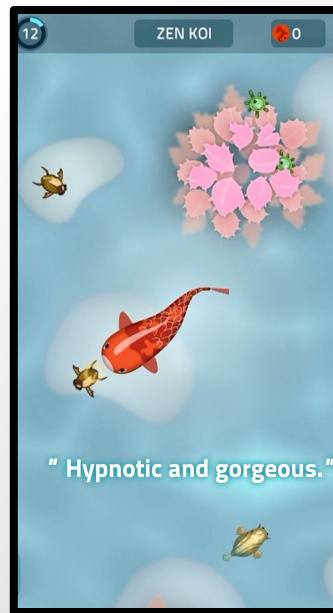


-  Delete
-  Delegate
-  Respond
-  Defer
-  Do

Make it HEALTHY



Make it HEALTHY



Merge 1

Summary



Recap

Parachuting into a new genre, here's how I got my bearings to chart a course:

- **Fake it** - talk art & theme
- **Deconstruct** - the competition
- **Try Lenses** - for different perspectives
- **Read Studies** - learn from others
- **Go Deep** - brainstorm with others
- **Interrogate Gameplay** - to evolve +1
- **Vary Parameters** - to innovate x2
- **Catalyze Insights** - to disrupt ^3

Conclusion

- I can't say where BigFish will take the Merge genre, BUT...
- This is **what's in my notebook**, as I grapple with the questions, like:
 - How might the Merge genre evolve underneath us?
 - What tidal forces are shifting puzzle appeal?
 - How might we ride the wave?
 - How we might create it?
- I share them in the hope that we can explore this space together

⇒ Good luck to all of us!

Thank you!

