

# Game Developers Conference®

February 28 - March 4, 2011  
Moscone Center, San Francisco

[www.GDConf.com](http://www.GDConf.com)



**GDC SMARTPHONE**  
SUMMIT

**GDC** 





# AFTER SUCCESS

Growing as an App Developer



**Arash Keshmirian**  
Co-Founder and CEO  
Limbic



ARASH KESHMIRIAN, LIMBIC

3

Limbic Software

Started end 2008,

three grad students at UCSD

Didn't want to work for Google like everyone else or go into research

Spurred by early success stories of really simple games, figured we could do well with our 3D background

Started by messing around with iOS SDK when it came out, decided to make a game,



# TowerMadness

ARASH KESHMIRIAN, LIMBIC

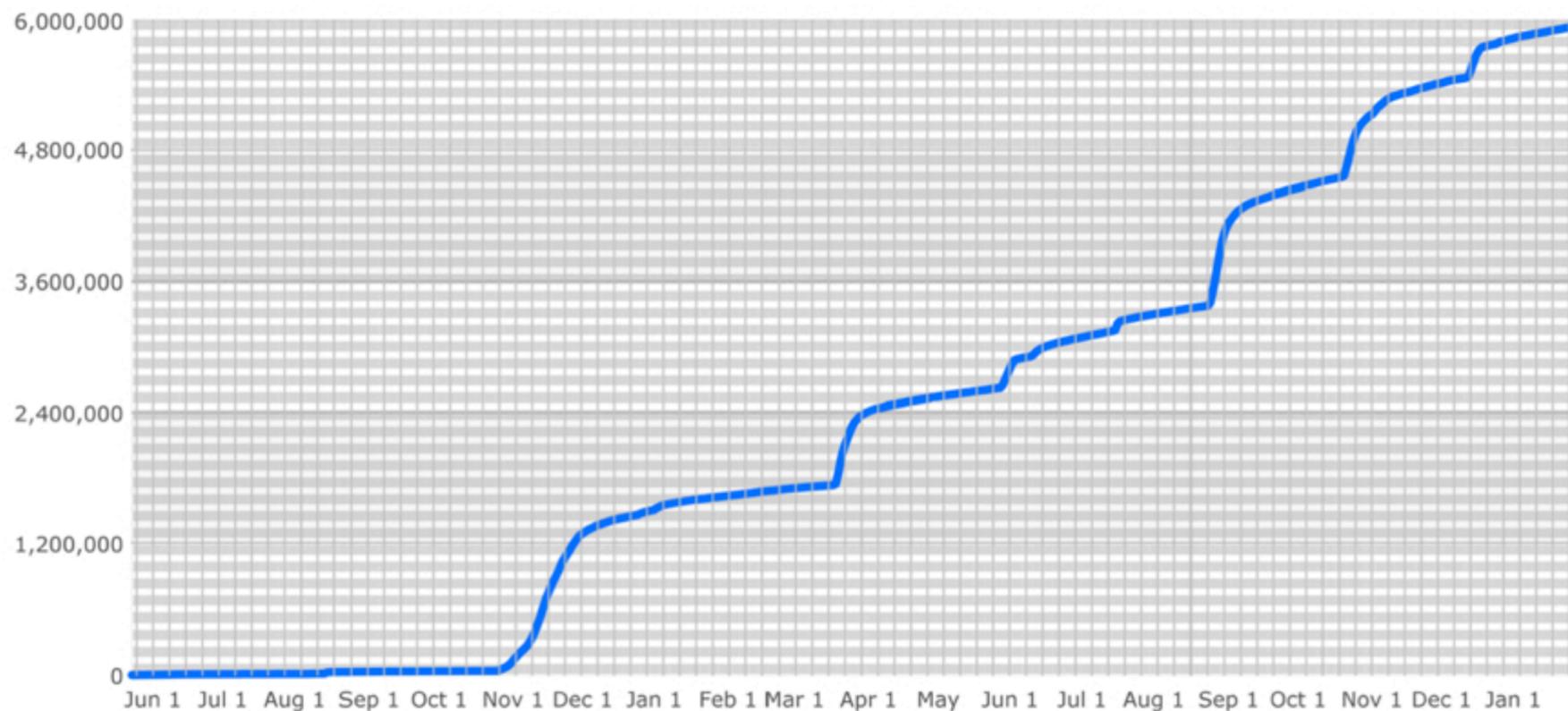
4

So what game did we build?  
We all loved tower defense, and back then there were only two.  
Both primitive in graphics and gameplay. Clear opportunity.  
We all had serious backgrounds in OpenGL as graphics/rendering students  
Two cofounders coding, me half-art-half-code.  
Produced TowerMadness in six months



ARASH KESHMIRIAN, LIMBIC

There were extremely few 3D games at the time  
Competitive if we made the game 3D.  
Build towers to defend your flock of sheep from aliens.  
They land at the top of the screen with UFOs, and you need to build a maze of towers to defend.



TOTAL DOWNLOADS

6 MILLION

MAJOR UPDATES

16

TOTAL PLAYTIME

OVER 3,000 MAN-YEARS



ARASH KESHMIRIAN, LIMBIC

What kind of a success was TowerMadness?

Launched TM in May 2009

- Started with a feature from Apple and great coverage from sites and blogs
- Had a lull afterwards for a few months
- Really exploded with launch of TowerMadness Zero
- Updates, updates, then In App Purchases
- Also launched TowerMadness HD

1.5B Towers Built - 34B Aliens Killed - Two out of every three sheep are abducted



ARASH KESHMIRIAN, LIMBIC

7

- Learned a lot through experimentation
- Icons: Started with cute
- Huge in Japan
- But quickly learned that guns and icons representative of gameplay were best
- Holiday Edition



ARASH KESHMIRIAN, LIMBIC

Experimented with a Lite version  
But then decided to go all the way  
Zero – Full version, for free, but with ads  
Got TowerMadness into the hands of a lot of people.



ARASH KESHMIRIAN, LIMBIC

TowerMadness HD  
Invested in innovative gameplay  
Not a simple scale-up  
Was one of the first split-screen multiplayer games on the iPad  
Apple loved this, source of getting featured



# GRINCHMAS

DEC 2009



# STAR FARM

DEC 2010



ARASH KESHMIRIAN, LIMBIC

Experimented with famous IP: Dr Seuss  
Grinchmas, published by Oceanhouse Media in 2009

Experimented with being a publisher, and trying out Farm style games  
Star Farm, published by Limbic in 2010 working closely with developer Seek Mobile Interactive



# SUCCESS!



ARASH KESHMIRIAN, LIMBIC

11

What is success on the App Store?

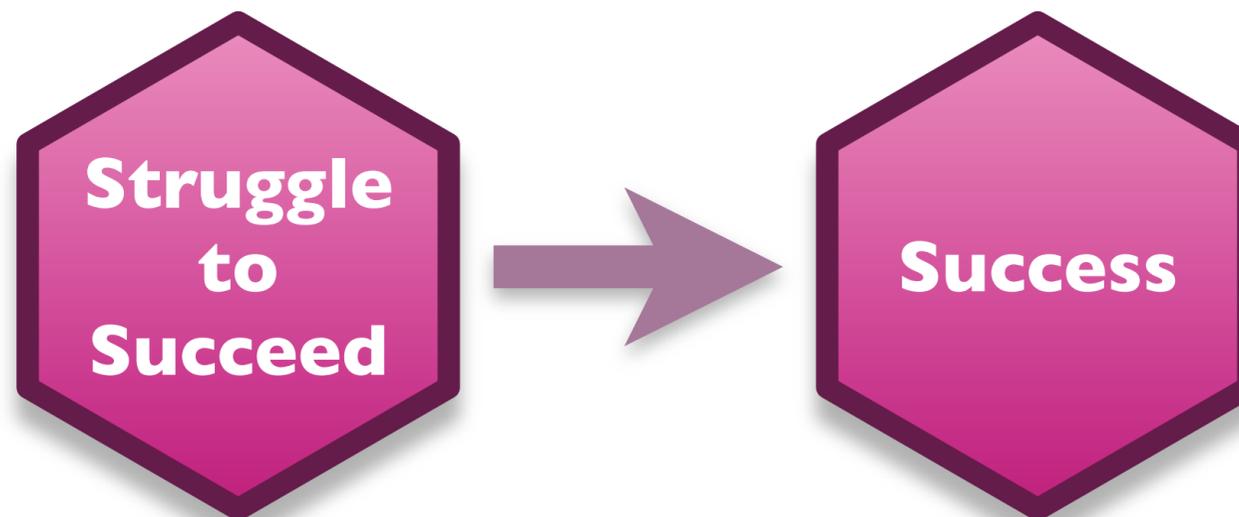
- Angry Birds - Riding at the top of the paid chart for months and months
- Tiny Wings - Upset their reign a few days ago
- Other end of spectrum - Solo developer making a couple hundred dollars a day but living off his app
- Most people are shooting for something in the middle.
- More than a hobby, and less than a fortune. Realistic expectations.

For us - considered Limbic success to be able to do this as a career, support a growing team, and continue doing what we love.

- Independence, self-determination are key

This talk is for everyone trying to get there, and these are our perspectives of riding success on the App Store. What challenges we've overcome, and what challenges we're facing.

Some of you are here, some of you are going to soon be here. The sooner you know and think about this stuff, the better.



ARASH KESHMIRIAN, LIMBIC

12

- But success is not a final state where you struggle and bam you're there

Really is not Before -> After

- Many will be still working just as hard to maintain and continue the success.
- Just like apps, the business needs constant updating.



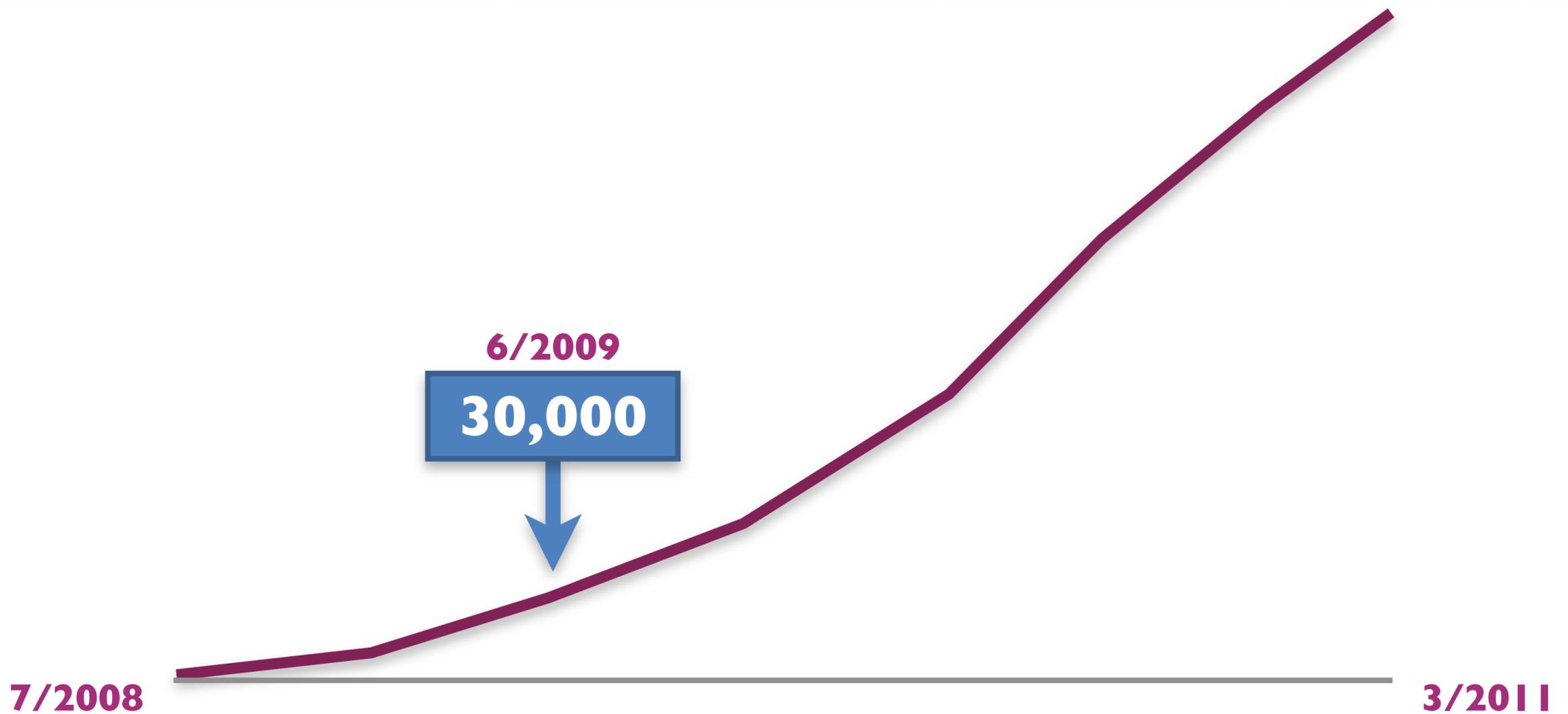
ARASH KESHMIRIAN, LIMBIC

12

- But success is not a final state where you struggle and bam you're there

Really is not Before -> After

- Many will be still working just as hard to maintain and continue the success.
- Just like apps, the business needs constant updating.



Wikipedia, "App Store", February 2011, AppShopper.com, 148apps.biz

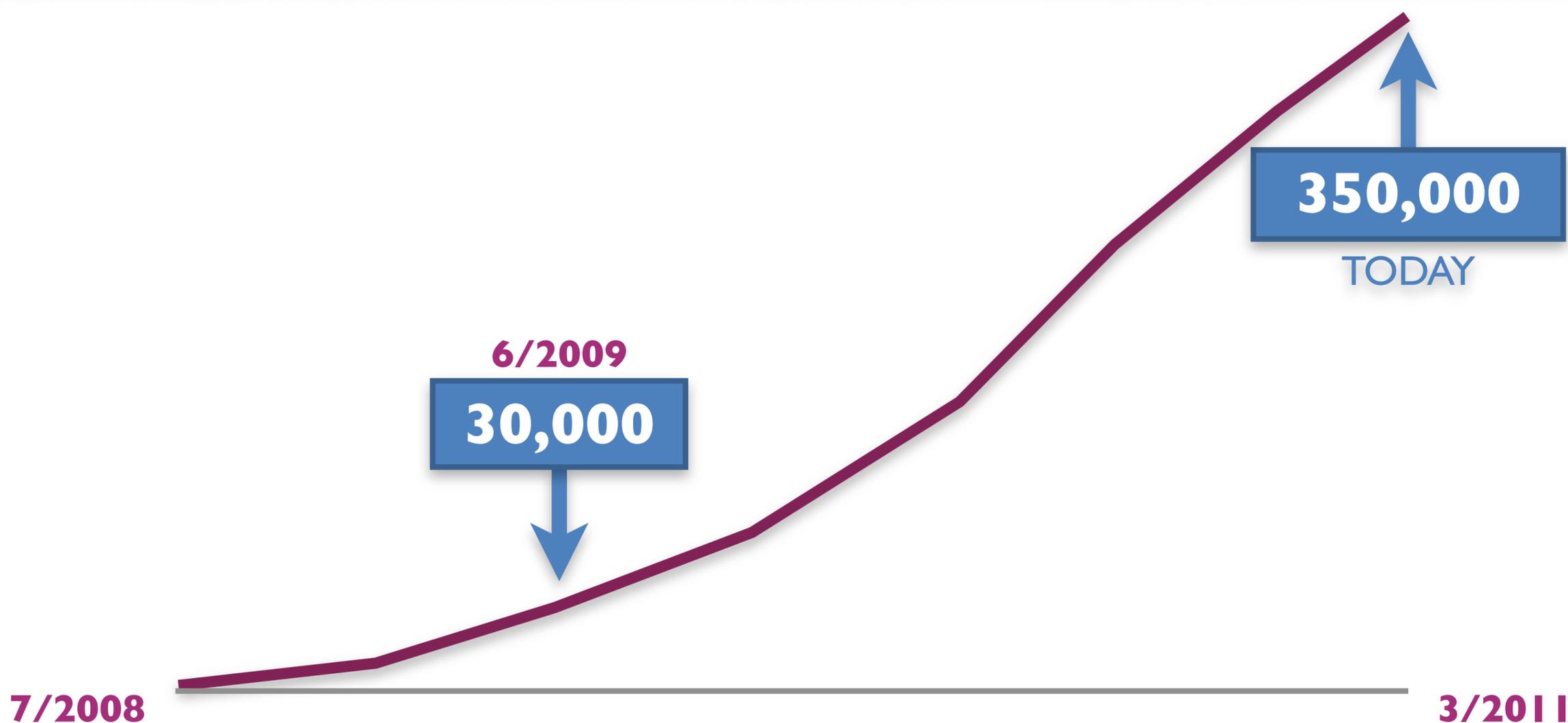
ARASH KESHMIRIAN, LIMBIC

13

When I talk about struggle, I mean this:  
10,000 apps when we started dev in Nov 2008  
30,000 apps when we launched in May 2009  
12x more apps now than when we launched TowerMadness

Some growth data from popular app site 148apps:  
15,000 this month alone  
587 apps per day, 17% games

Fun Fact:  
If you wanted to buy a copy of every Paid App in the store, over \$870,000!



Wikipedia, "App Store", February 2011, AppShopper.com, 148apps.biz

ARASH KESHMIRIAN, LIMBIC

13

When I talk about struggle, I mean this:.

10,000 apps when we started dev in Nov 2008

30,000 apps when we launched in May 2009

12x more apps now than when we launched TowerMadness

Some growth data from popular app site 148apps:

15,000 this month alone

587 apps per day, 17% games

Fun Fact:

If you wanted to buy a copy of every Paid App in the store, over \$870,000!



# CHOICES



ARASH KESHMIRIAN, LIMBIC

14

- The first thing that success brings is choice.
- And choice is good....
- Yet often the array of choices can be confusing and complicated
- These choices will force you to think about a whole bunch of things you may have been ignoring.  
(Maybe on purpose) : )



# CHOICES, CHOICES

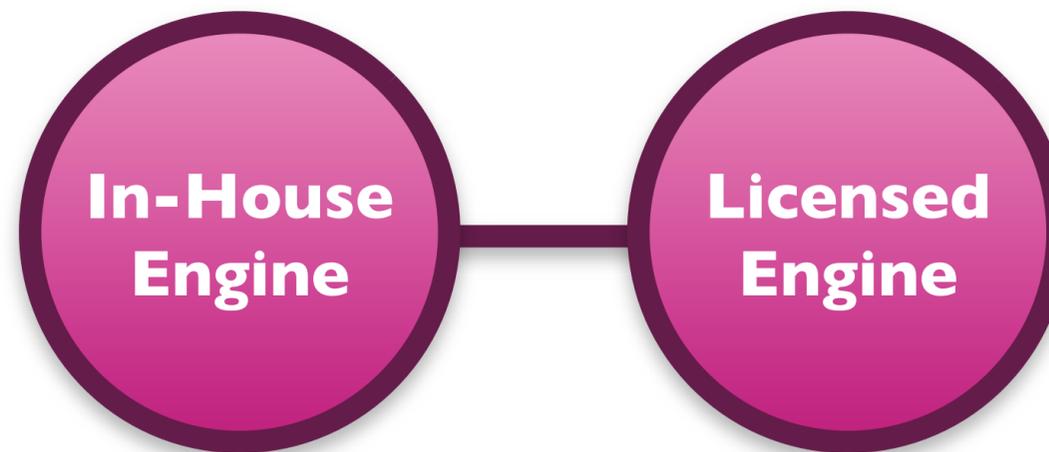
ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
  
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



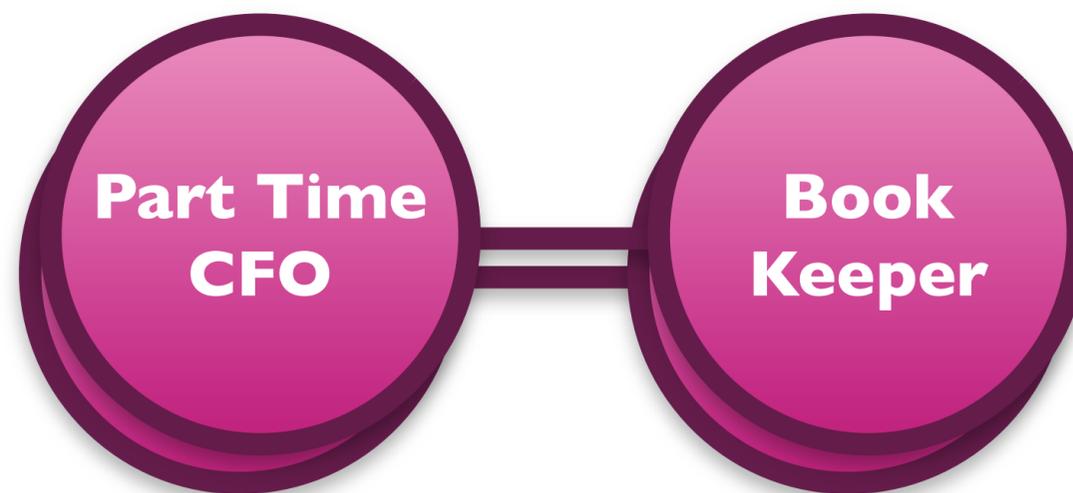
ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



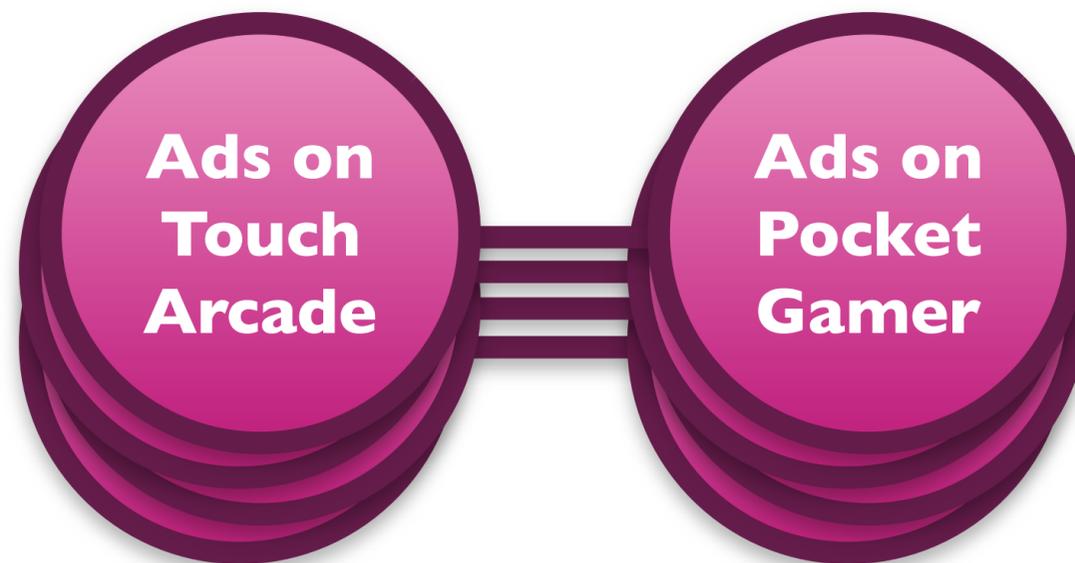
ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



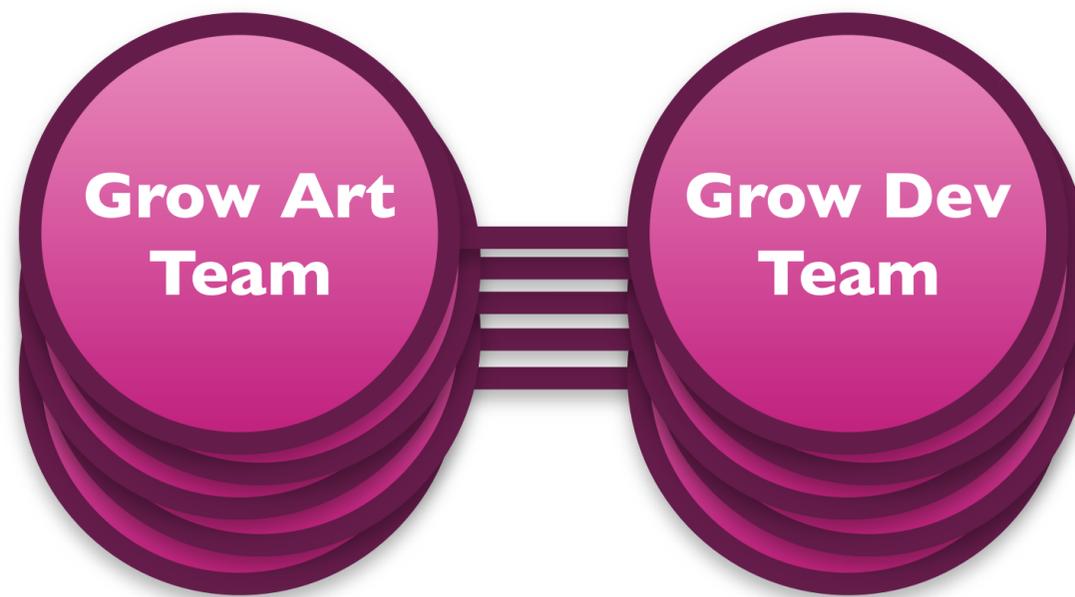
ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
  
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
  
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



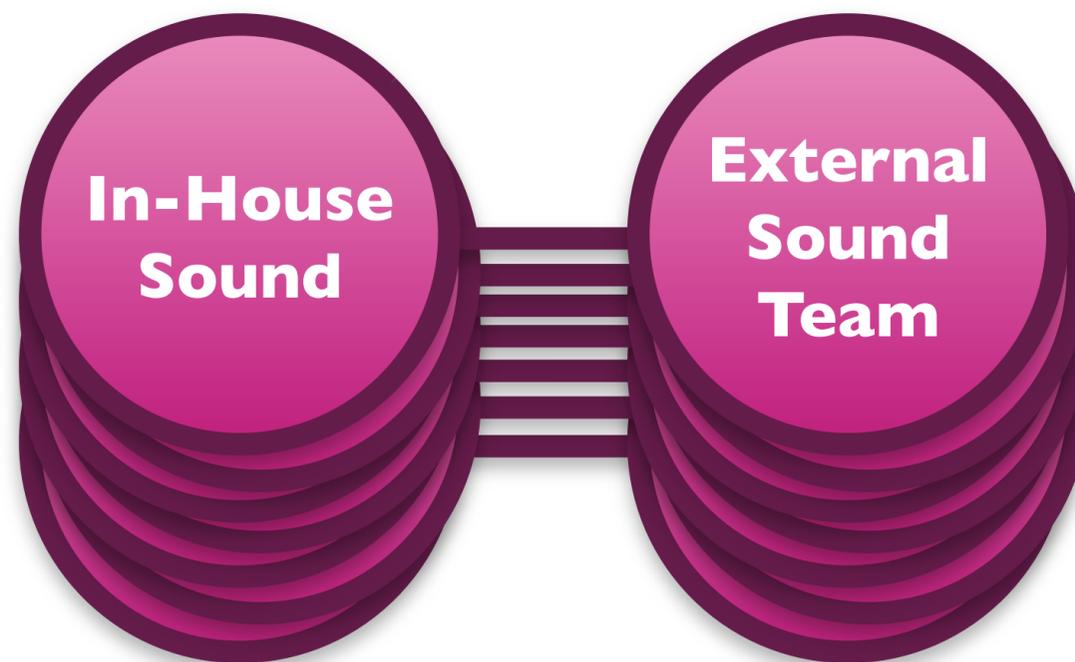
ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



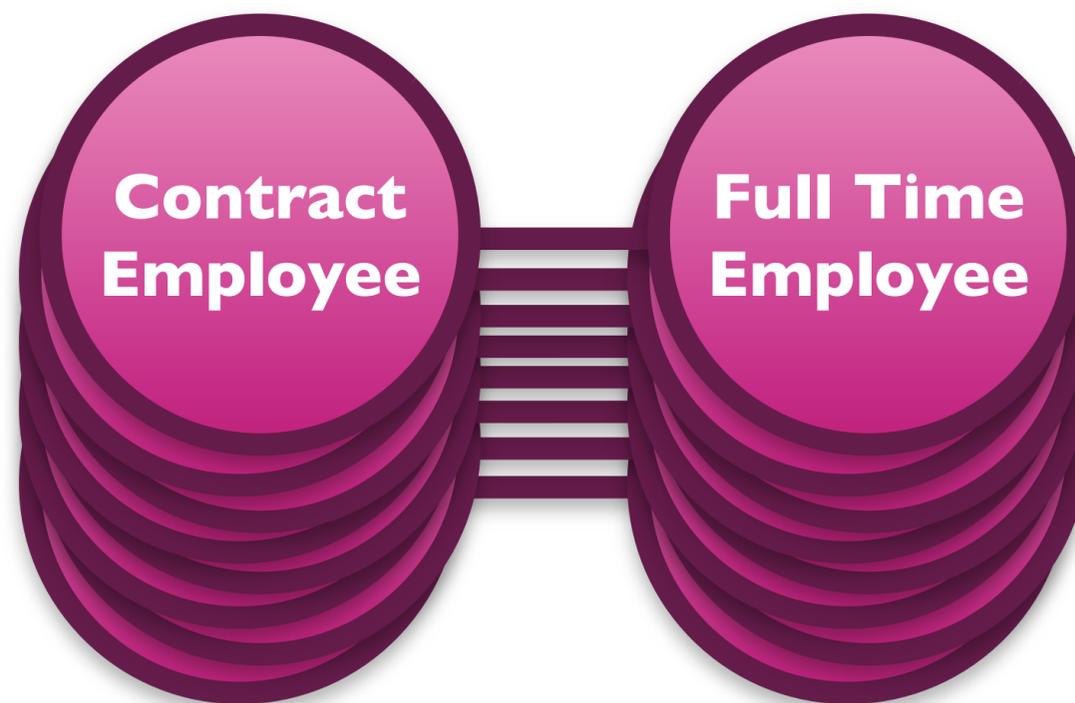
ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



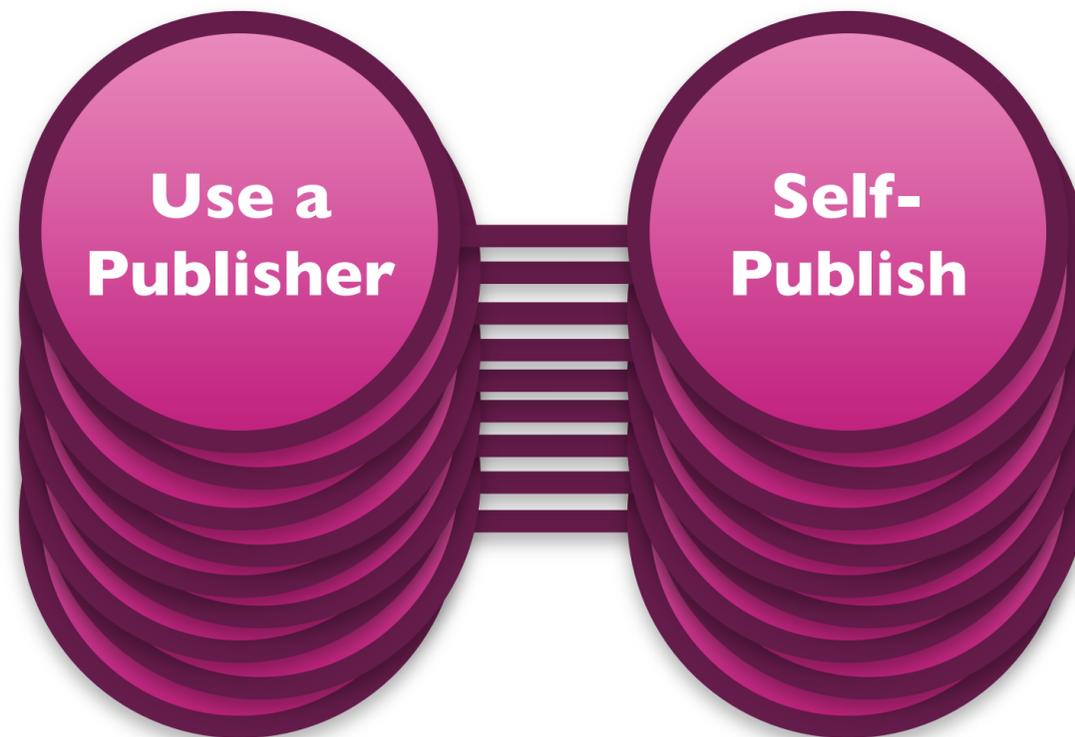
ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



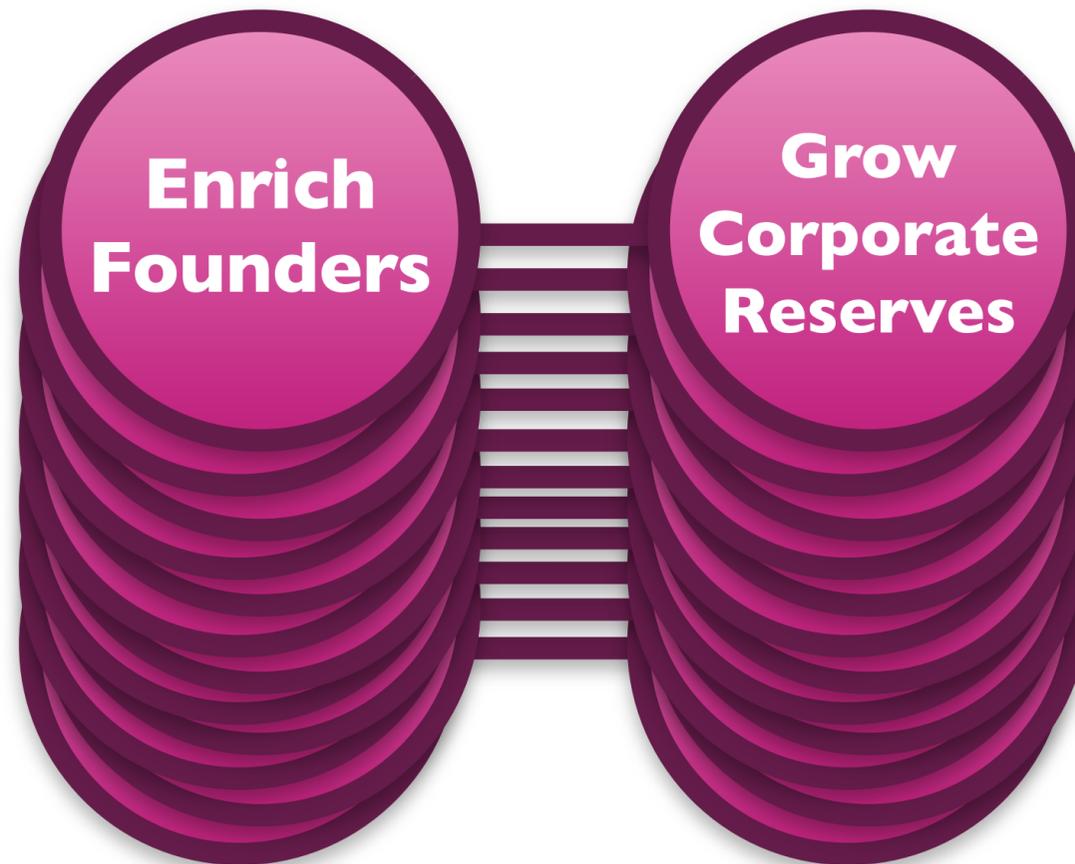
ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



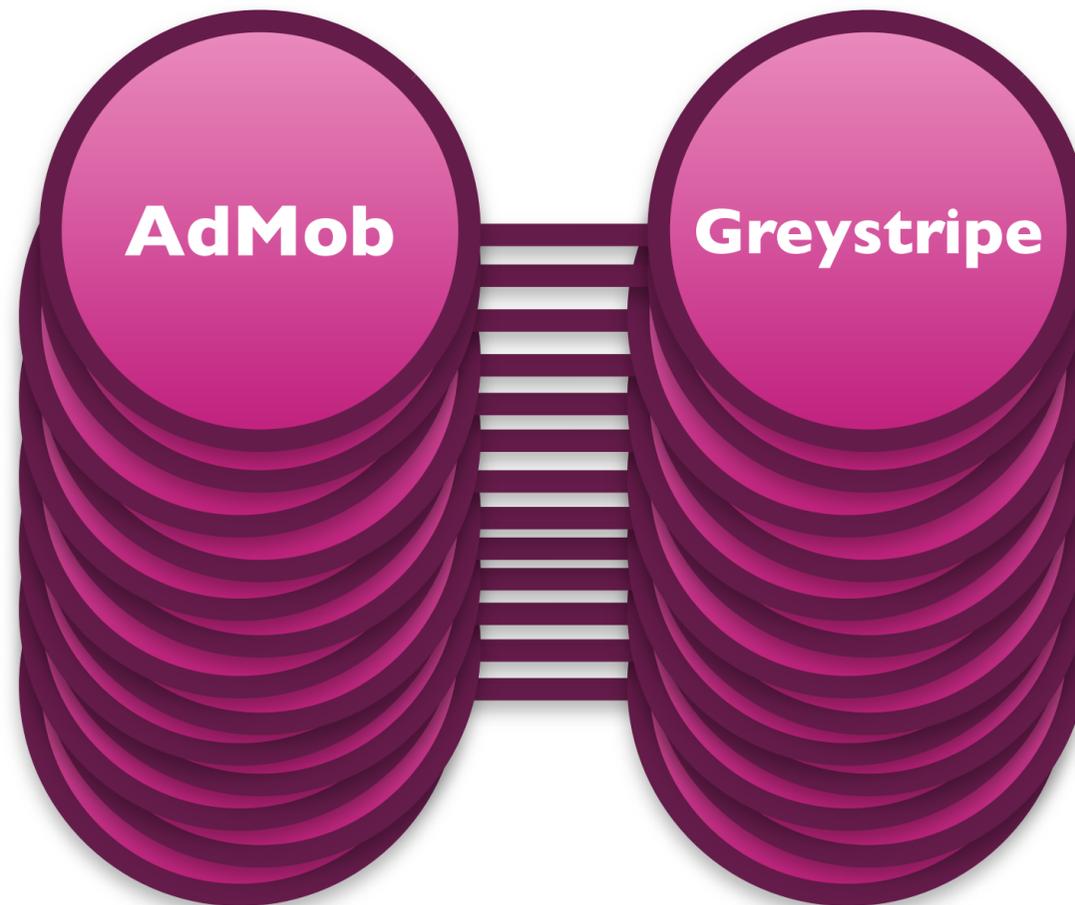
ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# CHOICES, CHOICES



ARASH KESHMIRIAN, LIMBIC

15

- Choices go on and on... could go on for 40 more minutes about these.
- These are all real decisions we've had to make.
- At Limbic we largely focused on deciding to do almost everything ourselves, hiring no one, and doing all tech in-house.
- These decisions had long-term benefits/consequences.



# DECISIONS EVERYWHERE



ARASH KESHMIRIAN, LIMBIC

16

The choices you face can be as simple as the decision of what conferences/gatherings to go to this year. How many do you go to? Is your time better spent networking, or developing new products? This becomes a big issue when your core engineering team is also your core business team.

Can't ignore opportunity – Example: TM Zero was born out of the PA iPhone developer's meetup.

Moral: So there are a lot of decisions. What do you do? How do you answer these questions? There's no way to know for sure, but best step towards making the right choice for you is to know what you want out of your business.



# AVOIDING DECISIONS

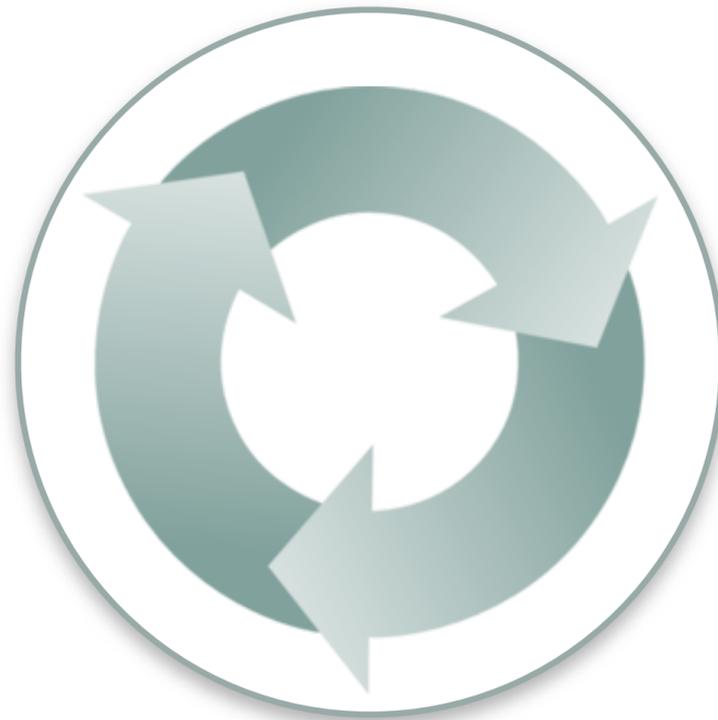


ARASH KESHMIRIAN, LIMBIC

- Make no mistake, it's important to realize that not making a decision is still a decision.
- Big risk of ending up somewhere other than you may have envisioned. Missed opportunities.



# REFLECTION



ARASH KESHMIRIAN, LIMBIC

18

- Core question for anyone driving for success – How to continue achieving it and more of it.
- One part of finding out how to do this involves looking back on what it took to get there.
- What could you have done better?
  - Example: Weak initial launch. Do that next time.
  - Example: Too late to market? Next time ship earlier with fewer features.
  - Opposite Example: Everyone complains your game is too shallow? Ship later with more complete product next time.
- Learn, Evolve, Improve
- Might seem obvious but important to be mindful of the need to reflect.
- This can mean gathering data when you make a decision so that you can truly evaluate whether it was useful or not. Some decisions are hard to quantify, and every effort helps.
- Social Games leading the industry on Reflection, everything A/B tested all the time. I don't espouse this for game design per-se, but it's something to learn from the other space.



# WHO YOU WERE



*The Lord of the Rings Trilogy, New Line Productions*

ARASH KESHMIRIAN, LIMBIC

19

- Singular focus and passion... the app you were building
- Market knowledge (obsession)
- Humorous stuff about how crazy we got about reading every toucharcade review and playing every single game that ever came out.
- Willingness to Experiment and Take Chances
- Doing everything ourselves, and learning anything we didn't know about running a business

For Limbic:

- Again, for us everything was about getting TowerMadness done, and after it was out, on getting everyone to play it.
- Taking risks on new business models.
  - TowerMadness Zero, one of first free games (of its size) on iOS (papertoss, lemonade tycoon).
  - We took a leap no one else was willing to make and reaped huge rewards by being early.



# WHO YOU WILL BECOME



*The Lord of the Rings Trilogy, New Line Productions*

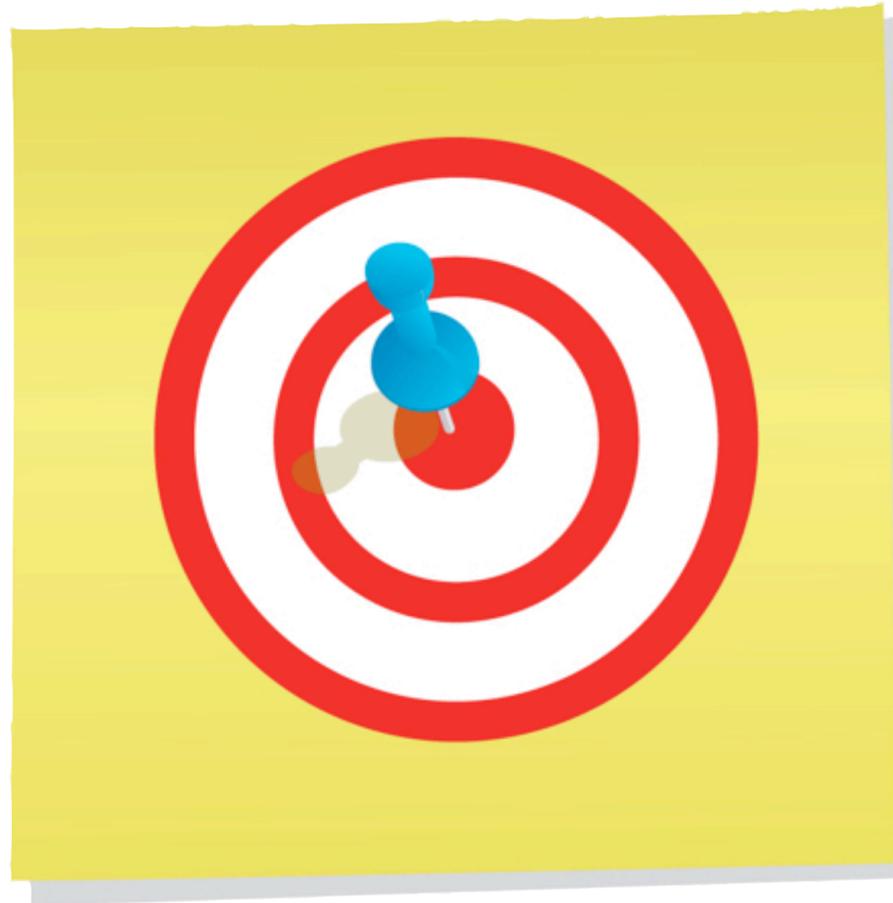
ARASH KESHMIRIAN, LIMBIC

20

- Greater capacity but less control – I no longer do all the art for our games, and we have more developers than just the three of us
- More options but less flexibility – Requiring other people to do work for you means you can't iterate instantaneously or suddenly change the project without meetings
- More resources but less time – We have resources to go a lot of routes and take risks, but actually managing many teams involves being quite busy. Customer support for a lot of users is also a costly investment of our time
- Even greater accomplishments but more to risk
  - Games that don't meet standards may turn away userbase, esp when promoted in connection to TowerMadness,
  - Lowers credibility. Even have to be choosy with cross promos with other developers.
  - Disappoint the users and they are less likely to trust you in the future.



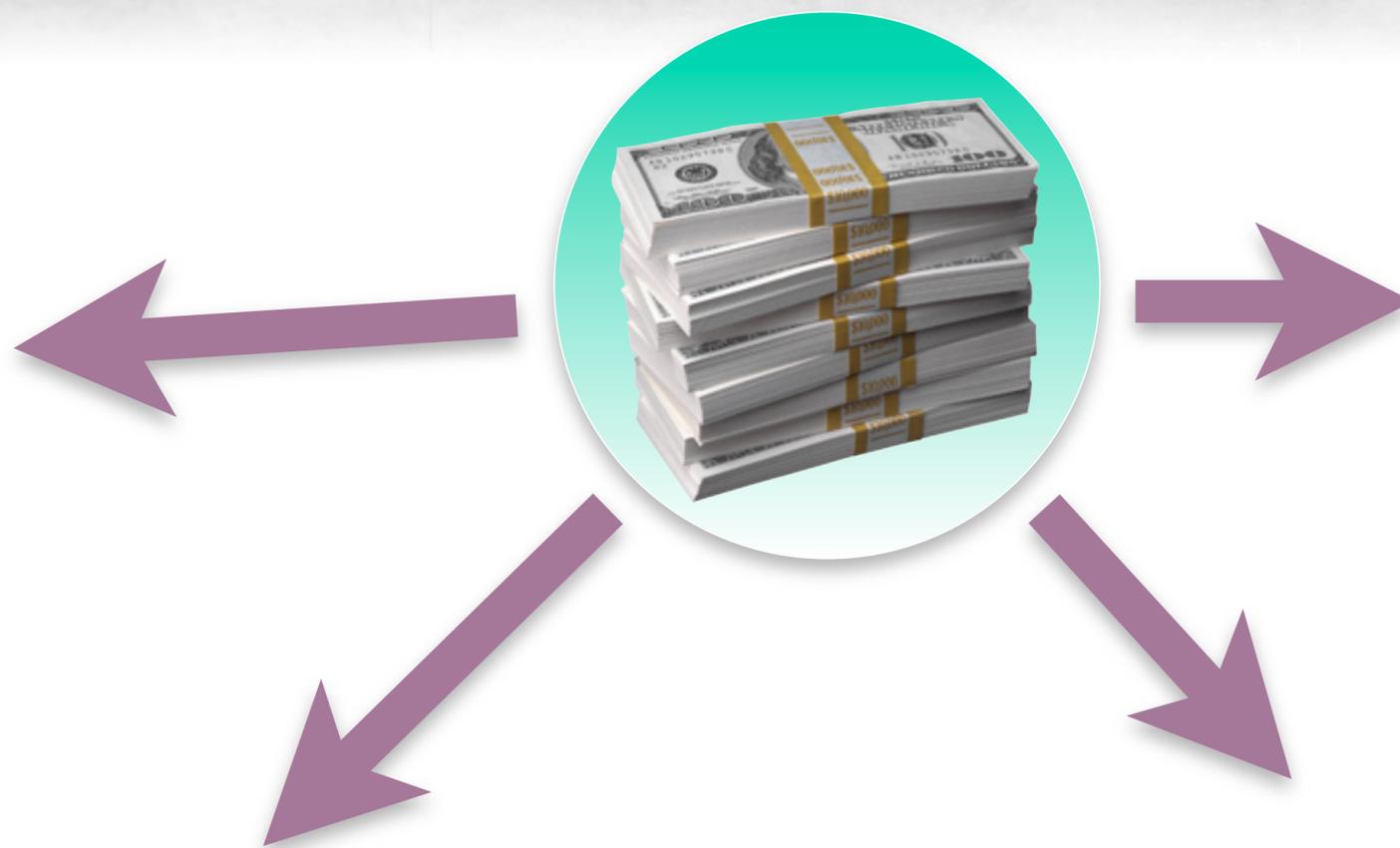
# GOALS



ARASH KESHMIRIAN, LIMBIC

21

- So this all comes back again to “Where do you want to go?” “What kind of business do you want to run?”
- Some of your options:
  - Large Business, Many Employees, High Revenue, High Costs, You->Boss/Mgmt, probably Investors on board
  - Medium Size Business, You->More involved, but team is still big enough where you’re not involved in everything
  - Super Small Business, You->Very involved, Small Team, Small Market Share
- High revenue per employee is still possible in all these models, it’s more about what sort of role you want to have

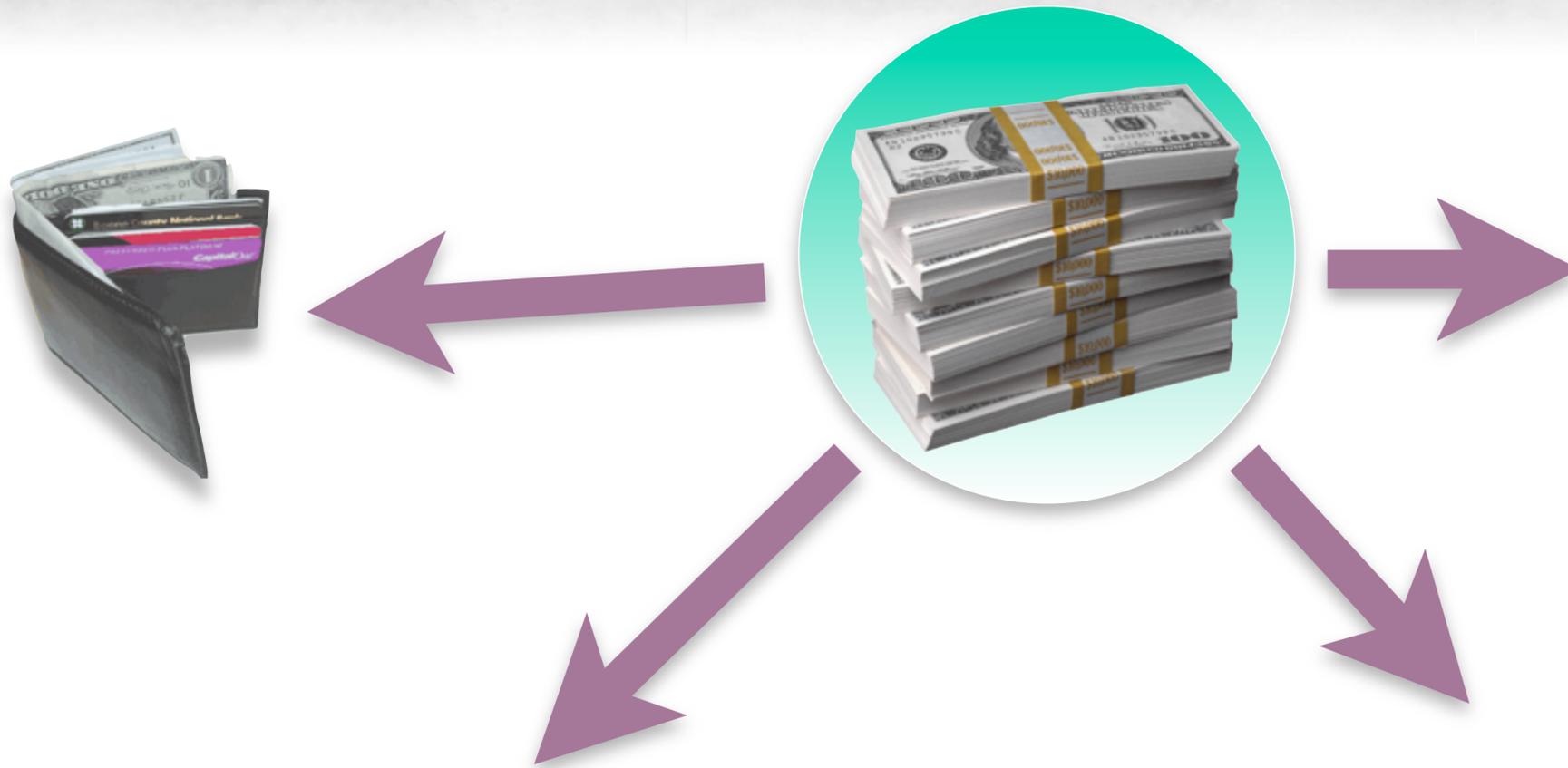


ARASH KESHMIRIAN, LIMBIC

22

An example of why knowing your goals is important... how do you spend your \$\$\$?

- Wallet: Save money personally and stay scrappy
- Sweet Apt and Porsche: An extreme example of improving your quality of life at the expense of flexibility
- Hiring: Growing the company and changing the size of the team
- Company wallet: For marketing budgets, Tapjoy, Domains, Legal, Offices, other capital-heavy moves
- Left side: Personal, Right side: Invest back in business
- If VCs/Investors are involved, you can be damn sure they'll have an opinion on where money goes.



ARASH KESHMIRIAN, LIMBIC

22

An example of why knowing your goals is important... how do you spend your \$\$\$?

- Wallet: Save money personally and stay scrappy
- Sweet Apt and Porsche: An extreme example of improving your quality of life at the expense of flexibility
- Hiring: Growing the company and changing the size of the team
- Company wallet: For marketing budgets, Tapjoy, Domains, Legal, Offices, other capital-heavy moves
- Left side: Personal, Right side: Invest back in business
- If VCs/Investors are involved, you can be damn sure they'll have an opinion on where money goes.

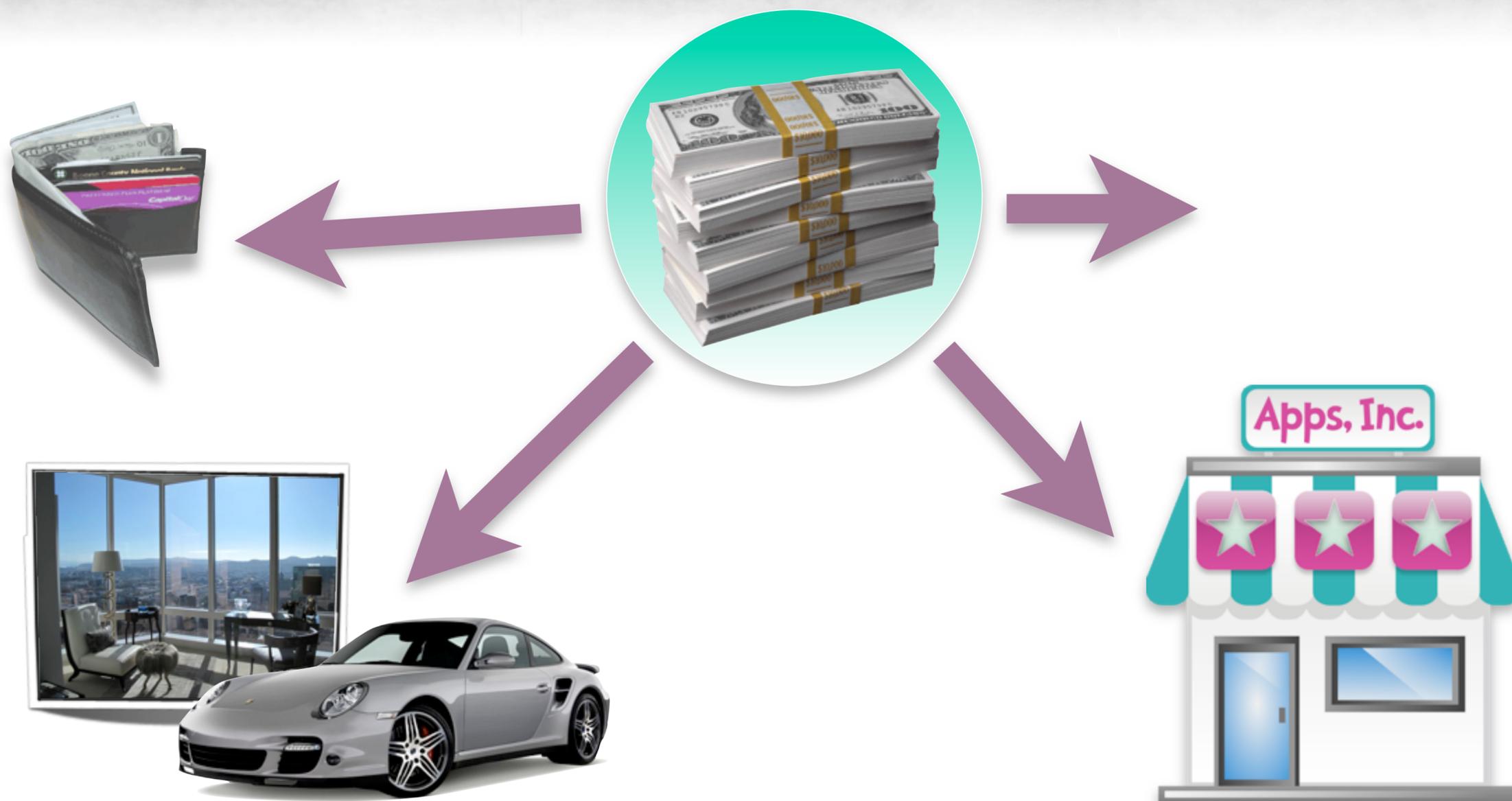


ARASH KESHMIRIAN, LIMBIC

22

An example of why knowing your goals is important... how do you spend your \$\$\$?

- Wallet: Save money personally and stay scrappy
- Sweet Apt and Porsche: An extreme example of improving your quality of life at the expense of flexibility
- Hiring: Growing the company and changing the size of the team
- Company wallet: For marketing budgets, Tapjoy, Domains, Legal, Offices, other capital-heavy moves
- Left side: Personal, Right side: Invest back in business
- If VCs/Investors are involved, you can be damn sure they'll have an opinion on where money goes.

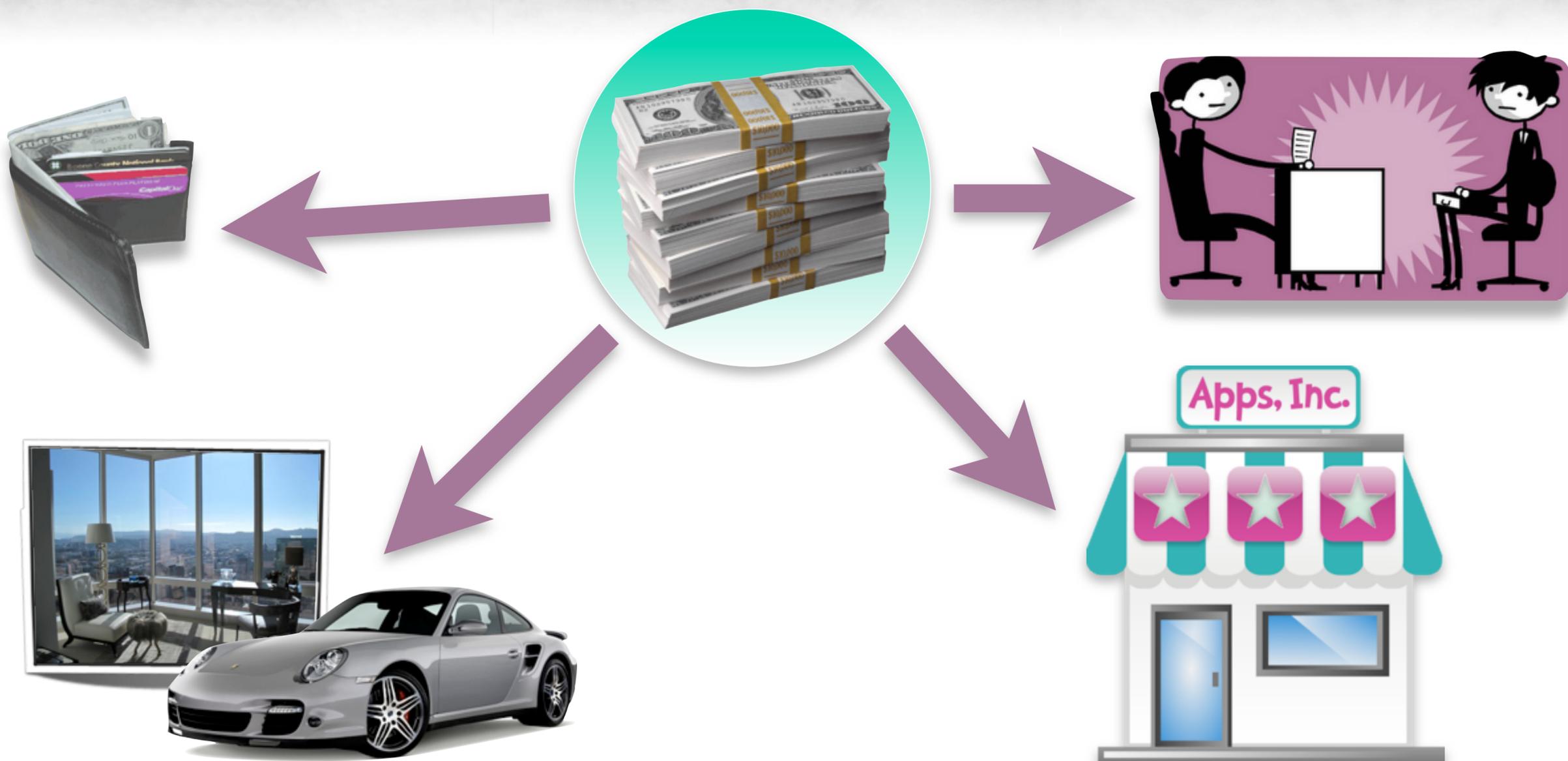


ARASH KESHMIRIAN, LIMBIC

22

An example of why knowing your goals is important... how do you spend your \$\$\$?

- Wallet: Save money personally and stay scrappy
- Sweet Apt and Porsche: An extreme example of improving your quality of life at the expense of flexibility
- Hiring: Growing the company and changing the size of the team
- Company wallet: For marketing budgets, Tapjoy, Domains, Legal, Offices, other capital-heavy moves
- Left side: Personal, Right side: Invest back in business
- If VCs/Investors are involved, you can be damn sure they'll have an opinion on where money goes.



ARASH KESHMIRIAN, LIMBIC

22

An example of why knowing your goals is important... how do you spend your \$\$\$?

- Wallet: Save money personally and stay scrappy
- Sweet Apt and Porsche: An extreme example of improving your quality of life at the expense of flexibility
- Hiring: Growing the company and changing the size of the team
- Company wallet: For marketing budgets, Tapjoy, Domains, Legal, Offices, other capital-heavy moves
- Left side: Personal, Right side: Invest back in business
- If VCs/Investors are involved, you can be damn sure they'll have an opinion on where money goes.



# CREATIVE GOALS



photoshopdaily.co.uk

23

- What kind of creative role do you want to have in your business as it grows
- For longest time I was only artist in company, and did all art in TowerMadness
  - Your role as a creative - Also applies to engineers
  - What drives you out of bed everyday and gets you excited? What kinds of things do you want to achieve that you can't achieve today?
  - Important to decide what you want as a creative or engineer.
  - Engineers, glDrawElements, John Carmack @ id
  - Your company, tailor suit to fit. Hate programming or art? Get out.



# CREATIVE FREEDOM



*"Modern Times" - Janus Films, Criterion [right]*

ARASH KESHMIRIAN, LIMBIC

24

## - CREATIVE FREEDOM

How much to hold on to, how much to give away to others,

Do IP/WorkForHire and lose creative control. Or maybe you enjoy working on famous brands like Dr. Seuss.

## - EMOTIONAL INVOLVEMENT

Way easier to get into games that you yourself are coding/developing and have creative control.

TowerMadness vs Grinchmas (no creative control, strict approval)



# THE APP THAT GOT YOU HERE



ARASH KESHMIRIAN, LIMBIC

25

As you grow:

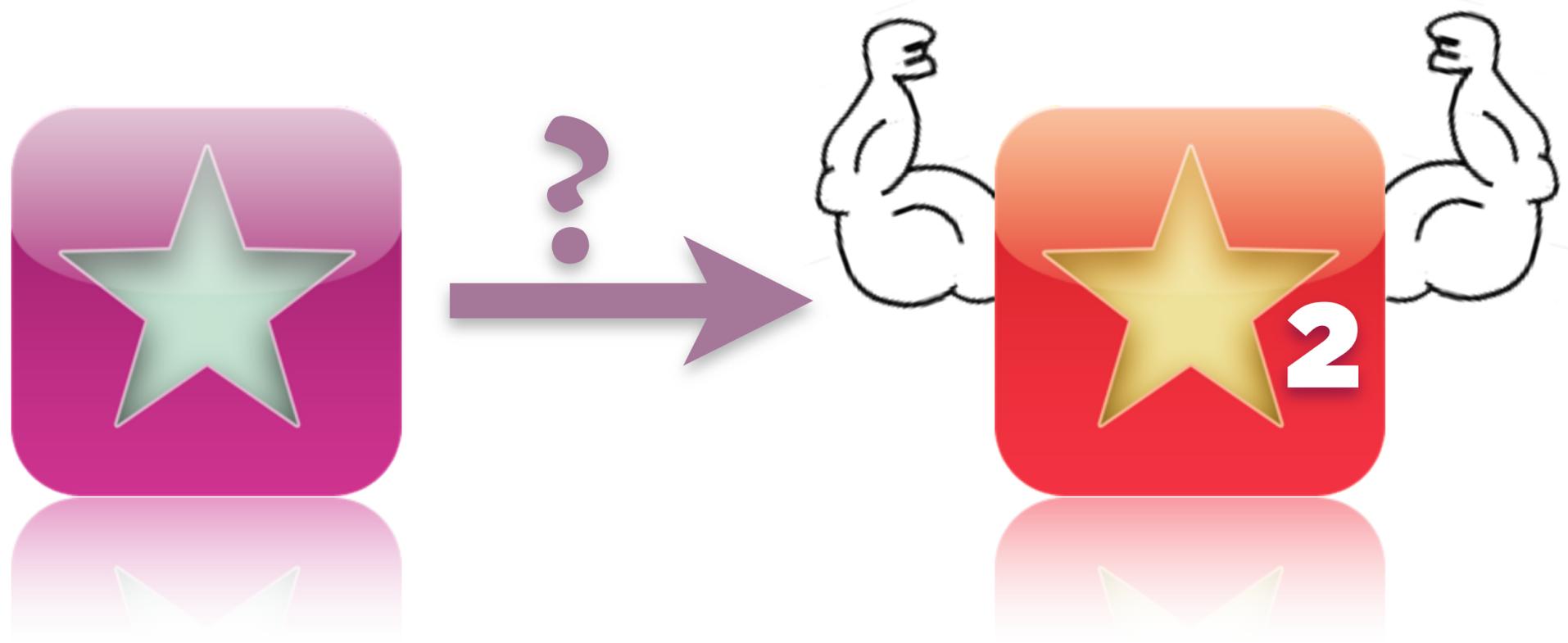
- What do you do with your original app? Your first hit, your bread and butter app/apps?
- For us, TowerMadness.

Three Options:

- Never release any sequels, continue to update forever -- For Lima Sky, Doodle Jump. For Bolt Creative, Pocket God.
- Move on to other unrelated games
- Try to continue the franchise and release sequels (traditional game industry)



# FOLLOWUP APP



Muscle Arms [right] - "Troglor the Burninator" - homestarrunner.com

ARASH KESHMIRIAN, LIMBIC

26

- Unlike traditional console/pc games, mobile apps not dependent on sequels for continued revenue because of IAP, and this eliminates some of the "sequel pressure".
- So making a sequel is a careful decision.
- Will it cannibalize? No one wants to buy #1, when #2 is out and looks much better. Might be an issue with seasonal releases too.
- Branch Franchise instead of Sequel: Diner Dash -> Cooking Dash / Wedding Dash / Hotel Dash, Tap Farm -> Tap Zoo, Tap Tap Revenge -> Lady GaGa Revenge, Justin Bieber Revenge
- Good example for a sequel doing well: Chopper 2, significant improvement to the original with a lot of innovations, Majic Jungle said it actually increased sales of Chopper 1.

We don't have the answers. It really depends on your app, but the point is to consider this decision carefully as you seek growth.



# WHAT KIND OF EXIT STRATEGY?

ARASH KESHMIRIAN, LIMBIC

27

Now that you know what you think you want to do... How are you going to finance your creative vision? Where do you want to take your business? What kind of exit do you have in mind?

- Growth – Grow the team into a larger, but privately held company. Want to grow into the next Zynga  
Get big enough where you have large amount of projects, a lot of manpower, and huge revenue. gameloft, etc.
- Lifestyle Business – Stay small, high revenue, highly managable, fast paced  
Make a lot of revenue for a few people to be able to live the way they want.
- Buyout – Grow the business with the intention of pitching it for sale.  
Usually the goal if you have investors on board, they want to pull their cash out at a multiple.  
ngmoco, tapulous, newtoy buyouts. exit is an option, but you need a LOT of users, neat Core-Tech or IP to become attractive.



# WHAT KIND OF EXIT STRATEGY?



ARASH KESHMIRIAN, LIMBIC

27

Now that you know what you think you want to do... How are you going to finance your creative vision? Where do you want to take your business? What kind of exit do you have in mind?

- Growth – Grow the team into a larger, but privately held company. Want to grow into the next Zynga  
Get big enough where you have large amount of projects, a lot of manpower, and huge revenue. gameloft, etc.
- Lifestyle Business – Stay small, high revenue, highly managable, fast paced  
Make a lot of revenue for a few people to be able to live the way they want.
- Buyout – Grow the business with the intention of pitching it for sale.  
Usually the goal if you have investors on board, they want to pull their cash out at a multiple.  
ngmoco, tapulous, newtoy buyouts. exit is an option, but you need a LOT of users, neat Core-Tech or IP to become attractive.



# WHAT KIND OF EXIT STRATEGY?



**Growth**



**Lifestyle  
Business**

ARASH KESHMIRIAN, LIMBIC

27

Now that you know what you think you want to do... How are you going to finance your creative vision? Where do you want to take your business? What kind of exit do you have in mind?

- Growth - Grow the team into a larger, but privately held company. Want to grow into the next Zynga  
Get big enough where you have large amount of projects, a lot of manpower, and huge revenue. gameloft, etc.
- Lifestyle Business - Stay small, high revenue, highly managable, fast paced  
Make a lot of revenue for a few people to be able to live the way they want.
- Buyout - Grow the business with the intention of pitching it for sale.  
Usually the goal if you have investors on board, they want to pull their cash out at a multiple.  
ngmoco, tapulous, newtoy buyouts. exit is an option, but you need a LOT of users, neat Core-Tech or IP to become attractive.



# WHAT KIND OF EXIT STRATEGY?

**Growth**

**Lifestyle  
Business**

**Buyout**

ARASH KESHMIRIAN, LIMBIC

27

Now that you know what you think you want to do... How are you going to finance your creative vision? Where do you want to take your business? What kind of exit do you have in mind?

- Growth - Grow the team into a larger, but privately held company. Want to grow into the next Zynga  
Get big enough where you have large amount of projects, a lot of manpower, and huge revenue. gameloft, etc.
- Lifestyle Business - Stay small, high revenue, highly managable, fast paced  
Make a lot of revenue for a few people to be able to live the way they want.
- Buyout - Grow the business with the intention of pitching it for sale.  
Usually the goal if you have investors on board, they want to pull their cash out at a multiple.  
ngmoco, tapulous, newtoy buyouts. exit is an option, but you need a LOT of users, neat Core-Tech or IP to become attractive.



# What is the Engine for your Growth?



*Irimpan, Wikimedia Commons*

ARASH KESHMIRIAN, LIMBIC

28

- With Limbic, our overall goal was to make a lot of high-quality games, and have our hands in each one.
- To do this, we knew we needed more people, more resources, better artists... we needed to grow.
- But to grow, you have to answer this question, because it greatly influences your choices.



**Organic  
Growth**

**Equity**

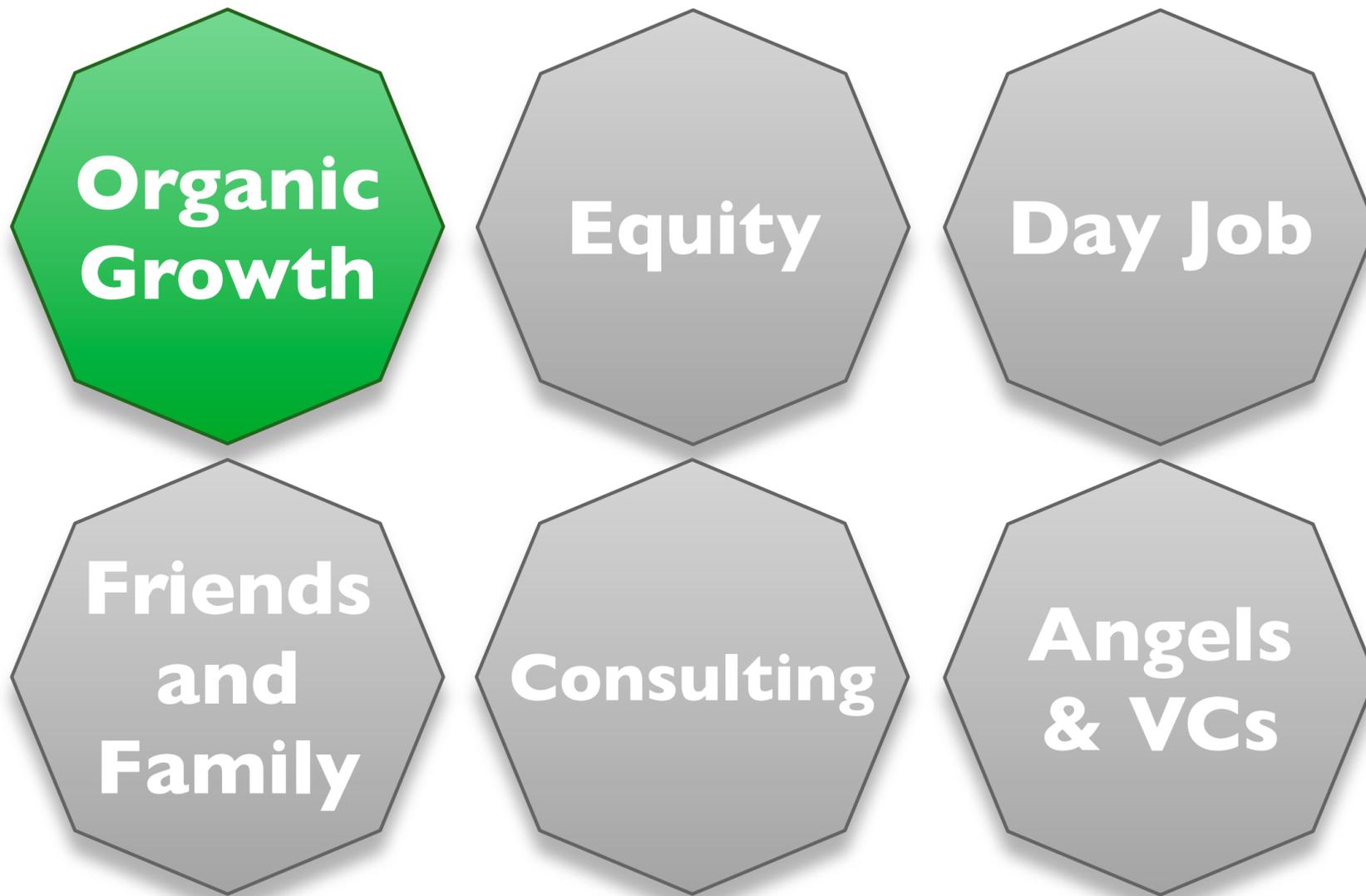
**Day Job**

**Friends  
and  
Family**

**Consulting**

**Angels  
& VCs**

ARASH KESHMIRIAN, LIMBIC



ARASH KESHMIRIAN, LIMBIC



# ORGANIC GROWTH



*WeatherTrak*

ARASH KESHMIRIAN, LIMBIC

31

## “Bootstrapping”

Money on your terms (preserving creative control)

Build more apps based on the revenue each app is building.

Scale up the company as it can support itself.

May seem slow to the outside observer, but as long as revenues remain steady, you inch slowly forward.

Can't hop right away and hire an office full of people. Might involve contractors more than employees, at first.



# REVENUE FROM ORIGINAL SUCCESS



ARASH KESHMIRIAN, LIMBIC

32

- Keep the original app alive with updates and IAP, fund growth through this.
- Expand original onto other platforms to grow your revenue base. Android, Mac, WP7 etc. Could be interesting with Nokia.
- Use these to drive growth of company. Keep game alive with updates, reinvest earned cash.
- An example of a developer doing a good job of diversifying is Distinct Dev with Moron Test. After a lot of hifted over to Android and became 8th most downloaded app. Going to WP7, Blackberry, Mac.
- Multiple revenue streams (especially from multiple platforms) is also a solid way to build a business from a traditional standpoint, and is something that can only help you if you're going in the VC or acquisition direction.



# REVENUE FROM ORIGINAL SUCCESS



ARASH KESHMIRIAN, LIMBIC

32

- Keep the original app alive with updates and IAP, fund growth through this.
- Expand original onto other platforms to grow your revenue base. Android, Mac, WP7 etc. Could be interesting with Nokia.
- Use these to drive growth of company. Keep game alive with updates, reinvest earned cash.
- An example of a developer doing a good job of diversifying is Distinct Dev with Moron Test. After a lot of hifted over to Android and became 8th most downloaded app. Going to WP7, Blackberry, Mac.
- Multiple revenue streams (especially from multiple platforms) is also a solid way to build a business from a traditional standpoint, and is something that can only help you if you're going in the VC or acquisition direction.



# REVENUE FROM ORIGINAL SUCCESS



ARASH KESHMIRIAN, LIMBIC

32

- Keep the original app alive with updates and IAP, fund growth through this.
- Expand original onto other platforms to grow your revenue base. Android, Mac, WP7 etc. Could be interesting with Nokia.
- Use these to drive growth of company. Keep game alive with updates, reinvest earned cash.
- An example of a developer doing a good job of diversifying is Distinct Dev with Moron Test. After a lot of hifted over to Android and became 8th most downloaded app. Going to WP7, Blackberry, Mac.
- Multiple revenue streams (especially from multiple platforms) is also a solid way to build a business from a traditional standpoint, and is something that can only help you if you're going in the VC or acquisition direction.



# REVENUE FROM ORIGINAL SUCCESS



ARASH KESHMIRIAN, LIMBIC

32

- Keep the original app alive with updates and IAP, fund growth through this.
- Expand original onto other platforms to grow your revenue base. Android, Mac, WP7 etc. Could be interesting with Nokia.
- Use these to drive growth of company. Keep game alive with updates, reinvest earned cash.
- An example of a developer doing a good job of diversifying is Distinct Dev with Moron Test. After a lot of hifted over to Android and became 8th most downloaded app. Going to WP7, Blackberry, Mac.
- Multiple revenue streams (especially from multiple platforms) is also a solid way to build a business from a traditional standpoint, and is something that can only help you if you're going in the VC or acquisition direction.



# REVENUE FROM ORIGINAL SUCCESS



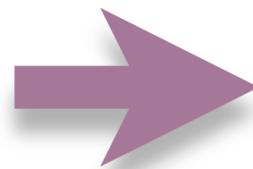
ARASH KESHMIRIAN, LIMBIC

32

- Keep the original app alive with updates and IAP, fund growth through this.
- Expand original onto other platforms to grow your revenue base. Android, Mac, WP7 etc. Could be interesting with Nokia.
- Use these to drive growth of company. Keep game alive with updates, reinvest earned cash.
- An example of a developer doing a good job of diversifying is Distinct Dev with Moron Test. After a lot of hifted over to Android and became 8th most downloaded app. Going to WP7, Blackberry, Mac.
- Multiple revenue streams (especially from multiple platforms) is also a solid way to build a business from a traditional standpoint, and is something that can only help you if you're going in the VC or acquisition direction.



# REVENUE FROM ORIGINAL SUCCESS



**\$2.99**  
**Paid**

**\$7.99**  
**HD**

**\$0.99**  
**Maps**

**Ads**

**\$0.99**  
**Guns**

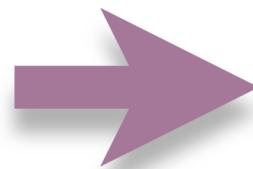
ARASH KESHMIRIAN, LIMBIC

32

- Keep the original app alive with updates and IAP, fund growth through this.
- Expand original onto other platforms to grow your revenue base. Android, Mac, WP7 etc. Could be interesting with Nokia.
- Use these to drive growth of company. Keep game alive with updates, reinvest earned cash.
- An example of a developer doing a good job of diversifying is Distinct Dev with Moron Test. After a lot of hifted over to Android and became 8th most downloaded app. Going to WP7, Blackberry, Mac.
- Multiple revenue streams (especially from multiple platforms) is also a solid way to build a business from a traditional standpoint, and is something that can only help you if you're going in the VC or acquisition direction.



# REVENUE FROM ORIGINAL SUCCESS



**\$2.99**  
**Paid**

**\$7.99**  
**HD**

**\$0.99**  
**Maps**

**Ads**

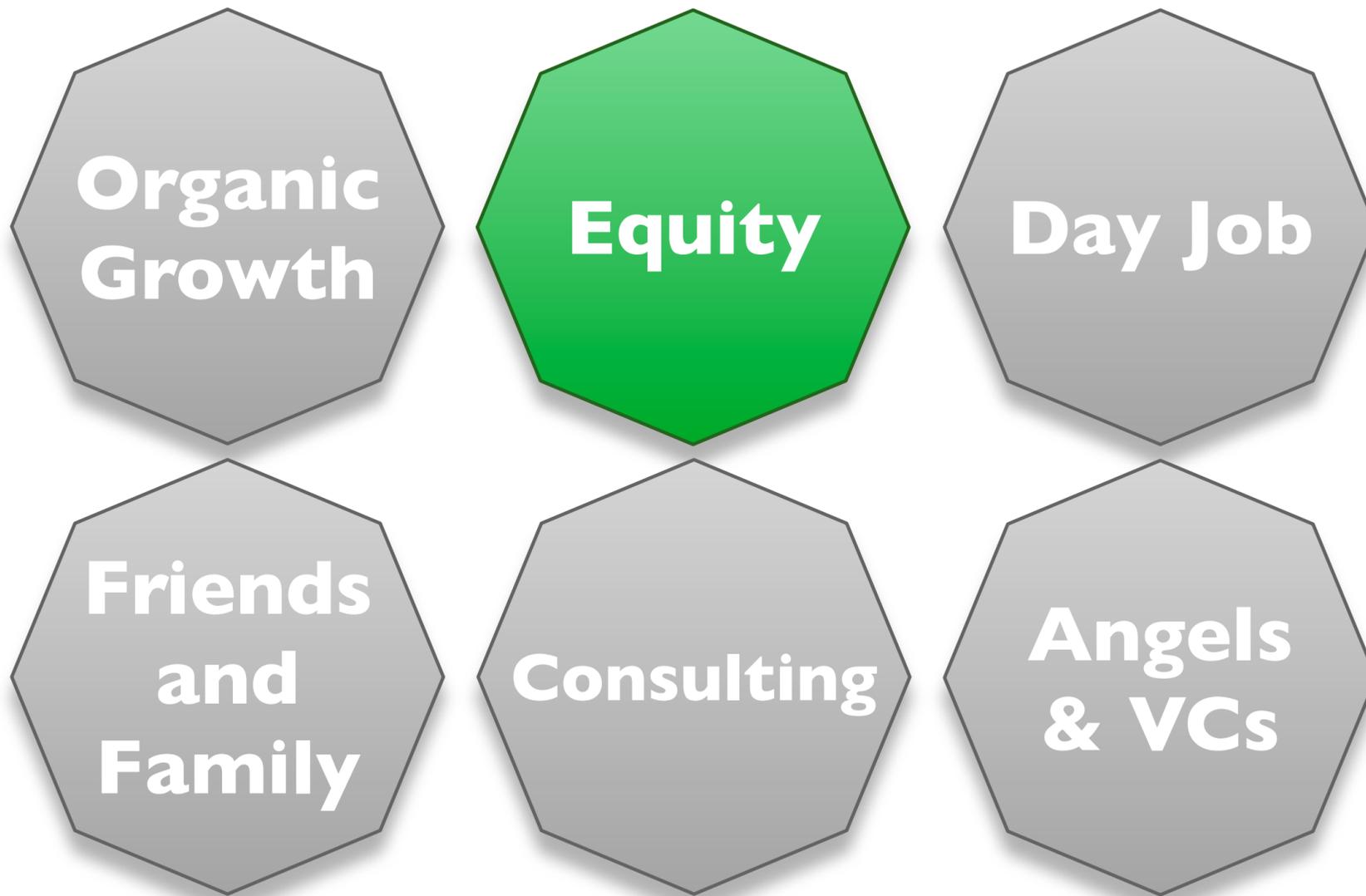
**\$0.99**  
**Guns**

**Affiliate**  
**Revenue**

ARASH KESHMIRIAN, LIMBIC

32

- Keep the original app alive with updates and IAP, fund growth through this.
- Expand original onto other platforms to grow your revenue base. Android, Mac, WP7 etc. Could be interesting with Nokia.
- Use these to drive growth of company. Keep game alive with updates, reinvest earned cash.
- An example of a developer doing a good job of diversifying is Distinct Dev with Moron Test. After a lot of hifted over to Android and became 8th most downloaded app. Going to WP7, Blackberry, Mac.
- Multiple revenue streams (especially from multiple platforms) is also a solid way to build a business from a traditional standpoint, and is something that can only help you if you're going in the VC or acquisition direction.



ARASH KESHMIRIAN, LIMBIC



# EQUITY EXCHANGE



ARASH KESHMIRIAN, LIMBIC

34

- Giving up stock to bring on key team members, or in exchange for some or all of their pay.
- Alignment of goals and incentives for both parties is essential
- The details of the equity exchange and who get's what when should be reviewed in exhausting detail until EVERYONE is on the same page
- Only makes sense for recruiting co-founders / employees when your company has no value at the beginning, and no money to pay them.
- If you're already an established company, giving out equity rarely makes sense in my opinion. Can totally complicate corporate structure if those shares have votes, and also makes things nasty later on if you are going toward acquisition, etc. Consider revshare on specific games instead. More on that later.
- Treat giving equity out as getting married to the person. They're going to follow you around for the rest of the life of the company even if they only own a tiny percentage.



ARASH KESHMIRIAN, LIMBIC



# DAY JOB



MrChrome

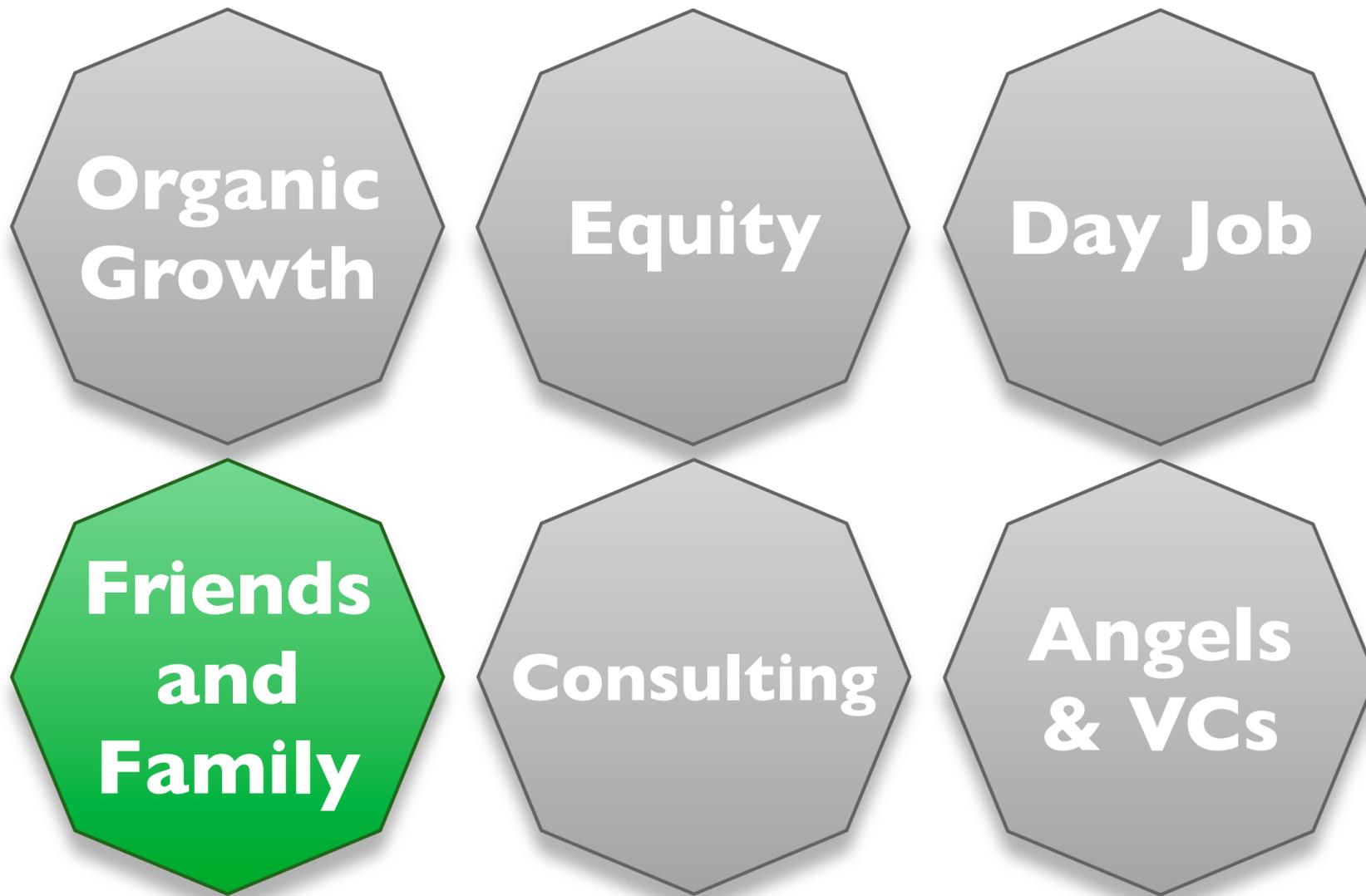
ARASH KESHMIRIAN, LIMBIC

36

- If you don't have a great app to fall back on, you can refuse to take outside money and instead keep your day job.
- Having a day job is great. 2 of us were grad students and only working part time before we made the leap.
- If you're not already being worked to death in your dayjob, you should have enough time to make your own app on the side, especially if you have at least one other person to work with. We don't recommend you do it alone, it's so much harder, plus you can do cooler stuff with more people (usually).

A lot of indie devs started this way, sometimes even while working at other bigger app studios and left to start their own smaller one independently.

Make sure this is OK with your company with respect to their IP ownership rules and the contracts you've signed.



ARASH KESHMIRIAN, LIMBIC



# FRIENDS AND FAMILY



ARASH KESHMIRIAN, LIMBIC

38

- Often willing to help you because they love you
- Make no mistake - they are just like VCs - the terms are just different!
- They do it for emotional, pride, self-interest, excitement, lottery ticket

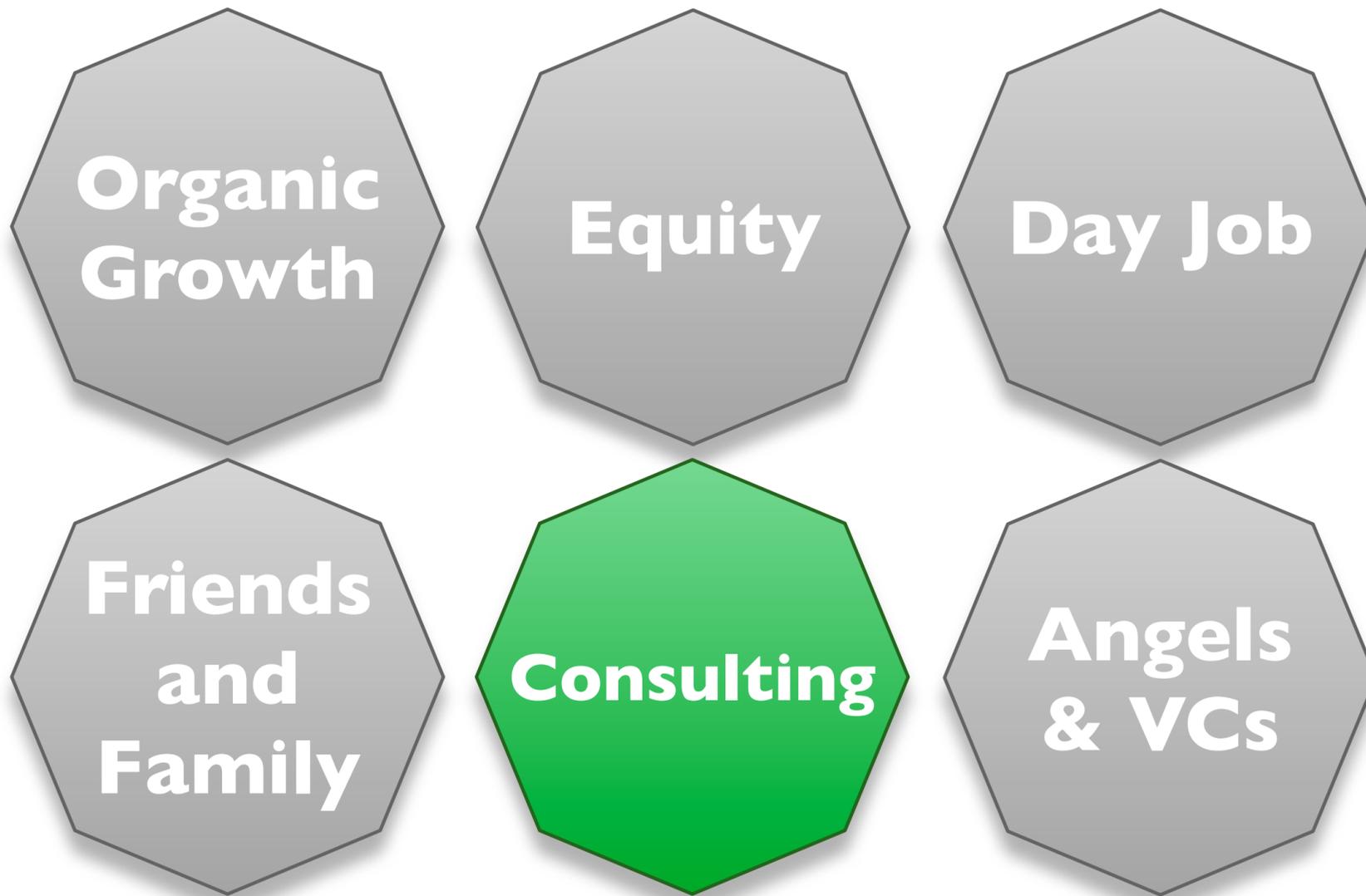
Good news: Less willing to scrutinize your business plan or demand a high return

Bad news: Personal and emotional issues. If you lose their money, it's going to be awkward every Thxgvgng.

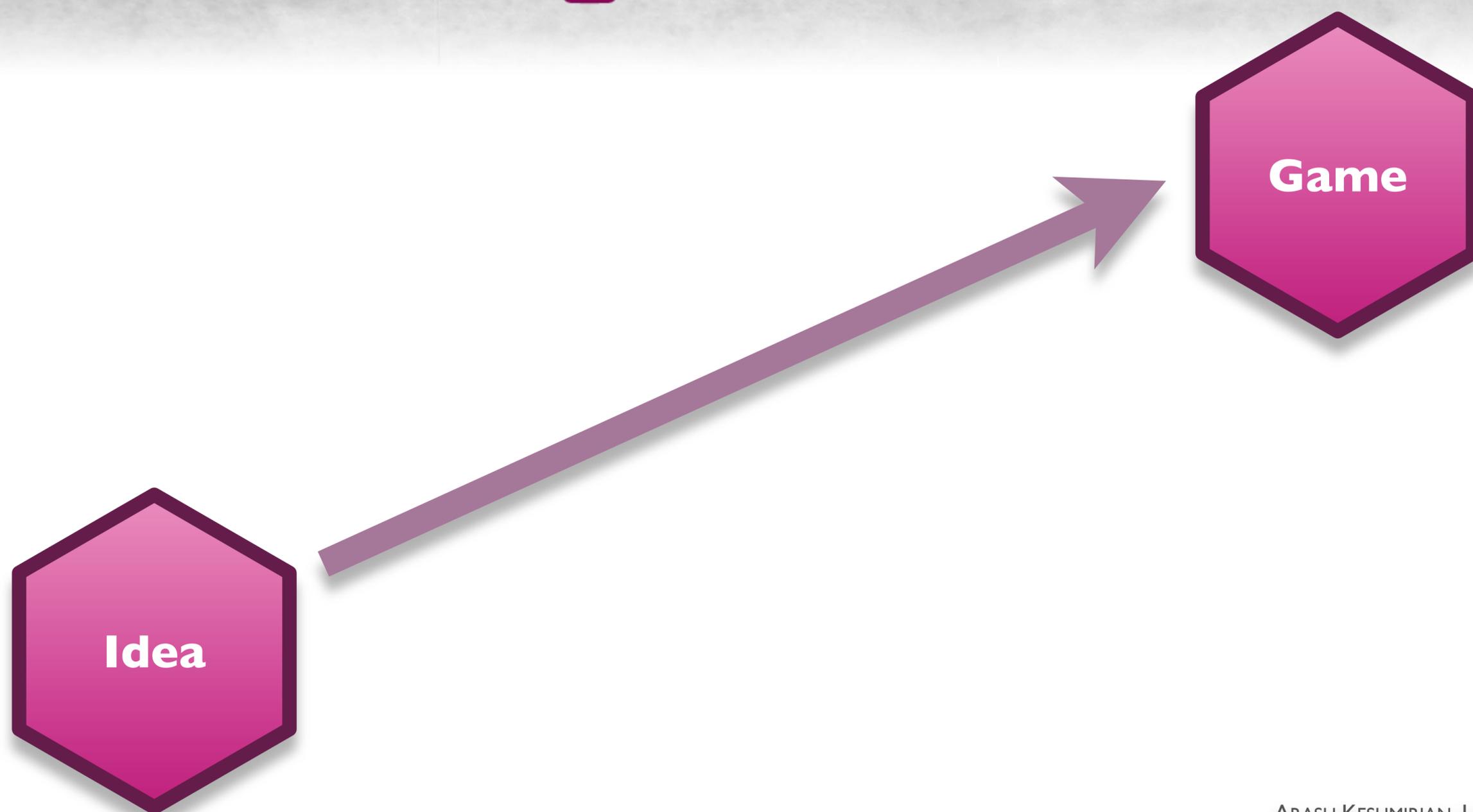
Also: Misunderstandings often occur.

## Tips

- 1) Treat as if they are strangers. (contracts, etc)
- 2) Treating it as debt may be better than equity.
- 3) Tie payments to cash flow.
- 4) Give them non-voting stock.



ARASH KESHMIRIAN, LIMBIC



ARASH KESHMIRIAN, LIMBIC

40

Going from an idea to a game requires a lift of time, and often money.

Consulting. If you've ever played GameDevStory...  
Work for hire. Talk about difference between this and dayjob.

Can be good for bootstrapping your business, just don't get addicted. You can use it to build up your tools and expertise and then do your own. Skip it if you have the luxury of going straight to making your own product. The sooner you have your own revenue stream, the sooner you can work to maximize it, make follow up products, etc. You'll have a \*real business\* then instead of just being another consultant.



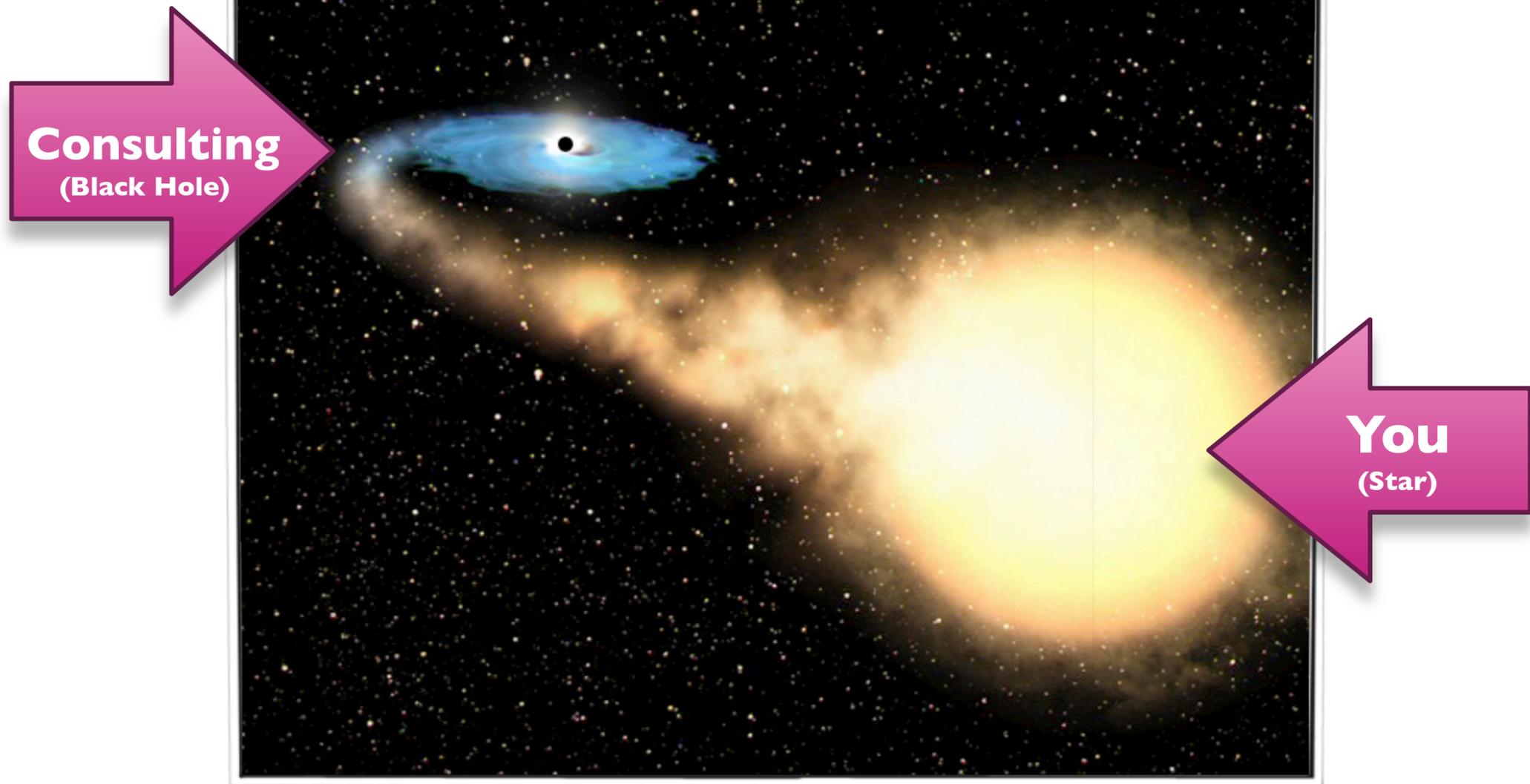
ARASH KESHMIRIAN, LIMBIC

40

Going from an idea to a game requires a lift of time, and often money.

Consulting. If you've ever played GameDevStory...  
Work for hire. Talk about difference between this and dayjob.

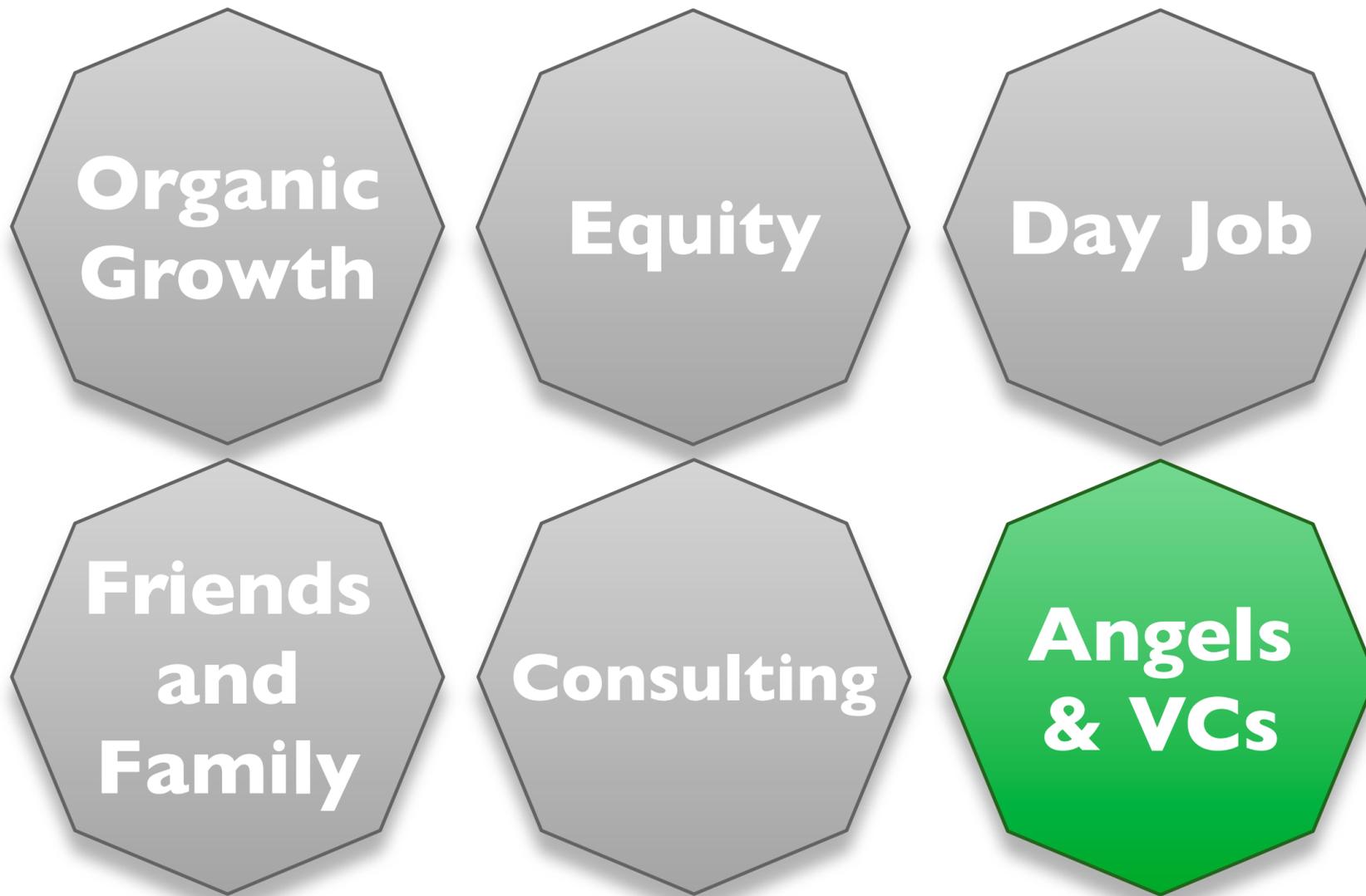
Can be good for bootstrapping your business, just don't get addicted. You can use it to build up your tools and expertise and then do your own. Skip it if you have the luxury of going straight to making your own product. The sooner you have your own revenue stream, the sooner you can work to maximize it, make follow up products, etc. You'll have a \*real business\* then instead of just being another consultant.



ARASH KESHMIRIAN, LIMBIC

41

- Can be a great crutch but sometimes can take over your forward momentum and become impossible to escape
- Don't let yourself become a consulting firm rather than a game development studio.
- Not that there's anything wrong with that, but with consulting, really, you're only going to be making money based on the hours you put in.
- I'd love to hear more about your experiences with this in the QA.



ARASH KESHMIRIAN, LIMBIC



# VENTURE CAPITAL / ANGEL INVESTORS



ARASH KESHMIRIAN, LIMBIC

43

We've never gone this route either, but going VC you often trade a lot of control for a lot of money. The other issue is that your VC will from that point forward be looking for an "exit". Basically, IPO or Acquisition. They will not be content with you making a little profit and continuing as a small business. VCs do bring on board a lot of connections and expertise.

What we've noticed... if you're a successful indie developer, you really don't need to raise in order to gain traction. One hit app can raise as much as a Series A. Lesser hits could be equivalent to angel rounds.



STANFORD  
GRADUATE SCHOOL OF BUSINESS

# “Unlearn Your MBA”

David Heinemeier Hansson, Creator of Ruby on Rails

**[bit.ly/uymba](http://bit.ly/uymba)**

ARASH KESHMIRIAN, LIMBIC

44

Just as an aside, this is one of my all-time favorite lectures about being an entrepreneur. If you do one thing today, just write down this link and check out this talk later. Seriously. Do it. It will change your views.

I even made a bit.ly link just for you guys. It's five letters. Just write it down.



# OTHER SOURCES



ARASH KESHMIRIAN, LIMBIC

45

There are other, less obvious and less talked about ways to fund your efforts.

- If you're still in school and receiving support from the university or academic grants, any free time you have might be well spent on your app. Don't wait until you graduate.
- Like a day job, make sure you stay within the limits of the rules, though.



# PUBLISHERS



...etc.

ARASH KESHMIRIAN, LIMBIC

46

- Advance Royalties, Development, Marketing, Expertise, Infrastructure
- Often very selective. Often if you have a hit, a lot of publishers will be interested in helping you launch your sequel under their brand.
- They do offer people that have no interest in spending time marketing or supporting their games an outlet to just focus on what they do. If that's all you're after though, you should also consult hiring a PR firm.



# THE REST: TIPS ON MATURING THE BUSINESS

ARASH KESHMIRIAN, LIMBIC

47

- Assorted tips on growth. Something for everyone.
- I'm happy to talk about any of these in more detail in the Q&A and later at the conference.



# LEADERSHIP (THAT'S YOU!)



ARASH KESHMIRIAN, LIMBIC

48

- Means something different for everyone, and where you need grow as a business leader depends on what your experiences have been up to now.
- For me started some little companies in high school / college, but nothing nearly as serious
- As a CS major I was always sort of an introverted person, so growing out of my shell was a long learning process.
- Like anything else, like playing chess, you can get better at leadership. It certainly helps to find role models, and read a lot of books on leadership, negotiation, etc.
- Some of this is also an issue of knowledge. Coming to understand basic business administration is another area to work on if you never got your MBA.
- For some people, you'll make the realization that you actually don't want to go out there and play CEO, and prefer to be a CTO or the Chief of Product. You'll want to find someone to take over this role and be the guy that does all the meetings and GDC talks.



# SETTING COMPANY GOALS



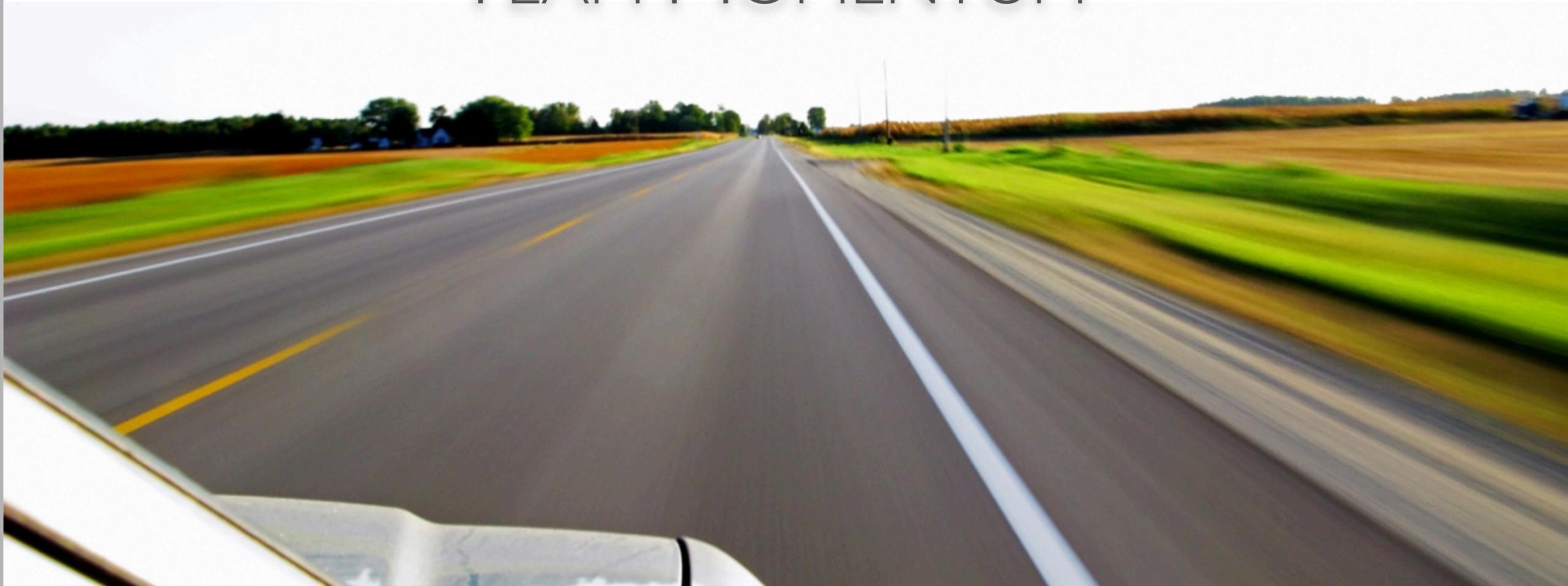
ARASH KESHMIRIAN, LIMBIC

49

- You really don't need a 5 year plan. The industry changes so fast that you'll be wrong anyway.
- But most important is something more like a 3 month plan, a two week plan. These are what really keep you moving forward. A short window is key, and our plans tend to be based on game releases and milestones.
- Apple will announce something to derail you
  - - Make decisions - (even if you change them the next month)
  - Gives momentum
  - Provides decision-making framework
  - Allows others a degree of autonomy and freedom to contribute in ways you didn't imagine
  - Set a company resolution for the year! It's not too late (even though it's March 1st). This is about general things you want to improve, like "adopt an agile methodology" instead of "develop haphazardly at our own pace"
  - Back to "where do you want to be?" "what do you hope to learn, what role do you want to have, what kind of company do you want to run"



# TEAM MOMENTUM



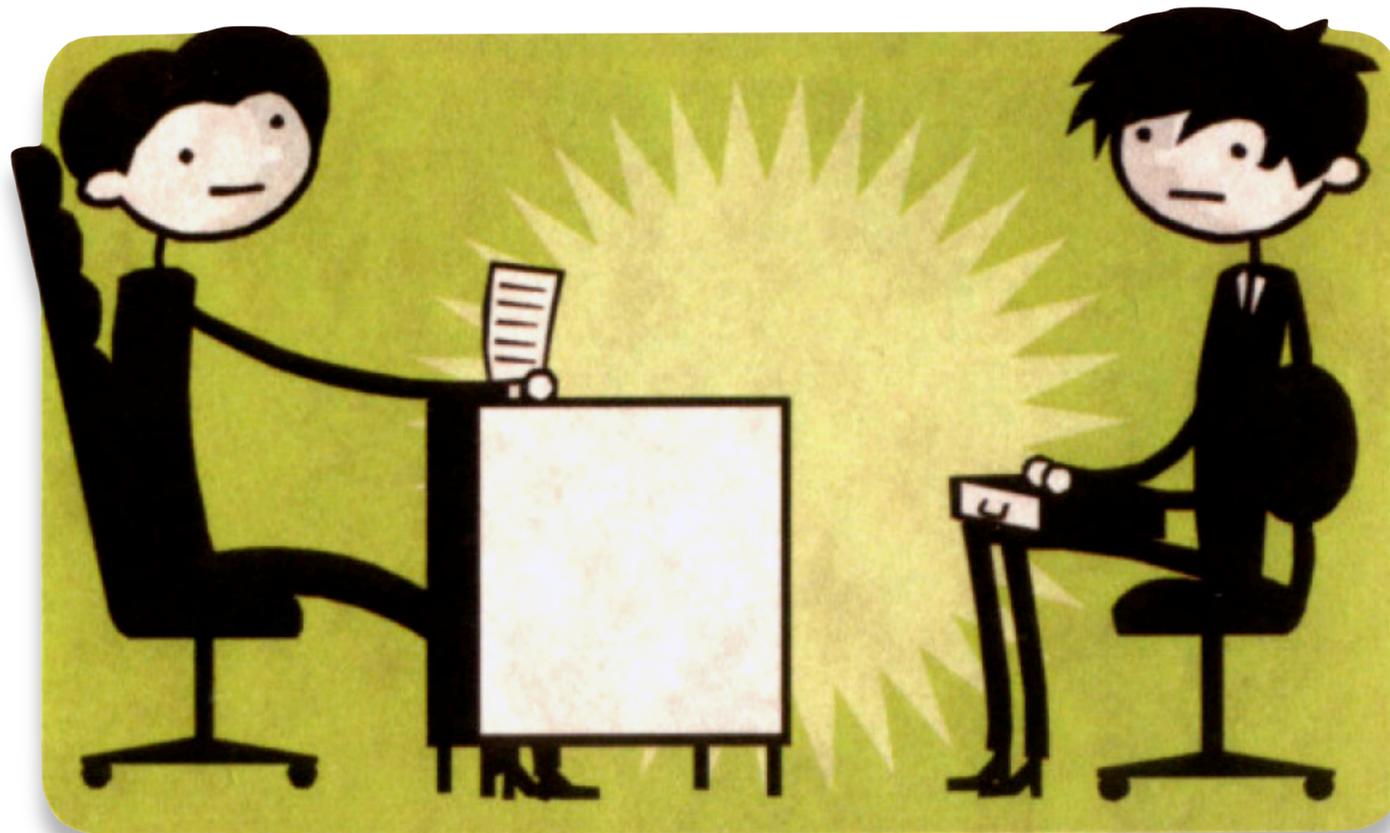
ARASH KESHMIRIAN, LIMBIC

50

- Important to keep energy alive even after hunger satiated
- If you have bread and butter success it can give you a sense of stagnation being stuck working on the same app for a long time
- Danger of early success -- complacent, thinking what tricks and strategies worked for you the first time around will work again.
- Ex: sales and going free -- good initially. As everyone else starts doing what you're doing, it becomes less special and that tactic loses effectiveness. The marketing side of the app store changes as fast as the technical side!



# HIRING & STAFFING



ARASH KESHMIRIAN, LIMBIC

51

- So I mentioned this in an earlier slide...
- You may have the money to hire more people, but should you rush into it right away? What employees do you really need? Hiring fewer people is easier than having to let people go when you realize you can't support them.
- Here are some easy examples where you might actually consider hiring
- Ports. (android, etc)
- Quality Assurance. (less engineering, more updates)
- Artwork (no more programmer art)



# COMPENSATING THE TEAM



**Hourly**



**Salary**



**Rev Share**

ARASH KESHMIRIAN, LIMBIC

52

- Hourly: More flexible, less commitment
  - Paying Artists and Sound Guys: By the deliverable
- Salary: Must have enough work to keep employee cost-effective. More commitment.
- Revenue Share: Excellent alignment of indiv. incentives and company incentives. Ongoing work for updates, etc.
- Good people policy. Personally, we only want to work with people who are at the top of their game, and those people don't tend to want to work for no pay or low pay. The only way to get those kinds of people to work for you without paying a lot of cash is to revenue share the project



# OFFICE SPACE



ARASH KESHMIRIAN, LIMBIC

53

Limbic is right in the middle debating this one. We're still virtual and really comfortable with it.

Benefits and drawbacks

(+) Easier to have meetings / scrum

(+) Usually leads to (more) regular work hours

(-) Higher Fixed Costs

(-) Additional time overhead (keeping the place clean, hiring office manager, etc)

(-) People have different needs in work environment (quiet, furniture, lighting, etc)

(-) Time wasted coming to office, going out to get lunch, etc. Every day.

- Sometimes there's just no way to get everyone in one place (half our team are in Germany, Netherlands, and New Zealand)

- Halfway solutions (shared work areas, etc)

- If you have an office easier to get some types of workers (interns, etc)



# ON THE TOPIC OF WORK HOURS...



ARASH KESHMIRIAN, LIMBIC

54

- Staying up crazy late -- not such a great idea
  - Not a race for most hours. Race for best ideas.
  - Missing a single good idea way more expensive.
  - Not going to out-muscle Gameloft or EA in man-hours worked.
  - At Limbic avg 5hrs/dy, 7 day weeks. Starting to not work weekends now.
  - You didn't become an indie developer in order to work yourself to death.
- Productivity getting cut into by meetings. Making games requires long stretches of uninterrupted time. Programming and design engage your brain in a way that you usually need at least a solid stretch of an hour, usually several hours to do anything substantial. Avoid scheduling more than one meeting in a day, pack meetings together.
- Paul Graham suggests having meetings in the morning, and doing coding in the evening / night.
- Wise man once said that programming is like sleeping. It takes a while to get into it, and it doesn't work if you are constantly interrupted. On the topic of sleeping...



## TED TALK

# “Why Work Doesn’t Happen at Work”

ARASH KESHMIRIAN, LIMBIC



# SLEEP



ARASH KESHMIRIAN, LIMBIC

56

- Sleep. As much as you can.
- Everyone needs different amounts of sleep.
- One of our cofounders can get up at 7am and he's good to go for 12 hours.
- 10am is still early for the rest of us, and we usually need a nap by late afternoon. Naps are a perk.
- Recognize the sleep needs of your teammates and work to plan meetings, hack sessions, etc around everyone's productive times.
- If teammates are yawning you must find a way to ensure they can get more sleep or you need to have your meeting when they are alert.



# GETTING THE WORD OUT



ARASH KESHMIRIAN, LIMBIC

57

- Have to decide if you do this yourself or bring someone else in to do it for you
- Intuitive in our space still, but dynamics are constantly changing -- while app store is a meritocracy
  - if nobody has heard of your game it doesn't matter how good it is.
- PR still figures prominently because press coverage (particularly online) is still one of the key areas for people to "discover" your game.
- More traditional marketing tools like advertising can also be good if used very strategically and coupled with audience knowledge and demographic data. Cost makes broad reach vehicles unwise in many cases but there are still good opportunities out there for cheap, well-targeted marketing.
- You need Marketing at all stages -- But you don't have to pay for it --
- Word of Mouth marketing is also critical. What users say about you and your title can affect everything - for good and bad. Give people the tools to communicate and find out more about your game.
- A living facebook page is great for this, but FB/TW is not a magic bullet. It's all additive, you want to do everything possible.

You can't rely on the quality of your game alone.



# MARKETING

ARASH KESHMIRIAN, LIMBIC

58

- If you have someone on the team who can do this for you, by all means do it (it's not that hard!). Make your own banners and promo videos if you have any skills to do so (or learn how).
- Recognize if you have absolutely no talent in making ads, banners, or videos and if this is the case, you may be better off at least contracting someone to make them for you.
- Dave Whatley, Critical Thought Games - very successful outsourcing all of his marketing and PR so he can focus on the tech since that's his background.
- Sometimes it really starts to seem like there are more App Marketing Companies than actual App Developers. A lot of people want to get into this platform by helping you market effectively.
- Pay-Per-Install: For most indies, propping up apps with svcs like TapJoy is not feasible for all but the most successful indies. Yet, it is still possible for games like TinyWings to get to the top with basically no paid marketing budget. The right price for marketing might be still be close to zero.



# ACCOUNTING



ARASH KESHMIRIAN, LIMBIC

59

Incorporate. Get an accountant. Figure out your corporate structure. They can also help you with your cashflow and your revenue forecasting.

After your incorporate it's not really wise to do your accounting yourself. Too much to know, too easy to forget things and trip yourself up.

If you're going to outsource anything, it's this. But be careful. People are going to try to take advantage of you, and your accountants know how much money you're making so shop around and get some prices up front.



# CUSTOMER SERVICE



ARASH KESHMIRIAN, LIMBIC

60

- Not trivial at 6 million players.
- Doing it yourself is the only way to really ensure quality. We still do it ourselves, as unwise as it may be for our bottom line. You get a really close pulse on the player base.
- Knowledge Bases / FAQs reduce emails. Products like Zendesk, etc.
- Amount of customer service you have to do is often inversely proportional to the quality of your product. Skimp on QA and you'll make it up with Customer Service and lower star ratings.
- I'll report back next year and let you know if we're still doing it that way.



# PROJECT MANAGEMENT

**Design  
Docs,  
Scrum**

**Email,  
Skype,  
IRC, etc.**

**Github,  
Lighthouse,  
Banana**

ARASH KESHMIRIAN, LIMBIC

61

- Formalities become more and more important as team grows and everyone needs to be kept from going off in different directions.
- Formalizing design, development with design docs and scrum
- Have multiple communication channels, let the people working with you use the ones they prefer. Example: Skype vs. IRC. People are different, don't try to cram them all into the mold of how you think they should operate.
- You should be using some kind of source control and online project management.



# A GROWING FAMILY



ARASH KESHMIRIAN, LIMBIC

62

- As the number of applications grows, so do the number of teams working in different areas of the company.
- One of the issues Limbic is starting to struggle with. Fans even “worry” that new products mean fewer updates.
- Learning to step out of each project and manage the entire flow of the product line becomes important, because interpromotion becomes an important thing to plan.
- Also important is a knowledge of the demographics you are hitting, and whether you want to narrow your focus or spread out to capture all kinds of users into your ecosystem. You are now managing a portfolio.
- Nimblebit is a fantastic example of a developer that has interpromoted and crosspromoted SUPER effectively. Pocket Frogs, Scoops, Skyburger, really great example of a wide range of games with broad appeal.
- Backflip Studios is another example of building a healthy ecosystem with Paper Toss, Ragdoll Blaster, NinJump. You have to either pay for eyeballs, or grow them organically in your own games and shift them around in your eco.



# UPDATES



ARASH KESHMIRIAN, LIMBIC

63

- Updates are awesome, More IAPs
- If you release updates too close, high user expectations that may drown you. but wait too long, and the game may cool down too far.

Other fast tips:

- Iterate on icons.
- It was very clear this year that seasonal apps with seasonal icons. Gotta decide how many seasons you want to support. We do a winter edition every year.
- Experiment with your screenshots!
- Happy to talk in more detail about these but what i really want to get to is...



# PARTNERSHIPS, ALLIANCES



ARASH KESHMIRIAN, LIMBIC

64

- What kind of partners make sense for your company?
  - Audience type, size, age
  - Pocket Frogs Cross-promo, more effective than ANY paid campaign. Frog App a Day
- Skills-trading Partnerships
  - Analyzing your strengths and weaknesses. Need an artist? Get one here.
  - Or complimentary teams... an art heavy company working with a programmer heavy team. Revshare the outcome.
- Sales partnerships, brand partnerships, middleware partnerships.
- This can really take place at all levels, big and small.



# FINAL THOUGHTS



ARASH KESHMIRIAN, LIMBIC

65

- This session has probably left you with more open questions than actual answers.
- My hope is that you'll come away from this lecture with a sense of the issues you face as you grow your studio after your first success, and set yourself up for the many successes to come.
- Make an app or game that you would use yourself. It's super hard to make a game for an audience that doesn't include you. Don't chase what other people are finding successful. Chase what you love.
- Be willing to change. Experiment. Take risks. Don't be the stubborn team that keeps doing the same thing over and over and wonders why it's not working.



# Q&A

*Reaching Me :*  
arash@limbic.com  
@akgfx

ARASH KESHMIRIAN, LIMBIC