Astral

Branding Across Realities

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Team 9, New Product Manager

Contents

A presentation cannot justify the vague but hopeful possibilities of tomorrow. We couldn't alone imagine all of what tomorrow might hold – but, we took some inspiration…

METAVERSE IS AN ARTISTS PAINTING COME TRUE

Let's jump in and experience an exhibition of the metaverse

GEAR UP!


oculus
Loading...

Ford Experience Centre
Test Drive Vehicles

Verizon Media
presents
Pittsburgh Steelers vs New York Giants

Product Marketing

Product Advertisement

Sephora Fashion Week

Experience Advertisements

Immersive-Gaming Advertisements


Zipping back into reality

Thank you!

The Metaverse already exists

The internet satisfies all the seven qualities Mathew Ball uses to define the Metaverse

Persistent

Synchronous & Live

No cap on concurrent users

Fully functioning economy

Spans both digital & physical worlds

Unprecedented interoperability of assets

Has content & experience by many

The gaming industry is already “there”

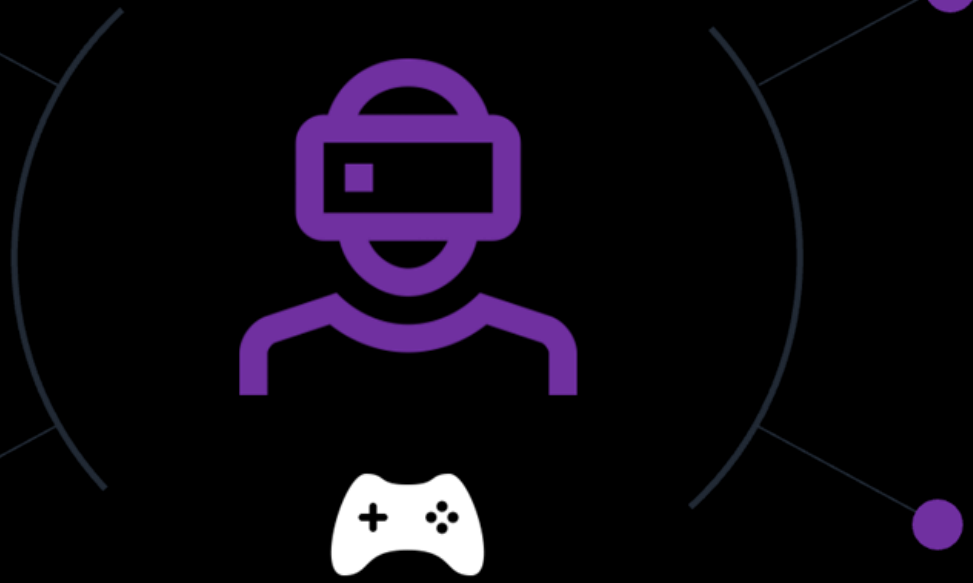
Video games already do what the Metaverse promises: Virtual hangouts, digital currency, weddings and more.

Steam, 2017

Steam’s VR platform had a home type experience with social features.

Epic Games, 2017

Fortnight has partnered with Netflix, Ferrari & more to create assets within the game.



Ubisoft, 2017

Its game, Assassin’s Creed offers convincing historical tours within the game

Second Life, 2003

Online social platform where people created digital representations of themselves.

Fashion's foray into the Metaverse

Metaverse

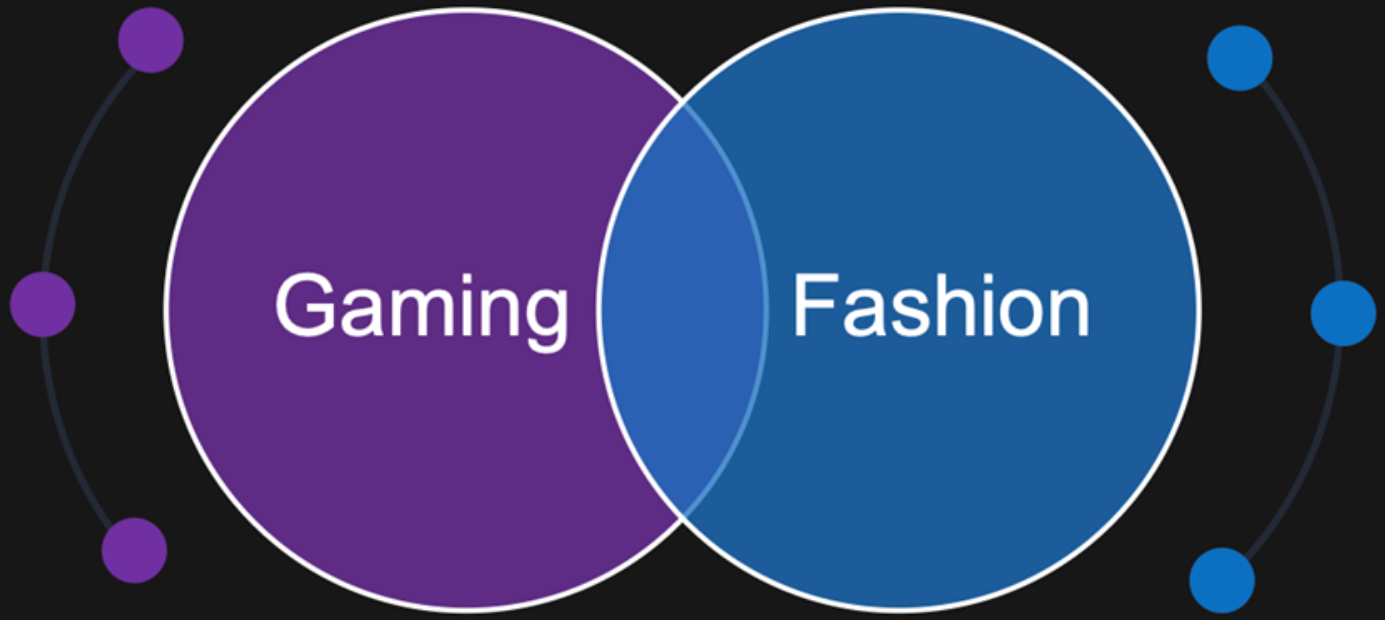
Game development on the metaverse has already began on platforms like Roblox.

Major Players

Epic Games, Unity Software, Magic Leap, Tencent

Initiatives

Nike has created NIKELAND on Roblox for its fans to connect, share experiences and compete.



Metaverse

Fashion companies are just starting to offer digital experiences & have realized its ability to scale.

Major Players

Gucci, Louis Vuitton, Nike

Initiatives

Louis Vuitton partnered with Riot Games to create skins for League of Legends game.

Persona

Name: **Tisha Baker**

Age: **38**

Education: **MBA**

Occupation: **Marketing Manager, top fashion house**

Personality

Ambition

Tech-savvy

Creative

Bio

Tisha is a marketing manager at a top fashion house that's looking to leverage the rising popularity of the metaverse by advertising there.

Frustrations

Doesn't have the technology developed to advertise on the metaverse.

Experimenting with advertising would be too expensive if done in-house

Goals

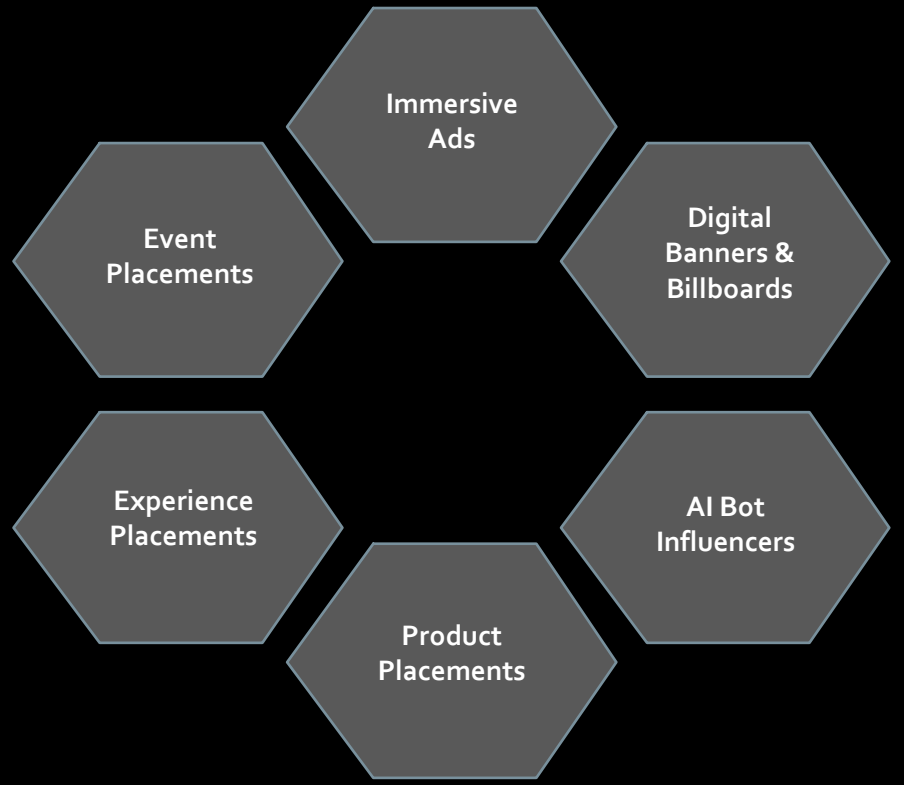
To find a unique way of advertising her firm's products that help increase sales.

Market Size

The metaverse is the next big technology platform, attracting online game makers, social networks and other technology leaders to capture a slice of a nearly $800 billion market opportunity. (Bloomberg)

The Metaverse market may reach $783.3 billion in 2024 vs. $478.7 billion in 2020 representing a compound annual growth rate of 13.1%, based on our analysis and Newzoo, IDC, PWC, Statista and Two Circles data. As video game makers continue to elevate existing titles into 3D online worlds that better resemble social networks, their market opportunity can expand to encapsulate live entertainment such as concerts and sports events as well as fighting for a **share of social-media advertising revenue.** The total Metaverse market size may reach 2.7x that of just gaming software, services and advertising revenue.

Concepts



Immersive Ads
Customers interact with advertisements placed within virtual games

Digital Banners & Billboards
Billboards could be placed in virtual workspaces, for all to see

AI Bot Influencers
Trained algorithms can maximize followers and display the most relevant content

Product Placements
Placing products in the virtual world to increase its engagement in the real world

Experience Placements
A virtual world setup for the brand to advertise, where the customers can actually get immersed in that world and interact with the products of the company

Event Placements
Events organized with real celebrities to boost the company's brand. For instance, Ariana Grande performed for players of the game, Fortnight

Concept Screening: Understanding the Criteria

Reach

- Number of impression
- Number of unique viewers

Technology

- Technology Maturity
- Adoption
- Learning Curve

User Experience

- Interfering advertisements
- Distracting advertisements

Cost

- Cost-to-benefit
- Technology expense
- User Acquisition
- Cost/1000 reach

Concept Screening: Screening

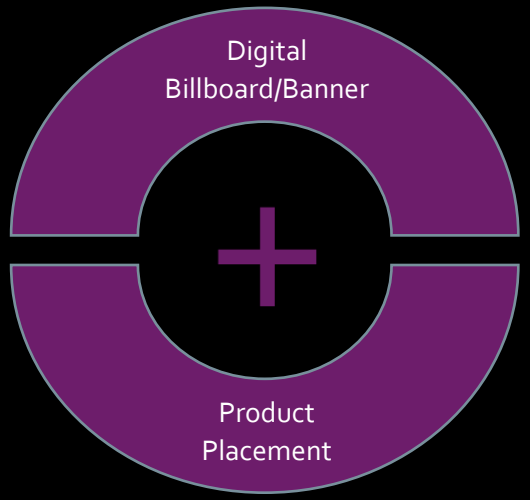
		Immersive Ads A	Digital Billboard/Banners B	AI Influencer Bot C	Product Placement D	Experience Placement E	Event Placement F
Reach	Number of impressions	+	0	-	+	+	+
	Number of unique viewers	0	0	-	+	-	0
	Cost-to-benefit	+	0	-	0	-	0
Cost	Technology expense	-	0	-	-	-	0
	User Acquisition	-	0	+	-	-	0
	Cost/1000 reach	+	0	-	+	-	0
	Technology maturity	-	0	-	-	-	0
Technology	Adoption	+	0	+	+	0	0
	Learning Curve	+	0	-	-	0	0
User Experience	**Interfering ads**	+	0	+	-	-	0
	Distracting ads	+	0	+	+	-	0
Totals: **Sum Positives, Sum Zero, Sum Negatives**							
Net Score (Rank)							

Positive (+) Negative (-) Reference Concept (0)

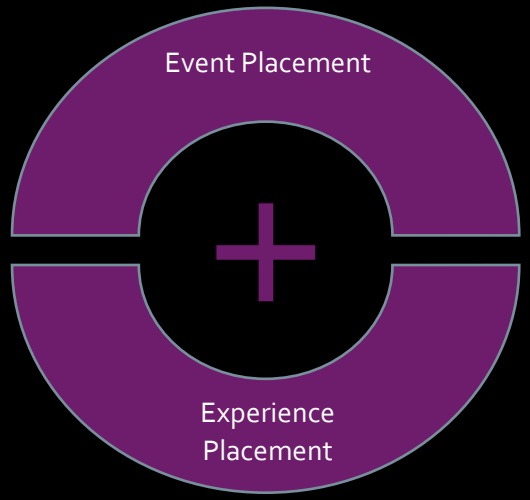
Concept Screening: Inference

✔ **Reference Concept Outperformed**
Referenced concept of billboards/banners got outperformed by concept A (immersive experience in gaming)

✔ **Combine and Improve Concepts**
After careful consideration and analysis within the group, it was deemed that concept B (billboard/banner) and concept D (product placement) are weak individual idea due to cost limitations, but when combined they complement each other well. For instance, holographic or 3-D billboards could become a reality for advertising in the metaverse.



3-D/Holographic Billboards



Events and Experiences

Concept Scoring: Matrix

		Weightage	Immersive Ads A		Holographic Billboards B + D		AI Influencer Bot C		Experience & Events E + F	
			Rating	Score	Rating	Score	Rating	Score	Rating	Score
	Number of impressions	15	3	45	2	30	5	75	4	60
	Number of unique viewers	10	3	30	4	40	3	30	3	30
	Cost-to-benefit	5	3	15	2	10	5	25	3	15
	Technology expense	5	3	15	4	20	3	15	2	10
	User Acquisition	10	3	30	2	20	5	50	2	20
	Cost/1000 reach	5	3	15	4	20	3	15	3	15
	Technology maturity	10	3	30	4	40	4	40	3	30
	Adoption	5	3	15	5	25	5	25	4	20
	Learning Curve	5	2	10	4	20	3	15	3	15
	Interfering ads	15	4	60	2	30	5	75	2	30
	Distracting ads	15	4	60	2	30	5	75	3	45
Total	Score (Rank)		(1)		(2)		(3)		(5)	

Positive (+) Negative (-) Reference Concept (0)

Concept Selection: Conclusion

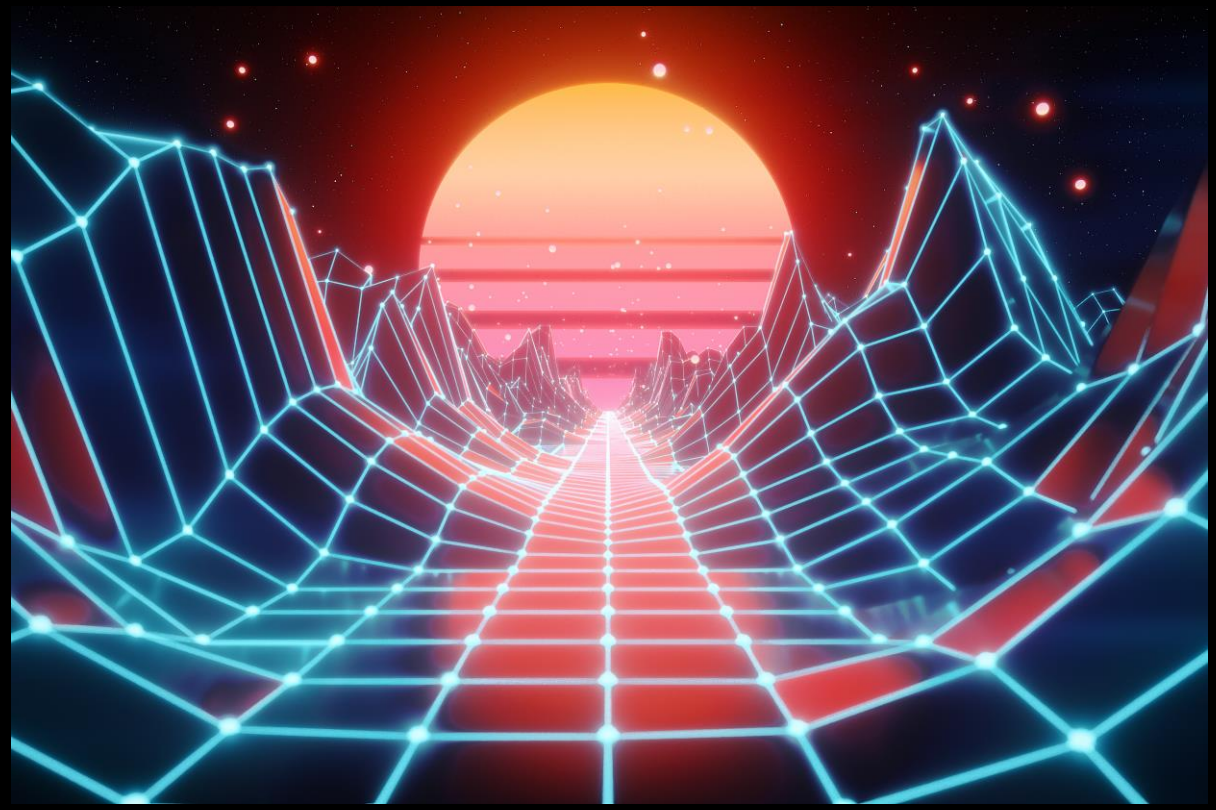
Immersive-ads in Gaming

Immersive advertisements in gaming to be a revolutionary way to capitalize the best of both real and virtual world – in the meta world of tomorrow. Immersive ads will be experienced by the early adopters of the metaverse (gamers) that get introduced to these new and unique styles of advertising immersive through gaming

Value Proposition

Virtual world is a big emerging market for a

marketer to expand their business.

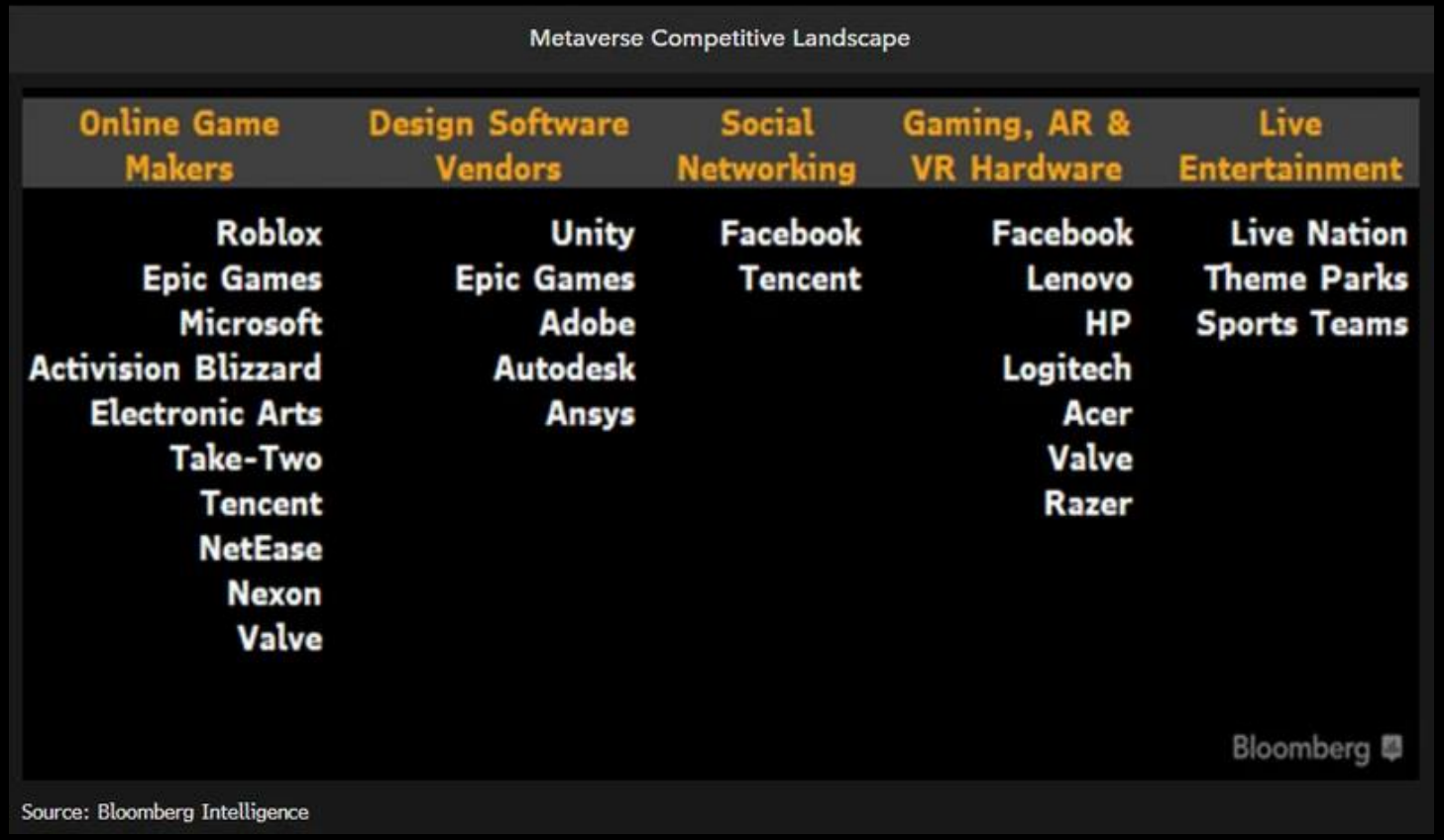


Value proposition

Astral: Meta-Ads

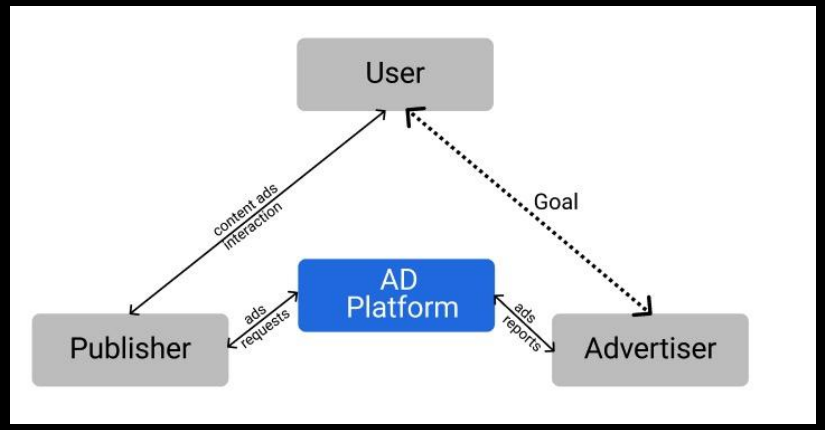
Help real-world companies step into virtual world and empower their monetization.

Competitor landscape



Roblox, Microsoft's Minecraft and Epic Games' Fortnite appear to be early leaders in the race for Metaverse leadership but there's **ample time for other game makers and social networking companies to** tweak existing services or launch new ones to capitalize on the market's growth.

Traditional Advertisement Industry



Ad platform is the bridge connecting publishers and advertisers. Publishers always care about their ads revenue. Advertisers always care about the effect of the ads. They will use GMV and ROI to evaluate advertising effectiveness. Also, for the end users, user experience is always the first priority.

Mature paid model:

CPM, CPC, CPL, CTR, CVR

Auction mechanism:

GFP(generalized first price), GSP(generalized second price) and VCG(Vickrey–Clarke–Groves mechanism).

Ranking strategies:

rankScore=ecpm+ gmv * ratio_a+exprience * ratio_b

Insight: Online ads is a very mature model and technology.

Opportunities & Challenges in Meta-ads

Build tools to streamline the creation of meta-ads.

3D modeling tool
API for connecting the metaverse platform and meta-ads
Marketplace for game creators and merchants

Redefine the pipeline of creating ads.

By exploration at the early period, a standard pipeline aligned with the industry level is supposed to be created, making the production of the Meta-ad frictionless and effective.

Devise criteria of meta-ads measurement

Based on the data collected, the industry needs common criteria to measure the effectiveness of the meta-ads to make sure the ads really bring news users/orders to the advertisers.

Financial Analysis: Revenue Sources

We will offer the following services in the metaverse advertising space.

1. Production & Publishing: we will produce immersive advertising experiences (i.e. game) as requested by advertisers, and will register such game into the metaverse platforms in a way that will attract the most users.

2. Consulting: we provide advices on advertising strategies in the metaverse space to advertisers. For example, we will answer to a client’s question on how to get 1 million views to their product in the metaverse space.

Revenue From Production & Publishing

In this service category, we will develop and publish games in the metaverse platforms (mostly in Roblox platform as of now). The price of each game is determined as below.

Unit price = (Down payment) + (Cost per visit) * (# of visits to the game)

This pricing is based on the assumption that the more game is visited, the more it is successful as an advertising campaign. The down-payment part covers the basic development cost, and the latter part is an incentive to attract more users.

Revenue From Production & Publishing (Cont.)

Unit price = (Down payment) + (Cost per visit) * (# of visits to the game)

Down-payment is fixed to $50,000, which is a typical cost required to implement a casual-level 3D game[1]. This price can vary depending on the size of the game, but it will be $50,000 on average. **Cost per visit is set to $1.00,** which is comparable to the average cost per click (CPC) in digital advertising[2].

By assuming that the game is visited 100,000 times during the given period, the invoice price is $150,000 as below.

Prce = ($50000) + ($1) * (100,000) = $150,000

1.Mozolevskaya, V. (2020, Dec 10). Mobile game development cost: Factors influencing price and clear estimates. https://kevurugames.com/blog/mobile-game-development-cost-factors-influencing-cost-and-clear-estimates/

2.Hochman, J. (2020). The Cost of Pay Per Click Advertising - PPC Trends and Analysis. https://www.hochmanconsultants.com/cost-of-ppc-advertising/

Revenue From Production & Publishing (Cont.)

Based on the pricing method given in the previous page, the revenue from the production and publishing service is determined as below.

Revenue = { average # of games that we produce during the given period } *
{ $50,000 + $1.00 * (average # of visits to each game) }

On average, 4 casual 3D games can be made in one year[1]. And the expected number of visits for average-quality game is 200,000[2]. Based on this assumption, the annual revenue from the production and publishing service is estimated as below.

Service	Down payment	Cost per visit	# of visits per game	Average price per game	# of games produced	**Revenue**
Production	$50,000	$1	200,000	$150,000	4	**$1,000,000**

1.Dana, (2021, April 24). How Long Does It Take To Develop a Video Game. https://geekygamingstuff.com/how-long-does-it-take-to-develop-video-games/
2.Glenday, J. (2022, Jan 27). Roblox explains what branded experiences mustered millions of visits. https://www.thedrum.com/news/2022/01/27/roblox-explains-what-branded-experiences-mustered-millions-visits

Revenue From Consulting

The price of consulting service is calculated on hourly basis, and the hourly rate is $130, which is a typical price for a digital advertising consulting[1].

We expect that each consulting case consumes 12 hours on average, and we will have 4 cases per month. Based on these assumptions, revenue from consulting will be $74,800.

Service	Hourly rate	Hour per case	# of cases per year	**Revenue**
Consulting	$130	12	48	**$74,880**

1.Credo (2021), Digital marketing agency pricing and hourly rates. https://www.getcredo.com/guide/digital-marketing-industry-pricing-survey/digital-marketing-agency-and-consultant-hourly-rates/

Revenue Summary

In sum, the total expected annual revenue from the production and consulting services is **$1,074,880**.

We are expected to reach this revenue in the **2nd year** when our business is on track. The first year revenue is expected to be the half of this number.

Category	Revenue (Y1)	**Revenue (Y2)**
Production	$500,000	$1,000,000
Consulting	$37,440	$74,880
Total	$537,440	**$1,074,880**

Revenue Projection in an Optimistic Scenario

In an **optimistic** scenario, from Y2 to Y5, our **revenue will grow at 20% annually**, which is a benchmark growth rate for a successful startup[1]. In this case, revenue for the upcoming 5 years is estimated as below.

Category	Y1	Y2	Y3	Y4	Y5
Production	$500,000	$1,000,000	$1,200,000	$1,440,000	$1,728,000
Consulting	$37,440	$74,880	$89,856	$107,827	$129,393
Total Revenue	$537,440	$1,074,880	$1,289,856	$1,547,827	$1,857,393

1.Maltz, J. (2013, Aug 24). How Fast Should You Be Growing. https://techcrunch.com/2013/08/24/how-fast-should-you-be-growing/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAMTQGW5oH8CngOACpAuA40QzmD5TnJFENbHFX5z1dqeubJ-KFRj19Gsf7hLvDZfkHrZkv9SQY4DMk5LefP7jkGCrXUcN0PrIEefxtRPtkCf5Fsgi-a9V-P2x7yLqjAqNkJplsJiRbFPKTADTeLGBgScwibl4g6sjRIphCRB0-x8Q

Revenue Projection in a Pessimistic Scenario

In a **pessimistic** scenario, our **revenue will stay around Y1 level** because of the intense competition in the market. By assuming 1% annual growth from Y1 to Y5, revenue for the upcoming 5 years is estimated as below.

Category	Y1	Y2	Y3	Y4	Y5
Production	$500,000	$505,000	$510,050	$515,151	$520,302
Consulting	$37,440	$37,814	$38,193	$38,574	$38,960
Total Revenue	$537,440	$542,814	$548,243	$553,725	$559,262

Financial Analysis - Cost Sources

Our business will incur three types of cost.

1. **Wages**: our services will be provided by a team of consultants, designers, programmers, publishers, and product manager. Wages account for the largest portion of cost.
2. **Publishing**: while it's basically free to put our immersive experiences (i.e. games) in the metaverse platforms, it usually cost some money to make out games more visible to users.
3. **Other expenses**: costs associated with office rent, software license, and other administrative stuffs fall into this category.

Cost From Wages

In order to determine wages, we should

1. Determine the annual labor hours needed to deliver each service outlined in previous chapter.
2. Based on this, determined the size of our team.

Cost From Wages (Cont.)

Annual labor hours L that are needed to deliver each service can be computed as below.

L = (Labor hours needed for one unit of a work) * (# of works to be delivered in one year)

For example, by assuming that average 12 hours are needed for performing one case of consulting, and we will have total 48 consulting cases in one year,

Annual labor hours for consulting = 12 hours * 48 cases = 576 hours

One year actually consists of 2088 working hours (assuming 8 hours per working days), but by assuming 25% of overhead, **one year is equivalent to 1566 working hours**. Eventually, annual labor hours can be converted into year unit as below.

Labor year for consulting = 576 hours / 1566 hours = 0.37 year

Cost From Wages (Cont.)

Based on previous assumptions, labor year for each service are computed as below.

Service	Labor hour per job	# of jobs per year	Total labor hours	**Labor year**
Production	1000	4	4000	**2.55**
Consulting	12	48	576	**0.37**

Cost From Wages (Cont.)

Based on labor year of each service, we can form our team as below. The marketing and sales member will bring more clients, and the general PM will assume leadership role. By assuming $100,000 annual salary for every member, the **annual wage cost is $600,000**.

Category	Total labor year	Needed workforce
Production	2.55	1 designers 2 programmers
Consulting	0.37	1 consultant

Member	Role
1	Designer
2	Programmer
3	Programmer
4	Consulting
5	Marketing & Sales
6	General PM

Cost From Publishing

In principle, no cash is required to register an immersive experience (i.e. game) in the metaverse platforms. However, it usually cost some money to make out games more visible to users.

In particular, we have to pay money to the metaverse platform to make our games appear at the top of the game list. By assuming that daily average advertising price is $23 (typical daily sponsorship price in Roblox.com), publishing cost for our games is determined as below.

Service	Daily pub. cost	Pub. duration	# of games	**Total cost**
Game	$23.41	100 days	4	**$9,365**

Cost From The Other Expense

The expenses not covered by the previous sections, such as office rent, software license fee, and other administrative expenses fall into this category. These expenses are estimated based on the following assumptions.

1. Office rent and utilities: $1000 per month per head
2. Software license: our team, especially designers and programmers will use expert software for production. On average, this cost is $100 per month per head.
3. Others: other miscellaneous expenses such as insurances, foods, or perks fall into this category. Approximately $300 per month per head.

Cost From The Other Expense (Cont.)

The cost of other expenses is estimated as below.

Expenses	Monthly cost per head	# of employees	# of month	Yearly cost
Rent and utilities	1000	6	12	$72,000
Software	100	6	12	$7,200
Others	300	6	12	$21,600
Total				**$100,800**

Cost Summary

In sum, **the total expected annual cost** from wages, publishing, and other expenses is **$710,165**. This number is for the 2nd year when our business is on track. The first year's cost is similar to the 2nd year's, except that publishing cost is half of the 2nd year's.

Category	Cost (Y1)	Cost (Y2)
Wages	$600,000	$600,000
Publishing	$4,682	$9,365
Others	$100,800	$100,800
Total	$705,482	$710,165

Cost Projection in an Optimistic Scenario

In an **optimistic** scenario, our team headcount will grow to accommodate the increased workload, and publishing cost will be proportional to the production revenue of the optimistic scenario.

Wages and other expenses will be proportional to the headcount. In this case, cost for the upcoming 5 years is estimated as below.

Category	Y1	Y2	Y3	Y4	Y5
Headcount	6 members	6 members	7 members	8 members	9 members
Wages	$600,000	$600,000	$700,000	$800,000	$900,000
Publishing	$4,682	$9,365	$11,238	$13,485	$16,182
Others	$100,800	$100,800	$117,600	$134,400	$151,200
Total Cost	$705,482	$710,165	$828,838	$947,885	$1,067,382

Cost Projection in a Pessimistic Scenario

In a **pessimistic** scenario, our team headcount will be reduced to adapt to the decreased workload, and publishing cost will be proportional to the production revenue of the pessimistic scenario.

Wages and other expenses will be proportional to the headcount. In this case, cost for the upcoming 5 years is estimated as below.

Category	Y1	Y2	Y3	Y4	Y5
Headcount	6 members	6 members	4 members	4 members	4 members
Wages	$600,000	$600,000	$400,000	$400,000	$400,000
Publishing	$4,682	$4,729	$4,776	$4,824	$4,872
Others	$100,800	$100,800	$67,200	$67,200	$67,200
Total Cost	$705,482	$705,529	$471,976	$472,024	$472,072

Financial Analysis: **Profit Projection**

Based on revenue and cost projections, we can deduce the profit projection for the upcoming 5 year in both optimistic and pessimistic scenarios. Taxation is not considered.

Break-even is reached in the 2nd year, when the accumulated income outpaced the accumulated loss in the previous years.

<**Optimistic** scenario>

	Y1	Y2	Y3	Y4	Y5
Revenue	$537,440	$1,074,880	$1,289,856	$1,547,827	$1,857,393
Operating cost	$705,482	$710,165	$828,838	$947,885	$1,067,382
Operating income	($168,042)	$364,715	$461,018	$599,942	$790,010
Accum. income	($168,042)	$196,673	$657,691	$1,257,633	$2,047,644

Profit Projection (Cont.)

In the pessimistic scenario, break-even is reached in the 6th year, when the accumulated income outpaced the accumulated loss in the previous years.

<**Pessimistic** scenario>

	Y1	Y2	Y3	Y4	Y5	Y6
Revenue	$537,440	$542,814	$548,243	$553,725	$559,262	$564,855
Operating cost	$705,482	$705,529	$471,976	$472,024	$472,072	$472,121
Operating income	($168,042)	($162,715)	$76,266	$81,701	$87,190	$92,734
Accum. income	($168,042)	($330,757)	($254,491)	($172,790)	($85,601)	$7,133

Sensitivity analysis

The incentive from the number of visits accounts for 74% of our revenue, and this incentive is largely dependent on **the number of visits**. By **varying this number from 0 to 300000**, Y2 **profit varies from -$435,000 to $764,000**.

Rev. Source	Rev. (Y2)	Ratio
Down-payment	$200,000	19%
Incentive	$800,000	74%
Consulting	$74,800	7%