

THE CREATOR ECONOMY

Getting Creative and Growing

Citi GPS: Global Perspectives & Solutions

March 2023



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THE CREATOR ECONOMY

Getting Creative and Growing

For over 600 years, innovations spawned new forms of entertainment. The printing press (invented around 1436) unleashed book publishing. Later, radio and movies (1895), TV (1927), and video games (1958) sprung onto the scene. However, amidst all this innovation, one thing remained constant: Content creation was both curated and centralized.

With the advent of the internet and smartphones, social media was born. For the first time, content creation was no longer centralized. It was distributed. As such, gatekeepers — like studio heads or masthead editors — were no longer required. Crucially, however, social media platforms — like Meta or TikTok — did not share the spoils with the content creators. They kept all the revenues for themselves.

This is beginning to change. Across industries — publishing, podcasting, esports, and education — content creators are finding ways to monetize their content directly with their fans. This new ecosystem is often called the creator economy. While it barely existed five years ago, today there are over 120 million content creators. In 2022, we expect the creator economy to generate about \$60 billion of revenue per year with ~9% growth per year through 2024 when it may approach \$75 billion of revenue. Around half of the revenues stem from ad-based video platforms, like YouTube. The other half is spread across a wide array of industries: publishing, education, and podcasting, among others.

The creators do need help, and platforms can assist. However, the platforms charge fees that can vary from less than 10% of creator's revenues (Patreon, Spotify and Unity) to as high nearly 85% (Roblox). The variance often depends on the value the platform provides across five functions: (1) creation, (2) hosting, (3) distribution, (4) promotion, and (5) monetization. The more functions these platforms perform, the higher the fees.

Today, the creator economy is diverse, vibrant, and growing. However, across many of the creator economy platforms, a similar pattern emerges. The lion's share of the revenue is captured by a very small portion of the content creators. Far more than 80% of the revenues are created by far fewer than 20% of the creators. In short, the Pareto principle, or 80/20 rule, does not apply. The creator economy is "winner takes most."

Going forward, we think there are three areas worth watching. First, traditional social media firms may begin to share some of the spoils with content creators. That is, platforms like Twitter may begin to emulate YouTube's business model. Or, as Instagram and Facebook push further into e-commerce, they will create opportunities for content creators to share in the economic spoils.

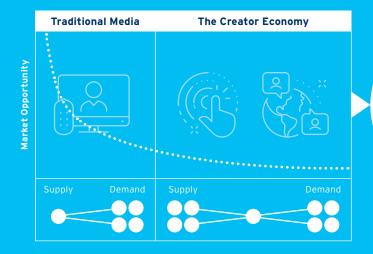
Second, Web 3.0 may create opportunities for creator economy platforms to leverage augmented reality, blockchain, crypto, and NFTs to alter the economics of the creator economy. These tools can help facilitate a direct relationship between content creators and fans with a diminished role for digital intermediaries. In short, Web 3.0 may help improve the economics of content creators.

Third, artificial intelligence may alter the creator economy in several ways including by helping with content creation and helping brands find the right influencer or helping consumer find the right content. It will be interesting to watch. With that, let's dig into the details.

New Technology = New Entertainment

FROM CENTRAL TO DISTRIBUTED

The rise of the internet and smartphones has shifted the supply of entertainment from being centrally produced to a distributed model. This means creators are no longer focusing on the largest, most lucrative markets but instead can serve micro-markets and niches, leading to a "creator economy."



Pervasive computing power, augmented with internet access, allows niche markets to be served.

This enables the creator economy.









WINNER TAKES MOST Services fees charged for creator services vary greatly by platform. A creator's average net revenue is inversely proportional to the number of creators that use that platform making the creator economy highly concentrated. Net Annual Creator Revenue Invesrsely-Related to Number of Creators on Platform 30 Substack Net Creator Revenue Per Year (\$000s per year) Patreon 25 Twitch Podcasts 20 Etsy Roblox 15 YouTube 0 20 40 60 80 100 Creators (millions) SIZING THE CREATOR ECONOMY The market for the creator economy is currently around \$60 billion per year and should grow nearly 9% through 2024, when it should approach \$75 billion. The largest segment of the creator economy is ad-based video. Some segments of the market podcasts, education, mobile games, Metaverse and publishing – are poised to grow 20% or more per year. Sizing the Creator Economy Market (\$ billion) Ad-based video E-commerce Esports Fee-based video Education Podcasts Metaverse

Donations

Mobile game

creation

Publishing

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New Technology = New Entertainment

Innovations are the wellspring of entertainment. The printing press enabled book publishing. The cathode ray tube spawned TV. More recently, the internet and smartphones launched social media and podcasts. Some things never change.

But, with the internet and smartphones, something did change. Historically, the supply of entertainment was always produced centrally. Now, the supply of entertainment is distributed. It can be produced by anyone. Some things do change.

Figure 1. Latest Tech Innovations Driving Change in How Content Is Supplied Year Innovation Content Supply Entertainment 1436 Book publishing Printing press All previous 1895 Radio broadcasts Wireless transmissions technical innovations 1895 Celluloid film Movies resulted in new forms of 1857 Vinyl, CDs Recorded music entertainment. But content 1927 TV Cathode ray tube supply was always 1958 Video games Game console centralized. Social media 1997 Internet Latest technical innovations 2008 Smartphone Mobile games, Podcasts allowed content 2010 VR/AR Metaverse supply to be distributed. Source: Citi GPS

Niches Are Born

Content produced by many and consumed by anyone means that — for the first time — niches can be easily served. That is, in a one-to-many paradigm, like film or newspapers, entertainment gatekeepers — studio heads or masthead editors — focus on the largest, most lucrative markets. Gatekeepers shun niches, but, without supply-side gatekeepers (or finite shelf space), micro-markets can be served. This, in short, enables the creator economy.

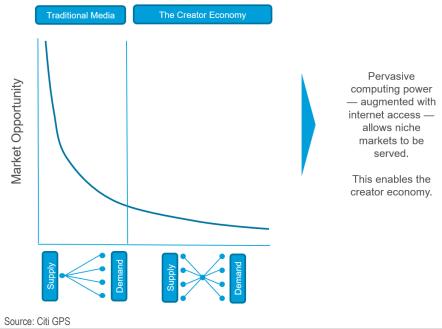


Figure 2. Serving Niche Markets Enables the Creator Economy

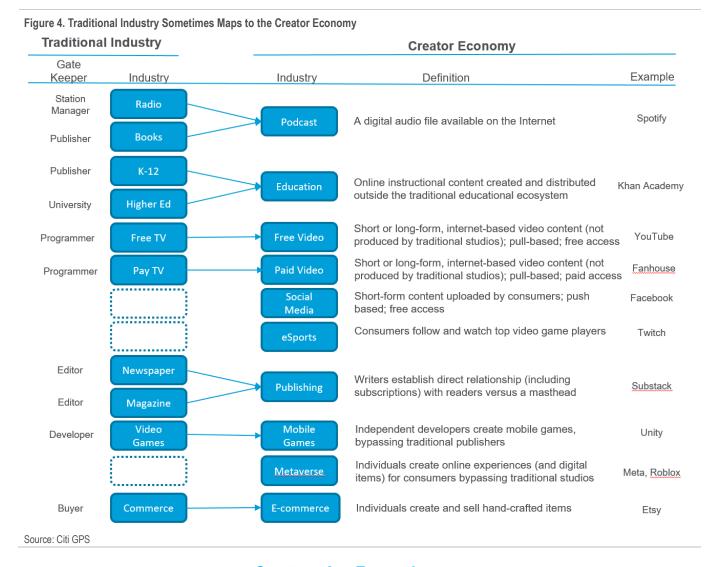
The Creator Economy

The creator economy is comprised of many sub-markets: (1) podcasts, (2) education, (3) ad-based video, (4) fee-based video, (5) esports, (6) social media, (7) publishing, (8) video games, (9) the Metaverse, and (10) e-commerce.

Consumer		Examp	les	Creator Action	
Desire	Industry	Traditional	Creator Economy		
Listen	Podcast	CNN	The Realignment	Produce	
	Education	MIT Open Course	Master Class	Teach	
	Ad-based video	Oprah Winfrey	Influencers		
Watch	Fee-based video	Disney+	Fanhouse	Produce	
	Esports	n/a	<u>FaZe</u> Clan	Play	
	Social media	Vogue	Influencer	Upload	
Read	Publishing	Rolling Stone	Matt <u>Taibbi</u>	Write	
Play	Video games	Candy Crush	Roblox	Create	
Enter	Metaverse	n/a	Meta or Roblox	Create	
Buy	E-commerce	3 rd Party Amazon sellers	Etsy sellers	Make	
rce: Citi GPS					

Business Models: Some Old, Some New

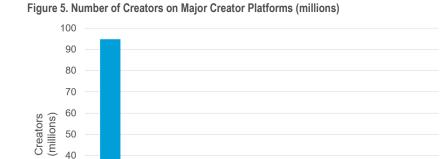
When we map these creator economy markets to legacy media, some patterns emerge. Some creator segments map nicely to traditional media. Free-to-air TV maps to free video, like YouTube. Radio maps to podcasts. But a handful of creator segments are *de novo*: social media, esports, and the Metaverse.



Creators Are Everywhere

How many creators have tapped into this opportunity? Estimating the figure is challenging due to platform overlap. For example, a gamer that creates a live stream on Twitch may also have a YouTube channel and a Patreon account. And some YouTube channels are associated with traditional media firms (like a film or a blockbuster video game).

However, even with these complexities, there are stark differences between platforms. We estimate YouTube has nearly 100 million channels (excluding traditional media). Roblox has about 10 million developers. Etsy has about 4 million sellers. There are currently over 4 million podcasts. At the other end of the spectrum, Substack only has a few thousand writers.



Etsy

Source: Citi GPS

Creator Funds

YouTube

Roblox

The growing importance of content creators has not been lost on the platforms that benefit from their work. Indeed, in 2022 YouTube paid out approximately \$16 billion to content creators from its YouTube Partner Program (YPP). More than a dozen firms have set up content creator funds spanning key sectors including social media, podcasts, crypto, and e-commerce. Most of these funds were established in 2021.

Podcasts

Creator Platform

Twitch

Patreon Substack

Figure 6. Content Creator Funds

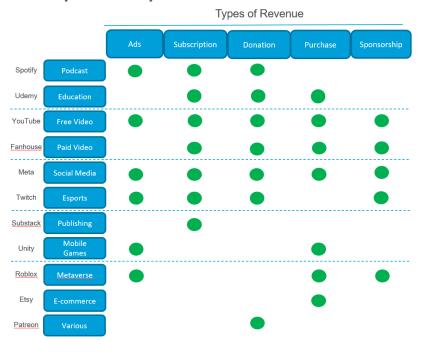
			Funds		
Platform	Sector	Started	(\$ mil)	Program Name	Comments
TikTok	Social Media	Jul 2020	200	TikTok Creator Fund	Open to U.S. and select European residents
YouTube	Social Media	May 2021	100	YouTube Shorts Fund	Focused on YouTube Shorts
Snapchat	Social Media	Nov 2020	na	Snapchat Spotlight Challenge	Daily pool of funds awarded to top creators
Meta	Social Media	nm	1000	Facebook and Instagram Creator Program	Spans Facebook and Instagram
LinkedIn	Social Media	Sep 2021	25	LinkedIn Creator Accelerator Program	100 U.S. creators via 10 week program
Amazon	Social Audio	Sep 2022	na	Amp Creator Fund	Provides payments for live audio Amp creators
Google	Podcast	2018	na	Google Podcast Creator Program	Trains independent podcast creators
Substack	Writers	Oct 2021	1	Substack Writer Programs	Awarded to 12 writers in 2021
Ripple	Crypto	Sep 2021	250	Ripple Creator Fund	Focused on NFTs
Shopify	eCommerce	2016	nm	Shopify Capital	Up to \$2mn Shopify Capital financing for start-ups

Source: Shopify, Citi GPS

Monetization Matters

Beyond creator funds, how do creators make money? Monetization has five potential sources: (1) advertising, (2) subscriptions, (3) donations, (4) purchases, and (5) sponsorships. Over time, social media platforms have successfully broadened their sources of monetization with the addition of subscription plans (Facebook, Instagram, and YouTube) and shopping (Instagram and Facebook).

Figure 7. Types of Revenue Generated by Creator Economy

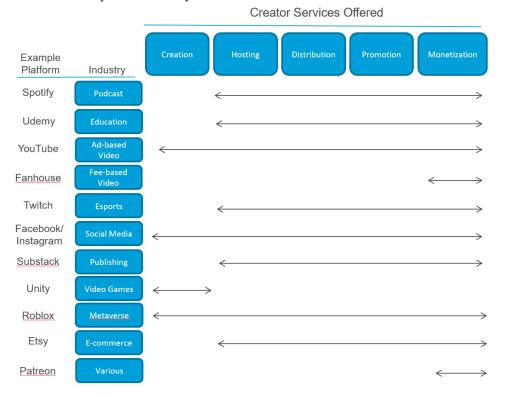


Source: Citi GPS

Creators Need Help

To generate revenues, creators need help. They often use larger platforms to perform up to five tasks: (1) creation, (2) hosting, (3) distribution, (4) promotion, and (5) monetization. The tasks depend on the creator segment. Creators that use social media and the Metaverse need help in all five areas. However, platforms like Fanhouse and Patreon only help creators with monetization.

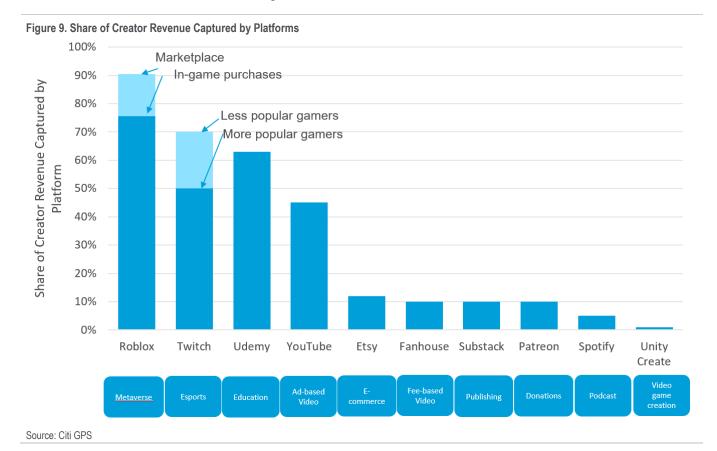
Figure 8. Types of Services Offered by Creator Economy



Source: Citi GPS

Creators' Share of the Spoils

But how much do creators pay to use these platforms? It depends. For example, Roblox (Metaverse) collects 75% to 90% of the creator's revenue (including the exchange rate fee for cash out between U.S. dollars and Roblox's platform currency, Robux). Spotify (podcasts) or Etsy (e-commerce), on the other hand, typically collect less than 10% of the creator's revenue. Why are the differences so large?



We regressed each platform's fees relative to the services they provide. Platforms that help with content creation collect 7% of revenues. Platforms that host content are entitled to 19% of revenue. Platforms that aid in distribution typically fetch 6% of revenues. Platforms that promote content charge 33% of revenues. And platforms that aid in monetization charge 11% of revenues.

Figure 10. Regression Analysis of Fees for Services SUMMARY OUTPUT

Regression Statistics								
Multiple R	0.94							
R Square	0.89							
Adjusted R Square	0.68							
Standard Error	0.21							
Observations	12.00							

ANOVA

	df	SS	MS	F	Sig F
Regression	5.00	2.46	0.49	11.05	0.01
Residual	7.00	0.31	0.04		
Total	12.00	2.77			

	Coef	Std Error	t Stat	P-value	L 95%	U 95%
Create	0.07	0.16	0.44	0.67	(0.31)	0.45
Host	0.19	0.21	0.88	0.41	(0.31)	0.68
Distribute	0.06	0.13	0.44	0.67	(0.25)	0.36
Promote	0.33	0.22	1.51	0.17	(0.19)	0.85
Monetize	0.11	0.13	0.83	0.43	(0.20)	0.41

Source: Citi GPS

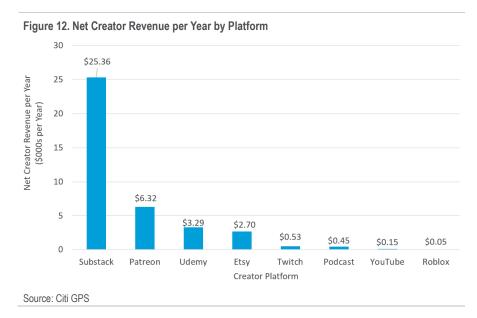
When we map the actual fees relative to the regression outputs, we can explain most of the fee variance across platforms. The data suggest YouTube fees may be too low. Conversely, Roblox's fees may be too high.

Figure 11. Platform Actual Fees vs. Predicted Fees for Services

	Spotify	Maven	Udemy	YouTube Fa	nhouse	Twitch	Meta	Substack	Unity	Roblox	Etsy	Patreon
Creation				7%			7%		7%	7%		
- Hosting			19%	19%		19%	19%	19%		19%		
Distribution	6%	6%	6%	6%		6%	6%	6%		6%	6%	
Promotion			33%	33%		33%	33%			33%		
- Monetization		11%	11%	11%	11%	11%	11%			11%		11%
Predicted	6%	16%	68%	75%	11%	68%	75%	24%	7%	75%	6%	11%
Actual	5%	10%	63%	45%	10%	60%	100%	10%	2%	85%	13%	8%
Predicted	6%	16%	68%	75%	11%	68%	75%	24%	7%	75%	6%	11%
Over (under)	-1%	-6%	-5%	-30%	-1%	-8%	25%	-14%	-5%	10%	7%	-3%
ource: Citi GPS												

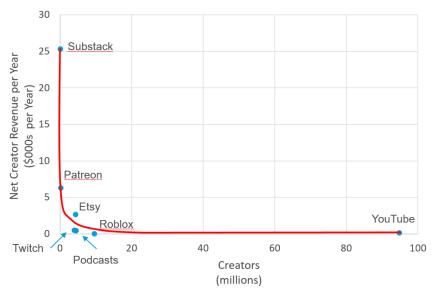
Creators' Net Revenue

So, how much can a creator make in net revenue after paying fees to the various platforms? It varies considerably. A writer for Substack generates, on average, \$25,000 per year. The average creator that uses Patreon generates \$6,000 per year. At the other end of the spectrum, a developer that creates items for Roblox generates, on average, just \$50 per year.



Indeed, as we show in Figure 13 below, a creator's average net revenue is inversely proportional to the number of creators that use the platform. That is, while Substack writers generate the most net revenue, the platform has very few writers. YouTube is at the other extreme. While there are many creators on YouTube, the average net revenue per creator is quite modest. Revenue per creator on the other platforms — Etsy, Twitch, or Roblox — falls in between.

Figure 13. Net Creator Revenue per Year Is Inversely Related to the Number of Creators on the Platform



Source: Citi GPS

Creators Who Make the Most

The inverse relationship between the number of creators on a platform and average revenue per creator suggests a small subset of creators perform far better than average. But how concentrated are revenues among creators?

We examined creator revenue concentration across four platforms: YouTube, Twitch, Patreon, and Substack. A remarkably consistent picture emerges: the creator economy is highly concentrated. In short, the creator economy does not have a middle class.

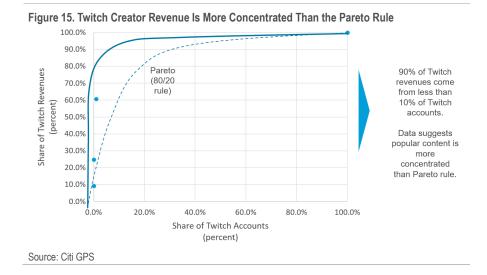
At YouTube, over 90% of YouTube subscriptions come from less than 5% of the channels. This is more concentrated than the Pareto principle, which states that for many phenomena, 80% of outcomes result from 20% of causes (meaning, in this case, that 80% of subscriptions would come from 20% of channels).

100.0% 100 to 1K 90.0% Share of YouTube Subscribers (percent) 80.0% Pareto 00K to 1 90% of YouTube (80/20 70.0% subscribers come rule) from less than 60.0% 5% of YouTube channels. 50.0% Data suggests 40.0% popular content is 30.0% more concentrated 20.0% than Pareto rule. 10.0% 10 to 50 nillion subs 0.0% 20.0% 60.0% 80.0% 40.0% 100.0% 0.0% Share of YouTube Channels (percent)

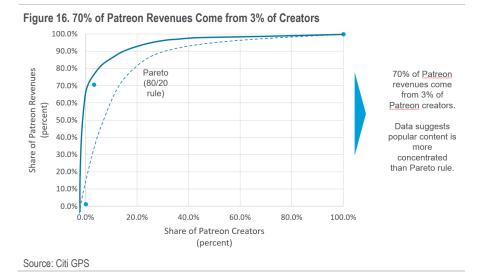
Figure 14. 90% of YouTube Subscribers Come from Less Than 5% of Channels

Source: Citi GPS

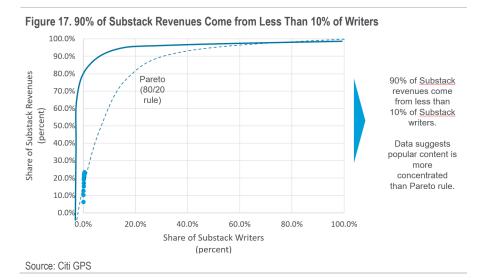
Twitch follows a similar pattern: a higher level of concentration than the Pareto rule.



And, Patreon's distribution is similar to those of YouTube and Twitch.



While we only have data on the top 12 Substack writers, the data also seems to follow a steeper curve than the Pareto rule.



Hollywood: More Diverse

Interestingly, traditional media — like movies — are less concentrated than the creator economy. Indeed, traditional media is less concentrated than the Pareto rule. For example, 70% of global box office receipts (in 2019) came from approximately 20% of films. We suspect one reason this is true is that the gatekeepers eliminate a lot of the lower quality scripts before they ever make it to the big screen.

Figure 18. 70% of Box Office Hits Come from ~20% of Films 100.0% Share of 2019 Global Box Office Revenue 90.0% Pareto (80/20)80.0% 70% of box office rule) 70.0% receipts come from ~20% of 60.0% films. (percent) 50.0% Data suggests 40.0% films are less concentrated 30.0% than Pareto Rule. 20.0% 10.0% 0.0% 0.0% 20.0% 40.0% 60.0% 80.0% 100.0% Share of Films Released in 2019 (percent) Source: Citi GPS

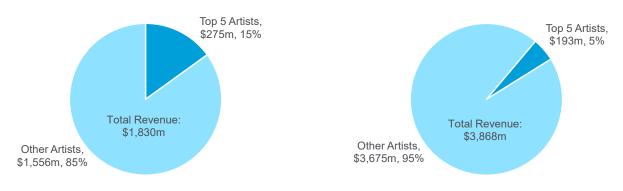
Recorded Music: A Special Case

So far, we have argued that new channels for content monetization enabled high levels of revenue dispersion among content creators.

One industry that may be migrating toward greater fragmentation, however, is the music industry. Historically, the music industry had record labels that acted as gatekeepers for manufacturing, distribution, and monetization. Although the market ultimately decided which artists became super stars, it was the record labels that determined who was given the opportunity.

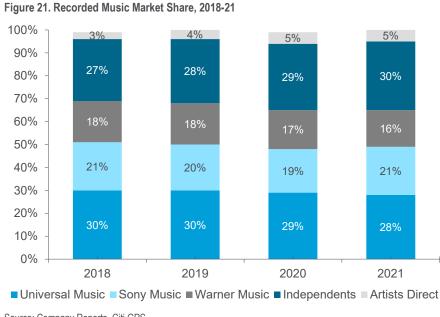
The music landscape is changing. Web 1.0 and Web 2.0 altered the position of these legacy gatekeepers, loosening their grip on the industry. Today, a modern artist can record a track on their laptop, use a platform like TuneCore to distribute it across streaming platforms, collect royalties, and use social media to build a brand and create awareness. Some of the most commercially astute artists are also very active in licensing and merchandising. In parallel, the proportion of revenue represented by the top artists at major labels — like Warner Music — has begun to come down.

Figure 19. Revenue Generation of Warner Music's Top 5 Artists (2012) Figure 20. Revenue Generation of Warner Music's Top 5 Artists (2022)



Source: Company Reports, Citi GPS

Source: Company Reports, Citi GPS



Source: Company Reports, Citi GPS

At an industry level, too, independent labels and "do-it-yourself" artists are taking share, potentially suggesting that the market is becoming less unequal. We suspect the music market is fragmenting due to a few historical distortions. One of the most significant distortions relates to the importance of local versus international content in recorded music. Music has always been a very local market in terms of consumption. But the recorded music market has skewed toward international artists which benefited U.S. and U.K. artists. The advent of streaming, however, changed this allowing local consumers to embrace local talent.

Daniel Ek, CEO of Spotify, was recently asked whether streamers should adopt a royalty payment mechanism that is more favorable to the traditional record labels. His response:

"The number of artists that matter for users are increasing...and the other change is that unlike in the early areas of streaming, we're seeing a notable increase in local repertoire. So, for instance if you look at many of the local geographies, take France as an example, you've seen a lot of French music...being very impactful. In Poland, you're seeing a lot of Polish music being very impactful, as well.

I think some of these trends are very powerful and very good. I think for consumers with more choice and more artists making their way...you need to balance that, obviously, with having the ability to have sustainable artist careers on the back of that too and that's a constant dialogue that we're having with our label partners. But I would mostly say that's most of what we're seeing is quite encouraging."

In this context, we suspect that greater fragmentation in music consumption among artists is a function of the idiosyncrasies of the recorded music market which relate, to a degree, to the closed nature of the market prior to digitization (due to record labels that acted as gatekeepers) and a potential unwinding of U.S./U.K. financial (and cultural) hegemony over global music in regional markets.

Put another way, it may be less likely that the next "Beatles" will come from the U.S. or the U.K. And there is a good chance an artist's initial success will come via their own endeavour and be driven, at least initially, by local/regional success. This may bad news for record labels as the legacy gatekeepers. But it should be helpful to independent artists and independent labels.

The Academics: Winners Take Most

In 1947, Alfred Marshall penned a piece in *Principles of Economics*. Marshall suggested there had been a shift so that "a businessman of average ability" gets a lower share of profits than before, while someone of exceptional "genius and good luck" could amass a large fortune. He attributed his change to "the development of new facilities of communication by which men, who have once attained a commanding position, are enabled to apply their constructive or speculative genius to undertakings vaster, and extending over wider areas, than ever before."

Over three decades later, in 1981, Sherwin Rosen wrote a prescient article — "The Economics of Superstars" — in *The American Economic Review*. In it, Rosen suggested:

"The phenomenon of Superstars, wherein relatively small numbers of people earn enormous amounts of money and dominate the activities in which they engage, seems to be increasingly important in the modern world."

What Rosen and Marshall understood was this: New technologies allow the best talent to reach a wider base of fans. As such, the lion's share of the spoils often accrues to the top performers. Of course, the internet and smartphones did not exist in 1947 or 1981.

But Marshall and Rosen understood that new forms of communication — like radio or TV — allowed stars to reach far larger audiences. That translated into superstars with outsized financial rewards that did not exist in the days of vaudeville or Broadway (where audiences were limited to the theater's size).

Both the internet and smartphones allow audiences to expand even further (beyond TV or radio). As such, the creator economy does two things. First, it dramatically lowers entry barriers and allows everyone to reach for fame. Second, consumer preferences tend to allow the best talent to generate most of the spoils.

Sizing the Opportunity

Sizing the creator economy is difficult. But, for our purposes, we have chosen to exclude social media platforms like Facebook, Instagram, TikTok, Pinterest, Snap, and Twitter. The reason is simple: These platforms currently do not share their revenues directly with the content creators (other than the content creator funds we reviewed earlier). So, we have elected to focus on the gross revenues generated by platforms that do share their revenues with content creators.

All told, we believe the market is about \$60 billion a year and should grow about 9% a year through 2024 when the creator economy should approach \$75 billion of revenue. The largest segment of the creator economy is ad-based video (in which we track YouTube as the largest player). We believe most segments of the market — with the exception of ad-based video, esports, e-commerce, and donations — are poised to grow nearly 20% or more per year.

Figure 22. Sizing the Creator Economy Market (\$ billion)

									CAGR	CAGR
	2017	2018	2019	2020	2021	2022E	2023E	2024E	'17-'21	'21-'24E
Ad-based video	7.4	9.8	12.8	16.7	25.6	25.9	27.1	30.4	37%	6%
+ eCommerce	3.3	3.9	5.0	10.3	13.5	13.3	13.6	15.7	43%	5%
+ eSports	1.3	1.5	2.2	4.2	5.3	5.8	6.3	6.9	43%	9%
+ Fee-based video	0.3	0.3	0.4	2.4	3.3	3.9	4.3	4.7	85%	12%
+ Education	0.7	1.2	1.6	2.0	2.7	3.3	4.1	5.0	42%	22%
+ Podcasts	0.2	0.4	1.1	1.6	2.1	3.0	3.7	4.2	80%	26%
+ Metaverse	0.1	0.3	0.5	0.9	1.9	2.3	2.8	3.3	109%	20%
+ Donations	0.3	0.4	0.8	1.0	1.3	1.6	1.8	2.0	48%	15%
+ Mobile game creatior	0.1	0.2	0.3	0.4	0.5	0.9	1.1	1.5	53%	39%
+ Publishing	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	211%	50%
= Total	13.5	18.0	24.6	39.5	56.5	60.1	65.2	74.0	43%	9%
memo: growth		33%	36%	61%	43%	7%	8%	13%		
Source: Citi GPS										

We suspect most of this revenue coming into the creator economy is coming from traditional media firms as consumers shift their consumption from linear TV (i.e., with scheduled programming and ad budgets migrate to digitally-centric platforms like YouTube.



YouTube: The Heavyweight of the Creator Economy

With YouTube currently generating about 50% of the revenue in the broader creator economy (excluding social platforms), it may be worth exploring some of the enhancements the platform has made over the years. First, YouTube has expanded the number of ways content creators can generate revenue. While the majority of revenue still comes from ads, there are nine other monetization levers content creators can pursue. These include:

- **Premium:** Viewers can pay a monthly fee to skip advertising on YouTube.
- Super Chat: Viewers watching live streams can purchase a Super Chat so comments receive more attention from the content creator and other viewers.
- Super Stickers: Viewers can purchase a Super Sticker to show their support during livestreams and Premiers.
- Super Thanks: For uploaded videos, viewers can show their appreciation for the content by donating to the content creator
- Memberships: Creators can offer exclusive perks and content to viewers who join the channel as a monthly paying member (at price points established by the content creator).
- Merchandise: YouTube creators can sell merchandise from their watch page on YouTube. Creators can select from 30 different global retailers.
- Ticketing: Music fans can learn about upcoming concert listings which link directly to YouTube's ticketing partners.
- **BrandConnect:** Creators and brands can work together to create branded content that helps both parties. BrandConnect brings insights, measurement, and industry expertise to the influencer marketing landscape. BrandConnect allows companies to post requests for social media content creators to advertise products and services. BrandConnect retains a 10% fee for this service.

Web 3.0

So far, we have shown five things:

First, the creator economy was enabled by smartphones and the internet. For the first time, these innovations allowed a distributed model for the supply of content versus centralized production, reducing the primacy of content gatekeepers.

Second, content creators often need help with things like content creation, promotion, or monetization. And a number of firms have emerged to meet the needs of content creators across a wide array of sectors (video, podcasting, education, etc.).

Third, the portion of revenues that are retained by creators varies significantly but can be explained based on the types of services the creator needs.

Fourth, the distribution of revenues among creators is highly concentrated with a small portion of the most popular creators capturing the lion's share of the spoils.

Fifth, collectively, we expect the creator economy to approach \$100 billion in revenue by 2024 with ad-based video comprising nearly 50% of the overall market.

However, we are in the early stages of migrating from Web 2.0, which focused on read and write applications, to Web 3.0, which will likely be characterized by greater decentralization and more open-source applications. Will this shift the landscape for content creators and the firms that serve them? Before we answer that question, let us quickly examine how the internet has evolved as we migrated from Web 1.0 to Web 3.0. We'll explore five key attributes:

- Key technology: Web 1.0 relied on HTML (for webpages) and HTTP (for hyperlinks). Web 2.0 shifted from HTML to specialized apps for narrow use cases (often on a smartphone). Web 3.0 will likely entail heavier reliance on technologies such as blockchain, artificial intelligence (AI), augmented reality (AR), and virtual reality (VR).
- Primary constituent: The underlying technologies behind each web version targeted specific constituents. During Web 1.0, the primary constituent was corporations. Businesses used HTML and HTTP to reach consumers. In Web 2.0, the primary constituent shifted to user communities. In Web 3.0, the primary constituent will likely be individuals focused on a narrow set of interests.
- Popular content: As the internet evolved, the type of content evolved as well. In Web 1.0, the most popular content was static webpages with little interaction. In Web 2.0, the most popular content included social media sites and messaging services. Here the content flowed two-ways. In Web 3.0, the content will likely shift to virtual worlds like the Metaverse. And the Metaverse will likely use AR and VR. Users will also be able to purchase digital items like non-fungible tokens (NFTs).
- Typical Platforms: Platforms that tended to thrive shifted as the web evolved. During Web 1.0, platforms like Yahoo! or GeoCities were popular. In Web 2.0, platforms like Facebook or TikTok became more popular based on their ability to facilitate interactive communication among smaller communities. In Web 3.0, it is not clear which platforms will become dominant, but platforms like Meta are making large investments in the Metaverse to capitalize on the evolving landscape. Other firms are focused on hardware to facilitate Web 3.0 interactions via AR/VR hardware.

■ Types of interactions: Users tended to interact with the content in Web 1.0 by simply reading text. As we shifted to Web 2.0, users uploaded content and shared it with broader communities. In Web 3.0, we suspect users will be far more likely to own specific items or buy the rights to specific services. Ownership will be enabled by blockchain (a digital ledger) that will track ownership of (digital) goods and services.

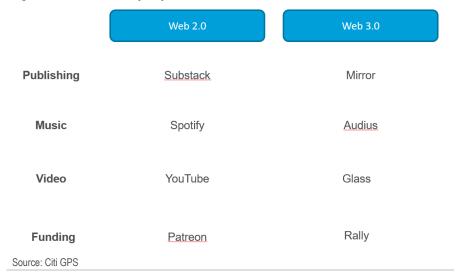
Figure 23. The Internet Evolution

	Web 1.0	Web 2.0	Web 3.0
Key Technology	HTML HTTP	Apps	Blockchain AR/VR Al
Primary Constituent	Corporations	Communities	Individuals
Content	Web pages Static content	Social media Podcasts Messenger	Metaverse NFTs
Typical Platforms	Yahoo! GeoCities	Facebook/Instagram TikTok Snapchat	Meta Roblox
Interactions	Read only	Dynamic Shared	Services Ownership
Source: Citi GPS			

So, what does this have to do with the creator economy? There are a handful of emerging platforms that believe they can use Web 3.0 tools — like blockchain, crypto and NFTs — to better serve the creator economy. In short, they believe Web 3.0 tools can facilitate direct relationships between content creators and fans without using large platforms as intermediaries. Let us look at a few of the emerging technologies.

Our aim is not to suggest that companies associated with these technologies are likely to emerge as the ultimate winners in the creator economy in a Web 3.0 world. Rather, our goal is to give a sense how some of these novel platforms are using Web 3.0 tools to better serve creators.

Figure 24. Creator Economy Players in Web 3.0 vs. Web 2.0



Digital wallets are one way that new Web 3.0 tools can help creators with monetization. Using a subscription model linked to a digital wallet, readers can access creator content stored on a decentralized storage layer. The subscription paves the way for creators to build a wallet-based community that enables far richer engagement than passive consumption more common with Web 2.0 tools. Platform provider Mirror, believes wallets can enable patronage, ownership of NFTs, community chat rooms, and governance participation. They are exploring tools that allow crowdfunding and NFTs. This would allow investors to buy an equity stake in a piece of writing before it's complete. Investors can then sell their stake in the future once the NFT begins trading.

Blockchain can help creators distribute their products directly to consumers. Blockchain-based music streaming services create an open-source community of artists, fans, and developers. Companies like Audius allow artists to upload their tracks at no cost and users can listen for free. An Ethereum-based token can be earned by both artists and fans and allows creators to offer extra features, such as NFT crypto collectibles. It also offers greater governance as staked tokens are required to vote on any proposal to make changes in the code or network. There are several other blockchain music platforms including Songcamp, Catalog, and Song That Owns Itself.

Crypto-based video distributors work with content creators to upload their videos and instead of sharing ad revenues, creators can determine the number of editions and the price of each edition. Consumers can buy one of the limited-edition videos in the primary market but once the finite number of editions is sold, purchases must be made in a secondary market. One distributor, Glass, takes a flat 10% fee from content creators in the primary market. On the secondary market, buyers can purchase the video from the lowest selling price available or can purchase an NFT from a specific seller at a higher price. Glass charges a 10% fee on this secondary market transaction and remits 8% of the secondary sale price as a royalty payment to the creator.

The bottom line is this: Web 3.0 tools — like blockchain and crypto — will allow consumers to finance, own, and trade content rather than simply paying creators to consume it. Whether these new tools will be embraced by legacy creator economy platforms or new platforms remains to be seen. But, Web 3.0 tools will certainly result in new innovations that are apt to benefit creators and consumers alike.

A Potential Role for Al

Artificial intelligence (AI) is also likely to play an important role in the creator economy. We can think of two areas where AI might be useful: (1) content creation and (2) recommendation engines.

- Content Creation: Al prototypes are already being used to write text, create artwork, and compose music. Whether Al-generated content will complement the work of creators or serve as a substitute remains to be seen. But there are already some real-world examples of Al replacing influencers on the web. Miquela Sousa (aka Lil Miquela) is a virtual influencer who launched on Instagram in 2016. She has over one million followers. The firm that created her, Brud, was recently acquired by Dapper Labs. And, Dapper Labs, has received funding from traditional media firms. We would not be surprised if traditional media firms lean into Al as a way to generate revenue from artists that were created virtually.
- Recommendation Engines: We also expect AI to be used to help bring some order to the highly fragmented creator economy ecosystem. For example, AI will likely be used to help consumers find the right content and can also be used to help brands find the right influencer.

To better understand some of the opportunities, challenges and changes happening in the creator economy, the next section includes conversations with four founders or CEOs of creator companies: music company Believe, learning platform BBC Maestro, the online learning company Udemy, and the gaming company Ninja Kiwi.



With dual academic education in Business Law and Management (Paris School of Management ESCP, Master of Law at Duke University North Carolina), Denis Ladegaillerie passed the New York Bar in 1997. He started his career as a Business Lawyer at Shearman & Sterling where he practiced from 1997 to 2000. He joined the financial department of Vivendi at the beginning of 2000 to take care of the restructuring of the portfolio of companies in the internet sector of the group.

He then managed the internet and new media activities for Vivendi Universal in the United States as Chief Strategy and Financial Officer for two and a half years. There, he managed the restructuring and development of the first digital music service (eMusic), the first music social networking site (MP3.com), and the leading mobile media distributor (Moviso/Infospace Mobile), as well as Rollingstone.com. In 2005, he returned to France and founded Believe. which is one of the world's leading digital music companies for independent artists and labels with more than 1,610 employees in 50+ countries. Believe is a listed company on Euronext Paris as of June 2021.

Expert Interviews

A Conversation with Denis Ladegaillerie, Founder and CEO of Believe

Q: To set the scene, can you talk about your background in the creative industries and how this led you to setting up Believe?

My background in the creative industry started with the first creator company, MP3.com, back in 1999-2000. It was the first company at scale to offer musicians the ability to make their music available digitally.

This was pre-Napster and one of the key learnings for me for Believe was about the power of technology to democratize market access and offer opportunities to music creators.

Q: Can you talk about Believe's broader offering? Specifically, can you talk about how the Automated and Premium solutions complement each other to the advantage of all music creators?

A: The way we view the music market is structured around three tiers.

First is entry-level artists, who are the new creators that are just starting their music careers. The second level is what we call the middle class of artists, who are either already making a living out of their music or are on the path to making a living out of their music. At the final level there are the top artists.

Believe has built an offering that allows us to serve artists with a very adapted offering to each stage of development — a new entry-level artist requires very different services than established top artists, so it's about how we position the model that allows us to work with artists at all stages of their career — from new creators all the way to top local artists.

Q: For your creators, what is the primary motivation to use a services model as opposed to a traditional record label? Is it just money, or are there other motivating factors that drive their decision-making?

A: The number of artists being signed by record labels remains very small, but there are a very large number of artists creating music every day.

The number one thing a platform like Believe's TuneCore does is it provides market access to all of these artists.

Before making money, the first thing artists seek is making their music available — they want their friends and family and everyone else to be able to listen to their music.

Second, as part of that model, it is really about retaining full flexibility, ownership, and dependence. Then, transparency and payout. For most of the creator economy, we're talking about the segment of artists that are making between \$0-\$10,000 per year. Their main motivation is really, "This is the first step in my career, so how do I make my music available and how do I develop myself at that first stage?"

Q: How transformative have TuneCore (and platforms like it) been in terms of allowing musicians to monetize their art? And how significant has this been culturally?

A: I would say extremely significant.

We're just at the beginning of the transformation. If you think about it, pre-TuneCore, entry-level artists did not have market access. Their music was simply not available to customers as the view of producers was that it was too expensive to produce for them and make their music available, so they did not have market access.

We've gone from a world where only a very small set of artists had market access to everyone having market access.

It changes everything.

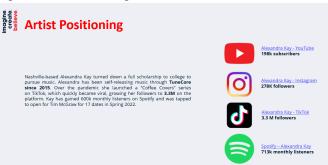
What you see is that there are a very large number of creators all around the world, and in each country, people who are creating music now have local market access. The game, now that they have market access culturally, is really to go to the next step and think about how to help them become better creators, produce better music over time as they progress, and become better known at that first stage of their career.

From a music standpoint, the step that we've taken with TuneCore is a significant one, but it is only the very beginning of where we can take this model in contributing to raising cultural education as well as the culture of creating inside local communities.

Figure 25. A Typical Tunecore Artist: Alexandra Kay



Figure 26. Artist Positioning and Reach



Source: Believe Source: Believe

Q: It feels like there has been a lot of Anglo-Saxon and American music that has succeeded globally, but the flow of music perhaps hasn't necessarily been as symmetrical as one might like or expect. Do you think this new environment means that we will see a broader range of music have global reach?

A: Totally.

We give access to a new generation of creators locally that are creating music. What we see is the higher the streaming penetration, the more educated people are to music and the more creation. In each market, the more paid subscribers you have, the more creators you have because creators see they can get a return on investment, they can make money, their friends are listening to their music, and it encourages creation.

To your point, what I think is going to happen in the next 10 years is that local creators are going to continue capturing a larger share of their market at the detriment of American and Anglo-Saxon artists. This is exactly what we are seeing everywhere. What we do think is ultimately the share of large international American artists is going to decrease and that is going to benefit mid- and entry-level artists in each local market.

Figure 27. A Typical TuneCore-to-Artist Services Upsell: Yanns France



Figure 28. Artist Positioning and Reach



Source: Believe Source: Believe

Q: Some of the traditional labels have started to argue that the "long tail" of content facilitated by platforms like TuneCore is "crowding out" high quality or premium content and that there should be a differentiation in pricing/monetization between premium artists and long tail artists from digital service providers. What is your perspective on this?

A: I think that the recent history is showing us exactly the opposite.

I would say when you look back over the past 15 years, when we negotiated our first deals with Spotify, YouTube, and Apple Music 15 years ago, the rates between major record labels and independent labels were very significantly apart.

What has happened in the past 10 years is all digital service providers (DSPs), except Spotify, have aligned their pay-outs to everyone. Apple Music, YouTube, Amazon, and most of the DSPs are paying the exact same payout to everyone, and we're trying to convince Spotify to do the same.

We don't think there's justification — yes, you can say there is a little bit more operating cost on some sides, but I would say there are bigger operating costs on other sides from major record label artists in other areas. So, when I look at the overall equation, I don't believe there should be any difference in the payouts between independent artists and large ones.

Q: Thinking about that financial opportunity longer-term, artists services/doit-yourself (DIY) artists are already taking share, which is clear from the IFPI data, how far can it go longer term? What does the steady state in the music industry look like between the categories of artists that you talk about?

It's a good question. If I had to make a guess, I would say probably something very similar in each local market to what we are experiencing in some of the large markets today, which is your top 500 artists capturing about 30%-35% of the market, the mid-level artists capturing 45%-50% of the market and then entry-level artists capturing about 15%-20% of the market, depending on the market.

Globally, this is the structure we're starting to see in many markets and probably not far from what we think the end game is going to be. For us, we think this is creating a very healthy market because you still have top artists making a significant amount of money who can invest in creation and developing themselves. You probably give rise, in many countries, to a mid-level class of artists that can support, from digital music, several thousand artists across various genres of music in their countries. That gives you an entry-level market that allows us to help new musicians from the early stages of their career to develop and participate in the market. So, we think this is a fairly healthy music market when you look at it from a diversity standpoint, with a market structure that can support an ecosystem at different levels of professionalization.

Q: What this feels like is that it really changes is how artists breakthrough/how they get discovered/how they first start to monetize what they are doing. Having broken through, are there big concerns for you as a business model to whether they shift to traditional record labels?

No, it's not a concern because if you take the market structure I just described, you have 70% of the market that are non-top artists, and only the remaining 30% require a full-blown, full set of services because they are big local or international artists.

Most artists don't require the full set of services but instead require a set of services that's much more adapted to them. We're seeing now that most artists are remaining independent where the ability for us to serve them through technology on the distribution side or lighter touch services is exactly what they need. We are now growing in the top local artist category since we expanded the deployment of our Artist Services business.

We feel the record label is really the best fit for a very limited type of artist in the market.

Figure 29. A Typical Premium Artist Upsell: Yura Yunita, Indonesia



Figure 30. Artist Positioning and Reach



Source: Believe Source: Believe

Q: How holistic is the "creator economy" opportunity when it comes to the music industry? What kind of role could you play in a broader range of monetization opportunities including Web 3.0 concepts like NFTs as well as physical goods like merchandise?

A: I would say it's very large when you think about the type of services the artists need. I would say that what we have brought to them through TuneCore is really only the first break — to make their music available where the audiences are. I would say the second break is to become a better creator and develop your audience. So, from helping them create music to helping them develop audiences progressively, there's a lot of things that can be done.

Once you have done these two things, it's going to be about (1) how you maximize your monetization opportunities at that level — this is where part of the monetization opportunities are tied to NFTs and Web 3.0, and (2) how you directly manage a community that, for new artists in particular, will be very engaged because these are newer artists where it's seed and love money coming from friends and family buying merchandise and supporting the artist.

For many of these artists, what we see is with digital live developing (which is much better in terms of economic spend in terms of having to rent venues and make people come) the range of opportunities to help play and develop in front of new audiences, expose their music, and then monetize these audiences will be larger and a much easier capture in the future than it was in the past.

Q: What are the main milestones for Believe over the next 12-24 months to signal that not only the group, but also the whole artist services industry, continues to be on the right track?

A: I would say it is to continue gaining market share and growing faster than market growth.

This is really the key.

The reason we grow faster as a company is because we have a model that is targeted at serving each of these artists. So, every time we grow market share, that means the market is going our way — either we capture more artists at the top, there's more mid-level artists capturing more money at the mid-level, or there is a bigger market of new creators across the world.

For us, it's about continuing to capture that growth across new music markets where you didn't have creators before because you didn't have a music economy (like in Southeast Asia and India). So, it's really market share growth that is going to be the main element to continue showing the trends playing in our favor.



After a number of years in Brand Management and Advertising at Procter and Gamble in the mid-90s, Michael moved into film and television working for PolyGram Filmed Entertainment, then Universal Pictures in acquisitions and production. Michael set up DVD Pro, his first production company back in 2005 primarily to service the sell-through DVD business. Michael saw an opportunity in the emerging interactive DVD market — the first market to allow for the creation of digital programming driven by celebrity talent. He sold his first four digital program ideas to the BBC and has never looked back. Running alongside his rapidly developing media and production career, Michael has also been a screen writer for the last 20 years, writing comedy and drama primarily for the BBC for shows including Eastenders, Holby City, Doctors, and Casualty while also developing his own original series. Prior to establishing Maestro Media, Michael has had a number of very successful media companies marrying his creative energy with his experience in marketing and his passion for digital content and innovation. Michael's focus has been on commercializing talent-driven digital content across a spectrum of markets from iDVD, through to apps and finally to SVOD services.

A Conversation with Michael Levine, Founder and Managing Director of BBC Maestro

Q: To set the scene, can you talk about your background in the creative industries and how this led you to founding BBC Maestro?

A: My background is a little unusual. I've been both a producer of linear and interactive programming, primarily for the commercial arm of the BBC, while at the same time having a career as a drama writer, primarily for BBC1.

My career began in advertising at Procter and Gamble many moons ago. I took this commercial training together with my creative writing experience into television production, setting up my own indie in the early noughties with the principle of being talent driven, but market led, and producing content across media: DVD, then interactive DVD, then apps, finally subscription video on demand (SVOD).

Over the last 20 years, myself and my co-founder Brian have produced a huge array of commercial programming from *Top Gear* to *Strictly Come Dancing*, from documentaries to health and fitness programming.

Our last venture was the creation of a health and fitness SVOD platform which was focused on offering the next generation of interactive, personalized health and fitness video content, tailored to the individual. We exited that business in 2017, having accumulated a vast amount of learning in SVOD.

Q: Can you talk about BBC Maestro in particular? What was its genesis, what is its mission and what is the story so far?

A: Knowing the 100th Anniversary of the BBC was approaching, I thought of all those incredible people who had crossed the large imposing doors at the front of Broadcasting House — and how the BBC, as the world's oldest and most respected broadcaster, has seen pretty much everyone of note on their channels at one point or another: writers, directors, actors, chefs, dog trainers, wine experts, business people, sports people, leaders, musicians, investors, inventors — if they're world defining, chances are they've been on the BBC.

Brian and I went to meet a very senior colleague at the BBC and pitched a proposition, with a very clear mission: to educate through experience — "Let the Greatest be your Teacher." I'm delighted to say, he loved it. It spoke to the principles of Lord Reith, the founding father of the BBC: To Inform, Educate, and Entertain.

It took about a year to lock the arrangement with the BBC — involving sign-off from both sides of the organization. I think it really helped that we'd not only had a lot of commercial success with BBC Studios, we were known as program creators on the public service side. I believe we're one of a small number of licensees to carry the BBC brand, which we're incredibly proud of.

Following the securing of the BBC brand, we set about raising seed. We presented to two companies, and both said yes pretty much immediately. We were very fortunate except that four weeks after we closed the round, COVID-19 struck and we were in lockdown.

We worked hard establishing the business, developing the service, and managing to film four Maestri (Gary Barlow, David Walliams, Jed Mercurio, and Marco Pierre White) all during the height of the pandemic. We launched at the very end of October 2020 and I'm delighted to be able to say, it's been a huge success.

Earlier this year, we closed Series A with the incredible BGF corner-stoning. We've just released our 19th and 20th Maestri — Lee Child, the 200 million best-selling Jack Reacher author and Sir Billy Connolly, the undisputed godfather of comedy. We're incredibly proud to be tracking to about 300% year-on-year growth, which we're over the moon about.

Q: For your creators, what is the primary motivation? Is it just money or are there other motivating factors that make them want to partner with you to share their expertise and insights?

A: For our Maestri, it's not about the money. It's really about two things.

The first and most important is the ability to give something back — to pass on their life's learning to the next generation — and in a forum that can reach not just the few, but the many across the world. They want to inspire and share what they've learnt in a deep and personal way. So many of our Maestri actually say in their courses how much they'd have loved someone to show them, support them, mentor them at the early part of their journey.

The second thing that we are very proud about — they really appreciate the opportunity to capture and codify their life's work in a beautiful and timeless way. Our team includes some of the industry's most respected, award-winning producers, directors, and crew. We're trusted to shoot the legacy courses of these truly incredible and unique people. It's genuinely a real honor.

Q: Can you talk about the modalities of learning and how this has/is evolving? Is this a passive, lean back experience for learners, or is it becoming more interactive? And what does this mean for the platform longer term?

A: The way our courses are designed is short-form linear videos that are accompanied by course notes that invite a level of interactivity with exercises and activities. We recognize it is key to make the experience more active to maximize engagement. We have an incredible Cambridge and Harvard affiliated education and technology specialist in the team, who is all about moving from absorption to immersion with our courses.

The next challenge is to move from individual learning to connected learning as we are planning a series of community interaction tools. It's incredibly exciting — watch this space.

Q: Where does this leave the platform longer term? Will it always be quite "narrow" with a small amount of "celebrity experts" or do you anticipate the range of experts broadening over time?

A: It's a natural corollary that unique, market defining talent often leads to celebrity and of course, that's a key component for our business.

One of the most appealing dynamics is that our cost per acquisition is kept low as it's driven heavily by well-known Maestri and their true passion for their courses. In every instance so far, the Maestri have done dramatically more public relations and social activity than they're contracted to which is incredible for the growth of their courses and the efficiency of the business as a whole.

What we're finding is that the business is already able to introduce those Maestri that are less about celebrity status and more about true category-defining, subject-leading expertise. Julia Donaldson isn't perhaps a recognizable face, certainly not as recognized as her creation, the Gruffalo, but what she absolutely is, is unique and the very best at what she does.

Richard Bertinet, as another example, is not a household name. *The Guardian* described Richard as the nearest thing bread-making has to a Jedi. He's not a celebrity, but he's the best at what he does, hugely respected in the cheffing world and most crucially has a huge and loyal audience around the world who have proven an incredible base for the success of his course.

In defining our Maestri by this criteria, we remain true to the mission, "Let the Greatest be your Teacher," but the breadth of opportunity for growth and expansion is really truly limitless.

Q: Thinking about the financial opportunity, do you have a view on the potential market size for a platform like BBC Maestro longer term? And what are the gating factors for you achieving your long-term goals? Is it access to capital, is it persuading celebrities/experts to share their insights, is it maintaining quality, is it engaging learners?

A: The real answer to this is probably different to the numerical answer we have to put on our Information Memorandum decks. That answer is filled with incredible numbers like the EdTech/Massive Open Online Course (MOOC) sector is expected to grow from \$7.3 billion in 2020 to \$67 billion by 2027, expanding at a compound annual growth rate (CAGR) of 37.2% during 2021-27, and the Global Video Streaming market size is expected to reach \$223.98 billion by 2028, expanding at a CAGR of 21% during 2021-28.

My real answer is that learning is a life-long pursuit and by that reckoning, I don't set a cap on the market potential.

It's literally anyone and everyone who holds a passion for a subject that they want to learn and haven't quite found the way in, via other channels. BBC Maestro isn't about curricula or qualifications; what we offer is a very specific way in. We've learnt that what our Maestri offer, beyond insight driven learning, is permission. Permission to fail, permission to try, and a trusted guide to help unlock that blank page or those first steps in front of the mic. Who better to hold your hand on stage than Billy Connolly? No night-school teacher can claim to know more about how to get up there than Billy.

In terms of gating factors or bottlenecks, capital is clearly key and there have been two occasions so far, where our growth has been such that we've secured additional funding to allow us to expand at pace. You're also right, talent availability has been an area that's been difficult to predict. We've had an instance of working to secure someone we really wanted for over a year before they signed. The good news is that with the right mix from A-list to very specific category defining talent, we're able to keep a regular through-put of incredible names. We're also now benefitting from the word-of-mouth effect. People talk, and we've been very lucky that word spreads of great experiences filming with us and lovely responses from the audience of learners. This has really helped.

Q: For BBC Maestro to "win" is there anyone who needs to "lose"? Put another way, is there any extent to which boosting the "creator economy" is "zero sum"?

A: The entire intention of this is to create the next generation of creators. If we do that, far from zero-sum, it's a real win-win. Think about it this way. If we're lucky enough to encourage a would-be writer to go and create the next *Line of Duty*, they're only going to be motivated to speak about it and even, one day, to perhaps appear on Maestro themselves. I don't believe that our success should ever be anyone else's loss. The world of learning is a big place. As I say, our aim to offer a different way in. That's our unique selling proposition (USP).

If people are able to start their journey with us, say by taking Mark Ronson's "Music Production" course, and then they want to go off and explore more specific learning in key areas of technical musical production on another e-learning service, that's a win-win. Equally, we hope and expect that English teachers will have great excitement when they discover the duo who will be teaching "Performing Shakespeare" on BBC Maestro and invite their students to learn from it.

Q: What are the main milestones for the platform that you expect over the next 12-24 months that will signal that BBC Maestro continues to be on the right track?

A: We have key performance indicators (KPIs), objectives, and key results (OKRs) that we have set in the business that, so far, I'm very pleased to say, we're exceeding. Our metrics are driven by content growth, user growth, and developing market efficiencies, but in reality, they're really driven by passion and engagement. Our task is to make courses that leave people confident to pursue their goals and genuinely to follow their dreams. There is no better advocate than someone commenting on social media that this is the best money they've ever spent or that these courses have finally given them the confidence to have a go — we've been very lucky to have received many comments like this, and we must constantly strive to get more. This is the real KPI for the next 12 to 24 months, and beyond.



Greg Brown has served as Udemy's Chief Executive Officer and a member of its board of directors since March 2023. Greg joined Udemy in December 2020 as President of Udemy Business. Prior to Udemy, Greg served as the Chief Executive Officer of Reflektive, a performance, engagement, and analytics solution platform, from August 2019 until December 2020. Before that, Greg was Senior Vice President of International Business at Blackhawk Network, a global payments provider, from August 2017 to August 2019; Chief Revenue Officer for Achievers Solutions, a developer of cloud-based employee engagement software, from February 2013 to August 2017; and Chief Revenue Officer for Extole, a developer of an online advocate marketing platform, from April 2011 to February 2013. Greg earned a B.S. in business administration from California Polytechnic State University - San Luis Obispo.

A Conversation with Greg Brown, CEO of Udemy

Q: To set the scene, can you talk about how Udemy came into being, its genesis, its history, and the major milestones achieved so far? Can you also talk about your role in the company and how you came to be there?

A: Udemy evolved from its co-founder Eren Bali's passion for learning while growing up in a small village in rural Turkey. There, he had limited educational opportunities until he gained access to a computer and the internet. Having unrestricted access to knowledge from people around the world, he realized that learning was the true key to unlocking opportunity. Eren then partnered with his fellow co-founders to achieve a common goal of making quality education accessible to all.

Since its founding in 2010, Udemy has become a leading online learning and skills acquisition destination for more than 59 million learners worldwide, providing the tools that learners, instructors, and organizations need to achieve their goals and reach their full potential.

I joined Udemy two years ago to lead Udemy Business for three core reasons. First, I wanted to work for a company that has the ability to make the world a better place. Udemy's mission to improve lives through learning resonated with me from the very beginning and it remains a guiding force in all of my decision-making. Additionally, as a lifelong learner, I am driven by the company's mission to help democratize access to education – enabling millions of people across the globe with the ability to accelerate their own learning and skills development on their own terms. The number of lives we have had the privilege of improving through our work is staggering. Second, I was impressed with Udemy's marketplace, which is the strategic moat that our enterprise SaaS business is built upon. And last, but not least, I was inspired by the talented team at Udemy, the unique culture they've built and their commitment to being courageously experimental.

Now, as I step into this new role as CEO of Udemy, I remain steadfast in our mission to continue helping people improve their lives through learning. To execute on this, we must continue providing learners with the critical content and tools they need to develop professionally and advance their careers; enabling real-world expert instructors on our platform to develop fresh and engaging content and generate income; and offering organizations the tools, insights and learning modalities they need to develop their teams and help them achieve critical business outcomes

Q: Can you talk about how the Udemy offering works? What is the pitch to content creators and instructors?

A: Udemy operates a two-sided marketplace where our instructors develop content that meets learner demand. Courses can be accessed through our direct-to-consumer marketplace or Udemy Business offerings. We have a community of over 70,000 instructors on our platform and approximately 200,000 courses in nearly 75 languages as of the end of 2022. While in-person teaching has the ability to reach hundreds of learners in a community, instructors that teach virtually on Udemy have the potential to reach millions of learners across the world. We have, on average, 35 million unique global visitors to our site each month, and our instructors benefit from this scale.

We offer attractive payment options for instructors who create content for Udemy. Over the last twelve months, we paid instructors nearly \$190 million for content creation, with our top instructors earning over \$1 million annually. This provides the necessary incentives to keep our instructors engaged and publishing new and upgraded content.

Our symbiotic consumer marketplace and Udemy Business products create a thriving ecosystem and diversified revenue streams. Our consumer marketplace enables instructors to reach a global audience of learners and monetize their courses. Our Udemy Business segment expands instructors' reach nearly 14,000 customers around the world, further diversifying instructor earnings potential. This segment now accounts for more than 50% of our revenue.

Udemy's platform provides data and insights to our instructors that enable them to see how their content is resonating with learners. Instructors have real-time access to their content on our platform so they can continuously update courses to remain relevant. In contrast, a traditional publisher model is limited in its ability to offer fresh content — a course may only get updated every two or three years, quickly becoming outdated.

In the context of digital transformation and the rapid pace of innovation, Udemy offers a clear advantage to instructors who want to ensure they offer the freshest, most relevant tech skills content. The ability to quickly build and post fresh content helps instructors attract more learners and generate more revenue. On average, courses are updated 4.5 times per year by top instructors on Udemy.

Q: Can you talk about some of the benefits of the platform beyond simple monetization? What other services can you provide that helps them reach a broader audience and, ultimately, earn more money?

A: Instructors who teach on Udemy not only gain access to our massive audience of learners, but also the various monetization, promotional, and marketing resources that help drive enrollments and increase course engagement. We leverage machine learning and artificial intelligence to provide learners with personalized course recommendations that align with their needs. As a result, we help generate more exposure for our instructors' courses, providing them with additional revenue opportunities through course enrollments and learner data they can leverage to strengthen their content.

There are a number of ways that instructors can succeed on our platform, including being early to market to support emerging business or tech topics, creating more effective learning experiences that resonate with learners, or by utilizing the tools Udemy provides, like practice test functionality or coding exercises. Udemy enables experts to innovate in order to create the most effective learning experience. We foster adoption, empower learning, and support the success of our instructors by implementing engagement, retention, and expansion strategies.

Udemy's global scale is a key competitive advantage, which provides us with massive amounts of data to understand learner needs and enables us to offer increased financial incentives to instructors. As a result of these incentives, instructors from all around the world create more than 4,700 courses each month, and the platform serves as many individuals' primary source of income.

Not only is the global scale a key competitive advantage for attracting and retaining instructors and providing massive amounts of data in order to quickly improve our product, but our platform also provides a unique ability to allow instructors all over the world to develop content in any language. This allows us to support learners in nearly 75 languages, and we have 14 curated local language collections for Udemy Business. We are uniquely positioned to support multinational and international organizations whose employees may want to learn in their native language.

Q: When we think about other stakeholders, how do you ensure that the content that appears on the platform is of sufficient quality or, alternatively, has not been stolen from other content creators?

A: Our marketplace model allows anyone to teach a course on Udemy. However, the highest quality courses are prioritized and recommended based on learner feedback and ratings, topic relevance, content quality, and instructor engagement. As a result, the courses on our marketplace that prove to be the most effective and relevant are surfaced to more learners, which powers the flywheel that supports a high-quality experience for all learners.

Our Udemy Business platform features a curated selection of only the top 7%-8% rated courses from the marketplace. We regularly review courses in the Udemy Business course catalog to ensure ratings consistently stay above a certain threshold and the topics are still relevant. All courses in the Udemy Business catalog are exclusive to our platform. We employ digital rights management technology and partner with a content protection vendor to protect our instructors' content on our platform, and we offer an industry standard copyright protection process for anyone who believes that their content has been published on Udemy without their permission. We believe that, on average, the value we offer instructors ultimately delivers a far higher return on investment relative to other content creation and online learning competitors.

Q: Can you talk about the global nature of the platform? In a practical sense, what are the challenges associated with running Udemy on a global basis? But also, what are the opportunities? Do you think an online marketplace for educational content is a "winner takes all" market longer term?

A: All of Udemy's courses are discoverable nearly everywhere in the world. We're proud of the depth and breadth of the courses we offer on Udemy's marketplace and our ability to reach learners wherever they may be located. Nearly 60% of our total revenue is from outside of the U.S. With courses in nearly 75 languages, we allow users to learn in their preferred language — not just subtitled — and promote an enhanced understanding of course materials.

Udemy's marketplace approach works in local regions around the world. Many local marketplaces have thousands or even tens of thousands of courses. These are courses created with local experts providing local context — which our global learners and customers love. In our Udemy Business catalog, we offer access to a hand-picked selection of more than 20,000 courses, including an international collection that spans 14 languages and ensures that companies can offer learning opportunities in all global locations.

Our pricing optimization approach fuels the local supply by making it easy and accessible for learners to purchase courses, regardless of where they are located. This helps drive instructor earnings and, in return, more supply. To make it easy to purchase courses from anywhere in the world, we've built a global pricing engine that allows anyone to have access to our products at prices adjusted to the local purchasing parity power, in the local currency, and using payment methods they are familiar with. This powers the global dynamics of our marketplace, promoting strong learner conversion that fuels Udemy's global pipeline.

With a majority of our traffic coming from outside the U.S., we are constantly looking for ways to cater to a global audience and ensure a heightened customer experience. In doing so, we are able to further our mission to improve lives through learning by providing flexible, effective skill development to empower organizations and individuals. The needs and expectations of learners are constantly evolving, which is why e-learning platforms must be flexible and adaptable to an everchanging world. Those that don't will get left behind.

Q: Thinking about the financial opportunity, do you have a view on the potential market size for a platform like Udemy longer term? And what are the gating factors for you achieving your long-term goals? Is it access to capital, is it attracting instructors on the platform, is it maintaining quality, is it engaging learners?

A: Udemy is addressing a massive and growing opportunity in corporate training and lifelong learning. In 2021, the total addressable market for corporate and other e-learning was estimated to be approximately \$166 billion and is expected to grow to nearly \$500 billion by 2027. The reality is that the opportunity is large and e-learning platforms are barely scratching the surface. With less than 1% penetration today, there is a long runway for growth for Udemy with both new and existing customers.

As automation and technology innovation spurs changes in the workforce, there is a growing need to offer more flexible training as remote work becomes more common. Companies are continuing their focus on employee learning and development, as there is an increasing need to continuously re-skill and upskill workforces in a timely manner to keep up with the pace of change.

We believe our differentiated business model and global learning platform will continue to attract instructors who are incentivized to continue to produce high quality content. That high-quality content, coupled with our personalization, and engagement capabilities, will continue to engage learners and drive outcomes for individual learners and organizations. These, in turn, support business growth and access to capital.

The gating factors to achieve our long-term goals are mostly macro-related and not in our control. We do believe it's likely that some companies, mostly small and medium-sized businesses, will reduce their Learning and Development (L&D) budgets in a recession. However, even if L&D budgets are reduced during this tough economic period, the online learning budget share is still growing on both an absolute and relative basis and taking share from off-line learning. That said, we expect to see continued strength in Udemy Business and our consumer marketplace is stable. Going forward, it's most important that we manage the business efficiently as we work through the near-term uncertainty.

Q: Can you talk about how broadly distributed success is on the platform?

Does Udemy create a genuinely flat/democratized outcome for instructors and learners or do a small minority take a proportionately greater share of the available revenue? Do you think, in this context, Udemy is making the market more or less equal over time?

A: Every instructor has the ability to succeed on Udemy. What it really comes down to is the quality, freshness, and relevance of their content. Our dynamic curation model is based on ratings and reviews to signal quality and relevance, instructor quality based on demonstrated record of learner satisfaction, and consumer demand in the form of data.

Higher quality courses on relevant topics tend to garner more learner engagement, and in return generate more revenue and retention. At its core, Udemy not only democratizes access to education, but it also decreases barriers to entry for those looking to teach. Udemy's instructors grow and thrive alongside our business.

Udemy's course catalog covers a wide range of topics, from web development to cooking. One of the easiest ways to innovate and attract learners is to be the first in the market to cover a particular topic. We see this happen regularly. For instance, the COVID-19 pandemic completely changed the way the world does business, and instructors that pushed out content quickly on the topic as it gained popularity saw heightened enrollment and increased engagement. This is because these individuals were able to respond to learner needs at the speed of industry change, which is critical for corporate customers going through digital transformations. Our instructors are incentivized to be first to market when new technologies or new versions of existing technologies are launched.

The opportunity for instructors is global. We have local language marketplaces in many regions and global instructors are taking part. The majority of courses created are from instructors outside of North America — providing a diverse range of expertise and perspectives from around the world. And nearly 40% of new courses created on our platform every month are in languages other than English.

Q: What are the main milestones for the platform that you expect over the next 12-24 months that will signal that Udemy continues to be on the right track? And what are the main innovations on the platform that you think we should be excited about?

A: We have a clear vision for where we're headed as we navigate the next 12-24 months. We are focused on investing in areas that will be most impactful for our learners, including personalization and immersive learning experiences. Over the last few years, learner expectations have been evolving quickly, and so have the learning challenges they face. Today, there's an expectation for more guided experiences and authentic practice that fits a person's preferred method of learning. We want to make sure we are effectively helping learners in those new modalities.

We've launched labs in different areas, and will continue to expand in Amazon Web Services (AWS), web development, data science, and kubernetes in the coming quarters. We're also automating lab reviews to enable personalized feedback on each task. Similarly, we continue to personalize the learner experience. For example, when international audiences search on the platform we can infer their language from their search queries.

There are also some exciting new features in the pipeline that we will roll out over the near and long term. We'll be focused on evolving our comprehensive learning platform using an API-first approach, which will promote increased innovation across the customer experience and enable faster, more efficient timelines to scale our offerings. Additionally, we'll be honing in on new third-party ecosystem integrations that will allow organizations to seamlessly integrate Udemy training programs into their flow of work.

Udemy only succeeds when our partners succeed. We want Udemy to be the first choice for all learners and all organizations looking to upskill and reskill their workforces. We want our instructors to have the best platform that allows them to build meaningful businesses. And finally, we want Udemy to be the primary solution for tech, business, and leadership learning. We've made great progress on these goals to date and look forward to continuing to deliver on Udemy's mission to improve lives through learning.



Scott joined Ninja Kiwi in 2010 and helped scale the company to establish and hold *Bloons TD's* position as a global leader in the tower defense category. Scott has almost 30 years in game development and has, prior to Ninja Kiwi, held design, production, and executive positions at Atari, Activision, and Electronic Arts. He holds two Bachelor of Arts degrees, in English and in Feminist Studies, and a master's degree in Education, all from Stanford University.

A Conversation with Scott Walker, Partner and co-CEO, COO of Ninja Kiwi

Q: To set the scene, can you talk about Ninja Kiwi? What it is, where it has come from, and what makes it different from other video/mobile gaming companies? Can you also talk about your role in the company and how you came to be there?

A: Ninja Kiwi was founded in 2006 by brothers Chris and Stephen Harris. Both came into the industry as passionate gamers. Their vision was to create a business for the long term that would make great games, compete globally with powerful brands, and have a focus on its employees.

Ninja Kiwi's first hits came in 2007 in the form of two Flash games: the casual physics puzzler *Bloons* and tower defense pioneer *Bloons TD*. These were the first steps in what is now the hugely successful *Bloons* intellectual property (IP). Today it's more of an ecosystem of games with a number of sequels, spin-offs, and crossovers.

I joined Ninja Kiwi in 2010 and partnered with Chris and Steven to help scale the games and the company, having previously gained experience as an executive producer at Electronic Arts and Activision. Fast forward to 2022, and we've built a team of 83 employees across our Auckland and Dundee offices. We're proud of the long-term value they bring to the company — employees stay at Ninja Kiwi for an average of 6.5 years, which is a landmark figure across the industry and has been central to our success.

There are several factors unique to our success:

- Our management team: We have two sets of co-founders in our management team. We've all partnered closely over the years to help scale Ninja Kiwi. David Hamilton and Barry Petrie, the co-founders of Digital Goldfish, helped bring Bloons to mobile devices some years ago and now head up our EU operations and Scotland studio, after being purchased by Ninja Kiwi in 2012. Most of the management team has spent ten to fifteen years with the business.
- Our structure: The highly driven teams at our Auckland and Dundee studios manage games from concept, to launch, to live-ops, and can produce games from start to finish. We see our set-up as a creative strength that keeps us nimble, focused, and tightly connected.
- Being part of MTG: In 2021, we became part of Modern Times Group's (MTG's) group of mobile gaming studios, which spans a range of geographies and categories and includes the likes of long-term partners Kongregate. This was a natural next step for Ninja Kiwi: It has given us resources to continue to build on our existing games and launch new ones, alongside access to a wealth of knowledge, technology, and insights across the group.

Q: Can you talk about the nature of your relationship with your players? How many people play the game a typical day and how long, on average, do they spend playing it? And what are the primary ways that you monetize this relationship?

A: We've had a strong history of growth, with each mainline entry in the *Bloons* franchise tending to be more successful than the last. Today we have over 1 million daily active users across our *Bloons* and *Zombie Assault* IPs. *Bloons TD6* has over a half million people playing every day, on average having two gameplay sessions each day of over 20 minutes.

Our titles are built on deep progression models, and we continually add new content to live titles — *Bloons TD6* is soon to receive its 34th major update. Frequent ingame events and content launches provide us with ongoing opportunities to monetize our player relationships, and this is further boosted by our work with content creators and our communities. Put simply, if players have more opportunities to engage with in a title, there are more opportunities for them to spend over time. This isn't just strictly in-game. We also consider interactions outside of the game extremely valuable, as they build players' affinity to our games and brands.

We see long-term potential for new content and features in *Bloons TD6*, which will enable us to introduce new monetization opportunities more quickly and efficiently moving forward.

Q: Can you talk about the various ways you broaden/deepen your relationship with the player community beyond advertising/in-app purchases?

Specifically, can you talk about the role of player-created content, and how these creators benefit from using the platform? What is the scale of the long-term opportunity if not in absolute terms, then relative to your organization?

A: Continuing to enable player creativity and strengthen our community is central to our growth plan, and the design and technology that underpin our games are created with player-created content and community empowerment firmly in mind.

Player-created content has been a key part of Ninja Kiwi's success since the 2008 launch of level creation and sharing tool Bloons World, which saw immediate traction with the community: over 1.3 million levels have been created by over 500,000 registered players, with over 100 million plays of player-created levels.

These tools have been continually improved over time as our player base and technology has evolved, with the latter becoming more accessible than ever: *Bloons TD6* saw us bring player-created content directly and safely into the hands of players within the mobile app.

We're working to give players the ability not only to participate in our games, but also to create within them more than ever. A new player creativity tool suite will be added to *Bloons TD6* next year, offering a full map editor and creator and also our first step toward support for game mods, which further extend the playability and content creator possibilities of the game.

From sharing fan artwork to creating their own stories, we see our players engaging with our IP, and building upon the *Bloons* universe, even when they aren't playing. This is something we reciprocate through clear and frequent communication, and we pride ourselves on our best-in-class community update notes, community support, and wider outreach. Elsewhere, the mass-market appeal of the *Bloons* franchise presents us with additional opportunities for licensing revenue, such as physical merchandising, which has been very well-received by our community.

Q: Can you talk about the business' relationship with content creators outside of the games (e.g., streamers and artwork/fan story creators)? What do both sides stand to gain? And how are these relationships built/maintained?

A: Content creators, both internal and external, form a key part of our organic marketing strategy. Creators are an integral part of the modern gaming world — the way that content creators take an interactive medium and perform it on an interactive stage creates a metalevel of entertainment for fans unlike anything we've seen before in gaming or advertising.

The Ninja Kiwi team has driven significant organic growth through internal content. We started a Ninja Kiwi YouTube channel years ago, which has hosted dozens of update videos and in-game event trailers and has received over 52 million views todate.

Ninja Kiwi also has over a decade's experience working with outside content creators, particularly with dedicated video "Bloonstubers," and *Bloons TD6* enjoys waves of heavily streaming on Twitch.

We've never paid creators via sponsorships or influencer marketing campaigns, as we feel the ecosystem is stronger and more genuine when creators play and perform games that they truly enjoy.

Recently, we've started working with Nexus, which provides a creator code sharing platform, and we've run a successful pilot program with key Bloonstubers which shares in-app purchase (IAP) revenue back to the creator when players use their respective codes. This pilot has been very successful and we're keen to expand it to more games and more creators in 2023.

Q: For those players who are actively making money from their interaction with your games/IP, how distributed is this success? Is it truly a model where everyone can benefit, or will the financial return disproportionately accrue to a small number of individuals? And does this matter?

A: Since we've seen players responding positively to sharing revenue with creators, it makes sense for us to develop a program that allows revenue sharing back to players who have created content that also generates revenue. This program is not in place yet and will take years to develop, but we are motivated to do this based partly on an overall philosophy of valuing our player-creators' time and creativity and partly to help legitimize gaming as a worthwhile career, which could help positively influence another generation of players to pursue careers in game development.

Q: In this context, how should we think about Ninja Kiwi, and some of your key brands like Bloons, in the context of the broader "Play to Earn" opportunity at an industry level? Is what you are doing substantially different from other players?

A: One thing I would say we do differently from many other game makers is how we focus on the value for players as part of the experience. Our main franchise, *Bloons*, and the latest installment *Bloons TD6*, is not a free-20-play. It's a premium game that players have to buy into because they want to play the game and engage with the brand our community.

Our games offer deep progression, which keeps players engaged for longer. A title like *Bloons TD6* rewards skill-based play, but also offers players opportunities to invest more to progress more quickly as well as in items like skins, which do not affect gameplay. At the same time, we have been careful to make sure that the ingame challenges that our community prizes the most are uncompromised and that every player has to approach them on an equal footing no matter how much they have spent in the game.

While I'd say that we are at the forefront of community engagement and player-driven as well as player-generated content, we are not focused on play-to-earn at this stage. We are exploring this going forward, and the level of focus will grow with player-creator interest and participation. The tools we develop will focus on content creation, which we prefer to represent as a "create-to-earn" model. We'll steer away from the gold-mining grind models which do exist and focus on actual revenue generated by player-created content, which some games do. More ambitiously, we'll look to value and share based on engagement created by player-generated content.

Q: Given that the Ninja Kiwi games are largely premised on player ownership through player-created content, do you think there is scope for Ninja Kiwi to further player ownership through Web 3.0 opportunities such as NFTs?

A: Given the strength of our brand and franchise, and how recognizable it is, this is an area we are following closely. Before we do anything here, we would want to carefully consider how it fits into the wider brand context (most probably *Bloons*, of course) and whether this positively contributes to the player experience and their relationship with our IP.

I don't think it's difficult to imagine some of the opportunities we could explore when it comes to the NFT space, but again, everything we do is based on respect for our players, and any future steps we take would take that into consideration. We already have quite robust collection and customization options inside *Bloons TD6*, and at some level we need to hear from our players that they see positive ways for NFTs to augment those options.

Q: As we look forward over the next 12-24 months, what are the main milestones you are looking to pass that will signal to us that Ninja Kiwi continues to be on the right track?

We want for our games to continue growing and for more and more players to find our games and player communities. This means that we'll continue to build new and high-quality content, to introduce new systems and ways to play existing games, and to refine and develop our community and creator relationships and ways of listening to the players.

We are also working on a number of games, both in existing and new franchises, and we hope to be able to launch our next title or titles in 2024.

And we're excited to be part of the evolution that MTG is going through as a group. There is a lot that we can learn from other companies within MTG, and there is a lot that we think we can share and contribute that will help other companies in their work. We are all in the same industry, and even though we are in different genres, a lot of the challenges we face as game makers are related and relatable. I think MTG's inclusive approach that aims to elevate expertise from its studios is the right way to go and look forward to Ninja Kiwi also putting its own stamp on it.

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NOW / NEXT

Key Insights regarding the future of the Creator Economy



INNOVATION

Throughout the years, innovation has driven new forms of entertainment, from the printing press and books to cathode ray tubes and television. / The internet and smartphones not only launched new forms of entertainment but changed how entertainment is created – from a central to a distributed model.





SHIFTING WEALTH

Revenue in the creator economy varies considerably by the platform used with a creator's average net revenue inversely proportional to the number of creators that use the platform. / New Web 3.0 tools – like blockchain, crypto and NFTs – might lower fees and increase creator revenue.





TECHNOLOGY

The creator economy has increased the amount of people creating content. / Two areas where AI might play an important role in the creator economy are content creation, where AI can generate artwork, compose music, and recommendation engines.



