

GGVCAPITAL

Digital Economy Index

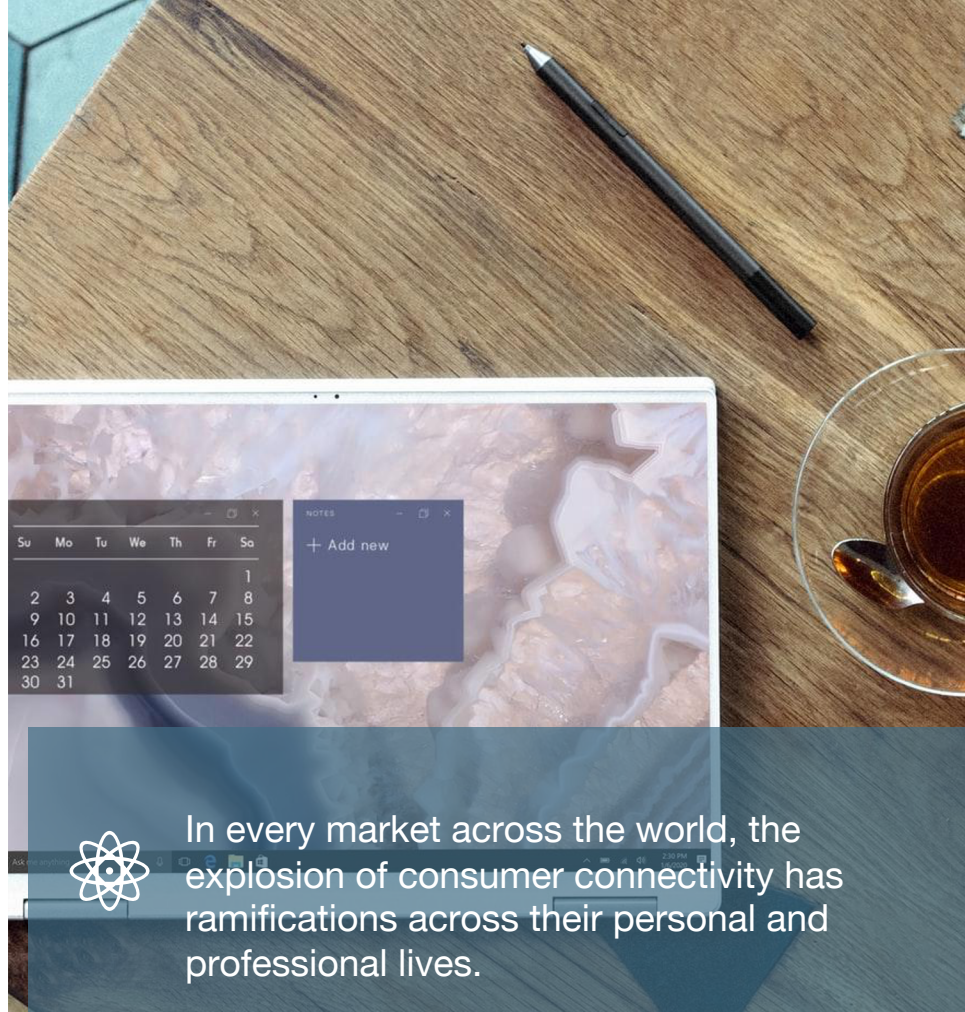
September 2021

Digital Economy Index

Overview

We created this index to analyze and highlight the shift towards a world where every sector is transformed. We focus in through a consumer lens, on how each part of their lives from wellness, financial services, entertainment, shopping, to personal productivity is reimaged. The term “Digital Economy” was first used 25 years ago by Don Tapscott, and we believe that this term remains relevant as our lives become increasingly digitized.

In our second series, we will examine the state of the digital economy as we emerge from the Covid-19 pandemic. After significant outperformance of technology companies during 2020, digital economy returns have lagged as performance has reverted to the mean. Global companies attribute disappointing sales figures to a return to physical shopping and an increase in regulation, especially in China. Overall, however, these disruptive businesses continue to drive innovation in retail, financial services, transportation, and other industries, creating outsized value in the long-run relative to incumbent players.



Digital Economy

Major Catalysts



In 2020, Covid-19 spawned a set of challenges that accelerated digital trends across all industries of the global economy.

Though a return to normalcy is underway through vaccinations, return to office is still not at full capacity and dining, recreation are also lagging. Remote work drove the rise of adoption of productivity tools and improved access to global talent. Companies can attract talent without having a HQ, even setting up new global teams. As such, we saw a major exodus away from cities, creating a dramatic rise in Prop Tech and many successful IPOs in this sector.



Ecommerce penetration across all verticals such as food ordering, grocery and home goods, has increased. With the rise in demand and access to increased capital, we have seen companies now adopt infrastructure to help manage their supply chain, become more efficient, and find new ways to reach consumers.

With all the time spent digitally at home and on smartphones, the creator economy ballooned, and tools to support monetization and business enablement are starting to take off.

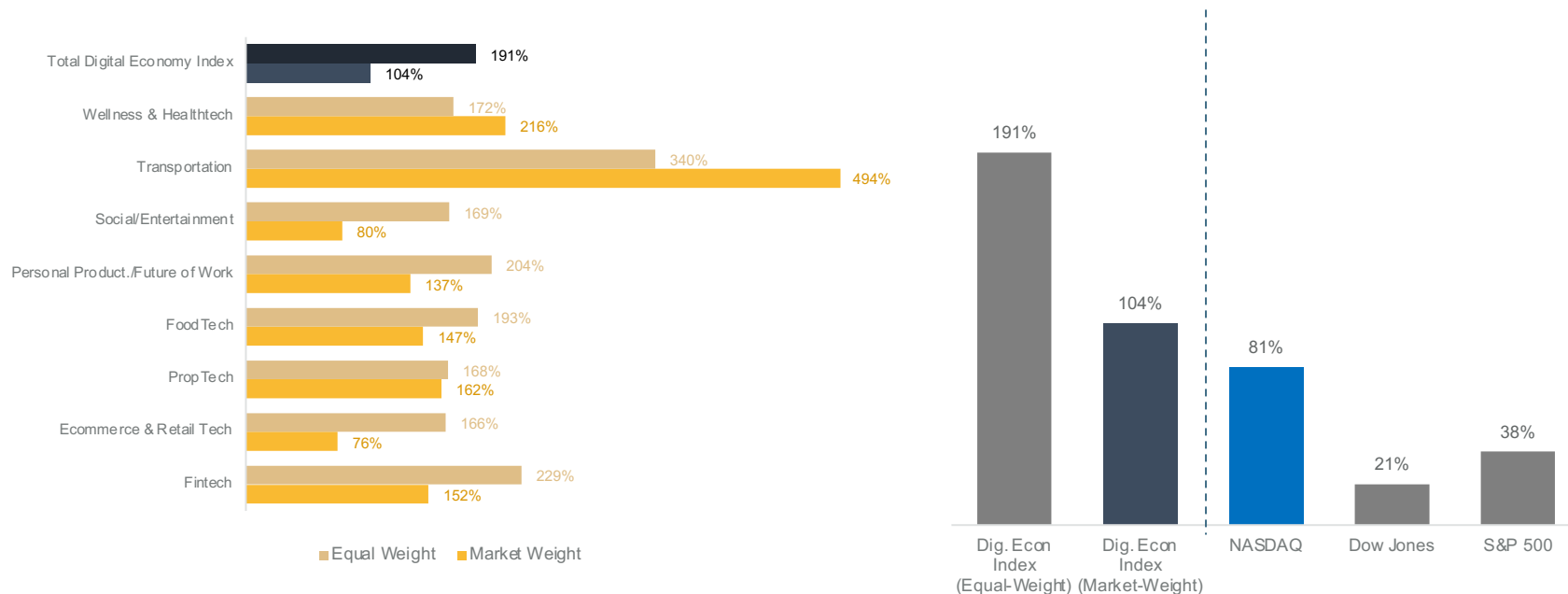


Because of lockdowns and social distancing, the movement of cash became more difficult than ever, enabling the rise of fintech technologies. Reducing the need for face-to-face interactions, fintech startups began to see rapid adoption of “buy-now-pay-later” (BNPL) options and neobanks. This further propelled the need for fintech infrastructure, such as KYC (know-your customer) technology to fraud mitigation and lending, both on the consumer side as well as B2B.

The Digital Economy Index

Digital Economy returns exiting Covid-19 pandemic, and the Digital Economy Index (with categories)

Market Performance From January 2020 to August 2021 (Broad Indexes Vs. Digital Economy Index)

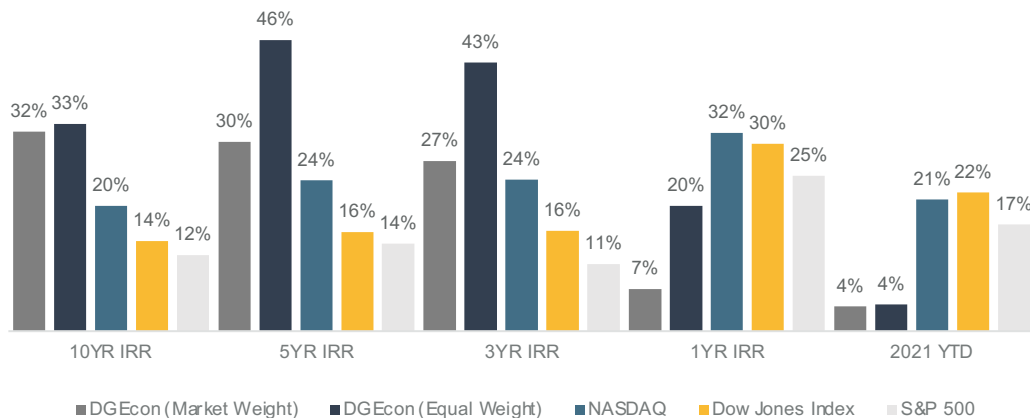


Note: this year, we excluded EdTech from the Digital Economy Index due to government policy changes in China.

The Digital Economy Index (Cont'd)

The Digital Economy Index underperformed the markets YTD but has exceeded market returns on a long-term basis.

Performance as of September 5th, 2021



Equal-Weight Performance % (# of Cos.)	10YR IRR	5YR IRR	3YR IRR	2021 YTD
EdTech (5)	10%	27%	-5%	-56%
FinTech (14)	34%	52%	46%	13%
Ecommerce & Retail (38)	28%	53%	36%	5%
PropTech (4)	25%	23%	32%	-15%
FoodTech (7)	34%	28%	39%	-8%
Personal Product./ Future of Work (5)	34%	42%	39%	40%
Social/Entertainment (15)	27%	22%	59%	24%
Transportation (6)	65%	74%	103%	7%
Wellness & HealthTech (4)	N/A	52%	23%	-38%
Total Portfolio (99)	33%	46%	43%	4%
<i>Total Portfolio (US only)</i>	<i>36%</i>	<i>42%</i>	<i>37%</i>	<i>12%</i>

Dow Jones	14%	16%	16%	22%
S&P 500	12%	14%	11%	17%
NASDAQ	20%	24%	24%	21%

E-Commerce Has Been a Huge Driver of Long-Term Value Creation

E-Commerce segment delivered over ~25% annual returns historically, but slowed this year as Covid-19 catalyst receded

Rank	Company	Current Mkt Cap (US\$MM) as of 05-Sept-21	HQ	IPO Year	10YR IRR	7YR IRR	5YR IRR	3YR IRR	2YR IRR	1YR IRR	2021 YTD
	Ecommerce & Retail Tech (Equal Weight)				28%	36%	53%	36%	55%	17%	5%
	Ecommerce & Retail Tech (Market Weight)				29%	31%	28%	20%	35%	-9%	-4%
	Ecommerce & Retail Tech (US Only)				27%	29%	40%	26%	63%	27%	14%
Gold	MercadoLibre	96,739	Argentina	2007	40%	49%	62%	71%	75%	51%	16%
Gold	Magazine Luiza	24,165	Brazil	2011	48%	82%	139%	66%	49%	-17%	-24%
Bronze	B2W Companhia Digital	7,294	Brazil	2007	13%	3%	22%	19%	3%	-61%	-45%
Gold	Shopify	193,479	Canada	2015	N/A	N/A	105%	121%	96%	39%	37%
	Alibaba Group*	460,173	China	2014	N/A	N/A	12%	-2%	0%	-43%	-27%
Gold	Pinduoduo	128,124	China	2018	N/A	N/A	N/A	77%	77%	7%	-42%
	JD.com	125,256	China	2014	N/A	13%	24%	35%	61%	-4%	-9%
	Xiaomi Technology	81,892	China	2018	N/A	N/A	N/A	13%	68%	28%	-23%
	Vipshop	10,414	China	2012	N/A	-5%	0%	29%	38%	-14%	-45%
	Baozun Commerce	1,843	China	2015	N/A	N/A	N/A	N/A	N/A	N/A	-30%
Silver	Zalando	28,233	Germany	2014	N/A	N/A	22%	27%	48%	26%	4%
Silver	Zooplus (Retail)	3,584	Germany	2008	23%	34%	26%	35%	82%	142%	149%
Gold	Wix.com	13,184	Israel	2013	N/A	45%	41%	28%	23%	-25%	-6%
	Z Holdings	50,575	Japan	1997	11%	7%	11%	21%	62%	-2%	17%
	Rakuten	15,304	Japan	2000	3%	-3%	-2%	13%	6%	22%	12%
Silver	ZOZO	11,351	Japan	2007	21%	26%	22%	5%	40%	42%	65%
	Mercari	7,776	Japan	2018	N/A	N/A	N/A	16%	47%	10%	18%
Bronze	Kakaku.com	6,876	Japan	2003	16%	11%	15%	20%	14%	25%	30%
	Prosus	293,066	Netherlands	2019	N/A	N/A	N/A	N/A	N/A	-19%	-12%
Gold	Farfetch	15,408	United Kingdom	2018	N/A	N/A	N/A	N/A	104%	43%	-32%
Gold	Boohoo	4,733	United Kingdom	2014	N/A	30%	28%	17%	11%	-12%	-21%
	ASOS	4,828	United Kingdom	2001	8%	8%	-3%	-13%	32%	-20%	-27%

* Denotes portfolio company

E-Commerce Has Been a Huge Driver of Long-Term Value (Cont'd)

E-Commerce segment delivered over ~25% annual returns historically, but slowed this year as Covid-19 catalyst receded

Rank	Company	Current Mkt Cap (US\$MM) as of 05-Sep-21	HQ	IPO Year	10YR IRR	7YR IRR	5YR IRR	3YR IRR	2YR IRR	1YR IRR	2021 YTD
Gold	Amazon.com	1,761,425	United States	1997	32%	38%	34%	20%	37%	-4%	7%
Silver	eBay	49,749	United States	1998	20%	18%	19%	30%	39%	29%	52%
Gold	Wayfair	28,421	United States	2014	N/A	N/A	49%	31%	64%	-15%	21%
Gold	Chewy	32,063	United States	2019	N/A	N/A	N/A	N/A	70%	54%	-15%
Gold	Etsy	27,895	United States	2015	N/A	N/A	74%	63%	99%	68%	24%
	Mercari	7,776	United States	2018	N/A	N/A	N/A	16%	47%	10%	18%
Gold	Stamps.com	6,108	United States	1999	35%	38%	28%	12%	126%	22%	68%
	Stitch Fix	4,307	United States	2017	N/A	N/A	N/A	3%	48%	74%	-32%
Gold	1-800-Flowers.com	2,156	United States	1999	29%	30%	28%	37%	43%	8%	27%
	The RealReal	1,070	United States	2019	N/A	N/A	N/A	N/A	-5%	-25%	-40%
Silver	Overstock.com	2,990	United States	2002	22%	22%	36%	33%	107%	-34%	45%
Rising Star	REVOLVE (US)	4,395	United States	2019	N/A	N/A	N/A	N/A	57%	182%	94%
	Wish*	4,547	United States	2020	N/A	N/A	N/A	N/A	N/A	N/A	-60%
	Poshmark*	2,067	United States	2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Digital Economy Index (Other Sectors)

Wellness and HealthTech were majorly impacted by demand and supply chain challenges, thus impacting returns.

Rank	Company	Current Mkt Cap (US\$MM) as of 05-Sep-21	HQ	IPO Year	10YR IRR	7YR IRR	5YR IRR	3YR IRR	2YR IRR	1YR IRR	2021 YTD
	PropTech (Equal Weight)				25%	10%	23%	32%	71%	12%	-15%
	PropTech (Market Weight)				25%	10%	23%	29%	71%	15%	-3%
Gold	Zillow Group	24,705	United States	2011	25%	10%	23%	28%	71%	17%	-29%
	Airbnb*	99,326	United States	2020	N/A	N/A	N/A	N/A	N/A	N/A	8%
Gold	Redfin	5,394	United States	2017	N/A	N/A	N/A	36%	72%	6%	-25%
	Hippo*	3,010	United States	2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	OpenDoor*	10,390	United States	2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Wellness & HealthTech (Equal Weight)				N/A	N/A	52%	23%	59%	0%	-38%
	Wellness & HealthTech (Market Weight)				N/A	N/A	52%	23%	59%	-2%	-33%
Rising Star	Peloton*	29,617	United States	2019	N/A	N/A	N/A	N/A	N/A	70%	-35%
Gold	Teladoc Health	23,021	United States	2015	N/A	N/A	52%	23%	59%	-34%	-28%
	SmileDirectClub	2,197	United States	2019	N/A	N/A	N/A	N/A	N/A	-35%	-53%
	Transportation (Equal Weight)				65%	45%	74%	103%	128%	30%	7%
	Transportation (Market Weight)				65%	45%	74%	119%	155%	57%	2%
Rising Star	Niu Technologies	2,223	China	2018	N/A	N/A	N/A	N/A	77%	19%	4%
Gold	Tesla	734,866	United States	2010	65%	45%	74%	121%	304%	63%	4%
	Uber	75,977	United States	2019	N/A	N/A	N/A	N/A	10%	26%	-21%
Gold	Carvana	27,772	United States	2017	N/A	N/A	N/A	80%	108%	69%	37%
	Lyft	16,164	United States	2019	N/A	N/A	N/A	N/A	-3%	65%	-2%
	Vroom	3,641	United States	2020	N/A	N/A	N/A	N/A	N/A	-60%	21%
	Edtech (Equal Weight)				10%	25%	27%	-5%	9%	-47%	-56%
	Edtech (Market Weight)				10%	16%	11%	-16%	-22%	-72%	-76%
	Tal Education Group	43,936	China	2010	10%	-2%	-14%	-45%	-62%	-94%	-93%
	New Oriental Education Group	22,861	China	2006	N/A	N/A	N/A	N/A	N/A	N/A	-87%
	51Talk	506	China	2016	N/A	N/A	-34%	-34%	-26%	-89%	-88%
Gold	Chegg	8,712	United States	2013	N/A	42%	63%	37%	41%	6%	-4%
	2U	2,578	United States	2014	N/A	9%	0%	-25%	43%	-11%	-7%

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Digital Economy Index (Other Sectors)

Fintech saw major IPOs and M&A activity in the past year and all continue to perform with positive tailwinds

Rank	Company	Current Mkt Cap (US\$MM) as of 05-Sep-21	HQ	IPO Year	10YR IRR	7YR IRR	5YR IRR	3YR IRR	2YR IRR	1YR IRR	2021 YTD
	FoodTech (Equal Weight)				34%	15%	28%	39%	60%	-1%	-8%
	FoodTech (Market Weight)				34%	27%	47%	29%	55%	-6%	-6%
Rising Star	Meituan	193,058	China	2018	N/A	N/A	N/A	N/A	73%	-12%	-17%
Gold	Delivery Hero	38,236	Germany	2017	N/A	N/A	N/A	35%	64%	25%	2%
Gold	HelloFresh	19,268	Germany	2017	N/A	N/A	N/A	98%	198%	119%	47%
	Beyond Meat	7,272	United States	2019	N/A	N/A	N/A	N/A	-12%	-4%	-8%
Rising Star	DoorDash	65,377	United States	2020	N/A	N/A	N/A	N/A	N/A	N/A	36%
Gold	Ocado Group	20,830	United Kingdom	2010	34%	27%	47%	24%	31%	-18%	-12%
	Fintech (Equal Weight)				34%	25%	52%	46%	57%	32%	13%
	Fintech (Market Weight)				22%	24%	47%	44%	56%	39%	18%
Gold	Afterpay	28,152	Australia	2017	N/A	N/A	N/A	89%	135%	46%	11%
	XP Investimentos	27,953	Brazil	2019	N/A	N/A	N/A	N/A	17%	-1%	26%
Gold	PagSeguro	19,228	Brazil	2018	N/A	N/A	N/A	31%	7%	31%	3%
Gold	Stone Pagamentos	13,787	Brazil	2018	N/A	N/A	N/A	N/A	29%	3%	-47%
Gold	Adyen	96,547	Netherlands	2018	N/A	N/A	N/A	64%	104%	81%	40%
Gold	PayPal Holdings	339,737	United States	2015	N/A	N/A	49%	45%	59%	34%	23%
Gold	Square*	123,999	United States	2015	N/A	N/A	85%	50%	104%	71%	24%
Silver	Global Payments	46,415	United States	2001	22%	24%	16%	10%	1%	-8%	-27%
Rising Star	Bill.com	28,758	United States	2019	N/A	N/A	N/A	N/A	N/A	113%	118%
Gold	LendingTree	2,213	United States	2008	41%	26%	10%	-12%	-28%	-45%	-39%
	Lufax	21,668	China	2020	N/A	N/A	N/A	N/A	N/A	N/A	-38%
	Lemonade	4,760	United States	2020	N/A	N/A	N/A	N/A	N/A	19%	-37%
	Root Insurance	1,525	United States	2020	N/A	N/A	N/A	N/A	N/A	N/A	-62%
	Affirm*	24,667	United States	2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Dlocal	19,909	Uruguay	2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Digital Economy Index (Other Sectors)

Personal productivity / future of work category posted top returns in DG Economy Index as people continue to work flexibly and remotely

Rank	Company	Current Mkt Cap (US\$MM) as of 05-Sep-21	HQ	IPO Year	10YR IRR	7YR IRR	5YR IRR	3YR IRR	2YR IRR	1YR IRR	2021 YTD
	Personal Product./Future of Work (Equal Weight)				34%	34%	42%	39%	68%	38%	40%
	Personal Product./Future of Work (Market Weight)				34%	35%	42%	37%	47%	32%	37%
Gold	Adobe Inc.	317,563	United States	1987	39%	37%	45%	36%	50%	23%	33%
Gold	Intuit Inc.	153,913	United States	1993	28%	31%	38%	37%	40%	61%	48%
Rising Star	Zoom Video Communications, Inc.	87,240	United States	2019	N/A	N/A	N/A	N/A	25%	17%	31%
Gold	DocuSign, Inc.	60,409	United States	2018	N/A	N/A	N/A	65%	155%	38%	39%
	Dropbox, Inc.	12,906	United States	2018	N/A	N/A	N/A	4%	32%	49%	46%
	Social/Entertainment (Equal Weight)				27%	22%	22%	59%	58%	43%	24%
	Social/Entertainment (Market Weight)				29%	23%	23%	23%	38%	13%	14%
Gold	Tencent Holdings Limited	602,716	China	2004	30%	20%	19%	10%	20%	-14%	-14%
	Tencent Music Entertainment Group	15,115	China	2018	N/A	N/A	N/A	N/A	-20%	-45%	-54%
Bronze	Weibo Corporation	12,274	China	2014	N/A	16%	2%	-11%	16%	51%	31%
	Spotify Technology S.A.	47,655	Sweden	2018	N/A	N/A	N/A	5%	28%	-19%	-21%
Gold	Sea Limited	183,602	Singapore	2017	N/A	N/A	N/A	179%	218%	102%	78%
Gold	Facebook, Inc.	1,060,844	United States	2012	N/A	25%	24%	28%	42%	20%	38%
Gold	Netflix, Inc.	261,366	United States	2002	33%	35%	41%	15%	37%	0%	9%
Silver	Activision Blizzard, Inc.	63,134	United States	1983	22%	20%	15%	3%	29%	-4%	-13%
Silver	Electronic Arts Inc.	41,720	United States	1989	21%	21%	12%	3%	22%	-2%	2%
Gold	Snap Inc.	118,709	United States	2017	N/A	N/A	N/A	83%	111%	235%	50%
	Twitter	51,597	United States	2004	N/A	4%	28%	22%	23%	52%	19%
Gold	Roku	45,676	United States	2019	N/A	N/A	N/A	77%	57%	114%	3%
Gold	Pinterest, Inc.	36,480	United States	2019	N/A	N/A	N/A	N/A	27%	67%	-14%
Rising Star	DraftKings Inc.*	24,617	United States	2020	N/A	N/A	N/A	N/A	N/A	49%	215%

* Denotes portfolio company

Appendix

Segment and Company IRRs were calculated under both a equal-weighted and market-weighted methodology:

Equal-weighted methodology

- At the start of every period (e.g. August 2020 for 1YR IRR, August 2016 for 5YR IRR, etc.) \$100 is invested in each one of the companies in that specific time period. Only companies that were public for the full time period are considered. A new company is not added to the index if it starts trading in the middle of a certain time period (e.g. Spotify is not considered in the Social/Entertainment 5YR or 3YR index starting in 2018 shortly after their IPO. It is only added to the index for the 2YR IRR onwards).

Market-weighted methodology

- At the start of every period (e.g. August 2020 for 1YR IRR, August 2016 for 5YR IRR, etc.) the Index buys the market cap of all companies that are trading in that specific time period. Only companies that were public for the entire time period are considered. A new company is not added to the index if it starts trading in the middle of a certain time period (e.g. Spotify is not considered in the Social/Entertainment 5YR or 3YR index starting in 2018 shortly after their IPO. It is only added to the index for the 2YR IRR onwards).
 - Under this methodology, a portfolio composed of two fictional companies, Company A (\$30Bn Market Cap. growing at 10% for 1 year) and Company B (\$1Bn Market Cap. Company growing at 100% over the same period) would have a combined market cap. increase of ~13% since the 10% increase in Company A would dilute the 100% return of the Company B. In the equal-weighted methodology the return would be 55%
 - Market Cap. is adjusted for potential capital increases and other effects to reflect only price per share performance in analyzed period

Appendix (Cont'd)

GGV Ranking

Gold/Silver/Bronze

- A Company is considered under "Gold" status if it achieved a IRR of over 25% over the longest analyzed trading time period (e.g. Tesla has been trading since 2011 with a 65% 10YR IRR and Afterpay has been trading since 2018 with a 3YR IRR of 89% - both are Gold). This status is only given for companies who have been publicly traded for over 2 years
- A Company is considered under "Silver" status if it achieved a IRR of over 20% over the longest analyzed trading time period. This status is only given for companies who have been publicly traded for over 2 years
- A Company is considered under "Bronze" status if it achieved a IRR of over 15% over the longest analyzed trading time period. This status is only given for companies who have been publicly traded for over 2 years

Rising Star

- For companies that have been trading in the market for less than 2 years, "Rising Star" status is given if the Company returned 30% over the longest analyzed time period (either 1YR IRR or 2020 YTD IRR)



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