



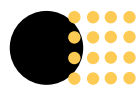
SNOWBALL
RESEARCH

Project X

-

**Snowball
Research**

Nov 2022



Testimonial

"If everybody's thinking the same thing, then nobody's thinking."

- General George S. Patton

"That Indian Snowball provides fresh, unbiased data which allows independent consumers to formulate his or her own opinion. It is unique, stellar and a bargain."

- J. Carlo Cannell, Cannell Capital LLC

Snowball is a tremendous research tool for value- and change-orientated investors that literally does the heavy lifting to help you find great, needle-in-the-haystack investment ideas."


- William C. Martin, Raging Capital Ventures

Raghu's research saves us an enormous amount of time researching what other activists are doing with domestic public companies. He is on top of the latest news and he often supplements the news with value-added analysis and background about the activists and the executives. Our payback on subscribing is enormous. "

- David Nierenberg, The D3 Family Funds

"In a world of too many research services providing too many reports of dubious value, Snowball stands out as a worthwhile and differentiated publisher. Further Snowball's key personnel are responsive to input from clients and always trying to improve their product, which bodes well for the future."

- Portfolio Manager (AUM: \$200 million*)



“Your product is a good statistical reminder of companies that are ongoing changes. It exposes me to companies I might not be taking a look at. While limited, it is a good starting point for further investigation.”

- Portfolio Manager (AUM: \$200 million*)

I've been getting these awesome in depth research reports flagging interesting ideas and special situations via @snowballresearch. Highly recommend checking them out - purely qualitative / special situation screens

- Adam Wilk, Portfolio Manager, Greystone Capital Management LLC



The Bear Cave

Featured in “A Hedge Fund Analyst Christmas List” under the list of the best-paid resources for professional investors

“Very intriguing research”

- Individual Investor



We publish

1.

PROJECT- X

2.

**EVENTS &
SITUTATION**

3.

WEEKLY 13D

We flag

**300+
IDEAS**

Yearly

**HUDREDS
OF
ACTIVIST
SITUATIONS**

Yearly



Project-X: Manual

What is Project-X?

This publication focuses on a completely different set of screening methodologies.

We focus on the following:

1. Owner-operators: Research companies that are run by owner-operators.
2. Find ideas from fund letters and fund commentaries.
3. 13F: Self-explanatory.
4. Segments: We find companies with multiple segments and flag the peculiar ones.
5. OTC: Self-explanatory
6. Business: We focus on companies that generate recurring revenue and/or show "some sign" of competitive advantage.

FAQ:

- Market cap? Stocks under \$5 billion market capitalization.
- Frequency? Even though we plan to publish once a month, our minimum guarantee is 9- 10 reports in a year.
- How many stocks? At least 6 stocks in a month.

INDEX

Update

1. [The Joint Corp \(JYNT\): 13F - Price crash](#)
2. [Similarweb \(SMWB\): Signs of moat; Price crash \[*New: Scuttlebutt research support service*\]](#)
3. [Byrna Technologies \(BYRN\): Owner-operator; Price crash \[*New: Scuttlebutt research support service*\]](#)
4. [WNS \(Holdings\) Limited \(WNS\): 13F](#)
5. [Matthews International \(MATW\): Dry-coating technology that supports Tesla battery is a hidden gem buried with funeral & packaging business](#)
6. [PlayAGS \(AGS\): Recurring revenue; New notable purchase by 1060 Capital in Q2 2022](#)

Update

Dear clients

On a trial basis, we have included scuttlebutt support section for two companies. We share our thoughts to assist you to find the “right type of contact” to gain insight into the business/industry/company.

This would be helpful for investors who talk to customers/industry experts as a part of due diligence.

Disclaimer: We are NOT compensated for including people’s names. The list does NOT mean that they are open for discussion.

Please share your thoughts and suggestions.

Thank you.

Best,
Raghuraman.S.S
Founder & Head of Research
Snowball Research

The Joint Corp (JYNT): 13F - Price crash

- M.Cap: \$235 million| The company develops, owns, operates, supports, and manages chiropractic clinics.
- Major shareholders: BANDERA PARTNERS LLC - 16.6% | BlackRock Inc. - 15.6% | VANGUARD GROUP INC - 7.8% | MORGAN STANLEY - 4% | SKYLANDS CAPITAL, LLC - 3.1% | STATE STREET CORP - 3.1% | FRED ALGER MANAGEMENT, LLC - 2.1%
- Screen: 13F - Price crash

I. BASICS

- The company is the rapidly growing franchisor and operator of chiropractic clinics.
- Benefits of Chiropractic
 - Chiropractic care is increasingly recognized as an effective treatment for pain and potentially for a variety of other conditions.
 - The American College of Physicians (ACP) now recommends non-drug therapy such as spinal manipulation as a first line of treatment for patients with chronic low-back pain.
 - The ACP states that treatments such as spinal manipulation are shown to improve symptoms with little risk of harm.

II. WHAT WE LIKE

1. Cash-based model; no insurance

- The company is the rapidly growing franchisor and operator of chiropractic clinics.
- Non-insurance – cash-based model: The company do not accept insurance and do not provide Medicare covered services.
- The company’s business model enables it to price its services below most competitors’ pricing for similar services and below most insurance co-payment levels. Why?
 - The company believes that chiropractic practices that run on insurance-based reimbursement model incur additional overhead expenses associated with maintaining the capability to process third-party reimbursement.
 - This third-party reimbursement model would find it economically difficult to discount the prices they charge for their services to levels comparable with the company’s pricing.
 - The company’s chiropractors focus on patient service and avoid administrative burdens of insurance processing.
- The company’s clinics are open longer hours than many of the company’s competitors, including weekend days.

2. Solid growth

- Since March 2010, the company has grown from eight clinics to 769 clinics as of June 30, 2022.
- Revenue grew from \$7.1 million in FY 2014 to \$90.6 million in LTM June 2022. Profitability improved significantly from \$3 million in FY 2014 to \$6.6 million in FY 2021. In the recent six months, the company’s profitability was hit due to the pace of greenfield openings. This is explained in detail in a below section.

	FY	FY	FY	FY	FY	FY	FY	FY	LTM
\$, mm	2014	2015	2016	2017	2018	2019	2020	2021	June
Revenue	7.1	13.8	20.5	24.9	36.7	48.5	58.7	80.9	90.6
Operating	-1.6	-9.3	-15.0	-3.3	0.1	3.4	5.5	5.4	1.6

income									
Net income	-3.0	-8.8	-15.2	-3.4	0.1	3.3	13.2	6.6	1.7

• **Rapid growth achieved by regional developer model**

- The company sells a regional developer the rights to open a minimum number of clinics in a defined territory.
- The regional developer’s job is to identify and qualify potential new franchisees in that territory and assist the company in providing field training, clinic openings, and ongoing support.
- The company pays 3% of the ongoing royalties to the regional developer and also shares a portion of the initial franchise fees.
- In 2021, regional developers were responsible for 81% of the 156 franchise license sales for the year.

3. Franchise-model & rapid growth

• **86% franchise clinics**

- As of June 30, 2022, the company has 769 clinics in operation.
- Breakup: 662 franchise clinics (86%) & 107 company-owned or managed clinics (14%).

• The number of franchise clinics increased from 242 in FY 2014 to 662 as of June 30, 2022.

• At the end of the June 2022, the company also had 270 franchise licenses in active development compared to 283 on December 31, 2021.

(\$, mm)	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	LTM June 2022
Franchise revenue	10.3	12.0	13.8	17.1	22.6	26.9	36.5	40.0
Operating income	4.2	4.6	6.1	8.1	11.0	12.6	16.7	17.6
Revenue growth		15.8%	15.2%	24.1%	32.3%	18.9%	35.6%	9.7%
EBIT margin	40.9%	38.1%	44.1%	47.2%	48.5%	46.7%	45.8%	43.9%
Number of franchise clinics newly opened	73	54	56	41	47	71	70	110
Number of franchise clinics (end of the year)	265	309	352	394	453	515	610	662

4. Other interesting data

• **Expansion of market**

- The company is not only capturing the market share from its competitors, but it is also “growing the market.” Let us explain - In 2021, the company saw over 807,000 new patients. Out of these new patients, approximately 36% visited a chiropractor for the first time.
- Attracting 290K patients who had never visited a chiropractor before is a commendable achievement.

• **Traffic higher than industry norms**

- According to the 2021 Chiropractic Economics survey, the company attracted an average of 1,422 new patients per clinic compared to the most recent chiropractic industry average of 291 new patients per year for traditional insurance-based non-multidisciplinary or integrated practices.

- The average new patients per clinic increased from 862 in FY 2017 to 1,422 in FY 2021.

• Notable metrics

- In 2021, 308 clinics achieved sales greater than \$550,000, which is up 82% from the 169 clinics of 2020.

- In 2021, 41 clinics achieved sales over \$1 million, which is more than 4 times higher than the nine clinics in 2020.

Recent hit in profitability

• As you can see below, the rapid opening of new “company-owned” clinics has increased G&A expenses and has compressed the margin.

Company-owned clinics	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021		6M Jun 2021	6M Jun 2022
Number of new clinics opened during the period	-	-	5	3	20		6	7

OUR COMMENTS

1. Long runway

The company accounts for only 2% of nearly \$18 billion spent annually in the US on chiropractic care.

According to the IBIS market research report in June 2021, the three largest industry companies were each expected to generate less than 1% of total industry revenue in 2021.

The company’s current plan is to achieve its goal of 1,000 clinics in operation by the end of 2023.

Overall - we believe that the company has a long runway.

2. Margin improvement

The margin recovery is tied to the “maturation of the portfolio.” It takes a bit of a time. Moreover, the company has tapered the greenfield pace from what it was doing at the end of 2021. So this should allow the existing units to continue to mature.

Similarweb (SMWB): Signs of moat; Price crash

- M.Cap: \$471 million | The company offers digital research intelligence solutions that allow senior leaders, strategy, business intelligence, and consumer insights teams to benchmark performance against competitors and market leaders, analyze trends in the market, conduct deeper research into specific companies.
- Major shareholders: VIOLA GROWTH MANAGEMENT - 16% | Prosus N.V. - 14.9% | NASPERS - 14.9% | OFFER OR - 8.1% | ION CROSSOVER PARTNERS - 7.7% | VARDI JOSEPH - 5.2% | ULYSSES MANAGEMENT - 3.2% | ALPHA FAMILY TRUST - 2.2%
- Screen: 13F - price crash

I. BASICS

- The Tel Aviv-based company, Similarweb has developed a platform for understanding online behavior by monitoring traffic on the web and mobile apps. The company's customers use the company's platform for digital insight.
- The company's user can: benchmark performance against competitors/market leaders, analyze trends in the market, understand their competitors' online acquisition strategies in each marketing channel, monitor consumer demand, increase brand visibility in the search process.
- The company's platform help answer relevant and essential questions such as:
 - "Which digital banking platform is gaining the most market share in my core geographic markets?"
 - "Which of my competitor's products are selling the most on Amazon? What other marketplaces is my competitor using to sell their product?"
- Notable customers: Google Inc., Amazon.com, Inc. and Microsoft Corporation.

II. WHAT WE LIKE

1. Signs of competitive advantages

- Hard to replicate?
 - The company's proprietary technology analyzes billions of digital interactions and transactions every day, from millions of websites and apps, and turns these digital signals into actionable insights.
 - The company collects real-time digital signals on virtually every website and app, and analyzes billions of search terms, digital ads, eCommerce product SKUs, articles, and content pages across digital platforms, channels, industries, and geographies. Through synthesis, modeling, and analysis, we transform these digital signals into timely actionable insights.
 - The company claims that it has aggregated data for over ten years and has amassed a quality and quantity of data that is nearly impossible to replicate.
- The company's platform has become a prerequisite experience for job opportunities and a notable skill that users highlight on LinkedIn.
- Multi-year subscriptions
 - The company's subscription contracts typically have a term of 12 months and are generally non-cancellable.
 - 33% of ARR from longer terms of subscription: In Q4 2021 CC, the CEO mentioned that 33% of annual recurring revenue (ARR) is generated from customers with a multi-year subscription. This underlines the "stickiness" of the product.
- Net revenue retention rate (NRR): 115%, as of Q2 2022.

2. Solid growth

- The company's revenue grew 2X in less than four years, from \$51.5 million in FY 2018 to \$167 million in LTM June 2022.
- The company's current challenge is its inability to generate profit.

\$, mm	FY 2018	FY 2019	FY 2020	FY 2021	LTM 2022
Revenue	51.5	70.6	93.5	137.7	167.6
Operating income	-32.6	-16.1	-19.7	-66.1	-92.3
Net income	-33.7	-17.7	-22.0	-69.0	-88.8

III. WHY ARE WE FLAGGING THIS?

The company's stock price crashed by 78% in the last 15 months. In fact, the stock is crashing consistently.

Most importantly, the company is trading at a significant discount to its major competitor, Semrush (SEMR).

	Revenue (\$, mm)	EV (\$, mm)	EV/Revenue
Semrush	222	1,510	6.7
Similarweb	167	426	2.5

Possible reasons for Semrush demanding a premium valuation

1. Brand awareness: Anyone involved in website development, SEO, or digital marketing knows Semrush. It is quite popular compared to Similarweb. Moreover, it costs less. One of the common complaints (online reviews) against Similarweb is its pricing policy – it lacks transparency. For the majority of its offerings, a potential customer has to contact a sales agent.
2. Diverse customer base: Semrush has a whopping 82K customers compared to a meager 3.5K customers for Similarweb.
3. Cash flow: Semrush generates positive free cash flow – \$10 million in recent LTM.

Arguments-

1. Average subscription cost is 17X higher than Semrush:

	SEMRush	Similarweb
Revenue (FY 2021)	188	138
Total number of customers	82,000	3,487
Average revenue per customer	\$2,293	\$39,576
Number of employees	1,173	926
Number of customers/number of employees	70	4

- The company's average revenue per customer is roughly \$40K. In fact, the company reported that 271 of its customers generate more than \$100K ARR.
- That's a lot of subscription costs compared to Semrush, which generates \$2.3K revenue per customer.

2. Cash burn

- Similarweb burned \$60 million in the LTM June 2022. Out of which, \$15-\$18 million is for constructing a new headquarters.
- When an analyst questioned the cash burn, the CFO made an interesting argument.

- In 2019, the company reduced its cash burn by 50%, and in 2020, the cash burn was reduced to \$5 million, and the company turned cash-flow positive in Q1 2021.
- Now, after the IPO, the company is using the proceeds from the IPO to drive growth.
- In Q4 2021 and Q1 2022 CC, the company outlined its target to reach positive cash flow in 2024. In the recent CC, the CFO commented that the company is continuing to balance growth and cash flow.

We know how to manage a business that's cash flow breakeven. But what we saw in front of us with this big TAM, and this big opportunity and what we are seeing today is strong unit economics and the efficient land and expand model, which we are seeing, it's ultimately in not only revenue growth, but the strong NRR. And that's the proof putting to us that our conviction was right. – Q4 2021 CC

\$, mm	FY 2018	FY 2019	FY 2020	FY 2021	LTM 2022
Free cash flow	NA	-10.0	-4.5	-29.9	-60.0

IV. Scuttlebutt research support

This is a new section where we share our thoughts to assist you to find the “right type of contact” to gain insight into the business/industry/company. We are NOT compensated for including people’s names. The list does NOT mean that they are open for discussion.

1. Suggested questions to ask

a) Customers

1. Why are you using expensive solutions from Similarweb when cost-effective services are available from Semrush?
2. What were you doing/using before becoming a subscriber to Similarweb?
3. If there is a budget cut, would you cut you subscription to Similarweb and switch to Semrush?
4. What features would you miss if you were forced to use Semrush instead of Similarweb? Would that feature be a “mission-critical” or “nice to have” feature?

b) Management

5. For every employee, Similarweb has four customers, whereas Semrush has 70. Clearly, Similarweb has employed a lot of employees to cater to the small number of customers. Why?

c) Question for Experts/analysts/executives of company/competitors

6. What would it take for Semrush/[any competitor] to replicate what Similarweb does?

Rationale for these questions

A couple of points

Semrush is a common competitor often cited by various sources. In fact, a few customers who gave reviews about Similarweb wrote that they considered Semrush before finalizing with Similarweb.

Make no mistake – Semrush is a top player. Plenty of online reviews that compare Similarweb with Semrush conclude that Semrush is the best bet.

Moreover, Semrush is a SaaS platform – it is easy to support additional users. Technically speaking, larger companies should not find any difficulty in using Semrush – they just have to buy some additional licenses/subscriptions.

But it is clear that many companies (especially larger corporations) are paying a lot of money to be a customer of Similarweb. Clearly, Similarweb has an edge. What is that edge? Is it replicable or not? That’s the crux of the research.

The super best-case scenario is to talk to a customer who pays over \$100K towards a subscription.

2. Job title

The following are the job titles that have experience using the company’s software.

Digital Strategist

Digital diligence

Digital marketing manager / director

Manager / Director of Product Marketing

Head of Social Media Marketing

Director – IT/Strategy

Digital acquisition

Search Engine Marketing manager

Senior Analytics Manager

Director – ecommerce

Director/Manager- Online Marketing

Content director

3. Suggested list of contacts

The below contacts gave positive feedback about Similarweb.

Customer of Similarweb	Name of the person who gave testimonial about Similarweb	Location of the person	Linkedin	Is the person working in the same firm?
Tourism New Zealand	Sarah Britton	Auckland, New Zealand	https://www.linkedin.com/in/sarah-britton-nee-short-64a09b32/	Yes
RedBus	Krishnan Ramaswami	Bengaluru, Karnataka, India	https://www.linkedin.com/in/krishnanramaswami/	Yes
Mosaic Ventures	Evan Schoenbach	Brazil	https://www.linkedin.com/in/evanschoenbach/	Yes
Wiideman Consulting Group	Steve Wiideman	California, United States	https://www.linkedin.com/in/seoexpert/	Yes
ForwardP	Timothy	England,	https://www.linkedin.com/in/timhawesforward	Yes

MX	Hawes	United Kingdom	3d/	
Redarbor	David Villalabeitia	Greater Barcelona Metropolitan Area	https://www.linkedin.com/in/dvillalabeitia/	Yes
Anything is Possible	Sam Fenton-Elstone	Greater Brighton and Hove Area	https://www.linkedin.com/in/samfentonestone/	Yes
eBay	Miroslav Sala	Greater Dublin	https://www.linkedin.com/in/miroslavsala/	Yes
Hearst	Jose Angel Morales Grela	Greater Madrid Metropolitan Area	https://www.linkedin.com/in/joseangelmoralessgrela/	Yes
Rakuten Advertising	Nicole Prodoehl	Greater Milwaukee	https://www.linkedin.com/in/nicole-prodoehl-167b422/	Yes
Any.do	Omer Perchik	Israel	https://www.linkedin.com/in/omerperchik/	Yes
Natural Intelligence	Yohai Barak	Israel	https://www.linkedin.com/in/yohaibarak/	Yes
Gruppomol	Gianluca Mileo	Italy	https://www.linkedin.com/in/gianlucamileo/	Yes
DHL Express	Leendert van Delft	Limburg, Netherlands	https://www.linkedin.com/in/leendertvandelft/	Yes
BIOCODEX	Daniel Zampini	New Jersey, United States	https://www.linkedin.com/in/daniel-zampini/	Yes
Sticker Mule	Anthony Constantino	New York, United States	https://www.linkedin.com/in/stickermule/	Yes
Adyen	Floris Dorgelo	North Holland, Netherlands	https://www.linkedin.com/in/florisdorgelo/	Yes
SEM	SEM	Şişli, İstanbul	https://www.linkedin.com/company/semtr/	Yes
PRNEWS.io	Alexander Storozhuk	Tallinn, Harjumaa, Estonia	https://www.linkedin.com/in/storozhuk/	Yes
Simplr®	Joshua Smith	Tennessee, United States	https://www.linkedin.com/in/joshuacorysmith/	Yes
Croud	Duncan Nichols	United Kingdom	https://www.linkedin.com/in/duncannichols/	Yes
AFILIZA	Sacha	United Kingdom	https://www.linkedin.com/in/sacha-	Yes

	Scomoro	Kingdom	scomorovschi/	
IG	Francesco Santoro	United Kingdom	https://www.linkedin.com/in/francescosantoro85/	Yes
Onefourzero	Fleur Hicks	Victoria, England, United Kingdom	https://www.linkedin.com/in/fleurhicks/	Yes
SparkToro	Rand Fishkin	Washington, United States	https://www.linkedin.com/in/randfishkin/	Yes
Airbnb	Imri Galai	Greece	https://www.linkedin.com/in/imrigalai/?originalSubdomain=il	No
Docsend	Bryan Gaertner	San Diego Metropolitan Area	https://www.linkedin.com/in/bryangaertner/	No
Ozon.ru	Konstantin Bayandin	Palo Alto, California, United States	https://www.linkedin.com/in/konstantin-bayandin/	No
Life360	Andreas Gross	San Francisco, California, United States	https://www.linkedin.com/in/andreasmgross/	No
Outbrain	Asaf Hochman	Israel	https://www.linkedin.com/in/asafhochman/	No
Playbuzz	Shaul Olmert	Israel	https://www.linkedin.com/in/shaulmert/	No
APMEX	Steven Pope	Duluth, Georgia, United States	https://www.linkedin.com/in/steven-pope/	No
Investing.com	Igal Stolpner	New York City Metropolitan Area	https://www.linkedin.com/in/igalstolpner/	No
MenschDanke	Altan Sarisin	Berlin, Germany	https://www.linkedin.com/in/altan-sarisin-56572027/	No
Ogilvy	William Adeney	Singapore	https://www.linkedin.com/in/williamadeney/	No
Snagajob	Slav Lakov	Virginia, United States	https://www.linkedin.com/in/slav-lakov-b10a57/	No
Payoneer	Ariel Navon	Israel	https://www.linkedin.com/in/arielnavon/	No
idealo	Philipp Schrader	Berlin Metropolitan Area	https://www.linkedin.com/in/philipp-schrader-5b3485182/	No
Kelkoo	Pierpaolo	London,	https://www.linkedin.com/in/pierpaolo-zollo-	No

	o Zollo	England, United Kingdom	48b48b2/	
Hootsuite	Cris Thome	Toronto, Ontario, Canada	https://www.linkedin.com/in/cris-thome/	No
CJ global advertiser	Nele Sharp	United States	https://www.linkedin.com/in/nele-sharp/	No
Postscript	Hannah Duncan	Scottsdal e, Arizona, United States	https://www.linkedin.com/in/hannahgraceduncan/	No
Microsoft	Nicolette Harper	Columbia, United States	https://www.linkedin.com/in/nicolette-harper/	No

Suggested further readings

Please read the below reviews published on Gartner.

Similarweb: <https://www.gartner.com/reviews/market/seo-tools/vendor/similarweb/reviews>

Semrush: <https://www.gartner.com/reviews/market/seo-tools/vendor/semrush/reviews>

<https://www.reliablesoft.net/similarweb-vs-semrush/>

<https://www.techradar.com/reviews/similarweb-web-analytics-tool>

Byrna Technologies (BYRN): Owner-operator; Price crash

- M.Cap: \$162 million | The company is a less-lethal defense technology company.
- Major shareholders: LAPEYRE PIERRE F JR - 2.8% | ARROWMARK COLORADO HOLDINGS LLC - 1.3% | VANGUARD GROUP INC - 0.7%
- Screen: Owner-operator

I. BASIC

The company sells non-lethal devices through its website and in over 300 brick-and-mortar locations, including gun shops, outdoor stores, and sporting goods stores across the US.

II. RESEARCH

1. Stellar revenue growth after new product launch

a) Product launch: Non-lethal self-defense weapon

- In February 2019, the company launched Byrna HD, a non-lethal alternative to a firearm.
- The Byrna HD fires 68-caliber chemical irritant projectiles filled with a highly potent cocktail of pepper spray and tear gas all in one shot.
- Byrna HD will cause intense pain and irritation, but it will not cause lasting damage.

No permits/license

- The company's devices require no federal permits or federal licenses to purchase or carry Byrna HD.
- There are no waiting periods or background checks required to purchase and own the Byrna HD.

Growth

- In mid-2019, the company's sales soared following the posting of a video by a YouTuber who has over 850K followers.
- \$1mm milestone: In the quarter ended May 31, 2020, the company's revenue grew over \$1 million for the first-time and generated \$16.6 million of revenue for the FY ended November 2020.
- The company's revenue grew from \$16.6 million in FY Nov 2020 to \$43.2 million in LTM June 2022.
- Outlook
 - Due to the soft economic situation, the company expects its revenue in 2023 to grow by 10% to 30%, rather than the 40% to 50% year-over-year growth the company has registered recently.

\$, mm	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	LTM 2022
Revenue	0.0	0.2	0.2	0.3	0.3	0.9	16.6	42.2	43.2
Operating income	-2.7	-2.1	-1.7	-1.9	-2.0	-3.3	-4.3	-3.3	-10.5
Net income	-2.7	-2.4	-1.9	-2.8	-2.2	-4.4	-12.6	-3.3	-11.0

• Solid website traffic

- For the first nine months of this year 2022, Byrna registered 5.7 million web sessions on byrna.com and another 2.3 million on amazon.com for a total of 8

million web sessions. This compares to 4.2 million total web sessions during the same period of last year.

- Comparison
 - As per similarweb.com, the company's website traffic is 415.4K and the average visit duration is 3 minutes.
 - A major competitor - <https://shop.pepperball.com/> attracts a meagre 18.3K visitors; pepperball.com's home page attracts 34K visitors.
- Positive reviews:
 - https://www.youtube.com/results?search_query=Byrna+HD
 - <https://www.youtube.com/watch?v=tXjsUmav1Pc>
 - <https://medium.com/illumination/what-i-know-after-owning-the-byrna-pepperball-launcher-for-3-months-7144f3965e55>
- Social media presence
 - 42.7K followers; 430 posts
 - <https://www.instagram.com/byrnanation/?hl=en>

2. Owner-operator

- Bryan Scott Ganz was appointed president of the company in July 2018 and was appointed CEO of the company in April 2019.
- He claims that under his watch, the company purchased the intellectual property portfolio and the design studio of South African inventor Andre Buys. Subsequently, he was also appointed as the chief technology officer.
- In April 2018, the company kicked off the development of its flagship product, the Byrna HD.
- Subsequently, in February 2019, Byrna HD was launched.
- He built the company from scratch to a \$43 million revenue-generating company.
- Ownership: 4.7%

3. Patents

- The company's product utilizes several of the company's proprietary patents and more than 65 custom-designed parts; 93 unique parts.
- The company has 44 issued utility patents and 21 issued design patents. Moreover, the company is currently prosecuting 10 utility patents with one newly filed provisional utility patent.

Overall-

Byrna appeals to gun owners as well as those who would never own a firearm.

Scuttlebutt research support

This is a new section where we share our thoughts to assist you to find the "right type of contact" to gain insight into the business/industry/company. We are NOT compensated for including people's names. The list does NOT mean that they are open for discussion.

- SALT Supply
 - Adam Kennedy, Founder
 - <https://www.saltsupply.com/pages/contact-us>
 - Another non-lethal gun start-up. When fired, it explodes powdered chemicals that create temporary blindness and lung constriction.
 - <https://interestingengineering.com/innovation/salt-gun-self-defense-weapon-shoots-pepper-spray-capsules>
- Warren Wilson

- He is currently the columnist of "Police One." Former Enid Police Department (OK).
- He wrote an article on the company's product (sponsored).
- How this powerful handheld device increases your de-escalation options (police1.com)
- <https://www.linkedin.com/in/warren-wilson-a308676b/>
- United Tactical Solutions is the parent company of Pepperball technologies
 - Bob Plaschke
 - Former CEO of United Tactical solutions; He is also the former CEO of Sonim Technologies (publicly-traded).
 - <https://www.linkedin.com/in/robertplaschke/>

WNS (Holdings) Limited (WNS): 13F

- M.Cap: \$4 billion | The company is a business process management (BPM) company that provides data, voice, analytical, and business transformation service.
- Major shareholders: FMR LLC - 9.4% | NALANDA INDIA FUND LTD - 8.4% | NALANDA INDIA EQUITY FUND LTD - 4.4% | GRANDEUR PEAK GLOBAL ADVISORS, LLC - 4.1% | WCM INVESTMENT MANAGEMENT, LLC - 3% | ALLSPRING GLOBAL INVESTMENTS HOLDINGS, LLC - 2.7% | JANUS HENDERSON GROUP PLC - 2.7% | ARTISAN PARTNERS LIMITED PARTNERSHIP - 2.7%
- Screen: 13F

I. BASICS

- The company provides data, voice, analytical and business transformation services.
- The company transfers the business processes of its clients to its delivery centers, located in China, Costa Rica, India, the Philippines, Poland, Romania, South Africa, Spain, Sri Lanka, Turkey, the UK, and the US, with a view to offer cost savings.

II. WHAT WE LIKE

1. Notable advantages

- Switching cost:
 - The contracts with its clients typically range from three to five years, with some being rolling contracts with no end dates.
 - The company claims that its client relationships tend to be long-term in nature given the scale and complexity of the services and due to the costs associated with switching processes in-house or to other service providers.
 - Even though the switching cost is high, it is not fool proof. In the last decade, the company had a client migrate to another service provider.
- Capital light business model
- Recurring: The company is not dependent on its client's annual budget, as it manages ongoing operations and not one-time projects.

2. Solid financial performance

- Revenue grew from \$54 million in FY 2003 to \$1.1 billion in FY 2022.
- During the same period, operating income improved from \$0.8 million in FY 2003 to \$132 million in FY 2022.
- Predominantly organic growth: Even though the company has acquired a few companies in the past decade, one of the primary drivers of the revenue growth in the last decade is organic growth.
- Resilience: In 2014, the company's largest online travel client transitioned the work from WNS to another OTA partner. This affected the company's FY 2014 revenue by 4%. Despite this setback, the company continues to win new clients and grow its revenue. In fact, since this loss, the company has doubled its revenue in eight years to \$1.1 billion. On a different note, in the last nine years, this was the only loss of a major client.

(\$, mm)	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Revenue	460	503	534	562	603	758	809	928	913	1110
Operating income	30	49	70	73	47	95	120	147	135	164
Net income	21	42	59	60	38	86	105	117	103	132
EBIT	6.5%	9.8%	13.2%	13.0%	7.8%	12.5%	14.8%	15.8%	14.8%	14.8%

Margin										
Net income margin	4.6%	8.3%	11.0%	10.7%	6.3%	11.4%	13.0%	12.6%	11.2%	11.9%

- **Notable recent acquisitions**

Business name	Aggregate cost	Date
CEPROCS S.R.L.	\$0.6mm	Dec-21
MOL IPS	\$2.9mm	Aug-21
HotelBeds Group	\$0.2mm	Oct-18
MTS HealthHelp Inc	\$68.9mm	Mar-17
Denali	\$38.6mm	Jan-17
Value Edge	\$18.3mm	Jun-16
Telkom SA SOC LIMITED	\$2.6mm	Apr-15

- **Possible reasons for the revenue growth**

- Deep domain expertise: Over the last several years, the company has hired industry experts, invested in technology, and pursued tuck-in acquisitions to create industry specific solutions. Moreover, the company also created domain-based universities and opened centers of excellence.
- Proprietary tools: The company rolled out several proprietary tools under the WNS umbrella that leverage state-of-the-art technologies, including natural language processing, RPA, cognitive computing, machine learning, and artificial intelligence.
 - a) Insurance:
 - Insurance accounts for roughly 30% of revenue.
 - The company currently has over 20 proprietary and collaboration tools and technologies in this vertical.
 - Examples:
 - Inspektlabs: A computer vision technology platform focused on automating inspections of any physical asset using photos and videos.
 - BAIL: An intelligent and versatile liability assessment and first notice of loss decision-making tool.
 - In page 47 of the latest 10-K, you can find more than 20 such tools.
 - b) Healthcare
 - Healthcare clients account for roughly 18% of revenue.
 - There are eight proprietary tools.
 - Example: Therapy Area Analyzer: A proprietary therapy area knowledge repository.

- **Fiscal 2023 guidance**

- Net revenue: \$1.110 billion to \$1.150 billion, representing year-over-year growth of 8% to 12% on a reported basis and 14% to 18% on a constant currency basis.
- The acquisition of Vuram is expected to contribute 2% inorganic growth to fiscal 2023.

3. Solid free cash flow & buyback

- In the last 10 years, the company generated \$1 billion in free cash flow.

(\$, mm)	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
FCF	43.7	61.8	72.6	75.4	69.3	102.6	117.4	200.8	187.2	159.1

- **Buyback:** In the last seven years, the company spent over \$400 million on share repurchase

	FY	FY	FY	FY	FY	FY	FY
(\$, mm)	2016	2017	2018	2019	2020	2021	2022
Buyback	30.5	64.2	39.5	56.4	63.7	78.6	85.0

Overall –

- Even though this is also a BPO company, the management has developed deep industry knowledge across several industry verticals.
- The company has aggressively hired senior leaders, consultants, and technical experts to help enhance its analytics team, while working on several technology and automation initiatives designed to create new tools, frameworks, and platforms.
- The deep domain knowledge and proprietary tools are helpful to create differentiated solutions. This in turn enables stickier relationships and nonlinear revenue growth.

II. WHY ARE WE FLAGGING THIS?

Plenty of funds have significant exposure to this stock.

Name of the fund	% of portfolio
GRANDEUR PEAK GLOBAL ADVISORS	9.30%
NEUMEIER POMA INVESTMENT COUNSEL	4.70%
RANGER INVESTMENT MANAGEMENT	4.47%
OLD WELL PARTNERS	4.37%
INTREPID CAPITAL MANAGEMENT	4.22%
PEMBROKE MANAGEMENT	4.21%
SUMMIT CREEK ADVISORS	3.39%
RICE HALL JAMES & ASSOCIATES	3.28%
HOOD RIVER CAPITAL MANAGEMENT	2.21%
PIER CAPITAL	1.80%

Matthews International (MATW): Dry-coating technology that supports Tesla battery is a hidden gem buried with funeral & packaging business

- M.Cap: \$839 million | The company provides brand solutions, memorialization products, and industrial technologies worldwide.
- Major shareholders: BlackRock - 17.1% | VANGUARD GROUP - 11.1% | PHOENIX HOLDINGS - 5.7% | DIMENSIONAL FUND ADVISORS - 4.9% | GAMCO INVESTORS - 3.6% | STATE STREET - 3.6% | AMERIPRISE FINANCIAL - 3.6% ARISTOTLE CAPITAL BOSTON - 3.6%
- Screen: Multiple segments

RESEARCH

1. SEGMENTS

a) SGK Brand – stagnant & declining margin

- Accounts roughly 43% of total revenue.
- The company has over 100 years in the packaging business, which is comprised of broad technical, engineering, and artistic expertise relating to the creation and production of graphics & their workflows.
- In the past 8 years, the company’s revenue has hovered between \$700-\$800 million.
- The profit margin has declined significantly over the last five years due to shift in product mix and pricing pressure.

(\$, mm)	2015	2016	2017	2018	2019	2020	2021	LTM 2022
Revenue	798.3	755.9	770.2	805.3	743.9	693.1	726.9	708.8
Operating income	21.9	42.9						
Adj. EBITDA			144.8	150.2	119.5	90.6	99.7	75.9
Revenue growth	61%	-5%	2%	5%	-8%	-7%	5%	-2%
EBIT Margin	3%	6%						
Adj. EBITDA margin			19%	19%	16%	13%	14%	11%

• Acquisition history

Business name	Value	Date
Name not disclosed	\$39.47	2018
Name not disclosed	\$2.5mm	Apr-21
Frost Converting Systems, Inc.	\$7.2mm	Nov-18
GJ Creative Limited	\$37.6mm	Mar-17
VCG (Holdings) Limited	\$10.7mm	Jan-17
A. + E. Ungricht GmbH + Co KG	\$25.2mm	Jan-17

b) Memorialization – solid market share

- Accounts for 46% of total revenue.
- The company manufactures and markets a full line of memorialization products used primarily in cemeteries, funeral homes and crematories.
- The Company operates approximately 100 distribution centers in the US.

- Leading market position
 - Bronze memorials - #1 position
 - Granite memorials - #1 position
 - Caskets #2 position
 - Cremation equipment - #1 position

(\$, mm)	2015	2016	2017	2018	2019	2020	2021	LTM 2022
Revenue	508.1	610.1	615.9	631.4	636.9	656	769	829.8
Operating income	70.1	68.3						
Adj. EBITDA			139.2	145.5	134.3	146.3	165.7	152
Revenue growth	0%	20%	1%	3%	1%	3%	17%	8%
EBIT Margin	14%	11%						
Adj. EBITDA margin			23%	23%	21%	22%	22%	18%

A note on segment financials: In the recent years, the company switched from reporting "operating income" to "Adj. EBITDA".

Acquisition history

Name	Value	Year
Name not disclosed	\$13mm	Jan-21
Name not disclosed	\$1mm	2020
Name not disclosed	\$3.1mm	2019
Star Granite and Bronze International, Inc	\$36mm	Feb-18
Aurora Products Group, LLC	\$210mm	Aug-15

c) Industrial Technologies segment

The company operates through three major sub-divisions

- Energy storage business:

- This segment builds advanced purpose-built equipment including tooling that supports lithium-ion battery production.
- IP protected process

- Warehouse Automation

- This complements the tracking and distribution of a customer's products with automated order fulfilment technologies and controls for material handling systems.
- High switching cost and relative operational ease and maintenance result in high customer retention.

- Product identification

- Manufactures and markets products and systems that employ different marking technologies, including laser and ink-jet printing.
- The company's team spent ~12+ years developing new technology that culminated in a product that is more reliable, experiences low downtime and results in approximately 75% lower cost of ownership.

(\$, mm)	2013	2014	2015	2016	2017	2018	2019	2020	2021	LTM 2022
Revenue	93.5	100.8	119.7	114.3	129.5	165.9	156.5	149.2	175.1	205.5
Operating income	8.86	11	13.1	7.7						
Adj.					18.5	25.9	24.1	22.8	26.7	36.7

EBITDA										
Revenue growth		8%	19%	-4%	13%	28%	-6%	-5%	17%	17%
EBIT margin	9%	11%	11%	7%						
Adj. EBITDA margin					14%	16%	15%	15%	15%	18%

Acquisition history

Name	Value	Year
Compass Engineering Group	\$51.9mm	Nov-17
RAF Technology, Inc	\$8.7mm	Feb-17
Guidance Automation Limited	\$9.9mm	Nov-16
Digital Design, Inc	\$8.8mm	Feb-16

WHY ARE WE FLAGGING THIS?

Frankly, if you look at the below table, it is far from enticing.

Since FY 2015, the financials have hovered between \$1.4 billion and \$1.7 billion, and profitability has declined significantly in the last four years.

Key financials

\$, mm	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	LTM 2022
Revenue	1,426	1,480	1,516	1,603	1,537	1,498	1,671	1,744
Operating income	105	119	121	139	10	-64	42	37
Net income	63	66	74	107	-39	-88	3	28
Growth		3.81%	2.37%	5.74%	-4.07%	-2.54%	11.53%	4.37%
EBIT Margin	7.36%	8.03%	8.01%	8.65%	0.67%	-4.28%	2.52%	2.09%
Net income margin	4.44%	4.47%	4.88%	6.68%	-2.53%	-5.85%	0.17%	1.62%

Free cash flow

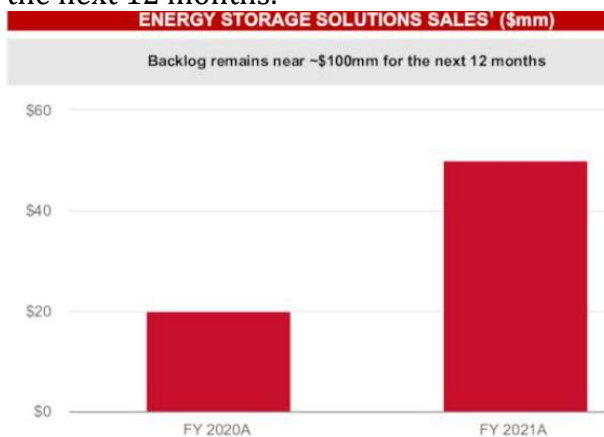
\$, mm	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	LTM 2022
Free cash flow	61.4	92.8	98.6	104.4	104.4	93.4	145.6	128.5	89.9

So, why are we flagging this?

(a) Potential upside from “energy storage” segment – Tesla’s supplier

- The company’s energy storage business has principally focused on supporting lithium-based products.
- Exposure to electric vehicles: Saueressig Engineering, the company’s subsidiary, designs, manufactures, and services custom equipment including lithium-ion battery electrodes, fuel cell plates, and hot-embossed foils for various applications.

- Dry electrode:
 - The company believes that dry electrode battery production will be the next generation of batteries to enter the market as they offer a significantly lower capital cost and a small footprint to produce versus wet electrodes.
 - The company claims that it has enjoyed almost a decade of experience, know-how, and intellectual property in dry electrodes.
- Located near Tesla’s Gigafactory
 - Various news sources reported that Saueressig is the supplier for Tesla. Saueressig is working with Tesla on their dry battery electrode technology
 - In April 2021, Saueressig set up an office in Texas. The company received an economic incentive package from the San Antonio City Council.
 - Saueressig’s Texas location is roughly 88 miles away from the Tesla’s Gigafactory in Austin, Texas. See the Google Maps [link](#).
- Financials:
 - For the first time in the company’s history, in the recent Q3 2022 presentation, the company reported the “revenue” of the energy storage business through the below chart.
 - Revenue increased roughly from \$20 million in FY 2020 to \$40-\$60 million in FY 2021.
 - The company also reported that the backlog will remain near ~\$100 million for the next 12 months.



Our comments

Tesla is working aggressively on mass production of 4680 cells – it is getting delayed because it is hard to execute “dry-coating” technology.

Dry-coating technology could cut battery costs significantly, but the technology is difficult to execute.

Dry-coating technology is complex compared to the wet chemical method. Dry-coating needs a huge labour force, electricity, and machinery.

The advantage of dry-coating is that since electrodes are coated with a minimal amount of liquid, it need not be dried.

Now, what is it for the company?

The company claims that it has intellectual property in dry electrodes and has guided \$100 million of backlog for the next 12 months.

Unlike various companies that trade at astronomical valuations for a simple fact that they operate in “EV” business, this is a company trading at a meager 0.9X of revenue even after guiding \$100 million of backlog.

If you are interested, the below are “must-read” articles.

- [Inside Tesla's drive to keep Musk's battery promise | Reuters](#)
- <https://www.licarco.com/news/tesla-can-cut-5500-off-model-y-battery-costs-thanks-to-dry-coating-process>
- <https://www.eenewspower.com/en/continuous-dry-coating-process-for-battery-electrodes-cuts-costs/>
- <https://www.electrichybridvehicletechnology.com/opinion/why-dry-coating-electrodes-is-the-future-of-the-electric-vehicle-battery-industry.html>
- Fraunhofer (Competition): <https://www.electrive.com/2021/09/02/fraunhofer-develops-cleaner-electrode-dry-coating-process/>

2. Barington Capital

Barington Capital purchased 0.33% of the o/s stock of the company in Q2 2022. Now, this stock accounts for roughly 4.5% of Barington Capital’s portfolio – the 8th largest position.

In June 2016, the fund presented a [presentation](#) to the shareholders of Chico’sFAS. In the presentation, it added its past case study. See below images.

Under the influence of Barington, three companies divested its segments/businesses to unlock value.

So, why are we saying this now?

The company is currently in three broad businesses, which Barington might target to divest to unlock value.

Case Study: Lancaster Colony Corp.



Active Strategy

- The Company agreed with Barington to form a task force to improve the Company's operations, productivity and profitability. The Company also agreed to implement certain corporate governance initiatives, establish a goal to repurchase more common stock and work toward completing its strategic review process for the Company's non-food businesses by August 31, 2008.
- In 2008, the Company proceeded to sell its non-core automotive and consumer and floral glass operations, added a new independent director to the Company's Board with food industry experience and exceeded its share repurchase goals.
- As a result, Lancaster significantly outperformed the Russell 2000 and S&P Midcap 400 Index in 2008.
- In March 2009, Barington publicly released a letter it sent to the Company's CEO commending him for the Company's performance in a challenging economic environment.

Case Study: The Warnaco Group, Inc.



Active Strategy

- In September 2006, Barington met with Warnaco's management team to discuss measures to improve shareholder value and improve execution in light of the Company's past operating disappointments. Among other things, Barington made specific operational suggestions to improve margins through better merchandising and SG&A and corporate expense reductions. Barington also recommended that the Company dispose of non-core brands and licenses, especially underperforming divisions of the Company's intimate apparel and swimwear segments.
- CEO Joseph Gromek began implementing most of Barington's suggestions, including the disposition of underperforming non-core assets, and improved execution by Warnaco's management team, resulting in improved margins.
- In October 2006, Warnaco sold its Ocean Pacific brand for \$54 million.
- In December 2007, Warnaco sold its Catalina, Anne Cole and Cole of California brands for \$23 million.

Case Study: Gerber Scientific, Inc.



Active Strategy

- Reduced the size of corporate-level expenses and R&D.
- Initiated a strategic review to determine the long-term viability and return on equity potential of each of the Company's businesses.
- In March 2010 the Company reported that in the third quarter of fiscal 2010 total outstanding debt was reduced by \$6.0 million to \$45 million
- In August 2010 Company announced its financial results for fiscal 2011 first quarter: Revenue for the quarter increased 8.2% to \$118.3 million from \$109.4 million for the comparable period last year. Net income for the quarter was \$1.5 million, or \$0.06 per diluted share, compared with \$0.5 million, or \$0.02 per diluted share, for the same period last year. The strong performance allowed the Company to reduce outstanding debt by \$7 million during the quarter, and brought total debt reduction to \$35.5 million - or down nearly 50%.
- In December 2010, the Company announced that it had entered into an agreement to sell Gerber Coburn, its ophthalmic lens processing business, to Coburn Technologies, Inc. for \$21.0 million. The Company used the proceeds from the divestiture to pay down debt and begin to return capital to shareholders.
- In August 2011, Gerber Scientific was acquired by Vector Capital for approximately \$283 million.

PlayAGS (AGS): Recurring revenue; New purchase by 1060 Capital in Q2 2022

- M.Cap: \$230 million | The company designs and supplies gaming products and services for the gaming industry.
- Major shareholders: Apollo Management Holdings, L.P. - 22.2% | HG VORA CAPITAL MANAGEMENT, LLC - 9.5% | GOLDMAN SACHS GROUP INC - 9.3% | ARROWMARK COLORADO HOLDINGS LLC - 8.8% | RENAISSANCE TECHNOLOGIES LLC - 3.7% | VANGUARD GROUP INC - 3.4% | MORGAN STANLEY - 3.3%
- Screen: 13F

I. BUSINESS

- The company provide its casino customers with high-performing Class II and Class III EGMs for the tribal and commercial gaming markets, more than 60 unique table products offerings, ancillary table products equipment, systems software, computer hardware, signage, and other equipment for operation within gaming facilities.
- The company designs all of its cabinets with the intention of capturing the attention of players on casino floors while aiming to maximize operator profits.
- In addition to our existing portfolio of EGMs, the company also offers more than 60 unique table products, including live felt table games, side bets, progressives, card shufflers, signage, and other ancillary table game equipment.
- Major locations
 - Oklahoma: 28%
 - Washington: 9%
 - Texas: 9%

WHAT WE LIKE

1. Signs of moat

- Proprietary games: In 2021, the company had a library of 545 proprietary game titles that is delivered on its state-of-the-art EGM cabinets.
- 79% of total revenue is recurring in nature: For the FY 2021, the company generated 79% of its revenue from recurring contracted lease agreements whereby the company places EGMs and table game products at its customers' gaming facilities under either a revenue-sharing agreement or a fee-per-day agreement.
- Solid market share
 - In an established market, the company enjoys a solid market share.
 - Alabama: 49%
 - Texas: 36.8%
 - Oklahoma: 13.3%
 - Florida: 11.4%

2. Solid growth under the watch of current CEO

- Growth under the current CEO
 - In February 2014, the company appointed David Lopez as CEO.
 - Since 2014, the company has expanded its product line-up to include: (i) Class III EGMs for commercial and Native American casinos permitted to operate Class III EGMs, (ii) table game products and (iii) interactive products. All these provided the company with growth opportunities as the company expanded in markets where it did not have a presence.
 - Revenue grew from \$58 million in FY 2013 to \$298 million in LTM June 2022 through both acquisition and organic growth.

- Even though the company generated net losses, the company generates positive free cash flow.
- Key financials

\$, mm	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	LTM June 2022
Revenue	72.1	123.3	166.8	212.0	285.3	304.7	167.0	259.7	297.9
Operating income	-8.4	-29.4	-17.1	14.5	25.3	23.7	-44.2	19.7	26.4
Net income	-28.4	-38.5	-81.4	-45.1	-20.8	-11.5	-85.7	-22.6	-19.7

- Acquisitions

Date	Business name	Aggregate cost
Jan-22	Aces Up Gaming	\$4.8mm
Sep-19	In Bet Gaming, Inc	\$4mm
Feb-19	Integrity Gaming Corp	\$52.6mm
Jun-18	Gameiom Technologies Limited	\$5mm
Dec-17	Rocket Gaming Systems	\$56.9mm
Sep-17	In Bet Gaming, Inc	\$9.6mm
Sep-15	Intellectual Property Acquisitions	\$10mm
Jun-15	Gamingo Limited	\$8.8mm
May-15	Amaya Americas Corporation	\$369.8mm

- FCF

\$, mm	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	LTM 2022
Free cash flow	2.7	0.6	8.1	3.1	-19.6	23.2	2.2	26.8	15.7

II. Current challenges

- After a period of rapid development, the “installed base” has been declining since 2020.

	2015	2016	2017	2018	2019	2020	2021	3M ended Sep '22
Domestic installed base	13,139	13,953	16,078	16,296	18,368	16,268	15,939	16,258
International installed base	6,112	6,898	7,727	8,351	8,497	7,985	7,643	6,274
Total installed base	19,251	20,851	23,805	24,647	26,865	24,253	23,582	22,532

- Oklahoma:

- The company generated 28% of revenue from Oklahoma and enjoys 13% market share in Oklahoma.
- In Q2 2019, the company started explaining the problems they were facing in Oklahoma – the company rapidly expanded its installed base with 800 incremental

units during the period of mid-2018 to mid-2019. This resulted in under-performance.

- The company executed two major changes to counter the under-performance: a) The company made several changes to 900+ units in Oklahoma. This included game title changes, cabinet swaps, on-floor relocations, and selling of underperforming units. b) The company sold many of its underperforming units.
- In Q4 2019, the company reported that Q4 Oklahoma RPD remained relatively flat from Q3 signifying stabilization as a result of some of its targeted countermeasures.
- Abruptly, there is no discussion about Oklahoma since 2021. Moreover, the company also stopped reporting about the installed base in Oklahoma in 2022.

	2019	2020	2021
Installed base - Oklahoma	10171	8871	8045

III. WHY ARE WE FLAGGING THIS?

1. The company is slowly recovering

- The company is yet to recover from the pre-COVID financial performance. Nevertheless, the financial performance is improving.

QE Sep (\$, mm)	2019	2020	2021	2022
EGM	76.0	45.1	61.6	71.6
Table products	2.9	2.3	3.1	4.0
Interactive	1.2	1.9	2.6	2.6
Total revenue	80.1	49.2	67.3	78.3
Adjusted EBITDA	36.8	27.0	31.9	34.5
QE June (\$, mm)	2019	2020	2021	2022
EGM	70.9	13.9	61.2	70.5
Table products	2.4	0.7	2.8	3.5
Interactive	1.1	2.2	2.8	2.6
Total revenue	74.4	16.8	66.8	76.6
Adjusted EBITDA	35.7	-1.2	32.1	34.1
QE Mar (\$, mm)	2019	2020	2021	2022
EGM	69.7	50.4	50.5	66.9
Table products	2.2	2.5	2.8	3.5
Interactive	1.2	1.5	2.1	2.5
Total revenue	73.0	54.3	55.3	72.9
Adjusted EBITDA	36.3	24.5	26.3	32.8

- Notable highlights in recent quarter
 - Domestic EGM recurring revenue topped \$45 million for the second consecutive quarter, exceeding prior year levels by over 4% and beating its Q3 2019 performance by 8%.
 - Global EGM unit sales increased by more than 50% year-over-year, topping 1,000 units for the first time since Q4 2019.
 - Table products segment delivered sequential revenue and adjusted EBITDA growth for the ninth consecutive quarter, supported by further customer adoption

of our PAX S card shuffler and industry-leading table game progressive technologies.

2. Trading below the takeover offer

- In August 2022, Inspired Entertainment offered to acquire the company for \$10/share, but the company rejected the offer.
- The current stock price: \$6.10.

3. “New notable purchase” by 1060 Capital, LLC

- In Q2 2022, the fund purchased 1.1% stake in the company.
- The stock accounts for 4.9% of the fund’s portfolio.