May 11, 2022

Dear investor,

For the three months ended March 31, 2022, Bonsai Partners Fund, LP, declined -17.8% net of fees and expenses. The S&P 500 Total Return Index declined -4.6% over this same period.

		Bonsai P	artners Historical	Returns Summa	mmary				
	2022	2021	2020	2019	2018*	Since Inception*	Annualized Since Inception		
Bonsai Gross Return	-17.6%	-13.9%	277.9%	60.3%	-17.6%	254.3%	44.5%		
Bonsai Net Return**	-17.8%	-14.8%	247.9%	56.1%	-17.7%	212.8%	39.3%		
S&P 500 Return	-4.6%	28.7%	18.4%	31.5%	-8.6%	74.6%	17.6%		

The performance data shown above represents past performance. Past performance does not guarantee future results. The investment return and principal value of an investment with Bonsai Partners, LLC and Bonsai Partners Fund, LP will fluctuate so that an investment, when redeemed, may be worth more or less than its original cost.

The above performance reflects a Bonsai Partners representative account from inception through April 30, 2021, representing the strategy applied across the managed accounts. From May 1, 2021, onward, performance reflects that of Bonsai Partners Fund, LP, the fund's inception date.

Beginning May 11, 2022, historical managed account performance through April 30, 2021, was updated to a different representative account than historically presented, reduced by the fee structure below.

Performance may be lower or higher than quoted performance due to different fee structures, beginning periods, capital additions, or individual mandates.

*Inception Date: 10/22/2018, Bonsai Partners Fund, LP inception date: 5/1/2021 **Net Returns apply a 1.0% management fee and 10.0% incentive fee above a 6.0% compounding hurdle

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Adversity Creates Opportunity

These past sixteen months have been the toughest stretch of performance for Bonsai since its inception. Despite these challenges, I view today's circumstance as an opportunity that will propel us forward and help drive our evolution.

The biggest opportunities of my career were born out of adversity. When I didn't receive a return offer at the end of my college summer internship, this pushed me to find my first job at Matrix Capital Management, accelerating my investing journey. When I didn't recieve a promotion to a partner track at Matrix, this drove me to join Adaptive Biotechnologies, where I learned how to build teams and a company. When Adaptive decided to sell the business line I was working on, this led me to launch Bonsai Partners. Finally, when COVID caused a drawdown in 2020, this offered unprecedented investment opportunities.

While today's situation is certainly unique, I believe that the current drawdown is just another way that tough times will create new possibilities. Each roadblock is also a detour in a new direction.

I suspect some of our best investments will come from this current period. But we will only know in hindsight. Today, I am focused on staying rational and executing against our unchanged long-term ambitions. My focus is on bending adversity into a position of strength by continuing to play our game.

This drawdown is painful, especially considering the fund's launch last May, but we will use this moment to accelerate our progress and build the best set of future return streams possible. At the time of writing, over half of the stocks in the NASDAQ declined over >50% from their peak valuations. This environment provides opportunities for us to upgrade the Bonsai portfolio into businesses we long admired but couldn't get comfortable owning at higher prices. I am excited to share that we purchased our first U.S.-listed software company during the first quarter: **Elastic NV**. I share our Elastic thesis below.

While I don't know when the market will turn around, I remain excited about the new opportunities it offers our partnership.

Founders and "Re-founders"

Good management teams are hard to identify. While company valuations are easy to measure, intelligence and trustworthiness are not.

Many investors rely on mental shortcuts to identify aligned and long-term-minded company leaders to address this issue. The "founder-led company" is considered the gold standard in this regard. Founders tend to own a significant amount of stock and take a longer-term view due to their experience forming the company. As a result, according to a 2017 Credit Suisse report, founder-led companies historically outperformed their sectors by nearly 4.5% on average.¹

Although the benefits of founder-led companies are well documented, this strategy today enjoys a large audience, as evidenced by an ETF dedicated to this strategy: the Global X Founder-Run Companies ETF (BOSS). While founder-led companies historically outperformed, today, their share prices are, using random sampling, around ~20% more expensive on average than non-founder-led companies.²

When an investor purchases stock in a "founder-led company" at a large premium, it takes multiple years of manager-derived outperformance to eliminate the premium paid. While founder-led companies are an elegant shortcut for identifying management teams to work with, this strategy's outperformance declines as more investors copy this approach.

While I sincerely appreciate founder-led companies, it is not necessarily what I'm looking for in a management team. What I am looking for isn't the presence of a founder, but a founder's mindset.

I call non-founder CEOs with a founder's mindset: re-founders.

Today, companies are classified as either founder-led or not. There is no middle ground. This dichotomy puts re-founders in an interesting position because these companies aren't technically founder-led but enjoy similar benefits of founder leadership. This gap hasn't closed because identifying founders is easy, but identifying a founder's mindset is not. Even if other investors agree with the premise and want to copy the re-founder strategy, it's challenging to determine who qualifies.

¹ https://www.credit-suisse.com/media/assets/corporate/docs/about-us/research/publications/the-cs-family-1000.pdf ² Bonsai Analysis

It should not surprise you that multiple impressive re-founders stand behind some of Bonsai's largest investments. These include:

David Rosenblatt (CEO, 1stDibs) – Joined 1stDibs in 2011. Transformed the 1stDibs business from a listing site to an ecommerce marketplace.

Herman Harrolddson (CEO, Boozt) – Joined Boozt in 2011. Turned the company around from bankruptcy. Changed its business model to a multi-brand website.

Li Jun (CEO, Greentown Management) – Joined Greentown China in 2002. Incubated the Greentown Management business inside Greentown China in 2010. Spun Greentown Management out as an independent company in 2020.

While I don't have clear rules for identifying re-founders (it's really hard!), I have some early observations:

- 1. Re-founders usually experience a "re-founding" moment. These are situations where a CEO reshapes a company around their values. From this point onward, the company becomes an extension of the CEO's identity; it's no longer just a job to them. The company's long-term success is deeply personal because it became part of who they are.
- 2. It takes a long time to know if any non-founder developed a founder's mindset. Each re-founder mentioned above has been in their current position for over a decade. Some CEOs in the Bonsai Portfolio may one day earn the right to be called a re-founder, but we won't know for many more years.
- 3. The title of re-founder is earned, not given. Managers can easily tell a great story about their long-term commitment, but actions speak louder than words. Difficult times reveal a leader's true colors, and these moments demonstrate their real level of commitment to a business.

To summarize, investors often pay a premium for "founder-led companies." Identifying a founder's mindset in the absence of a founder title allows us to obtain the benefits of thoughtful long-term leadership without paying up for the privilege. Re-founders are a way to retain more of the outsized returns that great management delivers over time.

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Objectives for 2022

In 2022 our key objectives remain the same as last quarter:

- 1) Hunt for and add attractive ideas to the portfolio
- 2) Simplify our operation and improve our operational infrastructure
- 3) Invest in our processes and people to improve the work we repeatedly do, both from an operational and investment perspective



On this latter point, I'm pleased to note that we began working with an outsourced CFO to improve our back-office functions early during the second quarter. I expect to integrate his workflows over the coming months.

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Portfolio Review

During the first quarter, we purchased a new position: Elastic NV. I outline our thesis in the pages below.

After the conclusion of the first quarter, I'd also note that we continued to trim our Redbubble position. While we like the long-term prospects of Redbubble's business and hope it will deliver outsized returns, I need to see improved execution from their management team before adding to the position.

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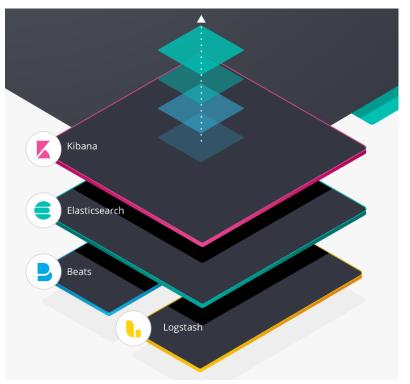
New Investment: Elastic NV (Nasdaq: ESTC)

Idea Overview:

Elastic NV is a leading technology platform for finding and observing mission-critical data. The company began in 2012 as an open-source software project and today generates over \$800 million of revenue on a mostly recurring basis.

The Elastic Stack:

The Elastic Stack comprises three layers, with Elasticsearch as the central technology:



Source: Elastic.co

Kibana: A data visualization tool for exploring and monitoring the information within Elasticsearch.

Elasticsearch: A distributed search and analytics engine providing near real-time results across most data types at scale. Data indexing, search, and analysis occur within the Elasticsearch cluster.

Data Input Layers: (Logstash, Beats, Endgame, etc.): Proprietary Elastic tools that collect and feed data into an Elasticsearch cluster.

A Search Company?

Elasticsearch is the most popular enterprise search software globally, with over a billion cumulative downloads. This scale makes Elasticsearch one of the most popular open-source projects worldwide.

Elastic is challenging to describe because the Elasticsearch platform drives multiple different use cases. Although the platform is called Elasticsearch, most of Elastic's sales are outside of traditional Enterprise Search. Elastic's core customer solutions include:

- 1. **Security:** logging, detecting, and alerting unusual activity on a network
- 2. **Observability:** monitoring, collecting data, and presenting internal system activity

3. Enterprise Search: quickly finding relevant information within large data sets

Why Free Software Can Be Big Business:

Elasticsearch began its journey as an open-source project, which means any developer can view and propose edits to the underlying Elasticsearch source code. While thousands of open-source projects launch each year, the few that gain meaningful traction tend to attract large and motivated open-source communities that improve the software. To illustrate Elastic's community scale, Elastic's membership on Meetup.com alone spans ~150,000 members globally in over 164 cities and 58 countries.³

Successful open-source software enjoys a network effect that exponentially grows. Once formed, this is difficult to dislodge. A developer looking to implement an open-source solution tends to default to the software with the largest community and most downloads. Such scale serves as insurance against bugs and vulnerabilities while also signaling the best functionality. The more robust an open-source community is, the less friction there is to attract new developers, further reinforcing the network.

Specifically, Elastic enjoys three main advantages from its open-source community:

First, their highly engaged community increases the efficiency of research and development spending. Elastic's community proposes new features, fixes software bugs, and signals areas of high interest, thereby offering a potential development roadmap. Elastic's expansion into Observability and Security came from community demands for such functionality.

Second, Elastic has visibility into emerging open-source projects built on Elasticsearch. Elastic can see which Elasticsearch projects are gaining momentum and, if it makes sense, can inexpensively acquire those companies early in their lifecycle. After an acquisition, Elastic typically integrates this functionality into its codebase and rolls it out across its large user base.

Elastic made roughly a dozen acquisitions to date, comprising a significant amount of its core functionality today. These include investments enabling machine learning, cloud integration, endpoint threat detection, event logging, and application performance management.

Third, Elastic can identify talented and passionate developers on Elastic's platform, making it easier to hire engineering talent.

How Elastic Sells its Solutions:

Open-source software companies sell their solutions differently and effectively. Rather than breaking down the door through "cold calling" or "cold emailing," open-source solutions operate more like a trojan horse; prospective clients eagerly welcome them in.

In the open-source world, software is typically sold "bottoms-up" compared to traditional enterprise software's "top-down" approach. In other words, developers initiate the sales process by downloading a free version of Elasticsearch to solve a specific problem they have. When their Elastic implementation

³ https://www.meetup.com/topics/elasticsearch/all/

grows into a critical part of their company's technology stack, this drives conversion into a paid version of Elastic. Paid versions of Elastic offer proprietary features and paid customer support.

Elastic's non-open-source competitors typically use a "top-down" sales approach, whereby a customer runs a competitive sales process to choose a solution for the entire organization.

With the rapid adoption of Agile software development methodologies, more developers operate within small and nimble teams that quickly iterate and deploy solutions (typically without leadership approval). Open-source solutions work well in these environments because they are free and highly customizable. No management approval is necessary to download and deploy a free version of Elasticsearch.

This customer lifecycle simplifies the sales process for Elastic. Since Elastic already knows who uses their software, they don't need to spend time selling a prospective client on why they should consider Elastic; they're already using it. Further, when it comes time to convert to a paid version of Elasticsearch, users often proactively reach out to Elastic when they need paid support or access to their propriety features. These sales motions increase Elastic's salesforce efficiency.

Elastic's Business Model:

While Elasticsearch began as free open-source software, its business model today is technically considered "open core." This term means that the core Elasticsearch functionality is free to practically anyone, but premium features and support are only available to paying users. Under this "freemium" model, most Elasticsearch users do not pay anything for their Elasticsearch implementations today.

Elastic sells software subscriptions through two models: self-hosted, which includes both on-premise and self-deployed cloud instances (~70% of subscription revenue), and managed Elastic Cloud (~30% of subscription revenue).

Over time, an increasing percentage of Elastic implementations are shifting to Elastic Cloud given how much simpler it is to deploy and maintain. We discuss Elastic Cloud further below.

I want to share a simplified explanation of how Elastic works because it helps explain how they make money. All you need to know is three pieces of technical jargon: an Elastic cluster, nodes, and shards.

Whenever a user starts an Elasticsearch instance for any use case, this is called a node. A collection of connected nodes forms a cluster. And finally, repositories of indexable data are broken down into shards and distributed across the various nodes, replicated for redundancy. Elastic infrastructure offers an extremely fast, resilient, and highly scalable searchable dataset.



Node1		Node2		
Shard1	Replica5	Shard2	Replica7	
Shard3	Replica6	Shard4	Replica8	
Node3		Node4		
Shard5	Replica2	Shard7	Replica1	
Shard6	Replica4	Shard8	Replica3	

Source: Quora

As customers ingest more data into their Elasticsearch cluster, they require additional nodes to maintain their near real-time search speeds. Otherwise, it will slow down the cluster. Elastic charges its customers recurring subscription fees based on **the number of Elastic nodes in use**. As the customer's data grows, or the number of Elastic use cases increases, the more nodes a customer needs and therefore, the more they pay Elastic each month.

For self-managed solutions, Elastic customers sign upfront enterprise agreements which include professional support and premium features based on the customer's product tier of choice and the estimated number of nodes in use for that period. Elastic Cloud's cost is calculated on a resource usage basis; you pay for the resources used at the prevailing rate.

"Product Led Growth" & Net Revenue Retention:

As I alluded to in the section above, an important feature of Elastic's business is that they see significant growth from within their existing customer base. In addition to having recurring revenue, Elastic's growth is primarily driven by the customers they already have. New customers are just the icing on the cake.

As customers ingest more data and implement Elasticsearch in new ways, the number of Elastic nodes increases, leading to growth in their Elastic spend. From this usage-based revenue model, Elastic's Net Revenue Retention (also referred to in the chart below as "Net Expansion Rate") remained at or above 130% since its IPO.

For context, Net Revenue Retention measures how much last year's customer cohort spent this year, net of churn and excluding new customers. Elastic's net revenue retention of 130% means that if Elastic's existing customers spent \$100 last year, they are spending \$130 this year. Said differently, Elastic's historic revenue grew by +30% before considering growth from new customers. This Net Revenue Retention rate offers Elastic a solid foundation for growth.





Source: Elastic's 2020 Analyst Day

We Believe Elastic's Net Retention Ratio will remain strong due to:

1. Continued growth of customer data stored inside Elastic clusters.

Of the \sim 30% incremental growth coming from existing customers each year, approximately half of this growth comes from the natural increase in customer data.

2. Existing customers will deploy Elasticsearch across additional teams

Elastic's bottoms-up adoption typically starts within a few select teams in a given customer. A successful implementation in one department often leads to new departments implementing Elastic over time.

3. Existing customers will adopt additional Elastic use cases

While Elastic has three core use cases today (Enterprise Search, Observability, and Security), over 50% of customers who spend over \$100K USD each year only use one Elastic solution.

Elastic's unified platform and a single pricing structure make it easy for customers to roll out additional Elastic products.

4. Elastic's Cost Advantage Against the Competition

While Elastic customers typically spend more each year, Elastic's competitors are dramatically more expensive. For example, Splunk, which competes with Elastic's Logstash solution (and also charges more each year based on the amount of data consumed), costs around ~5x as much as Elastic Logstash.

Elastic's cost advantage should drive incremental workloads to Elastic compared to its competition. This cost difference will prove increasingly important if there is an economic slowdown.

5. Customers Migrating More Workloads to Elastic Cloud



Elasticsearch works best when the cluster is close to the data it indexes. As customers migrate more of their workloads to the cloud, they likely will want to migrate their Elastic implementation to the cloud as well.

Elastic Cloud contracts are significantly higher value than self-managed solutions because Elastic earns a margin on the software as well as compute and storage.

I explain why customers increasingly choose Elastic Cloud Vs. a self-managed Elastic Cloud solution below.

Elastic Cloud Drives Improved Economics:

While we focused on what makes Elastic a great business, let's discuss Elastic's three most significant weaknesses.

1. Elastic is harder for engineers to learn than buying off-the-shelf software.

Elastic's highly customizable nature requires technical know-how to set up.

2. Elastic is more complicated to maintain than off-the-shelf software.

Maintenance and upkeep of an Elastic cluster require engineer attention. Such upkeep ensures that enough resources are available, versions are updated, and data is distributed effectively across the cluster.

3. Elastic salespeople struggle to convince developers to pay for something they currently use for free.

While these drawbacks slow down Elastic's new customer adoption, the introduction of Elastic Cloud significantly minimizes each of these issues. Elastic today leads with Elastic Cloud for all of their new sales motions, and this drove significant Elastic Cloud growth.

Elastic Cloud clusters automatically resource provision with the latest versions of Elastic's updates. This style of architecture eliminates most of the learning curve and maintenance challenges of traditional Elastic implementations. Customers don't need to worry about adding new nodes or managing resources with Elastic Cloud, saving valuable employee time.

In addition, Elastic Cloud is only available as a paid version. With customers increasingly wanting a hands-off approach to their cloud infrastructure, this naturally converts more new users to begin their Elastic journey on the paid version of Elastic Cloud rather than starting with a free version and later converting to a paid version.

Elastic Cloud further reduces paid adoption friction by giving developers access to all of the paid version functionality with significantly lower upfront investment. While a single Elastic node costs thousands of dollars per month, just a few hundred dollars per month is needed to build a proof of concept in Elastic Cloud.

As a result of these benefits, Elastic Cloud grew from 18.5% of subscription revenue in late 2019 to 38% in the most recent quarter.

From a cost perspective, Elastic Cloud also offers significant benefits to Elastic. Since Elastic Cloud eliminates the system design and maintenance aspects of an Elastic cluster, the sales process is more self-service oriented. Many customers can deploy Elastic Cloud independently without handholding. This sales process requires fewer sales support and customer onboarding resources, which drives salesforce productivity.

Since Elastic Cloud offers higher revenue and lower operating expenses per customer, this is a critical reason Elastic will be **cash-flow positive** in the fiscal year ending April 31, 2022. I expect their profitability will scale over the coming years.

Dr. Strangesearch, Or: How I learned To Stop Worrying and Love Amazon:

At the outset of studying Elastic, the most significant risk (and the most prominent "barrier to investment") we considered was Amazon. For those unaware, Amazon's cloud computing service: Amazon Web Services also sells versions of open-source software as a service. Amazon's software strategy typically involves repackaging existing open-source code and reselling it as its own Amazon solution.

Unfortunately for Elastic, this led Amazon to "fork" a version of Elasticsearch. Put differently, this means that Amazon took Elastic's open code and started selling it as their own without making any meaningful research and development investment in the Elasticsearch community. Amazon called this solution "Amazon Elasticsearch."

In 2021, Elastic responded to this behavior by filing a trademark suit against Amazon for the use of their trademark. Elastic also altered its open-source license, renouncing its status as a pure "open-source" company where anyone can use their software for free. Elastic switched its license type from an Apache 2.0 license to the Server-Side Public License (SSPL), allowing anyone to use Elasticsearch for free except those that intend to resell it (notably cutting off Amazon). Other open-source companies like MongoDB also successfully switched to SSPL to counter similar Amazon tactics.

Elasticsearch operates as a cognitive referent within the developer community, and with Amazon calling its solution "Amazon Elasticsearch," this created confusion in the marketplace. Customers assumed Amazon and Elastic were working together, which wasn't the case. In February 2022, Amazon settled its trademark lawsuit with Elastic and agreed to remove all mentions of "Elasticsearch" from its version and renamed its solution: "Amazon Opensearch." This trademark settlement was an important victory for Elastic since it ensured that the market-leading brand for enterprise search remained with Elastic.

Elastic maintains a significantly larger developer community and developer team than Opensearch. This allows Elastic to iterate faster and stay ahead. If we compare Opensearch to Elasticsearch on Github, on almost every metric, from the number of active contributors, to pull requests, to code commits, Elasticsearch has anywhere from 3x to 6x the activity level of Opensearch. The feature gap widens between Elasticsearch and Opensearch with each passing day. While Amazon Opensearch isn't a bad solution (it was built off of Elastic, after all), it is a lower-cost barebones alternative that eats into the lower end of this market.



Between Elastic cutting off Amazon's access to new Elasticsearch functionality and eliminating their use of the Elasticsearch brand, the gap between Amazon and Elastic continues to widen.

I was hesitant to invest in a company competing against Amazon, but I gained conviction that Amazon is not an Elastic killer. Amazon is falling behind Elastic's pace of development and the resources Elastic can devote to this industry. That said, I remain vigilant about the Amazon threat.

Conclusion:

Elastic is a company built by technical people for technical people. The company is structured to create the best software for its community, and this allows Elastic to scale and outpace its competition. It is still early days for Elastic, and we look forward to observing the company thrive in the data age.

Since I started Bonsai in 2018, I have been itching to own a high-quality western software company, and our patience paid off over three years later as software valuations declined significantly. We believe this investment will compound at high rates for an extended period.

As always, thank you for trusting me with your precious savings. I also appreciate your quiet patience during this challenging period. It doesn't go unnoticed. If you have questions or comments, don't hesitate to reach out to me directly.

The fund's K-1s were issued and distributed through our administrator's portal in March. If you have difficulty accessing your K-1, please don't hesitate to reach out to me.

Fondly,

Andrew Rosenblum andrew@bonsaipartners.com (858) 367-5854



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