

December 26, 2023

Dear investor,

For the three months ended September 30, 2023, Bonsai Partners Fund, LP, declined -2.8% net of fees and expenses. The S&P 500 Total Return Index declined -3.3% during this period.

Bonsai Partners Historical Returns Summary

	YTD 2023	2022	2021	2020	2019	2018*	Since Inception*	Annualized Since Inception
<b>Bonsai Gross Return</b>	9.0%	-26.5%	-13.9%	277.9%	60.3%	-17.6%	244.3%	28.5%
<b>Bonsai Net Return**</b>	8.2%	-27.3%	-14.8%	247.9%	56.1%	-17.7%	199.4%	24.9%
S&P 500 Return	13.1%	-15.8%	25.1%	18.4%	31.5%	-8.6%	69.5%	11.3%

*The performance data shown represents past performance. Past performance is not indicative of future results. All performance figures are calculated internally by Bonsai Partners and are therefore estimated, unaudited, and subject to adjustment. The investment return and principal value of an investment with Bonsai Partners, LLC or Bonsai Partners Fund, LP will fluctuate so that an investment, when redeemed, may be worth more or less than its original cost.*

*The period October 22, 2018, to April 30, 2021, presents time-weighted returns of a representative Bonsai Partners managed account with the same strategy and risk profile as Bonsai Partners Fund, LP, which launched on May 1, 2021. Results from May 1, 2021, reflect the time-weighted returns of Class A shares of Bonsai Partners Fund, LP.*

*Gross returns from October 2018 to April 2021 include transaction and commission fees. Gross returns from May 2021 to the present include transaction and commission fees and fund operating expenses, such as administrative and audit fees but do not include management or performance fees. Net returns reflect the gross returns (as described) reduced by a 1.0% management fee and a 10.0% performance fee above a 6.0% cumulative compounding hurdle. Actual performance for a particular investor may be lower or higher than quoted performance due to different fee structures, share classes, beginning periods, capital additions, or individual mandates.*

*The S&P 500 Total Return index is a basket of 500 large U.S. stocks, weighted by market capitalization, and is the most widely followed index representing the U.S. stock market. The S&P Total Return Index includes the reinvestment of dividends. Benchmarks and financial indices are shown for illustrative purposes only. They provide general market data that serves as a point of reference to compare the performance of other securities that make up a particular market. Such benchmarks and indices are not actively managed and do not reflect the expenses associated with managing an actual portfolio, the cost of investing in the instruments that comprise it, or other fees. No representation is made that any benchmark or index is an appropriate measure for comparison.*

*This report is neither an offer to sell nor a solicitation of any offer to buy securities in Bonsai Partners Fund, LP, or any investment managed by Bonsai Partners, LLC. This summary should be read in conjunction with the offering memorandum and all notes therein. This report is confidential, is for the use of its intended recipient, and may not be copied or otherwise distributed, or published without the prior written consent of Bonsai Partners, LLC.*

.....

## Five Years

When I first considered starting Bonsai Partners in 2017, three initial milestones came to mind: one, three, and five-year survival. In October, Bonsai reached its five-year mark, leaving me to consider what the next five years might look like. While it's been an exciting first leg of the journey, the opportunities ahead are even more energizing.

So, what is next for Bonsai? Our objective today remains the same as when we started five years ago: to reach the limits of our potential as investors, grounded in our ability to learn, improve, and adapt. While it's likely not evident from the outside, the past few years have been some of our best in how much we've improved our decision-making. Although the results have been lackluster during this period, I'm incredibly proud of how much better we are today and how those improvements will help our future results.

André Kostolany once said that economic data and stock prices resemble a man walking his dog. Sometimes, the dog pulls ahead of its owner, and sometimes, the dog falls behind, but eventually, the two always meet. We remain focused on the steady walk ahead.

.....

## Portfolio Review

In the third quarter, we made modest portfolio adjustments. Most notable, however, was a new investment made in **Nagarro SE**, which we outline below.

.....

## Narrow And Wide Aperture Ideas

I used to think that the narrower a company's scope, the better the investment opportunity. Now I'm not so sure. Ideas with "narrow" footprints attract investors because they have fewer layers in the value chain to investigate and fewer products to understand. It's far easier to get to "the answer" of an investment hypothesis when it involves a single product made by a single supplier and purchased by a narrow scope of customers. These are narrow investment ideas.

Incentives are perverse in investment management because analysts are compensated for being "right." This reality nudges analysts to focus on situations where they stand to be right more often, even if those situations don't necessarily offer the highest absolute returns.

Want to know what an analyst's worst nightmare looks like? Imagine being told to research a company with four separate divisions, each with a wide array of products, a diffused supply chain, and few sizable customers. That's about as bad as it gets. Such a project demands the research equivalent of four separate businesses coupled with the limited upside of a single investment. Further, good luck pitching this idea to an investment committee since complicated stories with multiple moving parts rarely inspire anyone. You're far more likely to intrigue an audience if your investment thesis revolves around a narrow, focused idea based on a fundamental insight. "Wide" aperture ideas look and feel like a waste of time.

Although companies with few moving parts are the easiest to research and build an investment case around, they typically offer limited long-term potential. While narrow aperture ideas often tempt fantastic rates of return in theory, in practice, their total returns often come up short because they don't last the test of time. In the compound interest equation, the hardest variable to optimize is the duration of the investment. Narrow aperture ideas act more like sprinters than marathoners.

This high return yet limited duration pattern appears often because narrow aperture ideas rank highly in "researchability" and poorly in robustness. The feature that makes a narrow aperture idea appealing to an investor also makes the business fragile. If an investment hinges on a single product, raw material, supplier, customer, or technology, these "features" act as singular points of failure and are hallmarks of a fragile company. These vulnerabilities make fragile companies more susceptible to external shocks, competitive threats, and tail risks, leading to permanent capital loss.

To be clear, I'm not advocating that all of our investments look like Berkshire Hathaway—a diversified conglomerate of many uncorrelated businesses—instead, I'm suggesting that certain companies can exploit their competitive advantages while dispersing their risks across their value chains. These are robust businesses. I will discuss robustness in more detail below.

While narrow aperture ideas require less upfront work and offer more certainty of "being right," they come with the cost of monitoring their failure points over their investment lifespan. If we define successful

investing as owning compounding businesses for long periods, these monitoring costs are enormous. I've unfortunately fallen into this trap numerous times.

Given enough time and the brutal nature of capitalism, a company's weaknesses will eventually get exploited, and its profits competed away. Accepting more uncertainty over the life of an investment in exchange for more certainty upfront is a stupid thing to do. Narrow aperture ideas are easier to understand today and harder to understand tomorrow.

## Seeking Robustness

Applying the lesson above, we avoid fragile businesses that rely on critical dependencies within their value chains. If there's an underlying rationale for robustness, it is this: the toughest problems we face will come from risks we can't anticipate. We rely on robustness as a guide because it is a powerful hedge against the unknowable. Robust businesses married with pragmatic leadership are purpose-built to make it through difficult terrain.

So, how do we identify robustness? I believe robustness exists in two forms: diversification and control. A robust business either spreads its risks across its value chain or owns its key processes outright. Robust companies reduce their reliance on others.

While most attention is paid to supplier, distributor, and customer concentration risks, the risk associated with a company's product portfolio is frequently overlooked. Investors often fail to see fragility at the product level for the reason mentioned earlier: selecting businesses with fewer products is desirable because they're easier to analyze and build an investment case around. Further, these opportunities often entice investors with high theoretical rates of return.

Robustness at the product level exists differently than in other layers of the value chain. Product diversification follows the same principle, but product control isn't related to vertical integration. Product control exists in multiple forms, such as switching costs or happy customers who don't want to buy elsewhere. However, one often overlooked dimension of product-level robustness is adaptability. Some businesses offer goods and services that behave like shapeshifters; they naturally adapt to the market's needs regardless of how the world changes. Adaptability also serves as a hedge against the unknown.

Consider our investment in Taiwan Semiconductor, which enjoys a highly adaptive product portfolio. If we compare TSMC to a fabless chip maker like Qualcomm, investing in Qualcomm is a bet that its products will retain their technological advantage over time. Meanwhile, TSMC sells a service that naturally produces whatever the end customer wants. There is little need for brilliant product-level foresight; TSMC just needs to maintain its process and service level advantages, allowing it to manufacture whatever the market demands. TSMC's product portfolio is robust compared to most other semiconductor companies because it naturally adapts to technological and market-driven shifts. Instead of product-level risk, TSMC's core risks are geopolitical.

In the past, I would have been more drawn to a company like Qualcomm given its clear technological lead in baseband modems, but if I'm honest with myself, I don't know if their technologies will retain their dominance ten years from now. Qualcomm's products express a relatively high degree of rigidity in a fast-changing industry, and this is something I prefer to avoid.

While robustness isn't a guarantee of company survival, it acts as a natural buffer that insulates the companies we invest in against the unknown. The better we are at identifying robustness for our portfolio, the longer we also will endure.

.....

## New Investment: Nagarro AG (XETRA: NA9)

### A Wide Aperture Approach to Digitization

The standing joke today is that every company calls itself a technology company. While this statement is mostly marketing spin, there is a hint of truth. In most developed countries, economic growth increasingly depends on productivity gains rather than labor force growth. As a result, most companies must continuously invest in technology to drive incremental efficiency and remain competitive.

Although technology is the cornerstone of the productivity march forward, digitization only stands to accelerate due to advances in new technologies such as artificial intelligence. Although we looked for new ways to ride this digitization wave within our portfolio, we struggled with the narrow product problem (mentioned above) that most technology companies face: it's difficult to identify long-term technology winners in such a fast-changing industry.

### IT Services

After we narrowed our focus and defined what we were looking for, we shifted our attention from companies that create technologies to those that enable their use. Technology enablers (such as TSMC) gain from digitization and participate in the underlying growth trend without being sensitive to changes in the technology landscape. Not only do technology enablers avoid technology risk, but they also benefit from it since they are needed to implement these new technologies.

The essential advantage of "technology enablers" is their **adaptability** in an ever-changing field. While TSMC is a vital upstream enabler of new technologies, Zi Hao wondered if downstream companies might also exhibit similar attractive characteristics. Ultimately, we recognized that information technology services companies sat in a favorable position in the technology value chain and deserved a closer look.

While IT services companies don't enjoy the same obvious "moats" or high gross margins that software businesses have, we were surprised to learn that the "base rate" of success in this industry—the percentage of companies with successful outcomes—was very high. Most listed IT services companies grew their revenues, profits, and share prices at compounded annual rates of >10% for decades, and we struggled to identify many examples of unsuccessful listed businesses. Considering how many IT services companies exist today, it was surprising how many success stories existed simultaneously in an industry with seemingly limited differentiation. The industry might be a fruitful hunting ground if share prices were reasonable.

Interestingly, in the technology industry, the highest margin businesses (software companies) were often the most unprofitable, while the unassuming "technology enablers" like IT consultants and certain chip makers have been earning attractive economic profits and returns on invested capital. Most of the value in the technology value chain does not exist where most people think it exists.

## The IT Services Industry

While the IT services industry appears homogeneous, it segments itself in a few ways. I outline three main lines of IT Services businesses: IT consulting, IT engineering, and business process outsourcing (BPO), with large companies usually spanning multiple categories simultaneously. The largest IT consulting firms include Accenture (formerly PWC), KPMG, and Deloitte. Some of the largest BPO firms include Cognizant, Genpact, and Wipro. And finally, some leading pure-play IT engineering firms include EPAM, Globant, Endava, Thoughtworks, and Nagarro. I include business process outsourcing companies in this discussion since most BPOs also offer IT services or embed technology within their solutions.

IT engineering and consulting companies struck us as the most interesting companies to consider because BPO firms often deliver less technical work. Since common BPO projects include staff augmentation or customer service, we viewed this as less defensible. Outside of the BPOs, the lines blur significantly between IT Consulting and IT Engineering firms since consultants who propose new solutions also help build these new technologies (IT Engineering) and offer to run those processes on an ongoing basis (BPO and managed services).

While our intuition suggested that diversified IT services companies would grow far more slowly than the software industry, we were surprised by how quickly many of these firms scaled. The image below presents a selection of leading IT Engineering companies and their aggregate performance from 2010 to 2022. Note that these businesses **profitably grew revenues 20x to 40x over the past twelve years**. Of these businesses, we were intrigued that one company was available for ~14x earnings despite **compounding its revenue >40x** over this period.

	<b>Globant</b>	<b>epam</b>	<b>endava</b>	<b>nagarro</b>
Total Revenue Growth & CAGR (FY 2010-2022)	31.2x 33.2%	21.8x 29.3%	28.5x 32.2%	41.8x 36.5%
LTM P/E Ratio (On 9/30/2023)	57.4x	28.4x	27.9x	14.3x

While Nagarro offered the most attractive risk-reward on paper, we've learned to be wary of stocks with the lowest valuation in a seemingly attractive industry. You usually get what you pay for.

However, the more work we did on Nagarro, the more we believed the company scored highly on multiple key attributes that drive long-term success in this industry. These factors include a strong culture that helps attract top talent, a unique organizational structure that empowers people on the front lines, founder leadership that drives long-term decisions, and an emerging brand/reputation that helps build customer trust and win new business. Nagarro scored highly on each of these dimensions despite its low valuation. We were intrigued.

Such a valuation discrepancy made us ask ourselves, "Why is Nagarro available at such an attractive price?" The market is not stupid. Ultimately, we identified a series of "barriers to investment" that kept out most investors and made it harder for them to see why Nagarro sits in a position of strength. I highlight



two key points that we expand upon later: 1) Nagarro is an orphaned spin-off listed in a different geography than where they are best recognized, and 2) Nagarro's corporate structure is highly unusual, creating investor uncertainty. We discuss these issues and a few others in more detail below.

## **Nagarro - An Overview**

Nagarro is an Indian IT engineering company with over 19,000 employees. Despite being an Indian company, Nagarro's shares are listed on the Frankfurt Stock Exchange due to its previous ownership by a German-listed company, Allgeier SE. In 2020, Nagarro spun out of Allgeier as an independent business.

Nagarro's business revolves around attracting talented engineers in India (as well as other locations, such as Eastern Europe) and deploying these resources across its client base to help solve challenging technology problems. These projects range from transitioning an on-premise data center to the cloud, rebuilding a company's accounting system, building a new mobile app, or deploying a new database.

Nagarro makes money by entering into service agreements with its clients that are either "time and expense" contracts (over 70% of their revenue) or "fixed bid" contracts, comprising the remainder. In fixed-bid contracts, Nagarro assumes the risk of cost overruns if the project takes longer than expected.

## **Why Outsource to an IT Services Company in the First Place?**

Our initial question was, "Why would a company want to outsource its software engineering instead of building an internal team?" If Nagarro's fundamental value proposition was simply delivering solutions at a lower cost, that didn't sound like an enduring competitive advantage. Fortunately, that was not the case.

As you likely know, there is a persistent shortage of software engineering talent in North America and Western Europe, leading to the high cost of these employees. Further complicating this talent shortage, most software engineers prefer to work directly inside technology companies instead of more traditional 'Fortune 500' type businesses. Building out enough skilled engineering resources to meet internal needs is a tall task if you're The Hershey Company or General Motors.

Further, since the need for engineering ebbs and flows around technology projects, staffing needs are volatile, which means an employee hired for a specific project must be repurposed on a new task or be let go after the project is finished. This dynamic makes recruiting and retaining long-term engineering resources challenging in most cases.

The bottom line for Nagarro is simple: it's far more interesting, prestigious, and job-secure for an engineer to gain exposure to multiple companies by working at an IT services firm. These considerations lead a significant proportion of the talent pool in countries like India to seek out firms such as Nagarro. IT services companies offer businesses an improved engineering talent pool, a more flexible workforce, and improved accountability to keep projects on time and budget. While the cost of engineers is lower in a country like India, this is a secondary consideration. Capabilities are always the first filter when choosing an IT services firm; price comes afterward.

## **History of Nagarro**

Nagarro was founded in 1996 when several founders of small consulting firms, including Manas Human (formerly Manas Fuloria), the current CEO of Nagarro, merged their businesses. The company grew organically until 2011, when Allgeier SE, a German IT services firm, acquired the business.

While part of Allgeier, Manas made a series of strategic decisions that shaped the company's structure and enabled it to scale quickly and effectively.

### **Culture as a Competitive Advantage**

Early in Nagarro's journey, Manas recognized that the hierarchical structure used by most Indian IT consulting firms was inefficient. Hierarchy hinders agile decision-making since engineers working on a project can't make quick decisions when faced with a problem. Instead, engineers must seek approvals from managers, which slows down the resolution process and introduces "corporate-minded" decisions. This way of doing business increases the odds of project delays, increased prices, improper decisions, reduced client satisfaction, and ultimately, the best talent to leave these companies.

Nagarro's premise was simple. A consulting firm is only as good as its people, and if it builds an exceptional workplace, it will attract and retain exceptional people. Great people deliver better work to customers, and happier customers provide more word-of-mouth referrals. Over the long term, this strategy would create a large business with a trusted reputation, which would further help them win new business and attract top talent. This is the same virtuous cycle enjoyed by many of today's most prominent services companies, such as McKinsey, Accenture, and the "Big Four" accounting firms.

The best talent is usually independent-minded and wants freedom to solve challenging problems. To empower its people at scale, Manas created a decentralized business structure at Nagarro where people could do what they believed was right while also doing right by the business. To accomplish this, Manas pushed the decision-making process down to the lowest level, the engineers themselves, stripping the need for layers of middle managers and keeping project teams small. These small teams foster an agile culture, allowing them to be more flexible.

Employees at Nagarro are incentivized based on client satisfaction rather than profit margin targets like most of their peers. This distinction is important because while Nagarro enjoyed incredible growth in its history, it achieved it in a highly sustainable way.

In addition, Manas engineered hiring incentives that increase the odds of attracting great people who fit the Nagarro culture. Hiring managers at Nagarro have performance incentives tied to the results of the people they hire over their first few years of employment. This structure increases accountability for hiring managers and helps avoid bad hires. Lastly, Nagarro ensures that employees are well treated, offering above-market salaries, work-from-anywhere policies, and meaningful training opportunities.

While each of the above structures is unusual, Manas emphasized his extreme commitment to decentralized decision-making when he changed his title from "Chief Executive Officer" to "Custodian of Entrepreneurship in the Organization" (CEO). While this is a strange thing to do, his actions speak louder than words and indicate a deep commitment to his decentralized management philosophy. Further, Nagarro does not have a traditional c-suite. For example, the Chief Financial Officer function exists through a "finance council" comprised of multiple management team members across the business. While

the company has centralized accounting functions to handle financial reporting, a decentralized group of leaders makes all strategic financial decisions.

Nagarro's bet on building an unusual corporate culture has paid off so far, with employees at Nagarro staying twice as long as many of its Indian peers. Employee attrition is an important variable because staff turnover is the primary source of client dissatisfaction, and recruiting is also one of its largest expenses. Further, introducing new team members usually results in project slowdowns since it requires significant upfront investments for new employees to get up to speed.

While most readers likely have never heard of Nagarro, the company has built a good (and emerging) reputation, and this allows them to attract strong engineering talent.

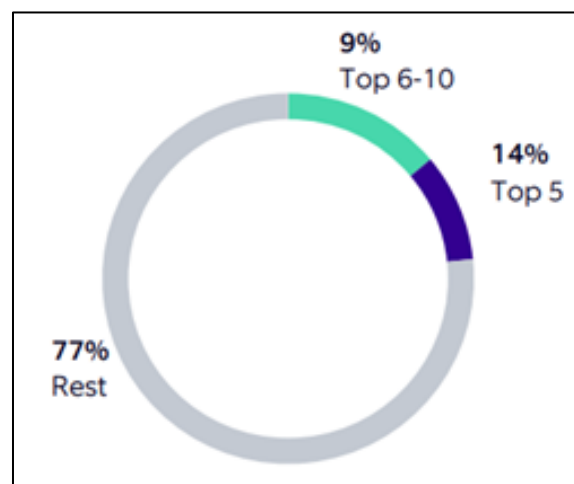
As mentioned earlier, happy employees drive customer satisfaction, as evidenced by Nagarro's strong net promoter score (67 in Q3 2023). Retaining customers is essential to Nagarro's business because it increases recurring revenue and drives word-of-mouth growth. Over 70% of Nagarro's new customers come from referrals, while over 90% of Nagarro clients continue their engagement at some point after the completion of an initial project.

Moreover, once engaged with a client, Nagarro employees can propose new projects after becoming acquainted with a client's information systems. In IT Services, most new business comes from the clients you already have, and in Nagarro's case, existing clients comprise ~90% of their revenue in any given year.

The net result of this dynamic is that customers who currently spend €1-5 million with Nagarro worked with Nagarro for five years on average, while customers in the €5-10 million range have an eight-year relationship on average. Lastly, customers exceeding €10 million have been working with Nagarro on average for 14 years.

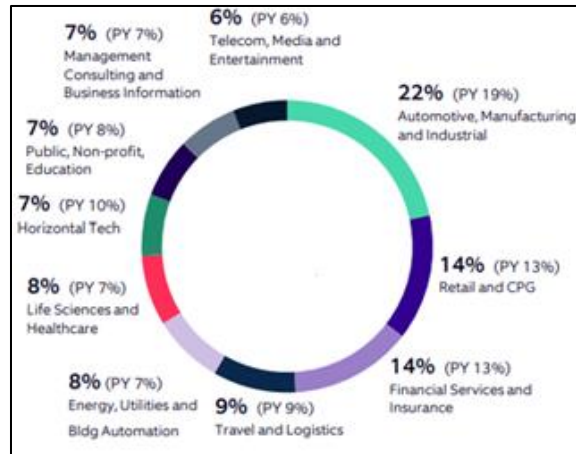
Despite significant existing customer growth, Nagarro has thoughtfully diversified its business, so it doesn't depend on its largest clients, geographies, or industries. Nagarro's robust approach helps it endure over the long term. Some attributes of Nagarro's client base include:

**1. Limited customer concentration: no customer >4% of revenue:**

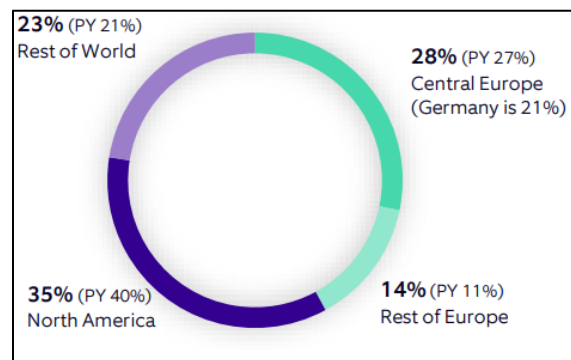




## 2. Broad diversification across industries:



## 3. Balanced exposure across regions:



Source: Company Materials

## Valuation Discrepancy Vs. Peers

In this section, we outline why Nagarro trades at a lower valuation than its peers, many of whom trade at substantial multiples of their trailing earnings. Multiple points mentioned here were disseminated in a short seller report published in the German media in early 2023 before we made our investment, and this further drove down its share price. The report highlighted points #2-4 mentioned below and a few other accusations that proved incorrect or immaterial. While the short report wasn't a smoking gun, it highlighted some of Nagarro's shortcomings and opportunities to improve.

### 1. Nagarro is an Orphaned Spin-Off

As mentioned above, Nagarro is an Indian company listed in Germany due to being spun out of a German company. Like our experience with Greentown Management, many spin-offs experience dislocation as they try to find their long-term shareholder base. This creates opportunity.

In Greentown Management's case, the people who understood the strength of the Greentown brand (investors in mainland China) could not buy its shares after it was spun out onto the Hong Kong Stock

Exchange. Mainland investors could only buy Greentown Management's stock when the southbound stock connect was enabled well over a year later.

In Nagarro's case, seemingly overnight, a group of German investors, many of whom mainly own German companies, owned an unusual Indian company. This potentially led to shareholder turnover, especially in the face of a short seller report that further increased uncertainty. These concerns should dissipate if Nagarro continues to execute and improve its governance.

## **2. Unconventional Management**

Second, as described above, Nagarro is managed in a highly unconventional way, which partially stems from its CEO, Manas. While Manas has been pivotal to Nagarro over the last two decades, his unconventional approach can come off as eccentric. He wants to run the company without a traditional C-suite of executives, and he spends a significant amount of his time focused on building company culture and corporate structure instead of directly running its day-to-day operations.

However, the hardest element to explain was Manas's recent name change from Manas Fuloria to Manas Human, reflecting his humanist worldview. This last point was a significant red flag since grandiose gestures often reveal much about someone's character.

That said, the more we learned about Manas, the more we believed his motivations were genuine. Our conversations with former Nagarro employees also describe him as humble, earnest, and empathetic. Manas works alongside his co-workers in cubicles, not fancy offices.

While Manas is highly unusual, I've learned that unconventional people are often necessary to drive unconventional outcomes. Manas's proclivities give Nagarro its uniquely human touch, which attracts excellent engineering talent.

I believe that if you're trying to understand someone, there is no substitute for spending a lot of time with them. I've been burned by lousy management before, so we remain vigilant and intend to continue investing our time in understanding the people involved.

## **3. Unfamiliar Auditor and CFO Arrangement**

Third, questions exist about Nagarro's infrastructure and decentralized corporate structure. For example, since Nagarro does not have a Chief Financial Officer but rather a finance council, this raises obvious governance and accounting questions.

Adding insult to injury, investors had concerns about Nagarro's auditor, a small German firm, LOHR + COMPANY GmbH. Nagarro inherited this audit firm from its parent company, Allgeier, which also used LOHR + COMPANY for its annual audit.

Fortunately, on this latter point, Nagarro retained KPMG to take over its group-level audit from LOHR + COMPANY in 2024 and indicated that they are considering additional governance improvements.

Of the issues mentioned in the short report, this is the section that I agreed most with. A company with an unusual corporate structure should employ more traditional checks and balances to show investors their

methods can be trusted. That said, the company seems interested in building the appropriate infrastructure needed to be a public company while retaining its unique culture. They have already made a few significant changes, and hopefully, more are on the way.

Like the above section, we remain vigilant around internal controls and governance and expect this to improve over time.

#### **4. Macro-Headwinds**

Without going too deep into macroeconomics, growth has recently slowed throughout the IT services industry, creating a moment of uncertainty. Even though industry growth has been strong over the past decade-plus, rising interest rates caused companies to tighten their variable technology budgets quickly. As a result, Nagarro's growth rate decelerated from 42.5% in Q4 2022 to 2% in Q3 2023.

Although the duration and severity of this correction are not knowable, Nagarro remains well-positioned to gain future market share regardless of the environment due to its advantages and expertise.

#### **5. Artificial Intelligence Uncertainty**

Finally, one of the most challenging questions of all lies in the impact of artificial intelligence on the IT services industry. Given the ambiguity around AI's future implications, you can find intelligent arguments on both sides, either alleging that the IT services industry is about to experience its golden age or it is about to become commoditized.

Bears argue that with the advancement of AI, software development will become more of a commodity as machines gain the ability to write highly relevant and accurate code. These advances reduce the need for outsourced engineers in aggregate. Since each engineer can produce significantly more code in the future, this will create pricing pressure on outsourced IT vendors.

Bulls, on the other hand, argue that it's unlikely that AI will be a panacea solution for software development and that time saved will just be reinvested into additional projects elsewhere to maintain a technological lead. The arms race for technology will only intensify. To leverage AI, companies will need to implement more modern systems to collect, curate, and understand their data, and even if they do, this requires hiring a company like Nagarro in the first place. AI should unleash a tidal wave of new business for IT services.

Trying to figure out how this will precisely play out is an exercise in futility. However, while we can't know the outcome in advance, we can rely on history since the IT services industry has faced multiple similar "extinction events" before. Each time a new paradigm like this emerged, the industry found a way to continue growing.

IT Services began in earnest in the 1980s and initially focused on custom application development for clients. With the introduction of off-the-shelf software solutions from the likes of Microsoft, Oracle, and SAP, analysts assumed the death of the IT services industry was around the corner. However, given the adaptability of these companies, the industry pivoted into assisting clients in implementing these packaged solutions, which enabled the next leg of growth.

The rise of cloud computing presented another moment of uncertainty since cloud software theoretically doesn't require as many resources to deploy. However, since then, IT services have been a massive beneficiary of the cloud since IT services firms helped customers migrate from on-premises solutions into cloud environments and developed these new solutions. This paradigm shift further propelled the industry forward.

As a last example, the rise of Robotic Process Automation (RPA) was supposed to destroy business process outsourcing (BPO) companies since RPA would theoretically accomplish these tasks with fewer people. Instead, BPO companies just embedded RPA into their offerings and sold these solutions as a service to their clients. This adjustment allowed the BPOs to charge less while also earning more.

As is often the case during the fog of war, nothing is ever as good or bad as it seems, and we believe reality lies somewhere in between in the AI debate. After studying the historical transitions of this industry, we believe that if the number of billable hours per project goes down, the number of projects will also likely increase. Lastly, AI workloads will be in high demand, given the limited talent pool, and this will increase average billable rates. If revenues grow at a more modest rate than in the past, there will likely be an offsetting increase in profit margins, which will drive similar levels of profitability growth as before.

Many assume that AI will be the straw that breaks the camel's back, but it's more likely that the industry will adapt yet again. Adaptability is their biggest advantage, after all.

## Conclusion

While the near-term macro trends are uncertain, we remain excited about Nagarro's long-term aspirations. Nagarro built an excellent culture and track record, and it is reaching a tipping point where its emerging reputation will attract significantly more attention. Nagarro provides an opportunity to compound capital at attractive rates over a long period.

.....

## Concluding Thoughts

As always, thank you for your partnership.

Please don't hesitate to contact me with questions or comments.

Fondly,



**Andrew Rosenblum**

[andrew@bonsaipartners.com](mailto:andrew@bonsaipartners.com)

(858) 367-5854

**Disclaimer:**

This document, which is being provided on a confidential basis, shall not constitute an offer to sell or the solicitation of an offer to buy any securities or to adopt any investment strategy which may only be made at the time a qualified offeree receives a confidential Investment Management Agreement ("IMA") or Private Placement Memorandum ("PPM"), which contains important information (including investment objective, policies, risk factors, fees, tax implications and relevant qualifications), and only in those jurisdictions where permitted by law. In the case of any inconsistency between the descriptions or terms in this document and the PPM or IMA, the PPM or IMA shall control. While all the information prepared in this document is believed to be accurate, Bonsai Partners LLC makes no express warranty as to the completeness or accuracy, nor can it accept responsibility for errors appearing in the document.

An investment with Bonsai Partners, LLC or Bonsai Partners Fund, LP involves a high degree of risk. The portfolio is under the sole trading authority of the investment manager. A portion of the trades executed may take place on non-U.S. exchanges. Leverage may be employed in the portfolio, which can make investment performance volatile. An investor should not make an investment unless it is prepared to lose all or a substantial portion of its investment. The fees and expenses charged in connection with this investment may be higher than the fees and expenses of other investment alternatives and may offset profits. There is no guarantee that the investment objective will be achieved. Moreover, the past performance of the investment team should not be construed as an indicator of future performance. Any projections, market outlooks, or estimates in this document are forward-looking statements and are based upon certain assumptions. Other events which were not considered may occur and may significantly affect the returns or performance. Any projections, outlooks, or assumptions should not be construed to be indicative of the actual events which will occur.

The enclosed material is confidential and not to be reproduced or redistributed in whole or in part without the prior written consent of Bonsai Partners, LLC. The information in this material is only current as of the date indicated and may be superseded by subsequent market events or for other reasons. Statements concerning financial market trends are based on current market conditions, which will fluctuate. Any statements of opinion constitute only current opinions of Bonsai Partners, LLC, which are subject to change, and Bonsai Partners, LLC does not undertake to update. Due to, among other things, the volatile nature of the markets, an investment in a managed account may only be suitable for certain investors. Parties should independently investigate any investment strategy or manager and should consult with qualified investment, legal, and tax professionals before making any investment.

The source for all figures included in this document is Bonsai Partners, LLC or Bonsai Partners Fund, LP, unless stated otherwise. While all the information prepared in this document is believed to be accurate, Bonsai Partners, LLC may have relied on information obtained from third parties and makes no warranty as to the completeness or accuracy of information obtained from such third parties, nor can it accept responsibility for errors of such third parties, appearing in this document.

The analyses and conclusions of Bonsai Partners, LLC ("Bonsai") contained in this document are based on publicly available information, including SEC filings and numerous other public sources that we believe to be reliable. We recognize that there may be information in the possession of the companies discussed in this document that could lead these companies to disagree with our conclusions. If we have made any errors or if any readers have additional facts or corrections, we welcome hearing from you. This document and the information contained herein is not a recommendation or solicitation to buy or sell any securities.

This document contains general information that is not suitable for everyone. The information contained herein should not be construed as personalized investment advice. The views expressed here are the current opinions of the author and not necessarily those of Bonsai. The author's opinions are subject to change without notice. There is no guarantee that the views and opinions expressed in this document will come to pass. Investing in the stock market involves gains and losses and may not be suitable for all investors. Information presented herein is subject to change without notice and should not be considered as a solicitation to buy or sell any security.

Our purpose is to disseminate publicly available information that we believe has not been made readily available to the investing public but is critical to an evaluation of the company. The analyses provided may include certain statements, estimates, and projections prepared with respect to the historical and anticipated operating performance of the company. Such statements, estimates, and projections reflect various assumptions by Bonsai concerning anticipated results that are inherently subject to significant economic, competitive, and other uncertainties and contingencies and have been included solely for illustrative purposes. No representations, expressed or implied, are made as to the accuracy or completeness of such statements, estimates, or projections or with respect to any other materials herein.

**Portfolios managed by Andrew Rosenblum and Bonsai Partners, LLC (including Bonsai Partners Fund, LP) may have a beneficial interest in any or all of the securities mentioned in this letter.**

Bonsai manages accounts that are in the business of owning securities and financial instruments. It is possible that there will be developments in the future that cause Bonsai to change its position regarding any or all of the securities mentioned in this letter. Bonsai may buy, sell, or otherwise change the form of its investment in any or all of the securities mentioned in this letter for any reason. Bonsai Partners hereby disclaims any duty to provide any updates or changes to the analyses contained here, including, without limitation, the manner or type of Bonsai investment.