C3.ai (AI)

Driving Shareholder Value Through Prescient Stock Ticker Selection

We are short shares of C3.ai (AI), a $4 billion market capitalization enterprise software company that has risen from the ashes of its busted IPO based on the misconception that its self-proclaimed "AI leadership" somehow positions it to benefit from Silicon Valley's current tech theme du jour: generative AI as represented by media obsession ChatGPT. We believe these speculative flames won't burn bright much longer, as the realities of C3's poor customer traction, failing sales partnerships, and financial pressures will catalyze what is likely to be a painful reality check.

This isn't the first time C3 has sought to ride a hot investment theme. The company was originally founded as C3 Energy to develop analytics solutions for public utilities preparing for the emergence of cap-and-trade and smart grids. C3 pivoted in 2016, renaming the company C3 IoT to capitalize on that buzzy opportunity. But management's master stroke was rebranding operations as C3.ai in 2019 and going public with the "AI" stock ticker, thus securing its place as the default artificial intelligence stock play for the undiscriminating investor despite the bulk of its business coming from relatively dated analytics models built for a very small number of utility, energy, and government customers. C3 is a minor, cash-burning consulting and services business masquerading as a software company, and its true value is a fraction of its current market capitalization.

Generative AI will do nothing to change the business or financial trajectory of C3 any time soon, yet C3 faces numerous, more serious near-term challenges. The company sells an expensive, trailing edge, and difficult to implement solution that is losing out to a plethora of alternative solutions. To make matters worse, C3's go-to-market motion seems to be completely broken. Excessive salesforce turnover suggests fundamental leadership issues, and the company's marquee sales partnership, with energy services giant Baker Hughes, seems to be falling apart. Furthermore, we believe C3's cloud partners, Microsoft, AWS, and Google, are more foe than friend. Thus, while C3 has done its best to obfuscate the facts, the company's track record of new customer acquisition is shockingly poor. Management has used recent pricing changes and accounting tricks to distract the market from the company's deteriorating results, but all signs point to a further weakening of fundamentals ahead.

C3 was egregiously overvalued even before its shares caught the generative AI hype wave, which added an unjustified $2 billion to its market capitalization in just a few short weeks. Shares should return from whence they came, approximately $12 per share, or almost 60% below current levels. The company's high mix of lower margin professional services, challenged growth, and industry worst cash flow profile suggests the downside could be even greater. We find little about C3.ai intelligent, but plenty artificial.

Table of Contents

II. Company Background

C3.ai Valuation, Summary Financials, and Kerrisdale Forecast								
($ in millions except per share figures, FYE April)								
Valuation			**F2020A**	**F2021A**	**F2022A**	**F2023E**	**F2024E**	**F2025E**
Stock Price (as of 3/5/23)	$ 28.48	Revenue	$ 157	$ 183	$ 253	$ 259	$ 290	$ 344
Shares Outstanding (1)	112	Adj. EBITDA	$ (62)	$ (33)	$ (76)	$ (91)	$ (82)	$ (64)
Dilutive Shares (2)	40	Adj. EBITDA Margin	-40%	-18%	-30%	-35%	-28%	-19%
Fully Diluted Shares Out.	152							
Market Capitalization	$ 4,327	YoY Growth						
Cash	$ 772	Revenue		17%	38%	2%	12%	19%
Debt (3)	$ 84							
Enterprise Value	$ 3,638	EV / Revenue	23.2x	19.9x	14.4x	14.1x	12.5x	10.6x
Notes								
(1) Cover of 10-Q filed 03/3/23								
(2) Includes 35.6m options outstanding at $12.64 average exercise price and 19.9m unvested RSUs								
(3) Includes $52 million of discounted lease liabilities and $32 million cash commitment to the Digital Transformation Institute								

Source: C3.ai, SEC filings, Kerrisdale analysis

Originally founded as C3 Energy in 2009 by software entrepreneur Tom Siebel, the company's original focus was on data analytics for public utilities to capitalize on emerging themes such as smart grid, demand management, and cap-and-trade. C3 won business at a handful of major utilities, but the prospects for growth in the notoriously slow-moving sector didn't match Siebel's ambitions. As the Internet of Things (IoT) became a dominant, yet somewhat amorphous, investment theme in the tech sector, Siebel pivoted, renamed the company C3 IoT, and pitched its data collection and analysis capabilities as a key enabler for the deployment of industrial sensors and other connected devices. Alas, this market too was slow to develop due to a jumble of tech standards, implementation complexity, and high costs. With the IoT fad subsiding, Siebel took his most ambitious leap, rebranding the C3 product as "artificial intelligence" and changing the company's name to C3.ai in hopes of capitalizing on the investment theme de jour. Once again targeting a nascent, ill-defined market, C3 firmly planted its flag as "the" enterprise AI company and fortuitously snagged the stock ticker "AI". C3 went public in December 2020, and with limited AI investment vehicles available in a frothy market for SaaS names, investors bid up its shares from the $42 offer price to a high of $177, equating to a market cap exceeding $20 billion.

However, despite its claims of enterprise AI leadership, most of C3's business came from predictive maintenance models for energy companies and the Department of Defense (DoD) and legacy data analysis tools sold to utilities. A bloated pretender with stagnating revenue growth, C3's shares quickly fell back to earth. Having achieved fallen angel status, management recently pounced on yet another opportunity to pump C3 shares: generative AI, a flavor of the technology that seemingly has little relevance to C3 products and will do little to address the shortcomings that have limited their adoption. In addition, C3 announced a transition from subscription to consumption pricing, which we believe is designed to serve as an excuse for the company's poor financial performance, as well as facilitating a shameless plug that C3 should now be valued in line with richly-priced SaaS consumption pricing players like Datadog and MongoDB. We believe the market is due to for yet another C3 wake-up call.

III. C3's Product Offering is a Hard Sell

Tom Siebel suffers from many shortcomings, but selling a vision is not one of them. With a deep rolodex of CEO relationships and a sales pitch that resonates with CEOs seeking to embrace technology, Siebel sells a vision that C3 is a tool for corporate "Digital Transformation", the process by which companies leverage new technologies and associated analytics to transform operations and improve decision-making. We heard from both former sales employees and C3 customers that Siebel's top-down pitch sold CEOs on his grand vision, even if it meant undermining CTOs and CIOs who foresaw some of the practical limitations of the C3 offering. Not surprisingly, the sales cycle for such a solution ranges from 6-18 months or more. The C3 sales pitch also takes aim at the easiest of targets: IT consultants. Most strategic enterprise technology redesigns are still conducted by outside consultants such as Accenture, Deloitte, McKinsey, and Boston Consulting Group, who have well-deserved reputations for difficult and expensive bespoke IT implementations. Noting the high failure rates of such projects, C3 positions itself as the savior with an all-encompassing platform that can cure the gamut of IT ills. However, the practical reality is that, despite its pitch, the C3 solution is difficult and expensive to implement, has been operationalized to address a fairly limited set of applications, and is likewise prone to failure. There are two core elements of the C3 offering: an application platform and a portfolio of applications.

The C3 Application Platform: Onerous Data Plumbing

C3's "application platform" attempts to access, integrate, and manage the vast array of data sources resident within a large company by leveraging an array of building blocks and domain-specific languages to create a system that provides data programmers a simpler way to integrate and access data from traditional databases, industrial sensors, and alternative data sets. Yet, there is no escaping the inherent complexity of such a task. C3's platform implementation largely mirrors that of a traditional IT consulting project: time-consuming, resource-intensive customization work requiring extensive use of C3 professional services personnel. In short, C3 customers incur all the brain damage associated with traditional "visionary" IT projects.

While the C3 platform cannot be classified as "AI", most customers we surveyed actually considered it the most valuable component of the offering, as it solves known data collection and integration challenges that can plague enterprise analytics. Of course, the extent to which the C3 platform adds value will be directly correlated to the complexity of the organization's data architecture and requirements, which probably explains why various DoD entities are oft-mentioned customers. However, we believe investors should be alarmed that there are numerous alternative solutions in the market. Most notably, Snowflake offers a multi-cluster, cross-cloud unified data platform that is comparatively easy to implement and operates at a materially lower cost. A simple comparison highlights the difference. Only 6% of Snowflake's LTM revenue comes from professional services, while that figure has historically ranged from 14%-18% for C3, and, as discussed below, we believe this figure is dramatically understated.

The C3 Application Portfolio: Is This the AI?

With the C3 platform in place, customers can select from a portfolio of "turnkey", in some cases industry-specific, decision models designed to address distinct operational use cases, such as predictive maintenance, manufacturing process optimization, and inventory optimization. Customers can also leverage C3 resources to jointly develop new applications tailored to their specific needs. Based on customer feedback, we found a big gap between the C3 pitch and reality. To begin, C3's definition of "ready-to-use" didn't meet customers' expectations. Even in situations where C3 had a previously developed application, it always required a lengthy and expensive customization before it could become operational. Second, several customers noted that the "industry experts" resident in C3's organization lacked the requisite domain expertise to facilitate a smooth implementation. Finally, we encountered several customers who harbored hopes of generating some revenue for themselves by helping C3 develop applications that could be resold to other industry peers. However, those plans largely went unrealized.

But most importantly, we find that C3's "AI" capabilities are underwhelming. In its public filings, C3 draws attention to two notable US patents, 10,817,530 and 10,824,634, both granted in late 2020, as evidence of the "rich" IP portfolio underlying its offering. However, both patents lean heavily on C3's IoT past and simply outline a platform that can be used to design and operate "next generation cyberphysical software applications". As technology writer Tiernan Ray noted in a ZDNet review:

*The patents refer to the AI as happening within a "machine learning component." That component uses some "state-of-the-art" machine learning libraries, it says, "including public libraries such as those built upon the Apache Spark, R, and Python systems." It includes things like IPython Notebook, the popular sci-kit learn library, and packages in R for such standard machine learning approaches as gradient boosting. C3.ai says these libraries are complemented by "custom-built, highly optimized and parallelized implementations of many standard machine learning algorithms, such as generalized linear models, orthogonal matching pursuit, and latent variable clustering models." **All those things are machine learning techniques that have been around for ages. In fact, the paradigmatic example of machine learning provided by C3.ai sounds, on its face, like something out of a machine learning textbook.** [Emphasis added]*

In addition, we believe C3's clumsy juggling of multiple open source tools stands in stark contrast to purpose built, native AI/ML platforms such as those developed by Palantir. We believe C3 will be challenged to ever create sustainable differentiation using such an approach. Ray charitably gives C3 credit for its ability to process large volumes of data at scale, but their applications are far from representing a fundamental advancement in machine learning.

Somewhat comically, the patents also reference the use of machine learning to analyze meter data to determine whether utility customers are stealing electricity. C3 Energy actually sold products that performed this analysis as early as 2013, meaning that C3 is referencing AI models that were used ten years ago. Not surprisingly, Ray concludes that *"the actual artificial*

intelligence component, at least based on C3.ai's published materials, is fairly routine and nothing special." In fact, a number of C3 former employees and customers had similarly harsh words regarding the company's AI.

- *"C3 was not designed to do AI from the get go…There's no AI at C3; it's just a framework…They sell the 'capability' to develop and deploy AI models, but the applications don't exist; they are just marketing positioning. There is a lot of AI technology in the market that is absolutely brilliant, but C3 doesn't leverage these advancements. They are way behind the times. I don't think they can catch up."* (former C3 sales executive)
- *"I thought Palantir's AI engine was more impressive. What C3 had going for it was data management, especially time series data"* (current C3 industrial customer)

In addition, [Glassdoor](#) reviews provide additional support for our thesis that C3 is not a credible AI leader.

- *"Terrible product. Honestly, the technology is so backward. Enterprise AI is basically a scam, surprised to see any customer actually paid for the product."*
- *"Feels like a scam to sell a product that is worse than free alternatives (tensorflow or any other open source libraries). Company lies to their customers a lot by making fake demos (lol at CRM). Company operates like a sales or consultant company rather than a tech company. Most of your work isn't actual interesting software development, mostly just obnoxious data cleaning and configuring json files"*
- *"The CEO himself said that C3 is a services and not a software company. So if you're thinking you're coming to a Products based company, don't bother."*

Moreover, we are comfortable with our assumption that the tech giants like Alphabet, Microsoft, and even IBM have significantly deeper data science benches than C3.

Ex Machina: Dangerous Data Science?

C3 also sells a "light" data science tool named Ex Machina. It is a no-code solution that enables the "citizen data scientist" to rapidly build, configure, and train models using a simple, drag-and-drop UI. While admittedly a more accessible product than the core C3 platform, we identified numerous issues with the product. Among the current C3 customers with whom we spoke, few viewed it as a serious tool, and we don't believe the product generates material revenue for the company. Moreover, Ex Machina fails to stand out in a very crowded field of no/low-code solutions, as other products are acknowledged to be either easier to use or more powerful. Lastly, while the notion of "democratizing" data science seems like a noble goal, ironically it is antithetical to the sound practice of data science. Simplistic tools like Ex Machina gloss over issues such as data governance, data integrity, and multi-variate complexity and can facilitate improper backfitting and false conclusions.

- *"Ex Machina was thrown in, but I've been told it doesn't work. Tom told folks to go clone Alteryx. I don't think it's a real product."* (former C3 sales executive)
- *"I'm familiar with Ex Machina, but we don't use it. It's not our preferred platform for low/no-code. We use Pega extensively, as well as Microsoft Power Apps"* (current C3 industrial customer)
- *"We use Ex Machina a little bit for simpler applications in less risky and less important businesses"* (current C3 energy customer)
- *"Low/no-code is absolutely a negative. Making these solutions more accessible sounds like a good goal, but there are all kinds of things only data scientists know how to do. It's potentially very dangerous."* (AI industry executive and consultant)

C3 CRM: Disappearing Act?

If there was one product area we figured C3 could nail based on Siebel's past success, it was CRM. In October 2020, shortly before C3's IPO, C3 announced a partnership with Microsoft and Adobe to incorporate C3's AI capabilities into Microsoft Dynamics 365, its CRM offering. Rather than "reinventing CRM", we can find barely a mention of this partnership since the initial announcement. When we review the Microsoft Dynamics website, it characterizes the product as incorporating "Microsoft AI" (and the screenshots clearly do not use the C3 graphical interface) and references C3 as a partner located in Australia. C3 subsequently announced the launch of its CRM application in September 2021, yet we note that the detailed product page on the C3 website for the CRM application includes no testimonials and only two customer examples, the results from which it generalizes to all potential CRM implementations. Importantly, C3's AI-enabled CRM launch came a whole five years after CRM leader Salesforce launched its Einstein embedded AI offering. Of note, C3's "President, CRM", Patrick Blair, left C3 in February 2022 after less than one year in the role.

Enterprise AI: More Than Meets the Eye

The competitive landscape for enterprise AI is crowded, complex, and dynamic. Among the large companies that C3 targets, there is a diversity of factors that govern purchase decisions, including data sources, IT architecture, business operations, regulatory environment, data privacy requirements, and internal software programming and data science capabilities. And importantly, not every company will approach their purchase decision in the context of "digital transformation", preferring instead to focus on a narrower scope of business issues that can be addressed by advanced data science. C3 states its TAM is nearly $600 billion, meaning that the bulk of enterprise AI spend still accrues to the consulting firms it disparages and that C3's market share is immaterial. While C3 was able to penetrate a modest number of customers largely in traditional sectors such as energy, industrial, and utilities, the company has been clearly eclipsed by emerging competitors such as Snowflake, Databricks, DataRobot, and Dataiku that offer simpler integration, more powerful AI, or both, resulting in dramatically faster customer acquisition and revenue growth.

Revenue Growth and Valuation of Select C3 Competitors								
	Revenue				4-Year	Last		
Company	2019	2020	2021	2022	CAGR	Val. ($B)		Date
Snowflake (1)	$ 265	$ 592	$ 1,219	$ 2,050	98%	$ 47.7		Current
Databricks	$ 175	$ 300	$ 425	$ 900	73%	$ 38.0		Aug 2021
DataRobot	$ 85	$ 140	$ 176	$ 300	52%	$ 6.3		July 2021
Dataiku	$ 35	$ 75	$ 110	$ 160	66%	$ 3.7		Dec 2022
Total	$ 560	$ 1,107	$ 1,930	$ 3,410	83%	$ 95.7		
C3.ai (2)	$ 139	$ 173	$ 233	$ 267	24%	$ 3.6		Current
(1) CY corresponds to next FYE January; 2022 based on Street consensus								
(2) CY corresponds to LTM as of January 31								

Source: Kerrisdale estimates based on multiple articles, press releases, and blog posts

C3's major cloud channel partners, Microsoft, Google Cloud, and AWS, are formidable competitors as well. They all offer data lake/warehouse capabilities accompanied by their own powerful workbench of AI tools to target a wide assortment of enterprise analytics. There is no debating that these companies have all the ingredients to be successful in this market, including engineering and data science talent, compute scale, data scale, and vast resources. Finally, there is an established field of analytics companies such as Cloudera, Alteryx, and Pegasystems as well as the universe of point product companies that offer superior products that compete with discrete C3 applications, such as Blue Yonder and Kinaxis in supply chain. Dozens of up-and-coming private AI companies are also raking in venture funding.

Similar to the stock market, there is a voting machine in the software engineering universe: the developer community. And here, investors should take note that C3 has virtually no presence. Unlike competitors, C3 does not provide developer documentation to the general public, and its blog posts and videos targeting the developer community are uninspired. One of the more technical experts with whom we spoke, an IT architect at a large financial services firm, noted, *"the DataRobot developer community is way bigger and way more active compared to C3. Even H2O.ai has a bigger one compared to C3. When a developer engages in a community, it is because they want to dig deeply, but C3 products are more generic."*

C3's marketing message is that its solution has heralded a new era of AI innovation. The reality is that C3 asks companies to spend tens of millions of dollars to implement somewhat rudimentary optimization models, and many C3 application development efforts have ended with a failure to operationalize the product. No one vendor today can address the range of potential customer needs given the inherent complexity of the various use cases. All legacy vendors, C3 included, are experiencing large project failures, and enterprise AI products are far from demonstrating a consistent level of utility that customers need.

IV. Ignore the Hype; Generative AI Changes Nothing For C3

Last November, start-up OpenAI released its ChatGPT generative AI offering to great fanfare. Why the frenzied hype? Beyond its creative capabilities and consumer accessibility, tools like ChatGPT may someday redefine human-machine interaction, which surfaces people's latent fears of technology so effectively captured in sci-fi storylines ("Open the pod bay doors, HAL"). Moreover, when Alphabet's management declares "code red" related to any innovation, then it must be a gamechanger. In the thick of this hype cycle, C3 issued a press release touting the introduction of its Generative AI product suite and its first product targeting enterprise search. Straight out of the stock pump playbook, the press release contained virtually no substance. We find it telling that the "industry quote" C3 elects to include in the release comes from retired Lt. General Ed Cardon, who is actually an employee of C3, as we suspect no credible AI technologist was willing to attach their name to C3's marketing fluff. However, the release was more than sufficient to get the investment community, in particular the rocketship and diamond hands crowd, all lathered up. After all, what company can be positioned to benefit from a new advancement in AI than the company whose ticker is "AI", right? Just in case there was any doubt what is driving C3 shares right now:
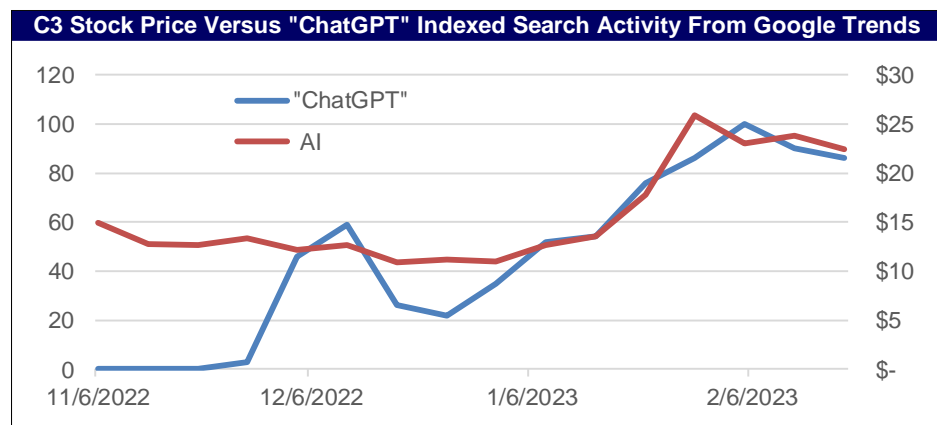
Source: Google Trends, S&P Capital IQ

Breathless commentary on ChatGPT aside, we pause to take a brief look at what exactly is generative AI. In contrast to most precedent AI systems that focus on interpretation and classification, generative AI is a form of machine learning that can produce content such as essays, music, computer code, and art. Thus, the ability to create opens up a world of opportunities. Generative Pre-trained Transformer (GPT) is a natural language learning model that can produce human-like text. These systems leverage foundation models that are pretrained on specific sources – the entire internet in the case of ChatGPT. Model training can thus be both time and resource intensive, and thus likely beyond the capabilities of any but the largest and most sophisticated tech companies. Moreover, the models will incorporate any biases inherent to the source data used for training.

According to Gartner, venture capital firms have invested over $1.7 billion in generative AI solutions over the last three years, yet the highlighted uses that have captured the imagination

focus on activities such as drug discovery, product design, and materials science as opposed to enterprise analytics. That said, we believe it is reasonable to believe that generative AI can provide value added capabilities that will benefit enterprise software companies and their products' functionality. For example, generative AI could be used to produce code or to compile user manuals. With refinement and guardrails, other obvious applications for generative AI include marketing communications, and Gartner expects synthetically generated messages to grow from 2% to 30% of outbound marketing communications by 2025. But this begs the question, will it help C3?

We find C3's hasty embrace of generative AI somewhat curious, because it is arguably the antithesis of sound data science. By themselves, Google's Flan T5 and OpenAI's ChatGPT (C3 says they will eventually use both) are not designed to analyze data and cannot improve the quality of analytic outputs. In fact, the early reviews of ChatGPT clearly demonstrate that it repeatedly gets facts wrong, has trouble counting, and cannot solve basic algebra problems. If anything, ChatGPT is dangerous for its ability to present bad data as correct in a remarkably convincing way. The early consensus around ChatGPT is that the results of generative AI, while entertaining, simply cannot be relied upon. This strikes us as in conflict with the primary goal of enterprise AI, which is to improve data analysis to enable improved decision-making. Somewhat comically, the bloom seems to already be coming off the generative AI rose, as Microsoft has already backtracked on its ambitions in search and negative (if not outright creepy) reviewer experiences with ChatGPT led to the imposition of guardrails.

There will be two primary options for incorporating generative AI: using the available open source models or developing smaller, specialized models. Using open source models such as Flan T5, one of the more popular mid-sized models, could speed implementation, but it comes with the shortcomings noted above, and the use of off-the-shelf solutions reduces product differentiation. Bespoke models' intelligence will necessarily depend on their training data, information scope, and model strength, and perhaps better results can be achieved with narrower training data sets. But this begs the question whether C3 itself (or its customers) will develop their own models (which frankly seems like a stretch). Training generative AI models is no simple task. As a recent article in Wired noted:

"Training these models takes a huge amount of computational power," says Carlos Gómez-Rodríguez, a computer scientist at the University of Coruña in Spain. "Right now, only the Big Tech companies can train them."… Martin Bouchard, cofounder of Canadian data center company QScale, believes that, based on his reading of Microsoft and Google's plans for search, adding generative AI to the process will require "at least four or five times more computing per search" at a minimum. He points out that ChatGPT currently stops its understanding of the world in late 2021, as part of an attempt to cut down on the computing requirements."

A report from Bank of America Merrill Lynch estimates the cost of generative AI enabled search at 2-3 cents per query, which it deemed not commercially viable. Siebel recently claimed that he is unsure how C3 will monetize its generative AI search tool. We believe adoption of generative

AI faces other headwinds, including data privacy concerns, copyright issues, legal risks, and responsible/ethical use concerns. Can C3 guarantee data transparency? Can they be indemnified if their AI generates incorrect analysis? We believe most organizations are a long way from being in a position to operationalize generative AI with consistency, reliability, and credible governance.

More importantly, generative AI does nothing to address the fundamental shortcomings of the C3 product offering: trailing edge or undifferentiated machine learning capabilities, expensive and challenging implementations, and narrow established use cases. Is a search tool that can generate an analytic output really going to displace Tableau, Alteryx, or other popular visualization tools. We doubt it. Alternatively, if we are wrong and generative AI is truly a disruptive feature in enterprise software, we believe that either (1) its incorporation will be so widespread that any incremental functionality is quickly replicated and commoditized, or (2) its productization will be dominated by the companies with the greatest engineering talent and corporate resources, two metrics where C3 falls embarrassingly short compared to the likes of Alphabet, Microsoft, and Amazon. And one thing that seems likely is that any meaningful generative AI R&D effort by C3 puts at risk the company's previous guidance of achieving FCF breakeven in Q4 of FY 2024. Not surprisingly, in our discussions with several current C3 customers, they told us that the company has provided practically no details about their roadmap for this new product. Thus, we believe investors should see C3's generative AI hoopla for what it is: just another stock promote from a CEO who has shamelessly glommed onto past hype cycles.

V. C3's Unimpressive History of Customer Penetration

When reviewing C3's various customer disclosures (SEC filings, earnings presentations, press releases, and website testimonials), we are struck with a strong sense of déjà vu. Over and over again, we see the same names: Koch Industries, Shell, Baker Hughes, and DoD/US Air Force, two of which are C3 shareholders. We guess it should come as no surprise that a company selling a dated, expensive, and difficult to implement software solution has seen relatively modest customer traction. As of Q3 FY 2022, the last time C3 reported the metric, the company had just 50 "customer entities" after being in business for over twelve years. Moreover, a material portion of its customer base is comprised of public utilities that first purchased the energy management solutions developed when the company was known as C3 Energy before 2016. For example, the customer logos contained in C3's initial IPO S-1 filing and FY 2022 10-K contained 26 commercial (non-DoD) entities. Among that group, seven (or 27%) are public utilities that we believe all became customers between 2015 and 2018, if not earlier. On its product pages, C3 can only muster customer testimonials from five different (unaffiliated) customers. In addition, we can discern little new customer acquisition from C3's disclosures. From IPO through FY 2022, C3 only disclosed by name five new customers, and recent wins have been even harder to come by. Over the past two quarters, the only net new customer identified by name was the County of San Mateo (where C3 is headquartered). As a result, C3 today has perhaps the most concentrated customer base of any software company of its size, as its top three customers account for nearly 50% of revenue.

The ability to acquire new customers is the lifeblood of SaaS companies. After all, they can't "expand" if they are unable to first "land" incremental accounts. Knowing this dynamic is fundamental to how investors analyze SaaS companies, C3 revised its customer definition in early 2022 to include "the distinct divisions, departments, business units, or groups" within large organizations that use its products. Thus, C3 not only reduced transparency surrounding a key metric, but it selected a definition that can be easily manipulated and is so arbitrary as to be meaningless. In addition, C3 says it excludes free trials and only counts customers that generated revenue in a period. However, C3 also discloses that it offers "revenue generating trials of our applications as part of our customer acquisition strategy", meaning that the new metric could contain "customers" that have not yet committed to the C3 platform. While C3 is kind enough to warn investors of potential shortcomings of its reported customer calculation (as well as other "operational data") in a new risk factor, we believe that counting customers should not "involve judgement."

The company's year-over-year customer growth has essentially been halved each of the past four quarters, falling to just 8% in Q3 FY 2023. We find this performance striking, particularly when compared to peer companies. Snowflake has consistently grown its large (>$1M LTM revenue) customer count 100% per year or more. C3's closest comp, services- and government-heavy Palantir, has dramatically outperformed in recent quarters. Even a legacy player like Splunk is growing large (>$1M ARR) customers faster than C3.

YoY Customer Count Comparison							
	Q1 22	Q2 22	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23
Snowflake (LTM Revs>$1M)	116	148	184	206	246	287	n.a.
Palantir	169	203	237	277	304	337	367
Splunk (ARR>$1M)	582	635	675	690	723	754	n.a.
C3.ai	**180**	**203**	**218**	**223**	**228**	**236**	**236**
Snowflake (LTM Revs>$1M)	107%	128%	139%	98%	112%	94%	n.a.
Palantir	23%	43%	71%	86%	80%	66%	55%
Splunk (ARR>$1M)	47%	43%	32%	28%	24%	19%	n.a.
C3.ai			**82%**	**48%**	**27%**	**16%**	**8%**

Source: SEC filings

C3 Customer Case Studies: Fact vs Fiction

Given the frequency with which C3 references a limited number of major customers, it would be easy for investors to assume that those customers are satisfied users with strong relationships. To the contrary, we spoke with several current customers and former C3 employees and heard numerous stories that did not match the C3 customer narrative.

- **Large industrial customer.** *"Instead of using C3 applications off the shelf, we were going to partner with them where we provide the idea. We worked on one project for more than a year. They kept requesting more and more data. In the end, it didn't end up making it past initial analytics phase…That level of complexity is too hard to model. You*

can optimize 60% of the model, but the other 40% of the problem is unknown and just cannot be modeled with any accuracy." (current C3 industrial customer)

- **Large commercial bank.** *"Tom went to [the number two executive at the bank] and convinced him to part with $30 million to build enterprise AI solutions. It took three years to get one use case running versus the 45 they wanted to build. The license spend was $27 million, and the internal spend was likely between $15-20 million. So you're talking close to $50 million of spend for one use case. People at [the bank] now say it doesn't work; they aren't using it."* (former C3 sales executive)

- **Large financial services company.** *"They had no AI in their stack, so we engaged with them to build applications and license them. Very quickly they saw that the apps are not real. They were stuff that C3 had built for other clients. They were not deployable as such. Each time you have to start from scratch. The client has to build the AI. You need 12 data scientists to get a single use case running, and it can take 18 months to build. From first engagement, it can take three years, and no one in business can wait three years for anything. Each time it's a custom job. Nothing is live after four years. They have not sold a single license to one of their clients."* (former C3 sales executive)

- **Government agency.** *"I'm very good friends with the guy who ran DoD at C3, and he told me their DoD projects were not AI projects; they were really just data integration projects."* (AI industry executive)

In the course of our calls, we were told by several current customers that they know of industry peers considering C3, in some cases as a result of government use. However, that was greatly outnumbered by the stories of failed projects and industry rumors suggesting current large customers in several different industries considering leaving the C3 platform.

VI. C3's Go-to-Market Motion is Broken

Tom Siebel is often lauded as a master salesman, and he often touts the combined wherewithal of the aggregate C3 sales effort, comprised of both internal direct sales and the thousands of salespeople at C3's channel partners that are supposedly pushing the product. That's why C3's meager customer traction is so shocking. In fact, we would submit that the company's entire go-to-market motion is broken, perhaps beyond repair as long as Siebel is CEO.

Extreme Sales Dysfunction

Simply stated, C3's offering is a difficult sale. As noted, the company has historically pitched its product as the key enabler of a massive enterprise digital transformation, and Siebel has focused on selling to CEOs as the most receptive audience for such a grand strategic vision. With a track record and relationships that gets him access to many executive suites, Siebel is clearly able to drive initial sales engagement. However, the practical reality is that transformational IT projects are not entered into lightly and are often associated with broader process or organizational redesign; thus, this pitch creates an unattractively high bar for a purchase decision. Not surprisingly, the sales cycle for C3 products is very long, often 6-18

months or more. C3 references the sales risks inherent to its offering when it discloses as a risk factor, *"Our C3 AI Software is complicated and, as such, our sales force and operations require significant time and investment for proper recruitment, onboarding, and training in order for our sales operations to be productive."* One former C3 sales executive we spoke with said that it took new sales personnel a year or more to ramp up on the product and build a pipeline of viable leads. Yet, we heard numerous anecdotes that Siebel would make judgements on sales people after 3-6 months, most certainly an insufficient amount of time to close multi-million dollar software deals. Glassdoor reviews suggest the sales culture is terrible, turnover is rampant, and that there is a fundamental mismatch between the selling model and management expectations. We count 13 sales executives leaving in 2022 alone, most after worryingly short tenures.

C3 Sales Executives Departing in 2022			
Name	**Title**	**Departure**	**Tenure**
Ioannis Stavridis	VP, Sales, DACH	Dec 22	1 year
Hanaa Bengtsson	VP, Sales, Financial Services	Nov 22	3 years
Marc Cavell	VP, Financial Services	Oct 22	1 year
David Armstrong	VP, Ex Machina Sales	Sept 22	2 years
Rohit Prakash	Group VP	Aug 22	<1 year
Tilemachos Koulouris	Group VP, EMEA	Jul 22	1 year
Tim McGuire	VP, Sales, North America Central	Jun 22	2 years
Umesh Anand	VP, Sales	May 22	2 years
Lee Walinsky	VP, Sales, North America West	Apr 22	1.5 years
Rohit Khera	VP, Sales, Oil & Gas	Apr 22	<1 year
Steve Sundstrom	Group VP, Utility Segment	Feb 22	8 years
Gene Reznik	GM, Industries & Alliances	Jan 22	1.5 years
Ken Laversin	GM	Jan 22	1 year

Source: LinkedIn

We believe investors should be open to the possibility that Siebel's rolodex, which drove many early wins, is simply tapped out. Many of the "Friends of Tom" like the Koch Brothers are already customers, and the fact that other key customers and partners are C3 shareholders is not a scalable model.

Go-to-Market Partnerships Are Failing or Meaningless, or Both

C3 goes to great lengths to paint a picture of the massive sales leverage it achieves through its channel partnerships. These include industry partners like Baker Hughes, Fidelity Information Services, and Raytheon Technologies, and cloud and infrastructure partners, including Amazon Web Services, Microsoft, and Google Cloud, as well as Hewlett Packard Enterprise and Intel. We do a deep dive on Baker Hughes, as it is C3's most important sales partner and the fact pattern suggests the arrangement is failing, and we believe the other partnerships have seen at best modest success.

C3 entered into a strategic joint venture with Baker Hughes in June 2019. Under the arrangement, Baker Hughes would become both C3's largest customer and leverage its vertical market expertise to serve as C3's exclusive reseller to oil and gas industry customers. Baker

Hughes signaled a major commitment to C3, investing $69 million for a 15% stake in the company, having CEO Lorenzo Simonelli join the Board, and entering into a three-year contract with minimum, non-cancellable revenue commitments comprised of both Baker Hughes direct subscription fees and customer purchases. The original agreement anticipated a revenue ramp that peaked in FY 2022 at $170 million. Both the revenue and "optics" of this agreement were arguably instrumental in positioning C3 for its IPO 18 months later. And while Baker Hughes has remained C3's largest customer (at 31% of FY 2022 revenue), all signs indicate that the relationship is fundamentally broken.

Over the course of the next two and half years, the contract underwent three separate amendments, the second and third of which substantially reduced Baker Hughes' annual revenue commitments. The FY 2022 revenue target was reduced 56% to $75 million, and the new peak target of $125 million was pushed out three years to FY 2025. In addition, the contract was modified in other ways that were highly beneficial to (and meant to further incentivize) Baker Hughes, including (1) introducing variable consideration (discounts/rebates/refunds) and "contingent" payments to C3, (2) eliminating the "non-cancellable" language related to the commitment, (3) paying Baker Hughes a $16 million commission based on underwhelming 1H FY 2022 sales performance, (4) eliminating the Baker Hughes minimum sales personnel commitment, and (5) increasing C3's committed sales and marketing spend. Importantly, these changes introduced serious questions about the accounting related to the arrangement. First, we are troubled that the third contract modification coincided with a quadrupling of C3's unbilled receivables (from $5 to $20 million) in Q2 FY 2022, potentially suggesting that a cumulative revenue catch-up occurred. Second, the introduction of variable consideration in the form of customer discounts precipitated the inclusion of a new risk factor warning investors that C3's revenue estimates are subject to judgement and potential future downward revision, a major red flag in the context of a failing reseller relationship. Also, in CQ2 2021, Baker Hughes liquidated 20% of its C3 ownership, and in December that year Simonelli stepped down from the C3 Board.

Baker Hughes Annual Revenue Commitment							
		Contract Year					
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Contract	Date	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Original Agreement	6/6/2019	$ 50	$ 100	$ 170			
First Amendment	9/26/2019	$ 50	$ 100	$ 170			
Second Amendment	6/1/2020	$ 47	$ 53	$ 75	$ 125	$ 150	
Third Amendment (1)	10/31/2021				$ 85	$ 110	$ 125
Downward Revision		**(7%)**	**(47%)**	**(56%)**	**(32%)**	**(27%)**	
(1) Starting FY 2023, the commitment will be further reduced by any revenue C3.ai generates from certain customers.							

Source: SEC filings

What happened? Based on our conversations with former employees, the Baker Hughes sales people were ill-equipped to make a highly technical enterprise software sale, particularly when C3's success to date has come from selling a "vision" to the customer CEO.

- *"If you're a Baker Hughes salesperson, you have no idea how to sell against Palantir or Quantum Black [McKinsey]. You are used to selling to refineries."* (former C3 sales executive)
- *"Baker Hughes allowed C3 to move some money around before the IPO… C3 moved salespeople off their books onto the Baker Hughes books before the IPO. The whole thing seemed gimmicky and suspicious from the outside."* (AI industry executive and consultant)

We find ominous signs that Baker Hughes' eyes are wandering. In 2021, Baker Hughes led a $180 million financing, joined the board, and inked a strategic alliance with Augury, an enterprise AI company. Augury specializes in sensor-driven industry-specific predictive maintenance applications, arguably the area where the C3-Baker Hughes arrangement has been most successful. With a $1 billion valuation, highly credible customers, and strong momentum, Augury seems like a real threat to C3. As the Wall Street Journal reported last September:

Augury expects to add up to 50 new industrial customers by the end of the year, said Saar Yoskovitz, the company's co-founder and chief executive. In addition to Pepsi, current customers include Colgate-Palmolive Co., DuPont de Nemours Inc. and Hershey Co., among roughly one hundred beverage and food producers, pharmaceutical firms, consumer packaged goods makers and other large-scale manufacturers, the company says.

Thus, we see material risks to both C3 revenue from its largest customer and sales leverage from its most productive, albeit troubled, channel partnership. We would not be surprised to see Baker Hughes sales targets further reduced or to see the arrangement scrapped altogether when its term expires in FY 2025, if not sooner. While materially less important, we believe C3's other industry partnerships with Fidelity and Raytheon have made only modest contributions to revenue. Moreover, we spoke with at least one major customer that at one time had envisioned co-developing industry-specific applications with the intent of pursuing a similar partnership but abandoned those plans due to the frustration of its C3 engagement.

Whereas some observers have questioned the veracity of C3's cloud partnerships, we believe the practical reality is that they are simply meaningless, largely cosmetic relationships of convenience that do little to drive much actual commercial activity. After all, the cloud providers can provide both a data integration platform and a workbench of advanced AI tools that represent a viable alternative to C3, so there are limits to how hard they would push C3. In fact, one current C3 customer noted, *"Microsoft tried to pitch us on Microsoft Brain, which had very similar capabilities as C3, both of which were inferior to Palantir. They were even proposing to go after very similar problems that we've worked on with C3."* And to the extent they have a large customer that seeks to incur the brain damage of a C3 "digital transformation", then of course they want to capture the related cloud infrastructure revenue opportunity. Investors should recognize that the cloud companies have similar "partnerships" with most credible enterprise software companies that might drive attractive workloads. C3's penchant for exaggerating the impact of its cloud partners can be seen clearly in the detailed comments

Siebel made on the company's Q3 FY 2022 earnings call. Despite a combined 92 joint customer engagements with Microsoft and Google, C3 only added 18 new "customers" over the subsequent three quarters, some portion of which were likely just new units at existing customers under the C3 definition. And if these industry heavyweights can't help sell C3 product, then returns from the partnerships with HP Enterprise, Intel, and numerous IT consulting firms must be modest as well.

Q3 FY 2022 Earnings Call Commentary on Partner Sales Production	
Partner	Sales Progress Disclosure
Microsoft	Over $250 million of business closed to date; 50 active joint customer discussions
AWS	$70 million of business closed year-to-date
Google	42 joint prospects in active engagement

Source: C3 Q3 FY 2022 earnings call

Middle Market Selling Efforts Are Unlikely to Bear Fruit

With its history of modest success penetrating Fortune 500 clients, C3 has clearly hedged its bets by suggesting to investors that it also plans to target middle market customers through a dedicated sales organization. Pointing to the massive number of SMB customer opportunities is a timeless, classic maneuver for software companies encountering growth headwinds. In reality, the C3 offering is ill-suited for middle market companies, as both its price tag and internal software engineering and data science requirements are not realistic for smaller companies. And while C3's Ex Machina product is arguably an entry-level AI/ML offering for such customers, Siebel himself conceded on the company's Q2 FY 2023 earnings call that the Ex Machina product is underperforming expectations.

VII. SaaS Metrics Report Card Yields a Failing Grade

We find it curious that C3 has often blamed Covid as a headwind to its business. For most other enterprise software companies, Covid proved to be a boon for the adoption of transformational digital tools. Moreover, supply chain planning and optimization tools, arguably one of C3's most well-established application areas, saw accelerated adoption over the past few years due to both Covid and the conflict in Ukraine. For example, Canadian company Kinaxis, a leader in strategic supply chain planning solutions for large companies that, like C3's, require a relatively complicated implementation effort, has viewed the current environment as a positive catalyst for its business. For all the reasons discussed above, we believe C3's struggles are clearly company-specific. Based on current Street consensus, C3 is expected to post among the lowest NTM revenue growth rates in the software industry, just 5% compared to a median 16%. Coupled with a sector worst LTM FCF margin of -42% compared to a median 18%, C3 currently ranks dead last in a Rule of 40 benchmarking.

Rule of 40 Comparison for 108 Software Companies
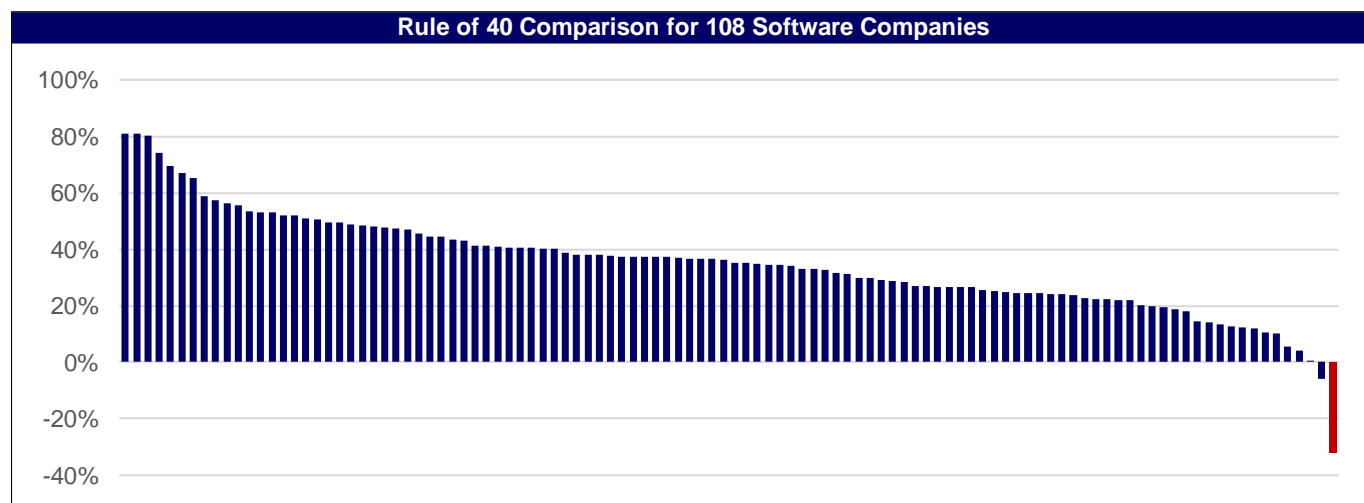
Source: S&P Capital IQ

Excluding Baker Hughes' remaining performance obligation (RPO), C3's "other customer" RPO has declined over the past few quarters, and our analysis shows that "other customer" implied bookings have also deteriorated markedly over the past few quarters. C3 would like investors to believe that this negative trend is simply the result of the switch to consumption pricing, but we don't believe that logic adds up. GAAP RPO hit a wall the last two quarters of FY 2022, before the consumption switch was announced. More importantly, in its Q1 and Q2 earnings releases, C3 provided detailed disclosure regarding subscription expansions with a number of existing customers that should have added to RPO, including multiple DoD entities, Shell, Raytheon, and a large pharma company in Q1 and multiple DoD entities, Bank of America, Cargill, Koch Industries, and Duke Energy in Q2. Finally, we find it hard to believe that any net new customer deals that were in negotiation prior to the announced consumption pricing switch were suddenly re-negotiated. That is, if any new customer deals were signed in Q1, and perhaps even in Q2, they too should have added to RPO. In the most recent quarter, non-Baker Hughes revenue declined to its lowest level in two years.

C3 RPO Analysis and Implied Non-Baker Hughes Customer Bookings																
		Q4 21		Q1 22		Q2 22		Q3 22		Q4 22		Q1 23		Q2 23		Q3 23
GAAP RPO	$	294	$	291	$	466	$	469	$	477	$	458	$	417	$	403
Baker Hughes RPO	$	104	$	95	$	301	$	237	$	215	$	198	$	185	$	189
Other Customer RPO	$	190	$	196	$	164	$	232	$	262	$	260	$	232	$	214
QoQ Change				3%		(16%)		41%		13%		(1%)		(11%)		(8%)
Other Customer Revenue	$	38	$	40	$	42	$	45	$	48	$	49	$	43	$	38
Implied Bookings			$	46	$	11	$	113	$	78	$	47	$	15	$	20

Source: SEC filings

VIII. C3 Financial Disclosures Obfuscate Underlying Fundamentals

We have concerns regarding a number of C3's accounting and financial disclosures.

Revenue More Services-Heavy Than Disclosed

Historically, there has been a strong inverse correlation between (i) SaaS company professional services revenue as a percent of total revenue and (ii) revenue multiple. This is not surprising, as investors are willing to pay less for the shares of a company with a relatively large portion of its revenue coming from dramatically lower gross margin (usually 0-40%), "lower tech" services that are typically incidental as opposed to recurring, scalable portions of their product offering. Furthermore, a high services revenue mix suggests a product that is challenging to implement and a business model and growth profile that more closely approximates that of a consulting business.

In all of our former employee and customer calls, one consistent data point was that the C3 business has a dominant services component. C3's reported professional services revenue over the past three fiscal years accounted for between 14-18% of total revenues. However, we believe C3 dramatically understates its services revenue by including two key services activities in its "subscription" revenue bucket. As C3 discloses in its reported financials, subscription revenue *"is primarily comprised of term licenses, **stand-ready COE support services**, trials of our applications, and software-as-a-service offerings… Our subscriptions also include our **maintenance and support services**, which include critical and continuous updates to the software that are integral to maintaining the intended utility of the software over the contractual term."* As additional proof, on C3's Q2 FY 2023 earnings call, the company noted that its shift to consumption pricing is driving a higher mix of trials and pilots, *"which carry a higher cost* [read: high services activity] *required to ensure customer success during this early phase of engagement."* Yet remarkably, C3's professional services revenue for the quarter declined -73% YoY and -65% QoQ to their lowest level yet reported. In reality, C3 is primarily a services business because its products are difficult to implement and require substantial ongoing effort to maintain (integrating new data sources and re-training models to ensure prediction accuracy).

- *"They look more like a professional services firm than an AI company. CoE is a minimum of 6 people and 12-20 people for larger deals. It was absolutely professional services but was not classified as such. C3's business is at least 70-80% professional services…No client could use C3 without a team from C3. It's very hard to deploy, very hard to build. You have to train the client. It's a high touch involvement, and they need to be there forever to maintain the models. There's a lot of maintenance that needs to be done. There's a lot of manual work."* (former C3 sales executive)
- *"I'd say 70% of what we've paid C3 has been for professional services."* (current C3 industrial customer)
- *"In years when implementing and adding additional apps, professional services expense could go to 50-60% of what we pay C3."* (current C3 energy customer)

Gross Margins Are Overstated and at Risk

Some investors may argue that C3's high services mix (1) is not a source of concern because C3's total gross margins are high enough (76% and 79% the past two fiscal years) to fall in line with SaaS averages, or (2) that C3's professional services revenues seem to have relatively attractive gross margins, typically falling in the mid-to-high 60s excluding some volatility in FY 2021. However, we believe both of these gross margin metrics are overstated as a result of the Baker Hughes arrangement. Based on C3's detailed related party financial disclosures buried deep in its footnotes, we find that both subscription and professional services revenue from Baker Hughes is being recognized at 99-100% gross margin, an arrangement we find hard to understand. Backing out high-margin Baker Hughes revenues shows that other customer revenues generate just mid-60s gross margins, putting C3 below average SaaS gross margins in the low-70s. To make matters worse, we believe C3's inflated gross margins are at risk. First, the ever-declining and decreasingly firm Baker Hughes revenue commitments are at serious risk. Second, as we learned from one C3 client, the massive level of unanticipated, expensive professional services can lead to a sour taste in customers' mouths. It is not unreasonable to expect that customers more closely manage such charges going forward, making such revenues unsustainable.

Extraordinary Unbilled Receivables Continue to Climb

As discussed above, C3's unbilled receivables quadrupled in Q2 FY 2022, we believe as a result of the Baker Hughes contract modifications contained in the third amendment. However, what was once a troubling one-off instance has become a glaring red flag. Unbilled receivables have grown to $88 million, representing 61% of total accounts receivable, and unbilled DSOs have exploded to 120 days. Detailed disclosures suggest Baker Hughes accounts for most of the unbilled receivables. Unbilled receivables have frequently been associated with accounting fraud. Of note, the QoQ change in unbilled receivables each of the past four quarters ($15, $19, $26 and $23 million) has greatly exceeded the amount by which C3 beat Street consensus revenue estimates each quarter, creating opportunities to goose revenue. By comparison, C3's DSOs are easily the highest among 108 software companies we reviewed, and the company's unbilled receivables as a percent of LTM revenue is the highest in the sector at 33%, a level that is more than triple the average of the next ten largest percentages.

C3's Dramatic Increase in Unbilled Receivables															
		Q4 21		Q1 22		Q2 22		Q3 22		Q4 22		Q1 23		Q2 23	Q3 23
Revenue	$	52	$	52	$	58	$	70	$	72	$	65	$	62	$ 67
Accounts Receivable	$	65	$	56	$	27	$	68	$	80	$	81	$	95	$ 144
DSOs		**114**		**97**		**43**		**89**		**101**		**114**		**139**	**197**
Unbilled Receivables	$	4	$	2	$	7	$	5	$	20	$	39	$	65	$ 88
Unbilled / Total AR		6%		3%		27%		7%		25%		48%		69%	61%
Unbilled DSOs		**7**		**3**		**11**		**7**		**25**		**55**		**95**	**120**
QoQ Δ in Unbilled Rec.			$	(2)	$	6	$	(2)	$	15	$	19	$	26	$ 23
C3 Revenue vs Consensus	$	2	$	1	$	1	$	3	$	1	$	(1)	$	2	$ 2

Source: SEC filings

Partner Financial Transactions Raise Concerns

We highlight that C3 has entered into two material financial transactions with one or more of its cloud channel partners that, on their face, present opportunities for fraudulent sales transactions, or at the very least undisclosed financial incentives to push C3 products. First, in August 2021, just days before announcing its highly touted strategic alliance with Google Cloud, C3 entered into a material real estate lease expansion with Google. Meant to provide C3's new corporate headquarters, the enormous $103 million lease agreement strikes us as wildly disproportionate since the company only had 574 employees four months before the lease agreement was signed. We also note that Google Cloud CEO Thomas Kurian, like Siebel, is a former Larry Ellison protégé and longtime Oracle employee overlapping the company's acquisition of Siebel Systems. Second, in July 2022, C3 entered into a non-cancellable contract with a cloud services provider that has a $100 million minimum purchase commitment over the following three years (averaging $8.3 million per quarter). Oddly however, in the first full quarter after the agreement was signed, C3 incurred just $1.3 million in costs under the contract. Although we find it unlikely that a credible tech giant would help facilitate questionable sales transactions, we found industry sources that questioned C3's accounting around other channel partners, namely Baker Hughes.

IX. Expectations For Growth and Positive FCF Are Not Credible

Against a backdrop of declining customer acquisition, a failing reseller relationship, stagnating revenue growth, and increasing margin pressures, C3 decided to make a fundamental change to its pricing model and boldly predict it would achieve positive FCF in Q4 of FY 2024.

Consumption Pricing Switch an Acknowledgement of Poor Value Proposition

We believe C3's embrace of consumption pricing is a tacit acknowledgement that potential customers were not adopting the company's products because they were not confident they would generate enough value to justify a large up-front commitment, particularly since C3 engagements are known to be subject to the risk of material cost overruns during implementation and application development. And while C3 and others pitch consumption pricing as a way for customers to start small and try-before-you-buy, we question how potential customers can get an accurate picture of C3's platform and application capabilities without undergoing a large implementation effort. Thus, either C3 tries to use the failing Ex Machina product as the hook for a much larger sale, or it ends up providing implementation / engineering services at a steeply discounted price. C3's garbled explanation of the switch on its Q1 FY 2023 earnings call was accompanied by a [presentation](link) that included a comically parabolic revenue growth curve relative to what the subscription model produced. The notion that a switch to consumption will produce such revenue growth is contingent on one of two outcomes: either greater customer adoption or an ability to extract more revenue per customer under the alternative pricing model. We think both are pipe dreams. C3 has disclosed it is expecting a

70% conversion rate from pilots, which seems unrealistic for a company that had only 50 active discrete customers after 12 years in business.
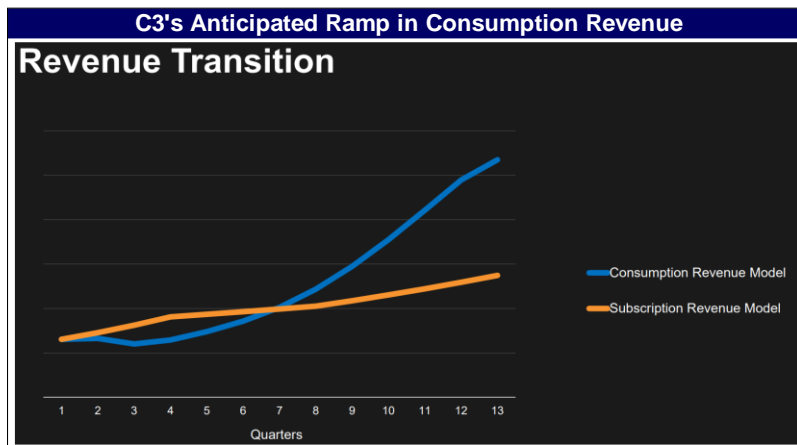
Source: C3 Q1 FY2023 earnings presentation

Most importantly, consumption pricing does not address any of the major shortcomings of the C3 offering. Namely, it doesn't make C3's AI engine more powerful, expand the breadth or value of relevant applications, or address the enormous implementation challenge that awaits any C3 customer. The existing C3 customers with whom we spoke were positively disposed to consumption pricing. But that's mainly because they largely viewed it as a way to scale costs to the reality of what they could actually operationalize and better match their costs with the lower-than-expected value delivered by the C3 offering. In short, they simply see an opportunity to pay less, which is probably why consumption pricing isn't being offered to existing customers.

Finally, we also see two more dubious reasons for the switch to consumption pricing. C3's business has clearly entered a rough patch, with enterprise tech spending overall entering a digestion period and its most important reseller relationship crumbling. Adopting such a pricing change provides C3 management a smoke screen that will reduce transparency and complicate comparability, providing a reprieve from investor questions.

Structurally Poor Operating Leverage Jeopardizes Profitability Goals

C3 has one of the worst cost structures of any SaaS company of its scale, vintage, and revenue growth rate. While many analysts simply shrug it off as largely driven by C3's excessive stock compensation expense, the company's non-GAAP operating expenses are full of fat. Its sales and marketing as a percentage of revenue is a whole ten percentage points above the industry average. And compared to other software peers, C3 has not demonstrated any material operating leverage since 2019 despite revenue increasing from $92 million to nearly $270 million. C3's closest peer from a business model standpoint, Palantir, achieved positive FCF in a $341 million revenue quarter. In contrast, C3 has guided the Street that it will achieve profitability in Q4 FY 2024, a quarter in which wildly optimistic analyst estimates are forecasting revenue of just $90 million. Investors shouldn't hold their breath.

X. Governance Shortcomings Exacerbate Our Concerns

We believe investors are ignoring numerous red flags in their embrace of C3 and that a closer look at both Siebel's track record and the company's weak governance should be a cause for concern. Siebel might be a talented salesman, but the totality of his leadership may be more of a liability than an asset for C3.

Is Siebel a Net Negative to C3?

Tom Siebel is a key component of the C3 marketing message, both to potential customers and investors. While many accomplished founders have taken companies public, we can't recall one that spent so much type in its IPO S-1 (and in the box summary, no less) granularly detailing the plethora of largely meaningless industry awards won by its CEO. Frankly, it smacks of desperation. However, Siebel's tenure as CEO of C3 has all the signs of unchecked power, poor executive judgement, and self-enrichment. Siebel clearly has a management style that many employees have characterized as dictatorial, demotivating, or toxic. He is famous for micro-managing and actively eschewing the concept of work-life balance. Nepotism too? Sure, why not. We note that three of Siebel's children, Riley, Taylor, and Hunter, have worked at C3. Siebel has also wasted enormous corporate resources on his pet projects, including over $57 million of cash commitments to his Digital Transformation Institute, an AI research consortium that seems to be a lead generation mechanism for his book. And of course, no overreaching CEO can go without excessive private jet usage and taking a loan from the company despite being a billionaire ($24.5 million in 2018). Heavy employee turnover and numerous descriptions on Glassdoor of the company's "toxic" culture are an indictment of management.

- *"The company is run like it's still the 90's. Top down dictatorship and will work you until break."*
- *"Tom Siebel doesn't scale and won't delegate. The slow approval process -- EVERYTHING requires Tom Siebel's sign-off -- destroys morale and kills innovation."*
- *"Led by Tom Siebel who is a toxic, mean spirited leader who enables those traits in others"*
- *"Turnover is huge, and it's an incredibly inefficient way to run a business, constantly promoting and then demoting people and firing them - shows poor judgement from the outset."*

As a result, C3 has suffered an unhealthy amount of executive turnover. C3 has cycled through five CFOs since 2019, which we view as a serious red flag. Of note, two of those transitions came shortly before (Marc Levine) and within a year after (David Barter) C3's IPO, a period when investors place a premium on finance function stability and there are clear incentives (if not implicit obligations) for an executive to remain with the company. More troubling, we have viewed each successive CFO as less qualified than his predecessor, with the most recent hire (Juho Parkkinen) previously serving as a mid-level accountant ("Senior Director") at his previous employer, MongoDB. Perhaps hiring a CFO without VP level experience would make him more

pliable? In addition, C3 lost its President/Chief Revenue Officer Sam Alkharrat in early 2022 after less than a year on the job. As previously discussed, nowhere has the turnover been so severe as in the sales function.

Perhaps most striking is that Siebel has maintained voting control through C3's dual-class share structure while also selling approximately $700 million of C3 shares, inclusive of a $100 million pre-IPO sale and nearly $300 million sold less than four months after the IPO. We don't begrudge founders taking some money off the table, but so soon after the IPO and in such scale while incessantly pumping the stock on TV is egregious. Somewhat ironically, Siebel's tenure at C3 seems to be mirroring that of his time at Siebel Systems. There too, Siebel ended up enriching himself while many investors suffered. Siebel's and C3's revisionist history claims that Siebel Systems was a revolutionary success. On the contrary, Siebel Systems was a byproduct of 2000 bubble-era tech frenzy. After a few years of massive revenue growth through 2001, the business shrank 35% over the following two years, and after a ~90% decline, its stock was largely dead money for three years until it was acquired by Oracle.

C3's Board is Conflicted

With a Board full of long-time associates, it is no surprise that Siebel's actions have gone unchecked. Lead Independent Director Mike McCaffery is the founder and CEO of Makena Capital Management, which manages money for and thus earns revenue from the Thomas and Stacey Siebel Foundation and potentially other Siebel pools of assets without similar disclosure requirements. Director Pat House was a co-founder of both Siebel Systems and C3 and served as a director of First Virtual Group, Siebel's private holding company. As the Thomas M. Siebel Professor of Computer Science at University of California, Berkeley and the Director of the C3.ai Digital Transformation Institute, Director Shankar Sastry has Siebel to thank for some portion of his income. C3's board strikes us as ineffectual and conflicted.

XI. Any Reasonable Valuation Approach Suggests Massive Downside

As always, the easiest answer may be the most accurate. We believe the move in C3's shares driven by unwarranted generative AI hype will prove transitory and expect the stock to decline to its unaffected price, around $12 or 50%+, once the market realizes its folly. More rigorous valuation analyses yield a similar result.

Despite its dramatically lower growth and profitability, C3 is trading at double the median SaaS company EV / NTM revenues based on Street consensus estimates. However, given its high mix of professional services revenue and government contract exposure, Palantir is arguably the most appropriate comparable for C3. While Palantir is expected to post sector-average revenue growth, it is dramatically more profitable with 22% LTM adjusted EBITDA margins, yet C3 trades at a 73% premium to Palantir.

C3 Comparable Company Analysis								
Company	Trading Information		Financial Metrics			Valuation		
	Price 3/5/2023	1 Month Return	LTM to NTM Rev Growth	LTM GM %	LTM Adj. EBITDA %	Market Cap	Enterprise Value	NTM EV / Revs
Software Sector Median		-1%	15%	74%	8%	$ 5,464	$ 5,366	6.2x
Palantir Technologies Inc	$ 8.33	-1%	16%	79%	22%	$ 18,633	$ 16,204	7.4x
C3.ai, Inc.	$ 28.48	10%	13%	70%	-25%	$ 4,329	$ 3,641	12.8x

Source: S&P Capital IQ

In valuing C3, we note that most analysts reference either every SaaS company in their coverage universe (regardless of comparability) or cherry-pick the sector's top performers, methodologies that both ignore C3's challenged fundamentals. Examining the relationship between revenue growth and EV / NTM revenue multiples for 108 software companies, C3 should trade at approximately 4.5x NTM revenues, at best, which based on optimistic Street consensus would equate to a $14 price target, implying -50% downside from current levels. And since revenue multiples are typically inversely correlated with high professional services mix, a lower target multiple would be more appropriate. In addition, we have been charitable in not reducing C3's cash balance for the cash it will surely burn before it reaches profitability (each $100 million of cash burn equates to $0.70 of share value).

Software Company LTM to NTM Revenue Growth vs EV / NTM Revenue Multiple
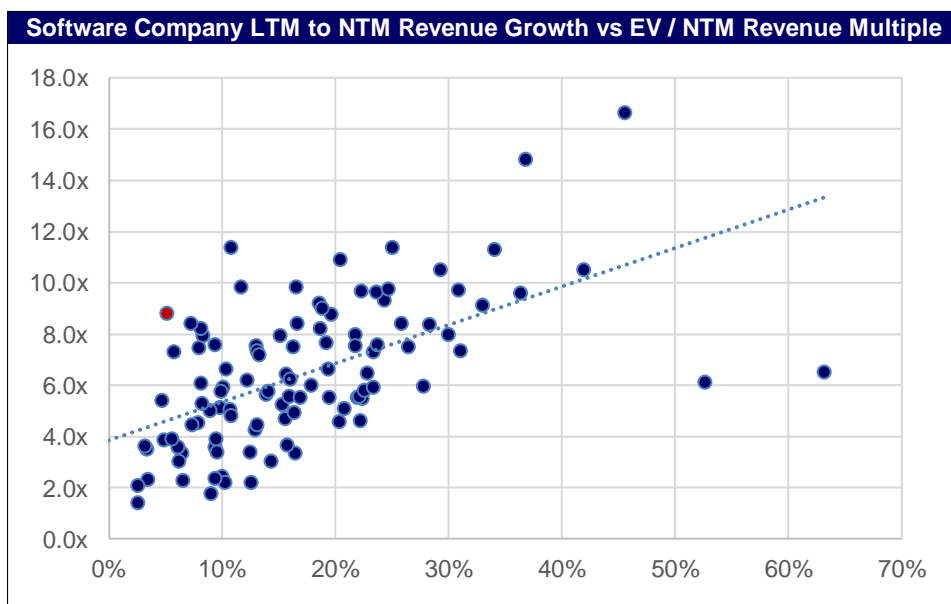
Source: S&P Capital IQ

We prefer cash flow based valuations, but C3's poor non-GAAP profitability for the foreseeable future makes a methodologically correct DCF meaningless. But to reinforce the point that C3 remains wildly overvalued, we conducted the most generous, and thus unrealistic, 10-year DCF possible, assuming:

- Street consensus revenue and EBIT through FY 2026
- Revenue growth rate linearly ramped down to 5% by the terminal year
- EBIT margins linearly ramped up to 20% by the terminal year
- Excluding the impact of stock-based compensation (ie. non-GAAP EBIT)
- Zero change in working capital and a 20% tax rate once EBIT positive

- Zero basic share count increase

Even in this highly optimistic case, we derive a valuation under $15.

Derivation and Present Value of Unlevered Free Cash Flows													
	Historical			Projected									
($ in millions, FYE April 30)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Revenue	156.7	183.2	252.8	261.3	316.8	385.6	527.8	633.4	744.2	855.9	962.8	1,059.1	1,112.1
EBIT	(60.7)	(37.5)	(80.7)	(90.4)	(51.5)	(12.8)	31.8	63.3	93.0	128.4	168.5	211.8	222.4
Income Tax Expense	0.0	0.0	0.0	0.0	0.0	0.0	(6.4)	(12.7)	(18.6)	(25.7)	(33.7)	(42.4)	(44.5)
EBIAT	(60.7)	(37.5)	(80.7)	(90.4)	(51.5)	(12.8)	25.5	50.7	74.4	102.7	134.8	169.5	177.9
Plus: Depreciation & Amortization	1.3	4.3	5.2	4.8	7.2	8.5	9.9	12.7	14.9	17.1	19.3	21.2	22.2
Less: Capital Expenditures	2.3	1.6	3.8	52.8	12.6	7.3	11.3	12.7	14.9	17.1	19.3	21.2	22.2
Less: Inc./(Dec.) in Working Capital	(9.9)	0.1	(5.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unlevered Free Cash Flow	(51.8)	(34.9)	(74.1)	(138.3)	(56.9)	(11.6)	24.0	50.7	74.4	102.7	134.8	169.5	177.9
Discount Period (mid-year convention)					0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5
Discount Factor					0.93	0.81	0.70	0.61	0.53	0.46	0.39	0.34	0.30
Present Value of Unlevered FCF					(53.0)	(9.4)	16.8	30.7	39.1	46.8	53.2	58.0	52.7

Valuation			Per Share Derivation			Assumptions	
Terminal Value	3,669.9		Basic Shares Outstanding	112.2		Risk-free Rate (10yr T-Note)	3.9%
PV of Terminal Value	1,012.7		Dilutive Shares	24.5		Adjusted Equity Beta (BBG 2yr Daily	1.91
PV of Cash Flows	234.9		Fully Diluted Shares Outstanding	136.7		Equity Risk Premium	6.0%
PV at Year End 2022	1,247.6		Price Per Share	$ 13.78		Size Premium	0.0%
Current Enterprise Value	1,195.3		Current Price	$ 28.48		Cost of Equity	15.4%
Less: Total Debt	84.0		Premium/(Discount) to Current	-52%		Cost of Debt	0.0%
Less: Preferred Stock	0.0					Marginal Tax Rate	20.0%
Less: Noncontrolling Interest	0.0					After-tax Cost of Debt	0.0%
Plus: Cash and Equivalents	772.4					Target Percent Equity	100.0%
Equity Value	1,883.7					Target Percent Debt	0.0%
						WACC	15.4%
						Terminal Multiple (LTM EBITDA)	15.0x
						Implied Terminal Growth Rate	9.7%
						Days to Valuation Date	61

Finally, we believe C3 shares have found incremental valuation support from Wall Street analysts touting the company as a potential takeover target. We advise investors to not hold their breath. C3 has none of the traditional attributes that make for attractive software deals: no dominant market leadership position other than niche custom products, no breadth of customer relationships, and no valuable revenue growth or cash generation capability.

XII. Conclusion

In reality, C3.ai isn't merely overvalued – it's most likely worthless. Burning $200m+ cash a year, with an additional $200m+ of stock compensation expense, on less than $300m of revenue, the company hasn't demonstrated an ability to provide an attractive solution that enough customers want, need or find competitive relative to alternatives. Its products don't solve business problems in ways that are sufficiently valuable for enough customers, or scalable and profitable enough for C3.

The result of this poor product solution set is dumpster fire financial statements. Revenue and gross profit are declining, while cash burn is accelerating. Customer concentration is massive, even as C3's largest customer relationship with Baker Hughes is crumbling. Revenue outside of Baker Hughes has been declining quarter after quarter. The company has struggled to convince enterprises to embrace its solutions, even after incinerating hundreds of millions of dollars on sales and marketing over the years.

The company's approach of building custom solutions across disparate industries to aggregate large amounts of data with the hope of potentially solving complex business problems isn't a

high margin business deserving a lofty sales multiple. Inception-to-date, the company hasn't demonstrated its revenue deserves any multiple greater than zero, as it hasn't been able to generate profits or cash flow, and has reached a point now where sales are not even growing anymore. Yet the market has granted C3.ai a $4bn valuation because it selected a clever stock ticker and its CEO regularly graces CNBC with buzzword-laced rhetoric. As the tech recession unfolds throughout 2023, we expect AI shares to return to lows.

Full Legal Disclaimer