The Evolution of C3 AI

Like many of the world's leading technology companies, C3 AI has changed and expanded its branding and product portfolios to achieve market leadership.

Microsoft began producing Basic interpreters for the Altair 8800 computer, later it expanded into developing operating systems for the IBM PC, and then again later enterprise applications, smartphones, video games, web browsers, CRM systems, cloud infrastructure, and AI utilities including ChatGPT. Many of these projects failed; some failed multiple times before achieving success. Each effort had different pricing models and different customer profiles. The net effect has been quite remarkable.

Oracle began as a consulting company called Software Development Laboratories (SDL). It then stumbled on a paper published by IBM Research and used that template in an effort to build a relational database management system (RDBMS) for Digital Equipment minicomputers. In the course of that effort, in 1979 it renamed itself Relational Software, Inc. (RSI). After some years of trial and error, that initiative proved successful. In 1983, it again renamed itself Oracle Corporation. Oracle then went on to develop and market its RDBMS for multiple computer markets including IBM mainframes, Unix, and PCs. Later it developed a family of application development tools that it brought to market. It went on to expand its market offerings to include enterprise application software, email systems, spreadsheets, operating systems, data storage devices, minicomputers, supercomputers, consulting services, cloud infrastructure services and numerous other products and services. Many of these efforts failed multiple times before achieving success; many never succeeded, and many went on to become world leading solutions. Today Oracle serves many markets with thousands of product and solution offerings addressing consumer, OEM, resellers, retail, enterprise, and government markets, each with different customer profiles and different pricing models.

It is difficult to find a highly successful information technology company that has not dramatically expanded its product offerings to achieve market leadership — starting from simple beginnings and moving into multiple markets: Intel (originally named NM Electronics) began with semiconductor memory (SRAMS); and IBM, originally named the Computing-Tabulating-Recording Company (CTR), began with mainframe computers. Today, each company offers hundreds to thousands of products and services offerings in a wide range of distinct markets.

In January of 2009, we founded C3, Inc with the purpose of developing and marketing a software platform and family of software products that would enable companies to exploit the power of elastic cloud computing, big data, IoT, and predictive analytics.

When we founded C3 AI, we believed the market for elastic cloud computing, IoT, big data, and predictive analytics software was destined to be large. That proved true. However, in 2009 the market was nascent, and the specific applications and markets were unknown. In 2008, the global public cloud market was less than $20 billion;[1] in 2023, it is expected to approach $500 billion.[1] In 2008, there were less than 1 billion IoT devices worldwide;[2] in 2023, that number is expected to exceed 55 billion.[3] In 2008, AI software — as we think about it today — did not exist. This year the AI software market is expected to exceed $450 billion.[4] We believe that by any standard that constitutes explosive growth.

When we consider mega-market developments like the internet, the smartphone, and AI, it is impossible to anticipate a priori exactly how these markets will develop. With the advent of the Mosaic internet browser in 1993, who could have anticipated Amazon and Google? With the founding of Apple Computer Company in 1976, who could have anticipated the iPhone? The Apple Store? Apple TV? iTunes? These mega-markets develop in unanticipated ways.

We believe that Enterprise AI is a mega-market event. As this market has developed, C3 AI has done a fine job of continually expanding its market offerings and continually expanding its market position to address the ever-expanding opportunity.

C3: 2009 - 2012

We founded C3 in January of 2009 and developed some of the core components of what is now the C3 AI Platform within the first year. You may recall there was much discussion and interest in the 2008 – 2011 timeframe about what we now consider sustainability initiatives, including clean tech, energy management, LEED certification, and cap and trade vs. carbon offsets; and as a result, we decided to focus our first use case on energy management. That proved to be a good decision.

In 2010 we released our first product, C3 Energy Management.

From 2010 – 2012, we closed several large agreements with a large global industrial company, one of the world's largest chemical companies, two large utilities, and one of the world's largest high-tech companies.

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[1] https://www.forrester.com/report/the-public-cloud-market-outlook-2022-to-2026/RES178311
[2] https://www.statista.com/statistics/764026/number-of-iot-devices-in-use-worldwide/
[3] https://www.idc.com/getdoc.jsp?containerId=US49631322
[4] https://www.idc.com/getdoc.jsp?containerId=US49571222

C3 Energy: 2013-2015

In 2012, C3 engaged McKinsey & Co. to conduct a study and make recommendations for maximizing growth including optimal company positioning and an associated pricing and product strategy. In the first two decades of the 21st century, utility companies were in the process of spending $2 trillion globally to upgrade their grid infrastructures with IoT devices, enabling the advent of the smart grid. Utilities were early adopters of IoT.

The McKinsey analysis recommended that there was a significant opportunity for C3 to expand its business by applying its energy management and energy efficiency solutions to utilities at grid scale in addition to selling to enterprises.

Adopting the McKinsey recommendations, C3 expanded its market position, rebranded as C3 Energy, and in addition to its prior solutions, C3 Energy offered a family of predictive analytics solutions — which were reliant on emerging AI techniques including machine learning, supervised learning, and unsupervised learning. Built to address the utility value chains of power generation, transmission, distribution, and consumption, these solutions optimize the operation of large and complex power grid infrastructures. The C3 Energy utility software products expanded to include C3 AMI Operations, C3 Revenue Protection, C3 Predictive Analytics, C3 Revenue Production, and C3 Customer Reliability.

Many customers also licensed our core C3 Platform that they could use to develop their own predictive analytics application and/or to develop derivative works of the C3 Energy applications.

It was during this period that the company formed its data science division to develop and apply AI techniques to our applications including machine learning, predictive analytics, supervised learning, and unsupervised learning.

During this period the company began to offer its products to the oil and gas industry including its AI Predictive Maintenance application for oil pumps, offshore oil rigs, LNG production facilities, etc. The company continued to offer its products for energy management and energy efficiency to utility companies based on per customer pricing and to enterprises based on expected value pricing.

This expansion into energy markets proved successful as the company booked[5] approximately $83 million in contracts and recognized $63.9 million in revenue during this period.

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[5] Unaudited

C3 IoT: 2016 – 2018

By 2016, we were seeing significant expansion in the cloud computing market and the proliferation of IoT sensors was expanding dramatically across many industries. We were increasingly approached by manufacturing companies, financial services companies, oil and gas companies, and the U.S. Department of Defense to deploy the same types of AI applications that we had successfully deployed in enterprises and utilities including AI Predictive Maintenance, AI Fraud Detection, AI Inventory Optimization, and C3 Energy Management.

At that time, the common expression for these types of applications was "IoT," and we appropriately rebranded the company as C3 IoT to communicate to the market that we were again expanding our market offerings from primarily one vertical market (energy) to a broadening range of markets.

In response to this increased demand, the company tailored its core applications to meet the needs of those industries. As such, in addition to the C3 Platform, we offered market-specific versions of all our applications including AI Predictive Maintenance, AI Inventory Optimization, and AI Energy Management for the utility, oil and gas, defense, and financial services industries. In addition, the company introduced the concept of 4-to-16-week product trials as part of the sales process.

This market and product line expansion again proved successful as the company booked[5] approximately $203 million in contracts and recognized $120.4 million in revenue from 2016 – 2018.

C3 AI: 2019 – Present

As the market for cloud computing, big data, IoT, and predictive analytics continued to expand, the market perception of IoT — as expressed in the literature, technical conferences, the academy, and in customer expectations — changed. While IoT had previously been considered at the confluence of sensor devices and AI applications, it was clear that IoT was becoming a concept increasingly centered on the devices — the IoT sensors themselves — with the AI applications considered a separate category. As this developed, the C3 IoT brand became confusing to the market, as many customers had the impression that the company was primarily in the business of manufacturing IoT sensors and devices.

To eliminate this market confusion, we rebranded the company C3 AI, clearly communicating that we were in the computer software business.

In addition to the products and services that the company offered since its inception, C3 AI again expanded its product offerings that now include over 40 AI production applications for the utility, oil & gas, financial services, manufacturing, health, and communications industries, and U.S. defense and intelligence sectors. Across industries, we introduced a number of AI application products that serve

all vertical markets including C3 AI Ex Machina to address the needs of the growing citizen data science market, C3 AI CRM, C3 AI Data Vision, C3 AI ESG, and C3 Generative AI.

Again, this market expansion proved successful, enabling C3 AI to book over $1.2 billion in additional contracts and recognize $951.1 million in revenue from 2019 – 2023.

C3 AI was well ahead of its time in predicting the scale of the opportunity in enterprise AI applications. We began when the market was nascent, and as the market has developed and expanded, we have expanded our branding and our market offerings to meet market expectations.