



# Complete Intelligence

An AI-powered global intelligence platform for strategic and tactical procurement and investment decisions



CX-Create

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Sponsored by Oracle for Startups program

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## About this report

Based on interviews with Tony Nash, founder, CEO, and Chief Data Scientist, this brief report introduces [Complete Intelligence](#), one of a growing number of highly innovative companies supported by the [Oracle for Startups](#) program.

The company, founded in 2019, is already significantly improving the forecasting and budget planning of a variety of large corporations through its advanced AI-driven intelligence platform.

The theme for this month is around startups in the energy and utility sector and how they are innovating, changing the competitive landscape, and contributing to sustainability.

CX-Create is an independent IT industry analyst and advisory firm, and this report is sponsored by the Oracle for Startups program team.

## The business context for Complete Intelligence

### Commodity price volatility and a post-pandemic surge in demand drive the need for more timely and accurate forecasting

Businesses coming out of lockdown have increased demand for commodities, from energy supply to raw materials for their products. In Europe, benchmark prices for natural gas to power their factories and heat their buildings have risen from €16 megawatt-hour in January 2021 to €88 in October. This, in turn, has sent electricity prices soaring. (Source: Euronews). While some have locked in prices through forward-buying, others have been exposed and seen profit margins plummet, unable to pass on price hikes to their customers.

But it is not just energy prices that are volatile. Semiconductor chip shortages have impacted many industries that depend on them, from automotive to electronic household goods manufacturers, putting a brake on their post-pandemic recoveries despite strengthening demand.

The growing demand for clean and sustainable energy sources and precious metals, like copper and lithium that power batteries have also seen tremendous volatility. As major industrial companies digitally transform their organizations and business models seeking elusive growth, the importance of data and AI are increasingly recognized as fundamental to success.

### Forecasting and budgeting needs data science, not spreadsheets

The ability to sense change, respond quickly and adapt rapidly relies on a synthesis of massively increased volumes and varieties of data, both from operational and external sources. Data volumes are too complex for manual approaches and spreadsheets and require AI to extract insight and meaning from this complex array of external demand and supply signals. The old industrial-age planning approaches can't cope. They are too slow, involve armies of accountants and analysts, and political wrestling between departmental heads, and are often based on opinion and inaccurate forecasts leading to erroneous budgeting decisions.

### Complete Intelligence provides the accurate evidence base for budgeting and forecasting decisions

When markets are relatively calm and stable, the cycle of annual planning and budgeting makes sense. But amidst continual volatility and dramatic accelerated change, the planning cycle is too slow. It fails to mitigate the risks unfolding at such speed and is impacted by a confluence of so many variables, like extreme weather, scarcity of raw materials, pandemics, and weakened supply

chains. An array of intelligent internal and external feedback loops is needed to mitigate risks and optimize resources in pursuit of the company's goals. This is what Complete Intelligence provides with its integrated and modular intelligence platform.

## Key observations

- Complete Intelligence provides the accurate evidence base for budgeting and forecasting decisions
- The Complete Intelligence Platform consists of three modules – CI Futures, RevenueFlow and CostFlow
- Forecast accuracy has rapidly improved, and error rates are now around 2%, which compares favorably with traditional methods and error rates of 35% or more

## Complete Intelligence, the story so far

Tony Nash, founder, CEO, and Chief Data Scientist, is steeped in market intelligence. A former VP of market intelligence firm IHS (now IHS Markit), and The Economist Intelligence Unit, where he was Global Director Consulting and Custom Research. He observed that large international companies he had supported typically followed an annual budgeting cycle based on often inaccurate or opinion-based data. It was not unusual to find large teams of people, sometimes several hundred involved in the process and heavily reliant on gathering data from multiple departments in complicated spreadsheets. The process could last several months, and the variance between forecasts and actuals was often above 35%, which could erode profits or tie up resources unnecessarily.

“ Many companies have budget processes that last months, layered with bias, anecdotal forecasts and friction. Oftentimes, these budgets are so flawed that they're discarded after the first quarter”

Tony Nash, founder and CEO,  
Complete Intelligence

## Trial, error, and persistence

As a data scientist familiar with cloud technologies, he developed algorithms to improve forecast accuracy and a complete process from data ingestion to forecasting and testing the results. He started developing the machine learning ML algorithms in 2017 while still consulting in Asia from his base in Singapore. His first iteration failed to produce a level of accuracy that would provide a sufficiently compelling proposition. He wanted to get down to an error rate of no more than 5%-7%. He adopted the 'ensemble' approach covering thousands of different scenarios layering external data on commodities such as the copper price with a customer's actual costs, identified in their general ledger.

## Ready for launch late 2019

In 2019, Nash returned from Singapore and set up his company in The Woodlands, near Houston, Texas. He continued his work on the algorithms and developed a commercial product ready to launch in early 2020. And then Covid-19 struck.

Through Covid-19, companies first tried to understand the changing environment, then remained risk-averse until public health, business environment, and supply chains became more stable. This has been a challenge for a cutting-edge machine learning firm like Complete Intelligence. It is only as the environment has begun to stabilize that enterprises have sought new solutions to legacy problems. With that has come a renewed interest in Complete Intelligence and deployment at a large scale.

## Solution overview

### The Complete Intelligence Platform consists of three modules

The Complete Intelligence Platform hosted on Oracle Cloud Infrastructure (OCI) consists of three forecasting modules:

- **CI Futures** – to forecast market trends. Covering over 1,400 industries in more than 100 countries and a database of over 16 billion data points from proprietary and publicly available data. Millions of learning algorithms are used, which factor in the most recent global events.
- **RevenueFlow** – provides accurate results for demand and forecast sales and revenue projections.
- **CostFlow** – to enhance product line profitability and improve supply chain and procurement outcomes.

Figure 1. provides a diagram of the Complete Intelligence Platform

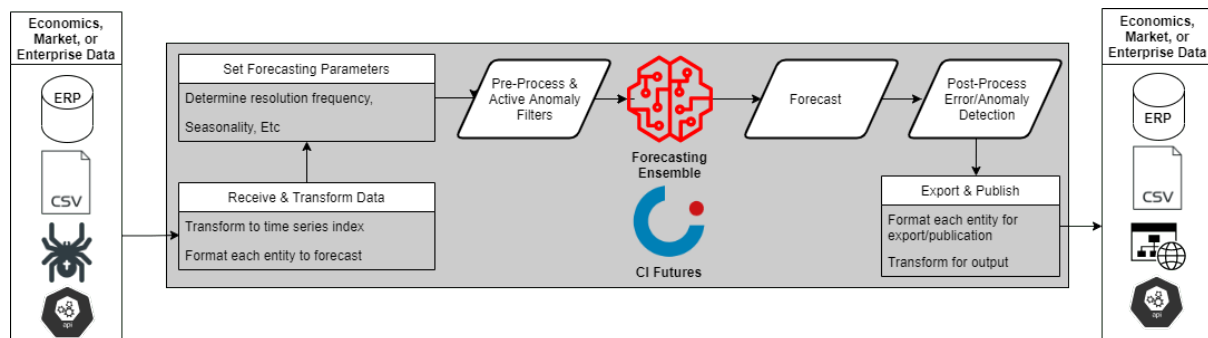


Figure 1: Complete Intelligence Platform by Complete Intelligence.

Market data is ingested from multiple trusted data sources like national statistical agencies, multilateral banks, multilateral government bodies, commodities exchanges, bilateral trade bodies and combined with the client’s data from their general ledger. A multi-layer testing and validation process used to ensure the accuracy of the data to be used in any forecast. Third-party data is gathered via internet spiders and APIs.

The platform provides an integrated global model to ensure that actions in one market, country, or sector of the economy are reflected elsewhere in markets, industries, and the global economy. International trade, economic indicators, currencies, commodity prices, and equity indices are all factored in to create a proxy of the global economy.

A comprehensive list of futures, currencies, and market indices is covered and accessed through a highly graphical and easy-to-use interface. Almost 1,000 assets, with historical data from 2010 and forecasts over a one-year horizon, are provided. More assets are being added all the time.

The platform is designed around three attributes:

- A globally integrated model
- A data-driven process without human intervention in the output
- A simple means of interfacing with the platform.

The platform can be connected to existing ERP systems and automatically upload pricing data from the general ledger at a very granular level for each item.

The Complete Intelligence Platform supports a variety of use cases:

- Supply Chain & Purchasing Optimization – help lower costs, anticipate risks, and provide input to sourcing strategies.
- Sales and market entry strategies – by identifying higher growth markets and optimizing resources
- Strategic Financial Planning – identifying growth markets and fine-tuning resource allocations in each market to minimize exposure to currency fluctuations.
- Mergers and acquisitions – provide a snapshot of cost structures and projections of future costs and profitability of target acquisitions.

### **Forecast accuracy has rapidly improved, and error rates are now around 2%**

Nash's persistence has resulted in significant levels of forecasting accuracy. A twelve-month forecast now sees error rates around 2%, which gives users considerable confidence compared with traditional methods, where the error rates are often above 35%.

As well as dramatically improving forecast accuracy on markets, revenues, and costs, the onboarding process to going live is a matter of a few weeks. After that, forecasting takes hours, not months.

## **Current position**

### **Successes to date**

While still a relatively new company, Complete Intelligence has already proved its value to several large companies.

- A major petrochemical company wanted to improve its predictive intelligence capability for feedstocks and refined products. They asked Complete Intelligence to examine nine product categories across crude oil, gasoline, diesel, natural gas, and gas-to-liquid (GTL) products. Monthly forecast averages are provided by category with extremely low differences from actual results on the order of 3% or less.
- A global furniture company wanted a more explicit link between their sales and revenue planning and their sales teams in China. Complete Intelligence built a sales forecasting model that more clearly identified and utilized market demand drivers and connected these directly to their business. An analytics-based approach to identify the drivers of sales by city and industry. Complete Intelligence built a city and industry-level forecasting tool that

determined the company's growth trajectory and provided recommendations to support the direction and transition of their sales teams.

- A global chemicals company needed a better understanding of the trends for costs in their supply chain and a more precise way to manage margin expansion and contraction at the bill of material level. Complete Intelligence was commissioned to forecast factor inputs and currencies for the key categories. The forecasts were calibrated based on the component make-up of the bill of materials. This enabled the client to identify the direction of the materials pricing and the impact on their BOM. Through the process, the client learned how to anticipate cost movements and protect margins.

### **Current go-to-market model**

Complete Intelligence sells directly to large organizations, mainly targeting CFOs and COOs with a broad view of their companies and strategic decisions.

The company also has strategic partnerships with Microsoft and is listed on the Azure Marketplace and with Oracle as part of the Oracle for Startups program and hosted on OCI.

Other partnerships with Bloomberg and Refinitiv allow for exchanging financial and market data and connection to their platforms.

### **Future direction**

#### **What to expect**

Complete Intelligence will continue to enhance its data sets and predictive capabilities.

Enhancements to come include:

- More transparent accuracy reporting so customers can view accuracy/error for every line item
- More robust and flexible data visualization for clients to utilize Complete Intelligence forecasts within their visual narratives
- More sophisticated data science to account for detailed sentiment and other qualitative factors
- Do-it-yourself forecasts for customers to do ad hoc forecasts for any data at any time. This will enable teams within a company to do their own sophisticated, reliable forecasts without waiting on their in-house market analysis or forecasting team with complicated macros and massive spreadsheet workbooks
- Embedding Complete Intelligence forecast APIs into ERP and accounting software

### **Oracle Cloud Infrastructure and the Oracle for Startups program prove their value to Complete Intelligence**

When asked what he felt about the relationship with Oracle and the Oracle for Startups program, Nash said, "Oracle Cloud Infrastructure is very flexible and secure. The Oracle for Startups team has been great. Oracle has been the most responsive and helpful of all our partnerships, connecting us to the right people to help with marketing, sales, or technical questions. I really feel that they want us to succeed. I'm a huge advocate of the Oracle for Startups program."

## CX-Create's viewpoint

### The Complete Intelligence Platform addresses a fundamental business need

Providing a global proxy model on markets, commodities, currency fluctuations, and many other aspects and making this easily accessible for business people will significantly improve strategic investment and procurement decisions. The emphasis on accurate and timely data supported by ML models will make it easier for business people to make informed decisions, stripped of personal bias. Digital transformation should lead to a more agile and responsive organization. The more progressive organizations will want highly attuned external signals that are constantly updated, enabling them to de-risk investment decisions and optimize resources for growth. Complete Intelligence provides for that.

### Summary details

Table 1: Fact sheet

<b>Solution name</b>	Customer Intelligence Platform	<b>Solution category</b>	Market intelligence
<b>Key industries</b>	Energy, manufacturing, petrochemical, utilities	<b>Geographies</b>	Global
<b>Deployment model</b>	SaaS	<b>Licensing basis</b>	Subscription
<b>Size of organizations served</b>	Large companies	<b>Go-to-market model</b>	Direct
<b>Number of employees</b>	12	<b>Key partnerships</b>	Bloomberg, Microsoft, Oracle, Refinitiv
<b>URL</b>	<a href="https://www.completeintel.com/">https://www.completeintel.com/</a>	<b>HQ</b>	Houston, Texas, US

## Appendix

### About CX-Create

Jeremy Cox founded CX-Create Limited in January 2021, a former principal analyst at Omdia (formerly Ovum) focused on customer engagement strategies and platforms.

He is recognized by major CX vendors, clients, and former colleagues as a leading thinker in customer experience and engagement. Formative experiences in the 1990s at IBM convinced him of the critical importance of understanding the business world from the outside in. These insights were put to practical use in his former roles as a principal CRM consultant at KPMG Consulting and as an independent consultant supporting public and private sector organizations.

### Our mission

CX-Create's mission is to help enterprises and the vendors and startups that serve them remain relevant. The company's primary focus is to track and understand the constantly evolving customer experience world and share those insights with clients. Continuous innovation is also an essential component of persistent customer relevance, directly and indirectly, which is why we are enthusiastic about startups and the Oracle for Startups program.



## Further reading

- [Complete Intelligence – an AI-powered intelligence platform for strategic investment and procurement decisions](#)
- [The All-in-One Waste Management Platform from Evreka](#)
- [Faradai AI-powered Energy & Sustainability Intelligence Platform](#)
- [GRØN SKY – a Green Cloud to massively reduce the carbon footprint](#)
- [Oracle for Startups program fuels continuous innovation the open way](#)
- [Four communications industry trailblazers accelerate the monetization of 5G and Edge](#)

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