



## Mining Data for Hidden Revenues

profitability artificial intelligence data analytics

**Summary:** Without the right tools and analytical approach, customer data is unlikely to have any significant impact on CFIs' overall profitability. But when artificial intelligence is used to help segment data into meaningful information, there are multiple ways it can be used to help organizations enhance their relationships with existing customers and boost their overall profitability.

England's earliest inhabitants looked nothing like most people believe. While extremely pale skin has long been a trait associated with individuals of English ancestry, DNA analysis on the remains of "Cheddar Man" — a 10,000-year-old skeleton unearthed in the Cheddar Gorge of Somerset, England, in 1903 — has determined otherwise. DNA results found that England's inhabitants at that time had dark skin, blue eyes, and unique facial structures, and were lactose intolerant.

Much like digging into the DNA of a 10,000-year-old man helped scientists uncover a wealth of information about England's early inhabitants, analyzing patterns and information hidden within the data that community financial institutions (CFIs) have on customers can reveal equally valuable information.

### Digging Deep

Analysis of customer data is nothing new, but there are new artificial intelligence (AI) tools and algorithms that enable CFIs to glean more relevant and effective insights into customer behavior, preferences, and needs. In addition to capturing information about individual customer holdings and transactions, in-depth data analysis enables financial institutions to rapidly identify customer trends and needs that previously wouldn't have been possible without lengthy periods of monitoring.

CFIs are also able to drill down into individual focus areas to a much more granular degree. Machine-learning and trend-analysis algorithms allow organizations to [segment customer data](#) into individual categories and focus areas, such as individual products and services like utilities, insurance, loan payments, and payroll, or to delve into specific demographics such as age groups, income, and lifestyle.

More comprehensive data translates to the ability for CFIs to tailor marketing, products, and service offerings to individual customers' unique needs and to streamline other processes, such as risk analysis and credit approvals.

### Reaping the Benefits

Data segmentation is essentially a window to better determine the lifetime value of individual customers by providing a more comprehensive look at how much they are likely to contribute to an organization's bottom line, as well as ways such relationships could be enhanced. Analyzing customer behavior makes it clear where individuals derive the most value from their banking relationships and can aid bankers in identifying areas where they can introduce additional benefits.

One such example is the offering of exception interest rates to the customers most likely to jump ship for better rate offers from competitors, instead of boosting interest rates across the board. In some cases, financial

institutions in the US have rewarded long-term customers with more attractive loan pricing and higher [interest rates for deposits](#).

In Europe, financial institutions have used customer data analysis across customer accounts, ranging from retail and business to wealth to craft value scores used to create rate sheets. Another way European banks have used AI-based data analysis is to apply it to [climate data that can be factored into real estate pricing](#), based on the risks of individual properties.

The benefits of data analysis translate to an enhanced customer experience as well. In a world where people have become accustomed to instant gratification and can acquire products and services with the click of a button, streamlined offerings are key to keeping customers happy. Automated credit approvals provide a good way to improve the customer experience.

By using machine-learning models that review the data of individual customers’ purchases, payment histories, and overall credit exposures, CFIs can access real-time risk profiles that allow for on-the-spot determinations for loan applications. Such capabilities make it possible to strengthen ties with small- and medium-sized businesses, particularly retailers, as [automated credit approvals](#) make it possible for consumers to open credit lines with retailers during popular holiday sales or weekend hours when banks are typically closed.

Looking Within

The benefits of AI and machine-learning models apply to a CFI’s internal operations as well. One area where such analysis can be used internally is assistance with capital reconstruction, by helping identify areas of capital shortfalls and ways any gaps can be bridged through alternative investment options.

Rapid fraud detection is another bonus of AI-backed data analysis, helping financial institutions head off the cost of elaborate and time-consuming fraud investigations by rapidly — and preventatively — identifying individuals or organizations attempting to misuse consumer data. Cleaner data and superior analysis can also assist with efforts to fine-tune the targeting of marketing efforts, improve regulatory reporting, and even assist with education and training efforts for employees.

As CFIs look to step up their data analysis capabilities, there are multiple areas where they can benefit, from more targeted marketing and product development for individual customers and demographic groups to internal perks such as enhanced risk management and even the identification of potential revenue sources. The first step is cleaning up your existing data and identifying AI-backed models that fit your organization’s overall goals.

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ECONOMY & RATES

Rates As Of: 01/29/2024 05:40AM (GMT-0800)			
Treasury	Yields	MTD Chg	YTD Chg
3M	5.44	0.04	0.04
6M	5.19	-0.07	-0.07
1Y	4.76	-0.01	-0.01

2Y	4.33	0.08	0.08
5Y	4.00	0.16	0.16
10Y	4.10	0.22	0.22
30Y	4.34	0.31	0.31
<b>FF Market</b>	<b>FF Disc</b>	<b>LOBB</b>	
5.33	5.50	5.40	
<b>SOFR</b>	<b>Prime</b>	<b>QBFR</b>	
5.32	8.50	5.31	

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