



A Guide to Our Consumer Analytics

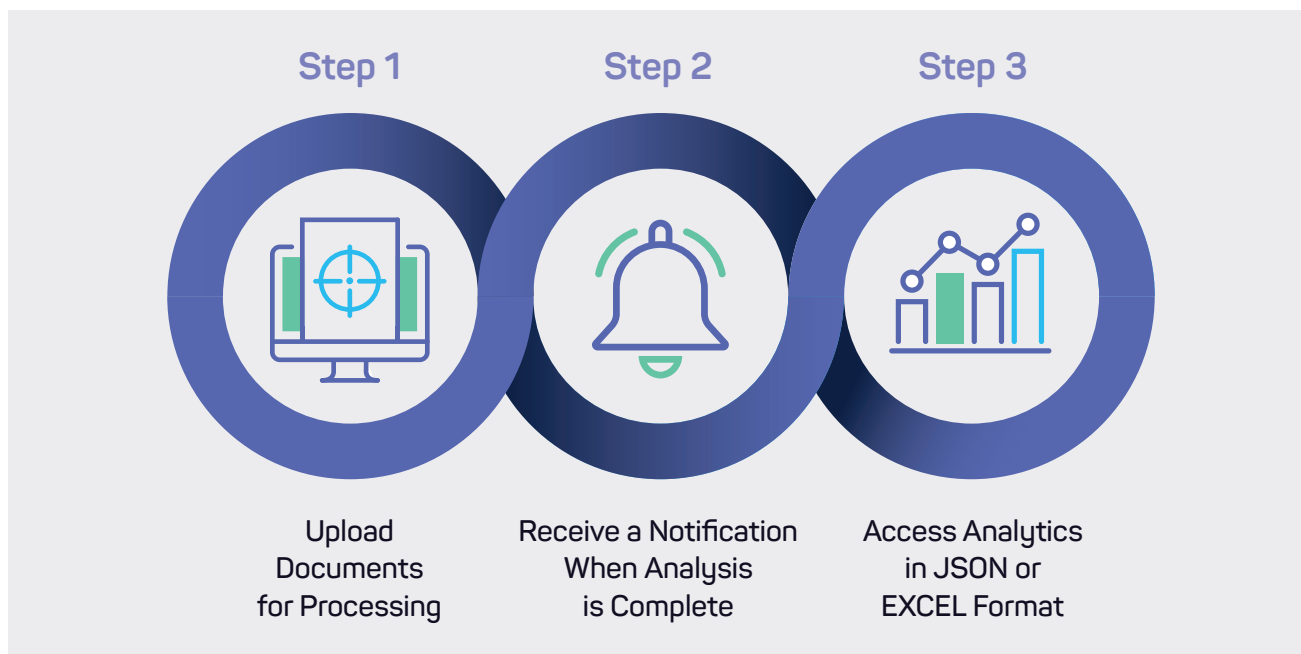
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Make sense of consumer data with cash flow analytics & multi-source verifications

As you get started, it's helpful to understand how we define and present data, so that you can use Ocrolus Consumer Analytics to inform smarter, faster decisions.

In consumer lending industries, these analytics help loan processors and underwriters estimate income for their applicants in order to manage risk, determine loan/line of credit size, price the loan, and decide whether or not to fund the loan. The following guide details Ocrolus consumer-centric metrics that can be requested for any bank account.

Three Steps to Successful Data Output:



Cash Balances

This set of analytics describes the cash balances in a customer's bank accounts. Metrics are available at points in time as well as in trended form. This information can be used to understand the liquidity position of an applicant and evaluate the cash buffer present in order to pay expenses or service debt.

| OCROLUS TERM | JSON ATTRIBUTE | DESCRIPTION | Available for objects: | |
|--|--|--|------------------------|--------------|
| | | | BOOK | BANK ACCOUNT |
| Average Daily Balance | average_daily_balance | The average daily ending balance of weekdays. | X | X |
| Average Daily Balance by Month | average_daily_balance_by_month | The average daily ending balance (including weekends) in a calendar month. | X | X |
| Average Daily Balance (Weekdays) | average_daily_balance_by_weekday | The average daily ending balance of weekdays | X | X |
| Average Daily Balance (Weekdays) by Month | average_daily_balance_weekday_by_month | The average daily balance of weekdays | X | X |
| 30 Day Cash Balance Trend | cash_balance_trend_30d | The ratio of today's cash balance to the balance 30 days ago. | | X |
| 60 Day Cash Balance Trend | cash_balance_trend_60d | The ratio of today's cash balance to the balance 60 days ago. | | X |
| 90 Day Cash Balance Trend | cash_balance_trend_90d | The ratio of today's cash balance to the balance 90 days ago. | | X |
| Running Daily Balance | daily_balances | A list of the daily ending balances for every day. | X | X |
| Running Daily Balance by Month | daily_balances_by_month | A list of the daily ending balances for every day grouped by month. | X | X |
| Running Daily Balance Weekday | daily_balances_weekday | A list of the daily ending balances for every weekday. | X | X |
| Running Daily Balance Weekday by Month | daily_balances_weekday_by_month | A list of the daily ending balances for every weekday grouped by month. | X | X |

| OCROLUS TERM | JSON ATTRIBUTE | DEFINITION | BOOK | BANK ACCOUNT |
|---|------------------------------------|---|------|--------------|
| Minimum Balance by Month | minimum_balance_by_month | The lowest end-of-day balance in a calendar month. | | X |
| List of Days Negative Balance by Month | negative_balances_by_month | The list of all days in which the daily ending balance fell below zero in a calendar month. | | X |
| List of Weekdays Negative Balance by Month | negative_balances_by_month_weekday | The list of all weekdays in which the daily ending balance fell below zero in a calendar month. | | X |

Overdrafts/NSF

These analytics identify the existence of overdraft and non-sufficient-funds transactions in a customer's bank account(s). They can be used to understand the reliability of a customer and their tendency to become overextended. Knowing the frequency of NSF/OD behavior helps lenders distinguish between customers who face episodic liquidity challenges from those who are chronically unreliable.

| OCROLUS TERM | JSON ATTRIBUTE | DESCRIPTION | Available for objects: | |
|--|---|---|------------------------|--------------|
| | | | BOOK | BANK ACCOUNT |
| NSF Count | nsf_count | The number of unique NSF & Overdraft fees for each bank account. This is especially useful with institutions that lump NSF fees into one transaction. | | X |
| NSF Count by Month | nsf_count_by_month | The number of unique NSF fees each month. This is especially useful with institutions that lump NSF fees into one transaction. | | X |
| List of NSF Transactions | nsf_transactions | A list of fees associated with non-sufficient funds and overdraft transactions. | | X |
| NSF Transactions Paid Or Negative Balance | nsf_transactions_paid_or_negative_balance | A list of fees associated with overdraft transactions. | | X |
| NSF Transactions Returned Or Not Paid | nsf_transactions_returned_or_not_paid | A list of fees associated with returned and/or unpaid items due to NSF fees. | | X |

Cash Inflows & Outflows

This extensive set of analytics is built on our ability to enhance each transaction with numerous additional points of detail. The information allows lenders to build a precise picture of the daily cash flow dynamics of their customers, including revenue, expenses, transaction categories, financial ratios, and trends.

| OCROLUS TERM | JSON ATTRIBUTE | DESCRIPTION | Available for objects: | |
|--|---------------------------------|---|------------------------|--------------|
| | | | BOOK | BANK ACCOUNT |
| Average Amount | average_amount | The average monetary value of all transactions in a statement period. | | X |
| Average Transaction Size by Month | average_by_month | The average absolute value of all transactions in a calendar month. | X | X |
| Average Daily Cash Flow | average_daily_cash_flow | Average daily cash flow over the observed period. Net Cash Flow = Credits - Debits. Important to understand if the business is running a surplus or deficit and how much free cash flow may be available for servicing new debt. | | X |
| Average Weekday Cash Flows | average_daily_cash_flow_weekday | Average daily cash flow for weekdays over the observed period. Net Cash Flow = Credits - Debits. Important to understand if the business is running a surplus or deficit and how much free cash flow may be available for servicing new debt. | | X |
| Average Deposit by Month | average_deposit_by_month | The average value of credit transactions in a calendar month. | X | X |

| OCROLUS TERM | JSON ATTRIBUTE | DEFINITION | BOOK | BANK ACCOUNT |
|--------------------------------------|---------------------------|--|------|--------------|
| Cash Flow Trend - 30 Days | cash_flow_trend_30d | The normalized change in cash flow over time. Used to measure the change in profitability for a business in different environments. $((\text{Mean cash flow over first 15 days}) - (\text{Mean cash flow over last 15 days})) / \text{standard deviation of cash flow over the period.}$ | | X |
| Cash Flow Trend - 60 Days | cash_flow_trend_60d | The normalized change in cash flow over time. Used to measure the change in profitability for a business in different environments. $((\text{Mean cash flow over first 30 days}) - (\text{Mean cash flow over last 30 days})) / \text{standard deviation of cash flow over the period.}$ | | X |
| Cash Flow Trend - 90 Days | cash_flow_trend_90d | The normalized change in cash flow over time. Used to measure the change in profitability for a business in different environments. $((\text{Mean cash flow over first 45 days}) - (\text{Mean cash flow over last 45 days})) / \text{standard deviation of cash flow over the period.}$ | | X |
| Daily Cash Flow List | daily_cash_flows | A list of net cash flows for each available date. Net Cash Flow = Credits - Debits. Important to understand if the business is running a surplus or deficit and how much free cash flow may be available for servicing new debt. | | X |
| Daily Cash Flow List by Month | daily_cash_flows_by_month | A list of net cash flows for each available date by month. | | X |

| OCROLUS TERM | JSON ATTRIBUTE | DEFINITION | BOOK | BANK ACCOUNT |
|------------------------------------|-----------------------------|---|------|--------------|
| Weekday Cash Flow List | daily_cash_flows_weekday | A list of net cash flows for each available weekday. Net Cash Flow = Credits - Debits. Credits - Debits. Important to understand if the business is running a surplus or deficit and how much free cash flow may be available for servicing new debt. | | X |
| Deposit Count | deposit_count | The total number of credit transactions. | | X |
| Max Deposit by Month | deposit_max_by_month | The value of the largest credit transaction in a calendar month. | | X |
| Min Deposit by Month | deposit_min_by_month | The value of the smallest credit transaction in a calendar month. | | X |
| Deposit Sum | deposit_sum | The total monetary value of credits. | | X |
| Total Deposits Sum by Month | deposits_sum_by_month | The sum of all credit transactions in a calendar month. | | X |
| Negative Cash Flow Dates | negative_cash_flows | List of dates where net cash flows (defined as credits - debits) are negative. | | X |
| Negative Cash Flow Weekdays | negative_cash_flows_weekday | List of weekdays where net cash flows (defined as credits - debits) are negative. | | X |
| Net Cash Flow By Month | net_cash_flows_by_month | The net cash flow by month. Net Cash Flow = Credits - Debits. Credits - Debits. | | X |

| OCROLUS TERM | JSON ATTRIBUTE | DEFINITION | BOOK | BANK ACCOUNT |
|---------------------------------------|---|--|----------|--------------|
| Recurring Inflow Ratio | recurring_vs_episodic_inflows_by_month | The ratio of incoming transactions that are recurring, demonstrating stability of revenue over time. | | X |
| Recurring Outflow Ratio | recurring_vs_episodic_outflows_by_month | The ratio of outgoing transactions that are recurring, demonstrating a likely minimum set of fixed expenses. | | X |
| Total Days | total_days | The total number of days in all statement periods captured in the bank account. | | X |
| Transaction Count | txn_count | The total number of transactions in a bank account. | X | X |
| Withdrawal Count | withdrawal_count | The total number of debit transactions. | X | X |
| Withdrawal Sum | withdrawal_sum | The total monetary value of debits. | X | X |
| Max Withdrawals by Month | withdrawals_max_by_month | The value of the largest debit transaction in a calendar month. | | X |
| Total Withdrawals Sum by Month | withdrawals_sum_by_month | The sum of all debit transactions in a calendar month. | | X |




Transaction-Level Data

Ocrologus performs deep and extensive transaction enrichment based on a combination of industry knowledge and continuously evolving machine learning. These metrics and indicators give lenders the ability to understand the banking activities of their customers in a significantly deeper way than would be possible with statements alone.

| OCROLOGUS TERM | JSON ATTRIBUTE | DESCRIPTION | Available for objects: | |
|---|-------------------------|--|------------------------|--------------|
| | | | BOOK | BANK ACCOUNT |
| Consumer Income Transactions | consumer_income_txns | List of all income transactions for a given consumer (direct deposit + gig). | | X |
| List of Interbank Transactions | interbank_transactions | A list of all transactions to/from any bank or financial institution. | | X |
| List of Deposits from Outside Sources | outside_source_deposits | The list of credit transactions that did not originate from one of the accounts within the application. | | X |
| Probable Recurring Transactions | probable_recurring_txns | A list of transactions with the same dollar value that are greater than \$10 and occur two or more times within 45 days. | | X |
| List of Transactions Ending in 5 Zeros or More | round_number_txns | A list of transactions that end in at least five zeroes, e.g., \$1,000.00. | | X |
| Transfer | transfer | The list of all transfers to/from a bank account. | | X |
| Withdrawals | withdrawals | The list of all debit transactions from a bank account. | | X |

Income

OcroLus consumer income analytics provide calculations and summaries of key income metrics for personal borrowers, including monthly and annual income, direct deposit income, and pay frequency. Our bank statement, W2 and, paystub-powered consumer analytics provide insight into the nature of income from salaried versus hourly earnings to the number of jobs and gig earnings.

| OCROLUS TERM | JSON ATTRIBUTE | DESCRIPTION | Available for objects: | |
|---|------------------------------|---|------------------------|--------------|
| | | | BOOK | BANK ACCOUNT |
|  Consumer Income by Month | consumer_income_sum_by_month | Sum of all income transactions by month. | | X |
|  Direct Deposit Income | direct_deposit_income_sum | Sum of all income transactions received through direct deposit, basically are payrolls. | | X |
|  Estimated Annual Income | estimated_annual_income | The estimated annual income of a consumer, calculated by the estimated monthly income * 12. | | X |
|  Estimated Monthly Income | estimated_monthly_income | The income of a consumer during a calendar month, estimated by the average monthly income of the observed months. | | X |
|  Gig Income | gig_income_sum | Sum of all income transactions related to gig work. | | X |
|  Number of Income Sources | number_of_income_sources | Number of distinct income sources for a given consumer. Transactions from the same source are grouped by the descriptions whose similarities are calculated using Levenshtein distance. | | X |
|  Estimated Pay Frequency | pay_frequency | An estimation of the frequency at which a consumer receives income, e.g., monthly, bimonthly, weekly, quarterly, from a particular source. | | X |

If you have any questions, or if you are interested in capturing an analytic that's not listed, our Customer Success team will be happy to help.

For any other feedback, contact
feedback@oculus.com.