Transform your business through data analysis

Master organisation data analysis

Master data analysis specifically tailored for your organisation operations with our step-by-step video tutorials.

Data-driven decision making

Leverage data-driven decision-making to significantly improve performance and identify critical financial indicators.

Financial insights

Calculate and interpret key financial ratios with confidence while spotting growth opportunities using simple visual tools.

Trend analysis

Analyse financial trends to determine what changed, why, and plan your next strategic steps with customisable templates.

Future planning

Implement scenario planning to prepare for multiple future outcomes and avoid costly data analysis mistakes.

Start now with these resources

Ready-to-use actionable checklists

Time-saving customisable templates



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What is data analysis?

Data analysis means turning the information your organisation collects into practical insights you can use to grow. Your organisation creates data every day from: sales records, customer orders, stock levels, payments and expenses.

On its own, this data can feel overwhelming. But with data analysis, you can easily spot:

Best-selling products

Busy seasons or slow months

Which location or customer group buys most

Why data analysis matters for your business



Smarter decision making

Turn raw data into clear dashboards or reports using simple tools like Excel, Google Sheets or software. Business owners and managers can make smarter decisions based on facts, not guesswork.



Understand your business better

Learn what's working, what's not, and what customers want based on facts.



Boost performance and growth

Drives improvements in five key areas:

- Innovation, Research and Design: Use insights to create better products.
- Product Development: Build new offerings based on actual market needs.
- Process Efficiency: Streamline operations and reduce waste.
- Targeted Marketing: Reach the right customers more effectively.
- Smarter Management: Make more informed internal decisions.



Turn information and data into actionable insights

Data alone has no value unless it's used. Analysis helps you solve real problems, reduce costs, serve customers better, and unlock growth opportunities.

Benefits of data analytics



Find your best customers

Focus marketing and sales on most profitable segments, leading to increased revenue.



Run your business more efficiently

Streamline processes, eliminate inefficiencies, and reduce operational costs.



Stay ahead of the competition

Use market and customer insights to adapt offerings and gain a competitive advantage.



Boost your return on investment (ROI)

Optimise marketing and resource allocation to increase profit without growing expenses.



Keep customers happy

Understand customer preferences to improve your products or services.



Prevent customers from leaving (reduce churn)

Quickly identify and address early signs of customer dissatisfaction.

What is financial data?

Think of financial data as all the numbers that show how money moves in and out of your organisation. It tells the story of your business's performance, whether you're making a profit, where your money goes, and how strong your business really is.

This data comes from many key sources:

Your daily activities

Sales records, customer invoices, supplier bills, expense receipts, payroll information, and bank transactions.

Your financial statements

These daily numbers are organised into key reports like your income statement (profit and loss), balance sheet, and cash flow statement.

Outside information

General market trends, competitor pricing and industry benchmarks (though your internal numbers are usually the first priority).

Click here to download detailed guide on key financial data

What are financial ratios?

Financial ratios turn your business numbers from your financial statements (such as the profit and loss account, balance sheet, and cash flow statement) into easy-to-understand signals that show how well your business is performing. Instead of just looking at big totals (like sales or expenses), ratios compare your numbers to highlight key insights.

Think of them as your business health check indicators; simple, smart, and powerful. Calculating and tracking key ratios is vital because it helps your organisation:



Monitor performance over time

See if key aspects like profitability or liquidity are improving or worsening compared to your own past performance.



Identify strengths and weaknesses

Quickly pinpoint areas needing attention (e.g., slow collection of receivables, low margins) or areas of strength.



Make smarter decisions

Use ratio analysis to guide decisions on pricing, cost control, investments, and financing.



Communicate with stakeholders

Ratios give banks, investors, or suppliers a quick snapshot of how healthy your business is.



Benchmark (carefully)

Comparing with industry standards is useful if available, but your own trends over time are often the best benchmark.

Key financial ratios: formulas, use and meaning

Ratio	Formula	Why it matters	Suggested interpretation
Gross profit margin	(Gross Profit / Revenue) × 100	Measures pricing power and cost control. Important for organisations with fluctuating material or labour costs.	Good if 40% or more (especially in high-profit industries). Less than 20% suggests high costs. Negotiate with suppliers or raise prices.
Net profit margin	(Net Profit / Revenue) × 100	Shows overall profitability after all expenses (e.g., rent, salaries, taxes).	Healthy if 10% or more. Less than 5% means cut costs or more revenue.
Current ratio	Current Assets / Current Liabilities	Measures ability to pay short-term bills. Crucial for organisations with lumpy or delayed cash inflows.	Aim for 1.5-2.0, as you will have enough short-term assets to cover short-term debts. Below 1.0 is risky; you may struggle to pay immediate bills (short term liabilities) therefore collect outstanding payments from clients faster or increase your cash sales.
Quick ratio	(Current Assets – Stock) / Current Liabilities	Focuses on fast-access cash (excludes stock). Useful for organisations with slow or seasonal stock sales.	Strong at 1.0 or higher. Below 0.5: collect receivables faster or sell unused stock.

Key financial ratios: formula, use and meaning

Ratio	Formula	Why it matters (clarified)	Suggested interpretation
Debt-to-equity ratio	Total Liabilities / Equity	Shows how much debt is used to fund the business. High ratios mean more risk for lenders.	Less than **1.0 is good**: primarily self-funded, favoured by lenders. **Over 2.0 is risky**: too reliant on borrowed money. Consider equity financing.
Inventory turnover	COGS / Average Inventory	Measures how often inventory is sold in a period. Lower turnover signals slow-moving stock.	Highly industry-dependent (e.g., retail 6-12x/year, manufacturing 3-5x). **Higher is good**: faster sales, better cash flow. **Lower is bad**: slow-moving stock, tied-up capital, storage costs.
Average inventory	(Opening Inventory + Closing Inventory) ÷ 2	Helps you understand how much stock your business typically holds; it is important for managing cash flow, storage costs, and procurement.	**Too high** (>3 months of sales): excessive stock, bad for cash flow. **Too low** (<1 month): risk of stock-outs and missed sales.
Days inventory	(Average Inventory COGS) × 365.	Indicates how efficiently you're turning inventory into sales. Helps optimise purchasing, avoid overstocking, and manage working capital.	**Short days** (30-60): good, indicating strong sales and efficient stock management. **Long days** (>90): slow sales, tied-up capital; may need to clear old stock.

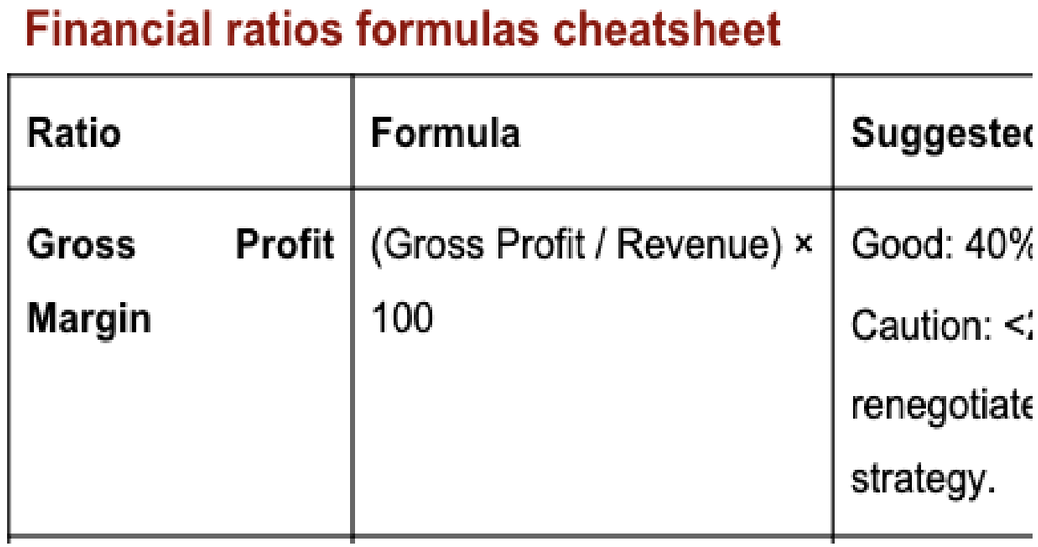
Key financial ratios: formula, use and meaning

Ratio	Formula	Why it matters (clarified)	Suggested interpretation
Days sales outstanding (DSO)	(Accounts Receivable / Credit Sales) × 365	Tracks how long it takes to collect payments. Long DSO can cause cashflow gaps.	**Goal:** Less than 45 days means quick customer payments. **Risky:** Over 60 days hurts cashflow; consider stricter credit terms or actively chasing payments.
Cash conversion cycle (CCC)	DSO + Days Inventory – Days Payable	Measures how quickly you convert purchases into cash.	**Efficient:** Less than 30 days means quickly converting investments into cash. **Inefficient:** Over 90 days means cash is tied up too long; improve customer payment and supplier payment terms.
Debt service coverage ratio (DSCR)	Net Operating Income / Total Debt Payments	Measures ability to repay debt from earnings. Important for borrowing eligibility.	**Safe:** 1.5x or higher means comfortable debt payment coverage from operations. **Risky:** Less than 1.0x means insufficient profit to repay loans; restructure debt or increase income.

Take action today

Benchmark against your own performance."Healthy" or "safe" ratio values typically vary by industry, business size, and business model. While industry averages provide context, your own historical performance often serves as the most relevant and valuable benchmark for decision-making.

- **Download your financial ratios formula cheat sheet**

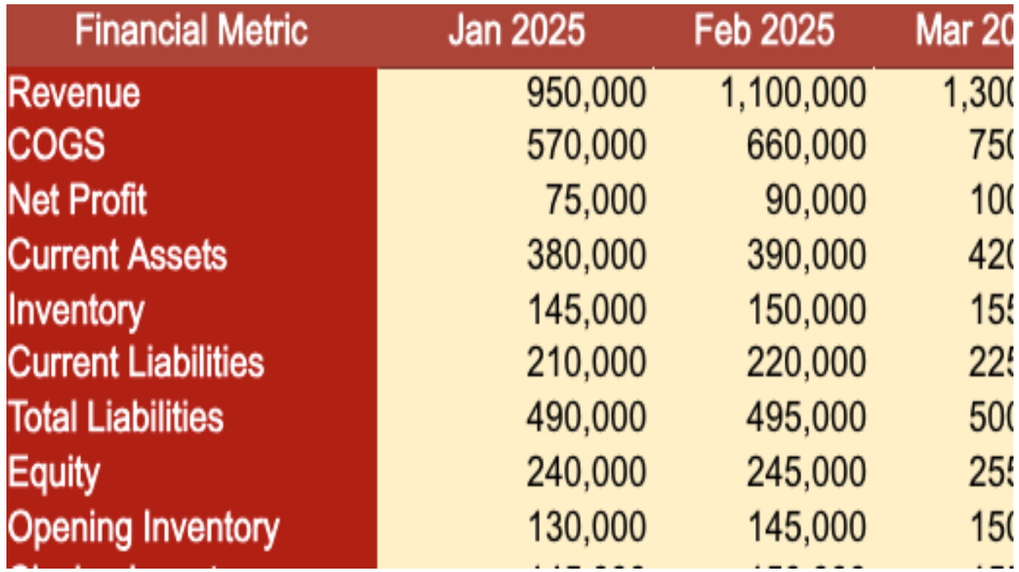


Financial ratios formulas cheatsheet

Ratio	Formula	Suggested
Gross Profit Margin	(Gross Profit / Revenue) × 100	Good: 40% Caution: <; renegotiate strategy.

Financial ratios formula cheat sheet

- **Download Your Monthly KPI Tracker Template**



Financial Metric	Jan 2025	Feb 2025	Mar 20
Revenue	950,000	1,100,000	1,30(
COGS	570,000	660,000	75(
Net Profit	75,000	90,000	10(
Current Assets	380,000	390,000	42(
Inventory	145,000	150,000	15!
Current Liabilities	210,000	220,000	22!
Total Liabilities	490,000	495,000	50(
Equity	240,000	245,000	25!
Opening Inventory	130,000	145,000	15(

Click here to download KPI tracker

Identifying trends in financial performance

Looking at raw numbers can be confusing. Data visualisation turns those numbers into clear charts and graphs, making it easier to spot trends and find useful insights. Many data analytics tools come with built-in features to create these visuals quickly.

What data visualisation does:



Converts raw data into easy-to-read charts.



Helps you see patterns and trends at a glance.



Makes complex information simple to understand.

Examples of data visualisation formats

Visualisation type	Best for	Advantages	Disadvantages
Line chart	Trends over time (e.g., sales growth)	• Clearly shows upward/downward trends • Good for comparing multiple series	• Can get cluttered with too many lines • Not ideal for categorical comparisons
Bar graph	Comparing categories (e.g., products)	• Easy to read and interpret • Works well for rankings	• Hard to read with too many bars • Less effective for time-based trends
Pie chart	Showing proportions (e.g., expenses)	• Simple for part-to-whole comparisons • Visually intuitive	• Confusing with >five categories • Difficult to compare small slices
Scatter plot	Relationships (e.g., ad spend vs. sales)	• Reveals correlations and outliers • Helps spot patterns	• Requires statistical knowledge • Misleading if axes are scaled improperly
Dashboard	Multi-metric overview (e.g., key performance indicators)	• Real-time tracking • Customisable for different teams	• Complex to set up • Risk of information overload

Steps to data visualisation

1. Define clear objectives

Determine your goals: identify growth, optimise processes, or reduce costs.

Clear goals guide your strategy.

2. Prepare your data

Identify sources, clean, organise, and verify data accuracy. Quality data leads to quality decisions.

3. Select appropriate tools

Choose software based on your team's skills and budget, from spreadsheets to BI platforms.

4. Create effective visualisations

Match formats to needs: lines for trends, bars for comparisons, pies for proportions.

5. Analyse and interpret key patterns

Examine data for growth, cycles, and anomalies.

6. Collaborate and share insights

Present findings to teams and establish KPIs based on feedback.

7. Monitor and refine

Regularly assess visualisation effectiveness and make iterative improvements.

Growth signals to track in an organisation

To measure if your business is truly growing, track signals in five key areas: revenue, profitability, assets, customers, and efficiency. These indicators show not just where money is coming from, but also whether it is being used smartly and sustainably.



Revenue

Are your sales improving?



Profitability

Are you making real profit from your sales?



Customers

Analyse customer retention and growth.



Efficiency

Evaluate operational scalability.

Revenue growth indicators to track

Are your sales improving?



Monthly/quarterly trends

Compare sales month-to-month or quarterly and see when business is busiest or slowest.



Year-on-year (YoY)

Compare this year's sales to last year's and work out if you're actually growing.



Revenue by product/service

Look at what products or services bring in the most money. Focus on the top 20% that generate the highest returns.



Customer acquisition rate

Track how many new customers you're getting each week or month. If it's dropping, investigate why and rectify it.

Profitability indicators

Are you making real profit from your sales?



Net profit margin

What remains after all costs, taxes, and loans are paid. This indicates whether your business efforts are truly worthwhile.

Formula: Net Profit Margin = (Net Profit / Revenue) x 100%



Operating profit margin

Your profit after covering day-to-day expenses like rent, salaries, and marketing. This reveals if operational costs are eroding your earnings.

Formula: Operating Profit Margin = (Operating Profit / Revenue) x 100%



Gross profit margin

The money retained after covering direct production costs. This helps identify if materials or labour costs are too high relative to pricing.

Formula: Gross Profit Margin = (Gross Profit / Revenue) x 100%

Asset growth and efficiency indicators

Are you using your resources wisely to drive sustainable growth?



Return on assets (ROA)

Measures how efficiently your equipment, capital, and property generate profit. Higher percentages indicate better asset utilisation and effective resource management.

Formula: ROA = (Net Income / Total Assets) x 100%



Inventory turnover ratio

Tracks how quickly your products sell. Higher turnover means less capital tied up in unsold inventory, improving cash flow and reducing storage costs.

Formula: Inventory Turnover Ratio = Cost of Goods Sold / Average Inventory



Accounts receivable turnover

Measures how efficiently you collect payments from customers. Faster collections than disbursements create a positive cash flow for operations and enable sustainable growth investments.

Formula: Accounts Receivable Turnover = Net Credit Sales / Average Accounts Receivable

Track these metrics monthly to identify optimisation opportunities and ensure your business assets are working effectively towards your growth goals.

Operational scalability

Are you becoming more efficient as you grow?



Revenue per employee

Divide your total revenue by the number of employees. If this metric increases as you hire, your team is becoming more productive, and your business model is scaling efficiently.



Cost per unit

Track production costs divided by units produced. This should decrease over time as volume increases, indicating successful economies of scale and improved production efficiency.



Fulfilment time

Measure how quickly you can deliver products or services to customers. Decreasing fulfilment times while maintaining quality indicates improving operational processes and systems.

Monitor these metrics monthly to identify bottlenecks and ensure your business can handle growth without proportional increases in costs or complexity.

Customer and market expansion

Are you effectively growing and retaining your customer base?



Customer retention rate

Track the percentage of customers who continue to purchase from you over specific time periods. A healthy business should maintain 80% to 90% retention. If yours falls below this benchmark, investigate your customer experience, product quality, or implement loyalty programmes.

Formula: Customer Retention Rate = ((Customers at End of Period - New Customers Acquired During Period) / Customers at Start of Period) x 100%



Top revenue generators

Identify the 20% of products or services that drive 80% of your revenue. Focus your resources on optimising and expanding these high-performing offerings while strategically evaluating underperforming items for potential improvements or phase-out.

Warning signs to track

Warning sign	What it means	Immediate action
Operating cash flow ↓ - despite sales ↑	You're selling more but have less cash (e.g., customers pay late).	Tighten credit terms or offer early payment discounts.
Days Sales Outstanding (DSO) ↑	Customers take longer to pay invoices.	Follow up on overdue accounts; shorten payment terms for slow payers.
Frequent overdrafts/late payments	Cash reserves are too low to cover bills.	Build a three-to-six-month cash buffer; delay non-urgent purchases.
Declining gross margins	Production/supply costs are rising faster than prices.	Renegotiate supplier contracts or raise prices.
Overhead costs rising more than the rate that revenue is	Rent, salaries, or admin costs are eating into profits.	Automate tasks, downsize office space, or renegotiate leases.
Net losses for 2+ quarters	Business is spending more than it earns.	Cut non-essential costs (e.g., marketing, travel) or pivot strategy.

More warning signs to track

Warning sign	What it means	Immediate action
Current ratio < 1.0	Can't pay short-term bills with current assets (cash, inventory, receivables).	Sell old inventory, collect receivables faster, or reduce debt.
Debt-to-equity ratio ↑	Relying too much on loans vs. owner's funds.	Pause new borrowing; boost equity through profits or investor funds.
Obsolete inventory buildup	Cash is stuck in unsold stock.	Clear stock with discounts/donations (tax benefits).
Employee productivity ↓	Sales/output per employee is dropping.	Train staff, automate repetitive tasks, or streamline workflows.
Customer churn rate ↑	More customers are leaving (e.g., 15% monthly).	Survey customers to fix service issues; launch loyalty programmes.
Frequent stockouts/delivery delays	Poor planning leads to missed sales or unhappy customers.	Use demand forecasting tools; hire temporary staff during peak seasons.

Making decisions based on identified trends

Diagnose the change

Identify exactly what shifted in your key metrics (e.g., "Gross margin dropped eight per cent last quarter") to pinpoint where action is needed.

Conduct root cause analysis

Investigate possible causes behind the change by reviewing supplier costs, pricing strategies, or operational inefficiencies.

Plan targeted actions

Design a solution directly linked to the root cause (e.g., renegotiate supplier contracts for margin erosion).

Implement and track progress

Roll out your plan with 30/60/90-day check-ins and monitor leading indicators (e.g., weekly customer feedback for churn reduction).

Adjust and optimise

Refine your approach based on results to ensure continuous improvement (e.g., tweak pricing if margins do not recover).

Understanding the 'what changed, why and what next' method

It is a simple, three-step framework for turning data insights into actionable business decisions.

1. **What changed?:** Identify the specific shift in your metrics or trends. For example, your gross profit margin dropped from 40% to 32% last quarter. This helps pinpoint exactly where the problem or opportunity lies and avoid vague assumptions (e.g., "profits are down").
2. **Why did it change?:** Investigate the root cause behind the shift. Consider supplier costs (did raw material prices rise?), pricing (are we discounting too aggressively?), operations (are production delays increasing costs?), or external factors (did a competitor enter the market?). For example, "The margin drop occurred because Supplier X raised prices by 20%."
3. **What next?:** Take action to fix the problem or capitalise on the opportunity. Create a plan:

Scenario	Immediate action	Long-term fix
Margin drop due to costs	Switch to a cheaper supplier	Diversify supplier base
Rising customer churn	Improve response time to complaints	Invest in CRM software

Key takeaways on tracking your financial performance

Use data visualisation to transform complex numbers into actionable insights

Choose the right visualisation format for your specific needs.

Track comprehensive growth signals across multiple business areas

Monitor revenue, profitability, assets, customers and operational efficiency.

Pay attention to warning signs that indicate potential problems

Address issues early before they become major challenges.

Apply the "What changed, why and what next" framework

Turn data insights into concrete business decisions and actions.

Scenario planning and data analysis

In today's uncertain business environment, scenario planning has become essential for organisational resilience. This strategic approach enables business to anticipate multiple future outcomes, test critical assumptions, and develop adaptive strategies, rather than relying on single-future predictions.

Anticipate change

Explore potential scenarios to stay ahead of market disruptions.

Build resilience

Develop flexible strategies that can withstand various future conditions.

Transform challenges

Turn uncertainty into opportunity through strategic foresight.

Take action today: Begin by identifying your organisation's critical uncertainties and developing three distinct scenarios to test your current strategy's resilience. Schedule a planning workshop within the next 30 days.

5-step scenario planning process

1. Define your focus

Example: "How might a recession impact our sales and cash flow over the next 12 months?" Identify critical uncertainties (e.g., customer demand, supply chain costs).

2. Research key drivers

Analyse factors that could shape your business: Internal: Staffing, production capacity, and debt levels. External: Market trends, regulations, and competitor moves.

3. Build plausible scenarios

Create three to four realistic stories about the future:

Scenario	Assumptions	Triggers
Best case	20% sales growth, stable supply costs	New product launch succeeds
Worst case	15% sales drop, supplier prices jump 30%	Supply chain disruption
Most likely	5% growth, moderate inflation	Steady market conditions

5-step scenario planning process continued

4. Analyse impacts

For each scenario, assess: cash flow needs, staffing requirements, inventory adjustments and profitability risks.

5. Develop action plans

Scenario	Immediate actions	Long-term prep
Worst case	Reduce non-essential spending	Secure a line of credit
Best case	Hire temporary staff	Negotiate bulk supplier discounts

Common data analysis mistakes and how to avoid them



No clear objectives

What happens: You waste time analysing the wrong data.

How to fix it: Define specific questions upfront (e.g., "Why are costs rising?").



Using wrong visualisations

What happens: Patterns are hidden or confusing.

How to fix it: Match charts to goals: trends to line charts, comparisons to bar graphs.



Ignoring data quality

What happens: Your results are misleading.

How to fix it: Clean data: remove duplicates, fix errors, and check data sources.



Overlooking context

What happens: You misunderstand what the data means.

How to fix it: Compare to past performance or industry benchmarks.

Common data analysis mistakes and how to avoid them



Confirmation bias

What happens: You only see what you expect to see.

How to fix it: Test different causes for changes not just your assumptions.



Ignoring outliers

What happens: Anomalies skew your results.

How to fix it: Look into big spikes/drops to understand them.



Overcomplicating analysis

What happens: You get stuck on analysis instead of acting.

How to fix it: Focus on two to three key metrics first, then expand.



No follow-up on insights

What happens: Wasted effort, no improvement.

How to fix it: Set action steps and timelines (e.g., fix pricing in 30 days).

Data analysis resources at your fingertips

Financial Metric	Jan 2025	Feb 2025	Mar 20
Revenue	950,000	1,100,000	1,300
COGS	570,000	660,000	750
Net Profit	75,000	90,000	100
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Inventory	145,000	150,000	155
Current Liabilities	210,000	220,000	225
Total Liabilities	490,000	495,000	500
Equity	240,000	245,000	255
Opening Inventory	130,000	145,000	150

Click here to download key financial ratios monthly tracker

Financial ratios formulas cheatsheet

Ratio	Formula	Suggested
Gross Profit Margin	(Gross Profit / Revenue) × 100	Good: 40% Caution: <2 renegotiate strategy.

Financial ratios formulas cheatsheet

Data analysis resources at your fingertips

Here's a quick guide to the key financial data that every organisation should know and monitor:

Category	Subcategory	Definition / Description
Revenue	Operating Revenue	Income from core business operations (e.g., product sales, service fees).
	Non-operating Revenue	Income from non-core activities (e.g., interest, rent, royalties).

Financial data that every organisation should monitor