Business Metrics Lesson: Terminology and Formulas

Metric	Formula	Commonly Used Alternate Terms
Marketing		
Click through rate (CTR)	(Clicks/ Impressions) * 100	
Cost Per Click (CPC)	Cost of advertising on the source platform / Number of people who clicked on that ad	
Cost Per Lead (CPL)	Cost of advertising on the source platform / Total number of leads	
Customer Acquisition Cost (CAC)	(Total marketing expenses + total sales expenses and salaries)/ # of customers acquired	
Marketing & Financial		
Cost Per Acquisition (CPA)	(Marketing and Sales Cost)/ number of new leads customers	
Life Time Value (LTV)	Average Sale Revenue x Number of Repeat Sales x Expected Retention Time x Profit Margin	
Average Sale Revenue	(Total customer revenue/ Number of purchases in the cycle)	
Total Sale Revenue Per Cycle	Revenue earned from customer per purchase cycle	
Number of Sales Per Purchase Cycle	Number of times customer buys during the purchase cycle	

Cost Per Acquisition	(Cost of marketing and sales)/ number of new leadsk	
Expected Retention Time	Amount of time (measured in purchasing cycles) you expect to retain the customer.	
Average Sale Revenue	(Total customer revenue/ Number of purchases in the cycle)	
Profit Margin (%) Per Customer	((Average Sale - Average Cost of Sale) / Average Sale) x 100	
Growth		
Stickiness	Daily Active Users/ Monthly Active Users	
Churn rate	(Customers beginning of month - Customers end of month) / Customers beginning of month	
Financial		
Revenue	Money that a company makes from the sales of its products and services	
Cost of Goods Sold	Direct costs the company incurs to develop and product the product or service being sold	Cost of Sales Cost of Revenue
Gross Profit	Revenue - Cost of Goods Sold	
Selling, General and Administrative expenses	Selling, General and Administrative expenses Marketing, sale commissions and salaries for office staff, supplies, computers, legal expenses, rent, utilities, taxes and interests on any loans). SG&A typically exclude research and development expenses.	Operating Expenses

Total Operating Expenses	Expenses incurred outside of direct manufacturing costs	
Operating Profit	Gross Profit - Total Operating Expenses	Operating Income, Earnings Before Interest and Tax (EBIT)
Net Profit	Operating Profit - (Interest + Taxes)	Net Income
Gross Margin	(Total Sales Revenue – Cost of Goods Sold) / Total Sales Revenue	
Contribution Margin	(Revenue - Variable Costs) / Total units sold	

Overarching Themes
Businesses use Key Performance Indicators to track how they are performing on key goals or objectives.
The Marketing Funnel captures the various stages in the customer's journey. At the top of the funnel, it captures the impressions, clicks, leads and conversions at the bottom of the funnel.
Optimizing the funnel refers to maximizing the conversion rate at each level of the funnel.
The Sales Funnel captures the various stages in the sales cycle. At the top of the funnel, it captures the prospects, then the leads and qualified leads, and ends with bookings or closed deals at the bottom of the funnel.
It is important to look at the distribution of the data to understand if the measures of central tendency represent a normal distribution. Looking at the distribution and measures of central tendency is a critical step of the data analysis process.
Data should be examined split across cohorts, business cycles, time, product lines, regions and other grouping criteria to fully understand the data. It is critical to slice the data across various factors to make sense of the data and make recommendations.
Metrics
Marketing

Click through rate (CTR) is an indication of whether the ad campaign is generating enough interest in potential customers. When the CTR increases, it is an indicator of an effective and interesting content in your ad campaign and that maybe you should increase the number of impressions for that ad.
Cost Per Click (CPC) is an indicator of the cost effectiveness of the ad platform and a useful tool to compare and strategize about which marketing platforms is yielding higher impression and reach and resulting in potential leads.
Cost Per Lead (CPL) is an indicator of the cost effectiveness of the ad platform and a useful tool to compare and strategize about which marketing platforms yielded more leads.
Customer Acquisition Cost (CAC) is a useful metric used to get an estimate of how much it cost us to acquire the customer in the period the money was spent to reach out to them.
Marketing and Financial

Cost Per Acquisition (CPA) allows a business to gauge whether the marketing campaign is generating enough potential leads.
Life Time Value (LTV) allows you to focus on audiences and potential customers that will generate higher LTVs with minimum customer acquisition cost. There are several ways to calculate the Life Time Value and it is best to calculate the LTV using different ways to arrive at the average LTV for a customer.
Growth

Stickiness indicates whether the customers are staying and returning to the website frequently enough. It is a good measure of potential growth of the business.
Churn rate is a measure of declining growth and business aim to have a higher growth rate than churn rate. It is a measure of whether the business is retaining the acquired customers.
Financial

The Profit and Loss Statement, also called income statement, is one type of financial statement that shows a company's performance and financial position. needed to create the P&L statement are:
Revenue is the money that your company makes from the sales of your products and services
Cost of Goods Sold OR Cost of Sales are the direct costs the company incurs to develop and product the product or service being sold
Gross Profit is the difference between the revenue and COGS
Selling, General and Administrative expenses capture a wide range of expenses, from administrative, sales commissions, supplies, legal fees, rent, utilities, taxes, and interests. It is used synonymously with Operating expenses. SG&A typically exclude research and development expenses.
Operating Profit is the difference between gross profit and total operating expenses.
Net Income is operating profit minus interest and tax expenses.
Gross Margin tells business executives what percentage of each revenue dollar is available to cover operating expenses after the COGS have been accounted for.