

## Glossary by Segment

### Profitability

**0-level inventory (potential opportunity cost)** - When a product is "sold out" and none is available were a potential new customer to request it.

**annualized continuously compounded return** -  $\frac{\ln(\frac{p_1}{p_0})}{n}$

Where,

$p_1 = \text{Price at time } t_1$

$p_0 = \text{Price at time } t_0$

$n = \text{Number of years}$

**annualized discrete return** -  $(\frac{p_1}{p_0})^{(\frac{1}{n})} - 1$

Where,

$p_1 = \text{Price at time } t_1$

$p_0 = \text{Price at time } t_0$

$n = \text{Number of years}$

**capital expenditure** - Synonym for capital investment.

**complete wastage** - When a product or service loses all value if not sold by a certain date. Examples are hotel rooms and airline seats.

**continuously compounded return** -  $\ln(\frac{p_1}{p_0})$

Where,

$p_1 = \text{Price at time } t_1$

$p_0 = \text{Price at time } t_0$

**cost of goods sold** - Costs that are allocated to each unit of production.

**cost of goods sold - P&L Item** - The standard accounting calculation of what it costs to manufacture a given unit of a product.

**customer loyalty** - The fact that repeat customers are typically motivated by more than only lowest price alone - they have positive associations with the brand.

**days inventory** - The average number of days between when a product is completed (or arrives at a retail location) and when it is sold.

**depreciation** - Accounting methodology for reducing the value of a capital investment over time and allocating that expenditure to products or services produced.

**discrete return** -  $\frac{p_1}{p_0} - 1$

Where,

$p_1 = \text{Price at time } t_1$

$p_0 = \text{Price at time } t_0$

**efficiency** - Delivering products or services of consistent quality while minimizing the cost of doing so.

**excess return (over benchmark)** - The manager's return minus the return of their designated benchmark, usually an index of the stocks from which they chose - their "universe."

**excess return (over risk-free rate)** - An investment return minus the return offered by stable governments for bonds in their own currency - this return is considered to have no default risk and so have zero volatility of return.

**expiration - "sell-by" dates** - Legal requirements that a product can only be sold within a certain time interval.

**fixed costs** - Costs that do not increase or decrease with small changes in production. An example are salaries for current full-time employees.

**general and administrative (G&A) expenses** - Overhead not directly tied to individual products or services - for example, rent, utilities, insurance,

required business licenses, salaries of central office employees.

**geometric mean return** - For a series of various returns  $r_1, r_2, \dots, r_n$ , the geometric mean return is defined below:  $\sqrt[n]{(1 + r_1)(1 + r_2)\dots(1 + r_n)} - 1$   
 $r_i = \text{rate of return } i$   
 $n = \text{number of periods}$

**gross profit** - Usually refers to the difference between the sales price of a product and its marginal cost. Does not include indirect costs that should be allocated to the product to determine net profits.

**internal rate of return (IRR)** - Rate on which the present values for the cash inflows equalize to the present value of the cash outflow(s) as defined below:

$$\frac{\text{Payment 1}}{(1+r)^{t_1-1}} + \frac{\text{Payment 2}}{(1+r)^{t_2-t}} \dots \frac{\text{Payment } n}{(1+r)^{t_n-t}} = \frac{\text{Payment out}}{(1+r)^{t_{out}-t}}$$

**inventory** - Finished goods on hand and not yet sold.

**inventory management** - The optimization process of simultaneously minimizing days inventory while avoiding the opportunity cost of having zero inventory when more product could be sold.

**inventory on hand - (value as balance sheet item)** - The value of inventory on hand at a given moment in time (usually the end of the fiscal or calendar year).

**inventory turnaround - same as inventory turnover** - Synonym for inventory turnover.

**inventory turnover = 365/days' inventory** - The inverse of days' inventory - simply calculates how many times in a year a given product on average is delivered and sold to a retail location, based on days' inventory.

**leverage** - Using borrowed money to buy an asset.

**logistics** - Planning for all physical stages of a commercial enterprise from delivery of raw materials to a factory through delivery of products to customers.

**"long-only" funds** - Funds, such as U.S. equity mutual funds, that are forbidden by rule from investing in options, or in selling shares "short" in order to make money if their price goes down.

**marginal profit** - Profit per one additional unit of production.

**market differentiation** - The ways in which a product or service is described as being different than competitive offerings.

**net earnings** - Synonym for profits.

**obsolescence** - When a product is no longer in demand due to newer, better, or equivalent but less expensive, alternatives being available.

**occupancy rates** - The percentage of rooms in a hotel that are booked by paying customers on a given night.

**operational metrics** - Metrics related to production, and in particular, to production efficiency.

**profit** - The positive difference between revenue and expenses, using standard accounting methods for capital expenditures.

**profitability** - Net Income, or gross sales minus all accounted expenses during a certain time period.

**recurring-revenue customers** - Customers who buy again repeatedly after a first sale.

**return on equity** - The investment return on an investor's cash. For example, an investment that returns 5% would have a 5% "return on equity" if it were purchased for cash. The same investment, if purchased 50% with investor's cash and 50% with money borrowed at 1% interest, would have a return on equity of 9%.

**spoilage** - The portion of inventory of a perishable product that becomes unsaleable because it is held too long.

**straight line depreciation** - Depreciation of the same amount over each of several time periods: for example, 20% reduction in value over each of 5 years.

**sunk cost** - Money already spent - such as the cost of an empty hotel room even absent the variable costs of occupancy.

**tracking error** - The standard deviation of excess returns (difference in returns) between a fund manager's performance and their designated benchmark.

**user experience** - The subjective quality of a visitor's interactions with a web site - is the web site clear, informative, easy to navigate, or confusing, unhelpful, and difficult to navigate?

**variable costs** - Costs that go up when production increases and go down when production decreases.

**wastage** - The portion of inventory that becomes unsaleable because it is damaged or lost before sale.

**efficient market** - A market, such as the U.S. public equities market, where active investors rarely outperform a passive index of the market assets. The efficient markets theory states that this failure is because the information that moves prices is available to everyone and stocks already reflect this information in their market prices - they are priced "efficiently."

## Revenue

**actual CPC** - Because winning an AdWords auction only requires paying \$0.01 more than the next highest bidder, Actual CPC will be lower than Max CPC - especially when an advertiser has a high "quality score."

**ad relevance** - A metric developed by Google that is based on how closely advertisement text relates to the viewers original search terms.

**booking revenue (a completed sale)** - When a commitment to buy becomes contractually enforceable and is recorded under accounting rules.

**browsing (to "view" a book in Amazon)** - Clicking on the link referencing a book to the web page with more detailed information about it.

**cash flow** - How cash "on hand" - meaning in the Company's bank accounts - has changed over a give time interval.

**click-stream** - The exact path a visitor follows through a website - what they view, how much they spend on each page visited and etc.

**click-through** - When a web visitor clicks on an advertisement or sponsored link and arrives at the "landing page" of the sponsor.

**click-stream** - The exact path a visitor follows through a web site - what do they view, where do they spend the most time, etc.

**co-occurring sales** - When someone buys two items during the same store visit or web session.

**conversion** - When a web visitor becomes a paying customer. Also used to refer to a lesser step when a visitor registers and provides identity information.

**conversion rate (to revenues)** - The percentage of visitors not previously customers who become customers.

**correct decision-maker** - Someone who has the budget and authority to decide on purchases and sign purchase orders.

**duration** - The time interval that a visitor spends on some part of a company's site.

**expected click-through rate** - When used to generate a "Quality Score" - Google's estimate, based on historical data or mathematical models, of the percentage of viewers who will click-through a particular sponsored link.

**expression of interest** - When a decision-maker informs you that they want to engage with you about the possibility of buying your product.

**floor rate** - The minimal price of a room, based on accounting breakeven - its share of fixed costs plus variable cost.

**frequently bought together** - An Amazon metric for items with a high likelihood of co-occurring sales.

**gatekeeper** - People whose job it is to stand between you and the person who will ultimately make a decision.

**Google Ad Rank** - Google's system for rating a company's desirability as bidder on a sponsored link. It combines the bid expected click-through rate, ad quality and landing page experience.

**landing page experience** - A metric developed by Google that is based on how focused, factual, current, and informative the landing page text is, relative to key word and sponsored link text.

**latency** - The time delay in a computerized response caused by processing requirements or distance a signal must travel.

**lead** - A person whose name and contact information you know, whom you believe may be interested in buying something from you.

**LTV - various measures** - Life Time Value - a metric intended to estimate the discounted present value of all future revenues from a new customer. It is calculated a number of different ways depending on context. What method to use is a matter of individual preference and judgment.

**manager skill** - Manager skill is usually defined as the ability to consistently generate an excess return over the manager's benchmark, without excessive additional volatility - the risk-adjusted return should be better than

the benchmark index.

**max CPC** - The maximum cost per click-through that a Google AdWords bidder is theoretically willing to pay.

**page-load time** - How much time is required for a web page to be complete and usable from the point of view of a visitor.

**Price per click-through (CPC)** - Cost per Click-through - for ads where the advertiser pays only when a potential customer clicks through to the advertiser's landing page.

**promotional rate** - A rate between the rack rate and floor rate, typically offered to repeat customers on a limited-time basis.

**qualified lead** - A lead that you have determined to have the budget and the decision-making authority to purchase your product or service.

**quality score** - A metric developed by Google that combines expected click-through rates, "ad relevance" and "landing page experience."

**rack price** - The official, list price of a hotel room.

**retweet** - A tweet that originates with one author and is reposted by another - the format is RT@username. Retweets indicate that the retweeting party (a holder of a Twitter account) thinks your tweet will be of interest to his or her audience as well as your own.

**revenue** - Gross income, the dollar amount of sales booked during a certain time period.

**sales "funnel"** - The metrics used to track the steps in the process of converting individuals or Companies with a potential interest in one's product or service into paying customers.

**sales & marketing** - The process of creating positive awareness about a company's products or services in a target audience, and converting members of that audience into paying customers.



**segmentation** - The process of classifying one's current customers or target customers by recognizable, traceable attributes such as how much on average they purchase in a year.

**sentiment analysis** - The algorithmic study of large amounts of web-based text to evaluate public opinion - and any changes in public opinion - about a product or company.

**soft-circle sale** - A verbal commitment to buy that is not yet an enforceable contract.

**tweet** - A 140-character message in response to Twitter's "What are you doing?"

**user experience (UX)** -

**user session** - One visitor's single interaction with a web site from beginning to end.

**negative float** - Needing working capital to make and deliver products or services for which one is paid cash later.

**positive float** - Holding customer cash for a product or service to be delivered later. The classic example is insurance.

## **Risk**

**correlation with equity markets** - What is the linear correlation of returns between an investment and its appropriate stock market benchmark over time.

**accounts receivable** - Monies a company's customers owe it for products or services we have already delivered.

**burn rate** - Actual net negative cash flow for a time interval, typically a month, or projected net negative cash flow for the next month.

**churn rate** - The portion of customers who leave within a year.

**default** - Failure to pay interest or principal on a debt.

**information ratio** - The ratio of annualized excess returns over a manager's benchmark, divided by the standard deviation of the time series of excess returns.

**insolvent** - When a company does not have the cash to meet its immediate obligations to creditors.

**leverage** - Purchasing an asset, in particular an investment asset, partly or completely with borrowed money.

**linearity of log wealth** - Describes how linear is the return when evaluated on a log wealth scale. A continuously compounded rate of return that never varies (volatility of 0) will have a linear correlation of 1.

**reputational risk** - Events that can damage a company's brand, goodwill, or future attractiveness to customers and potential customers.

**risk** - The chance of a major negative event such as a product recall, default on a debt, insolvency, etc. In finance, "risk" is often also used to refer to volatility (standard deviation) of returns from an investment.

**risk-free rate of return** - An investment return minus the return offered by stable governments for bonds in their own currency - this return is considered to have no default risk and so have zero volatility of return.

**runway (for a company)** - Net cash on hand divided by current monthly burn rate gives the number of months a company can survive under present conditions.

**sharpe ratio** - the ratio of a manager's excess return over the risk-free rate (the manager return minus the risk-free return) divided by the volatility

of the manager's return.

**unrecoverable (debt)** - Money loaned out that will never be repaid.

**volatility of returns** - The standard deviation of a time series of investment returns.

**years to breakeven** - How many years, at average return, it would take to get back to breakeven from the maximum draw-down. Calculated as  $|maxdraw - downpeak - to - valley| / annualizedrateofreturn$ .

## Companies

Accenture

Adobe (Photoshop)

Airbnb

Amazon.com

AMD

Apple

Argus Information & Advisory Services

AWS

Bain

Boston Consulting Group

Cisco

**Comscore**

**Deloitte Consulting**

**Equifax**

**Experian**

**Facebook**

**Fico (FairIsaac)**

**Google**

**Google Compute Layer**

**IBM**

**IBM Watson**

**Intel**

**LexisNexis**

**LinkedIn**

**Matlab**

**McKinsey**

**Mead Data Central**

**Microsoft**

**MS Azure**

**Nielson**

Nook

Opera Solutions

Oracle

Palantir

Salesforce.com

SAP

SAS

Symantec

Tableau

Teradata

Texas Instruments

TransUnion

Uber

VMWare

Walmart

Zillow

## Software/Programming languages

C++

Hadoop

Hive

Java

Javascript

Mapreduce

Matlab

Python

R

SAS

Spark

SQL