Software

Software refers to a set of instructions given to the computer. Software coordinates and directs the flow of information, enabling interactions between the user and the computer. These instructions are usually written in a structured language the computer understands, also known as a **Programming Language**.

Categories

There are two general categories of software: **Operating Systems Software** (OS) and **Application Software** (apps). Operating system software provides lower-level instructions to help the computer do its job, while application software helps the user perform some task. Common examples of operating system software include *Microsoft Windows, Mac OS, Linux, iOS,* and *Android.* Common examples of application software include the *MS Office* suite of applications, the *Google Docs* suite of applications, video games like *Pokemon*, entertainment software like *Pandora, Netflix* and *Spotify*, as well as social networking applications like *Facebook, Twitter, Instagram.*

Business Models

An organization can derive value by using software provided by others, or by creating its own software. An organization which distributes its own software can make money by charging other people and organizations to use the software (e.g. *Microsoft Windows*), and/or by charging advertisers to place ads inside the software (e.g. *facebook.com* and *mail.google.com*). What other business models can you think of?

Distribution Models

Software is most commonly distributed in one of two ways: installation or **Software-as-a-Service** (SaaS). Installed software runs on the machine it was installed on, while software-as-a-service generally runs on one or more machines operated by the software distributor. Examples of installing software include downloading it from the distributor's website onto your personal computer or downloading it from an app store onto your mobile device. Examples of software-as-a-service include online web applications such as *mail.google.com*, *facebook.com*, *twitter.com*, *netflix.com*, *slack.com*, *spotify.com*, *pandora.com*, etc. As you can see, some providers might offer multiple distribution options for their software.

Licensing Models

Proprietary if the end user can not see its source code, or Open Source if the end user can see its source code. Most software is proprietary. Examples of proprietary software include *Microsoft Word*, *GMail*, and *Google Docs*. Just because software is free to use, does not mean it is open source. Example open source software includes the *Linux* operating system, the *Firefox* web browser, the *WordPress* blogging platform, most database management software like *MySQL*, most programming languages and tools like *Python* and *Ruby*, and any repository you see online on Github. Even if a software distributor does not open-source the end product's source code, it may open-source various tools it used to develop the end product. Facebook's *React* framework is a great example of this.

See also: Software Licensing.