

Who they are?

Who exactly do I mean with “they”. I speak about surveillance capitalists. Companies which offer products and services to extract our behavioral user data and make predictions and modifications to our future behavior.

Surveillance capitalists see your behavior data as their proprietary and use the data to feed machine intelligence to fabricate sophisticated prediction products. These prediction products are then traded on behavioral futures market places. The more data is fed into this new machine intelligence-based “means of production,” the more powerful are its prediction products.

What they know about you?

- Location
- Search History
- Installed apps on your phone
- Websites you visit
- They also monitor your social media posts
- Private conversations
- Emails
- What you buy
- All the metadata that comes with it and the list goes on and on.

Who they are?

Who exactly do I mean with “they”. I speak about surveillance capitalists. Companies which offer products and services to extract our behavioral user data and make predictions and modifications to our future behavior.

Surveillance capitalists see your behavior data as their proprietary and use the data to feed machine intelligence to fabricate sophisticated prediction products. These prediction products are then traded on behavioral futures market places. The more data is fed into this new machine intelligence-based “means of production,” the more powerful are its prediction products.

What they know about you?

- Location
- Search History
- Installed apps on your phone
- Websites you visit
- They also monitor your social media posts
- Private conversations
- Emails
- What you buy
- All the metadata that comes with it and the list goes on and on.

3 Major Economies:



Three major economic principles are dictating the direction of this kind of capitalism

Economies of scale imply the more behavioral data they can extract the better the prediction.

Economies of scope mean the more varied the data sources are, the higher its predictive value.

Economies of action describe the modification of behavior, shaping it towards a desired commercial outcome.



Three major economic principles are dictating the direction of this kind of capitalism

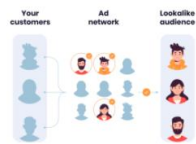
✓ **Economies of scale**
Economies of scale imply the more behavioral data they can extract the better the prediction.

✓ **Economies of scope**
Economies of scope mean the more varied the data sources are, the higher its predictive value.

✓ **Economies of action**
Economies of action describe the modification of behavior, shaping it towards a desired commercial outcome.

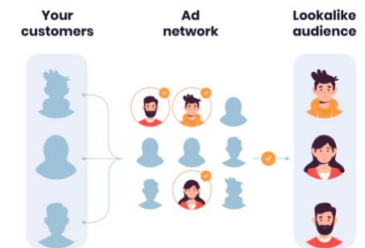
What is Look-alike Modeling?

Every business needs to continue growing new customers to achieve success, but also to maintain it. But how do you identify those target groups of new people who will enjoy your products and services? Look-alike modeling is a process that identifies people who look and act just like your target audiences. This tool analyzes your seed audience, identifies some key characteristics and finds users who are similar to your target. Say you're hoping to target people who are more likely to click on your ad or watch your video. Look-alike modeling uses machine learning to find more users who will take that action. This means your campaigns can scale to reach more people, with a higher engagement rate. In other words, more bang for your buck!



What is Look-alike Modeling?

Every business needs to continue growing new customers to achieve success, but also to maintain it. But how do you identify those target groups of new people who will enjoy your products and services? Look-alike modeling is a process that identifies people who look and act just like your target audiences. This tool analyzes your seed audience, identifies some key characteristics and finds users who are similar to your target. Say you're hoping to target people who are more likely to click on your ad or watch your video. Look-alike modeling uses machine learning to find more users who will take that action. This means your campaigns can scale to reach more people, with a higher engagement rate. In other words, more bang for your buck!



IP Address

What is IP Address

IP address stands for internet protocol address; it is an identifying number that is associated with a specific computer or computer network. When connected to the internet, the IP address allows the computers to send and receive information.

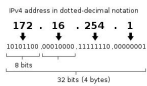
Explanation

An IP address (internet protocol address) is a numerical representation that uniquely identifies a specific interface on the network. Addresses in IPv4 are 32-bits long. This allows for a maximum of 4,294,967,296 (2³²) unique addresses. Addresses in IPv6 are 128-bits, which allows for 3.4 x 10³⁸ (2¹²⁸) unique addresses. The total usable address pool of both versions is reduced by various reserved addresses and other considerations. IP addresses are binary numbers but are typically expressed in decimal form (IPv4) or hexadecimal form (IPv6) to make reading and using them easier for humans.

How IP Works

IP is designed to work over a dynamic network. This means that IP must work without a central directory or monitor, and that it cannot rely upon specific links or nodes existing. IP is a connectionless protocol that is datagram-oriented, so each packet must contain the source IP address, destination IP address, and other data in the header to be successfully delivered. Combined, these factors make IP an unreliable, best effort delivery protocol. Error correction is handled by upper level protocols instead. These protocols include TCP, which is a connection-oriented protocol, and UDP, which is a connectionless protocol. Most internet traffic is TCP/IP.

Example



Packets

A packet is the unit of data that is routed between an origin and a destination on the internet or any other packet-switched network.

Example

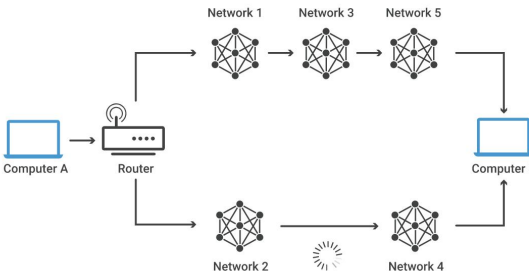
As an example, e-mails and web pages will make use of network packets to send information back and forth to the user and recipients. The goal of a network packet is to send information reliably so data does not have to be sent as a single, large file. Each packet sent includes information such as the source and destination.

Routing

Network routing is the process of selecting a path across one or more networks. The principles of routing can apply to any type of network, from telephone networks to public transportation. In packet-switching networks, such as the Internet, routing selects the paths for Internet Protocol (IP) packets to travel from their origin to their destination. These Internet routing decisions are made by specialized pieces of network hardware called routers.

Example

Consider the image below. For a data packet to get from Computer A to Computer B, should it pass through networks 1, 3, and 5 or networks 2 and 4? The packet will take a shorter path through networks 2 and 4, but networks 1, 3, and 5 might be faster at forwarding packets than 2 and 4. These are the kinds of choices network routers constantly make.



What is Internet



Protocol

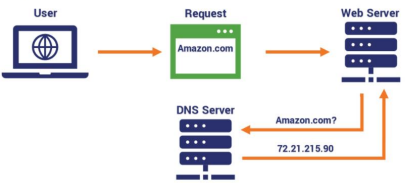
A well-known set of rules and standards used to communicate between machines. The Internet Protocol (IP) is the method or protocol by which data is sent from one computer to another on the Internet. Each computer (known as a host) on the Internet has at least one IP address that uniquely identifies it from all other computers on the Internet.

What is DNS

The Domain Name System (DNS) is the phonebook of the Internet. Humans access information online through domain names, like nytimes.com or espn.com. Web browsers interact through Internet Protocol (IP) addresses. DNS translates domain names to IP addresses so browsers can load Internet resources. Each device connected to the Internet has a unique IP address which other machines use to find the device. DNS servers eliminate the need for humans to memorize IP addresses such as 192.168.1.1 (in IPv4), or more complex newer alphanumeric IP addresses such as 2400cb0020481:c629d7a2 (in IPv6).

Explanation

The process of DNS resolution involves converting a hostname (such as www.example.com) into a computer-friendly IP address (such as 192.168.1.1). An IP address is given to each device on the Internet, and that address is necessary to find the appropriate Internet device - like a street address is used to find a particular home. When a user wants to load a webpage, a translation must occur between what a user types into their web browser (example.com) and the machine-friendly address necessary to locate the example.com webpage.



IP Address

What is IP Address

IP address stands for internet protocol address; it is an identifying number that is associated with a specific computer or computer network. When connected to the internet, the IP address allows the computers to send and receive information.

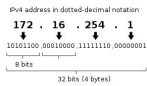
Explanation

An IP address (internet protocol address) is a numerical representation that uniquely identifies a specific interface on the network. Addresses in IPv4 are 32-bits long. This allows for a maximum of 4,294,967,296 (2³²) unique addresses. Addresses in IPv6 are 128-bits, which allows for 3.4 x 10³⁸ (2¹²⁸) unique addresses. The total usable address pool of both versions is reduced by various reserved addresses and other considerations. IP addresses are binary numbers but are typically expressed in decimal form (IPv4) or hexadecimal form (IPv6) to make reading and using them easier for humans.

How IP Works

IP is designed to work over a dynamic network. This means that IP must work without a central directory or monitor, and that it cannot rely upon specific links or nodes existing. IP is a connectionless protocol that is datagram-oriented, so each packet must contain the source IP address, destination IP address, and other data in the header to be successfully delivered. Combined, these factors make IP an unreliable, best effort delivery protocol. Error correction is handled by upper level protocols instead. These protocols include TCP, which is a connection-oriented protocol, and UDP, which is a connectionless protocol. Most internet traffic is TCP/IP.

Example



Packets

A packet is the unit of data that is routed between an origin and a destination on the internet or any other packet-switched network.

Example

As an example, e-mails and web pages will make use of network packets to send information back and forth to the user and recipients. The goal of a network packet is to send information reliably so data does not have to be sent as a single, large file. Each packet sent includes information such as the source and destination.

Routing

Network routing is the process of selecting a path across one or more networks. The principles of routing can apply to any type of network, from telephone networks to public transportation. In packet-switching networks, such as the Internet, routing selects the paths for Internet Protocol (IP) packets to travel from their origin to their destination. These Internet routing decisions are made by specialized pieces of network hardware called routers.

Example

Consider the image below. For a data packet to get from Computer A to Computer B, should it pass through networks 1, 3, and 5 or networks 2 and 4? The packet will take a shorter path through networks 2 and 4, but networks 1, 3, and 5 might be faster at forwarding packets than 2 and 4. These are the kinds of choices network routers constantly make.

