

In the Future

How do you think the collection, analysis and insights will evolve in the next 10 years?

Instagram's collection of multimedia and data will increase dramatically during the next ten years as more people acquire smartphones with sophisticated cameras. Instagram is owned by Facebook and (other than Snapchat) there is very little competition for its user base. A larger user base should yield more opportunity for analysis and insights. Image recognition and machine learning thrive on massive quantities of data, and each year within the next ten years should yield an exponential increase in the amount of images and metadata available. API users could scan images for brands, foods, objects, people and more which could lead to the creation of a rich database containing far more about a person than any one company could have previously known.

However, Instagram may eventually wish to loosen their restrictions on accessing their API. On June 1, 2016, Instagram suddenly locked down use of its API.

Most developers can only work within "sandbox mode" until their project is approved for "live mode" usage. Sandbox mode restricts you to only accessing your previous 20 images shared to your account or other sandbox accounts which have approved your request to use their data. This tightening suggests that either Instagram doesn't want many people using its API (because they wish to curate its use on the web), they lack the infrastructure to support its widespread use, or they are positioning themselves to launch a paid service.

In which areas do you see the biggest future potentials or value of the data?

Besides the boundless opportunities for marketing, Instagram data could be used for predictive behavior analysis. Images could be scanned for the presence of certain health conditions or habits (obesity, smoking, inclinations towards self-harm) and offer interventions.

Instagram could (like Facebook) become part of an identity verification schema to be used when applying for travel visas, identification, financial loans and more.

Like Twitter, Instagram forces its "story" creators into a compact fifteen second clips. This tight framework could be ideal for sharing news reports as the number of cable television "cord cutters" rise.

Instagram could (increasingly) be used for various investigative purposes (criminal or otherwise). Images and video are already being used to verify timelines and activities. Someone's Instagram feed could also become part of a character assessment.

Another future use case could be for dating and matchmaking based on patterns found within images or account behavior.

Violent jihadists are already using Instagram stories to disperse propaganda, but perhaps these videos could be analyzed in order to make predictive assessments regarding the nature of future attacks.

Instagram



Instagram

API

What is the technology or service?

Instagram is a multimedia sharing and social networking service which allows its users to edit and share multimedia content. Initially, Instagram only featured photos and had very few image filters available for use. Now, users can choose from a large collection of pre-set filters (along with making their own custom edits to their images). They can also post videos and curate contiguous film segments (known as "stories").

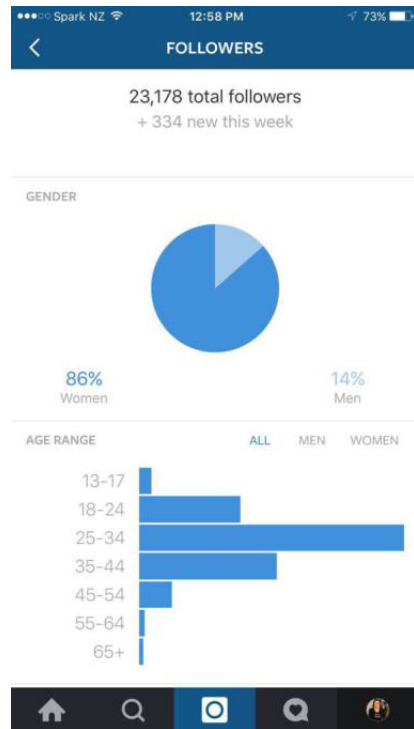
What behaviors does it capture?

Instagram captures "likes," comments and "views" of multimedia content. It can also capture who your account follows, unfollows, hashtag interactions, bios, advertisement engagements, geolocation data, post counts and more.

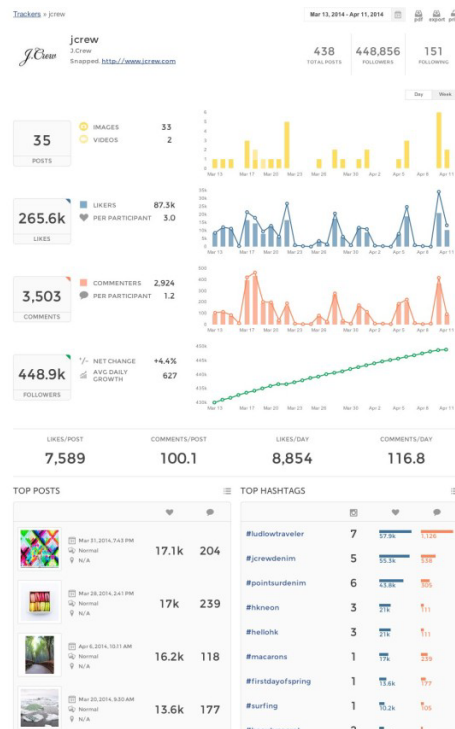
What does the raw data look like?

media_ID, short_URL, date, caption, comments_count, likes_count, video_URL, thumbnail_url, location_ID, location_name, location_url, latitude, longitude, user_id, username, full_name, profile_pic_url, profile_url, bio, website, media_count, follower_count, following_count, private, verified, email.

Visual Examples of this technology:



Mobile (iOS) analytics interface



Analytics dashboard showing multiple KPIs for J. Crew

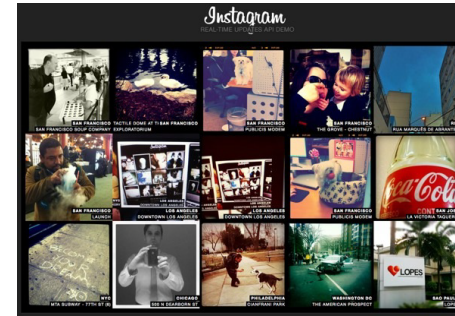
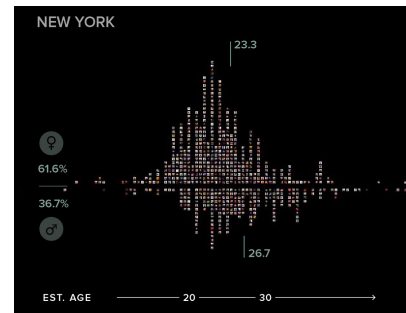
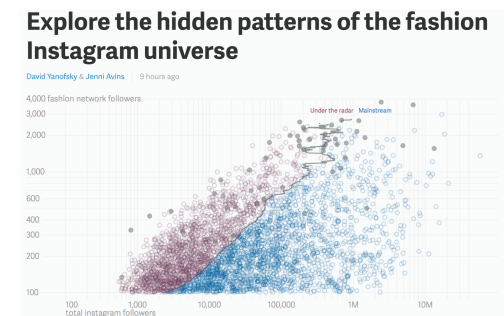


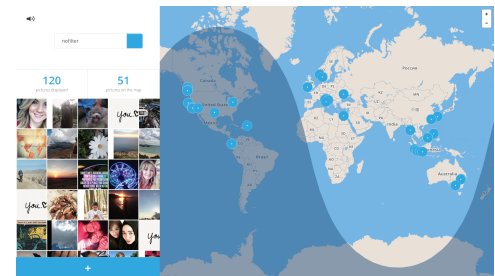
Image gallery



Visualizing usage by metro demographics via facial recognition



Identifying rising influencers



Mapping hashtag usage

Insights

What are the main types of insights that can be derived from the data?

Engagements

Tracking engagements allows account owners to measure the interactions of those who had the opportunity to experience the post. Did they comment, like or watch? Did they click on a bio link?

Posting Frequency

How many times has an account posted?
When do they typically post?

Tags

Which hashtags are used the most? Which other hashtags and accounts are they paired with? How often are they accessed?

Geolocation Data

Where are our users located? Where are our users posting from?

Usage

How are the insights currently being used?
By who?

Image Galleries

Instagram opens its API for full use to TV and broadcasting affiliates who then share galleries of content with audiences.

Image recognition + Machine Learning

Images can be processed in order to discover demographic information about its account holder which informs targeting decisions

Trend Analysis

Instagram data can be used to discover which accounts generate the most interactions. This is useful for recognizing influencer accounts which are leveraged as paid platforms for advertising.

Mapping

The data can be used to map activity such as hashtag utilization. Understanding these trends can inform regional targeting decisions