Active Identity What is «Active Identity»?

When meeting strangers online, we can never be sure who they are. This project wants to solve this through a trustworthy identity visualization.

On the Internet, it is difficult to communicate one's identity. Often, portrait photographs are used to give us a feeling of a person. However, photos can lie: beautiful faces are more successful and thus are also often used to fake an identity. A visualization abstracts this and lets us see what is behind. To trust someone means to know him. This is hardly possible on the Internet. By being able to present a digital fingerprint that is based on facts and whose contents are in our control, lets us communicate an aspect of ourselves to others.

Instead of showing raw data, which can be overwhelming when looking at many, many people, a visualization makes it possible to group the data and make it comparable.

Also, we become more aware of our online identity if we can see what we look like to others. Many of the ideas in this thesis have been developed in close collaboration with my mentor, Prof. Dr. Gerhard M. Buurman. He established the Interaction Design course at our school in 2000 and co-founded the Swiss Design Institute for Finance and Banking (sdfb.ch) in 2007, an interuniversity competence center for design.

Active Identity Facts, Not Fiction.

This visualization is based on facts that have been actively contributed by the user – there is no automatically aggregated or made up data.

The user is in total control of his data, the visualization does not present data that has not been actively added by the user. Data can also be removed.



Today, connecting data has to happen through OpenID or OAuth, two protocols that allow one website to access the contents of another one. In a digital ecosystem, these two websites would not know of each other, the user would bring the data that has been selected by him to them instead. Even though the user controls the data that enters the visualization, he cannot change or make up this data, all data comes from trusted sources.

If he wants to hide certain data sources, this is perfectly fine, and it should be. However, the lack or sudden removal of data is reflected in the visualization.



Active Identity **Parametrization**

What does it mean if someone has many friends on Facebook? That he is especially friendly? Respected? Or just addicted to collecting friends?

It is obvious that raw numbers can't express who someone is without generalizing and lumping together. The data has to be interpreted with context, intent and experience. However, parametrizing a large amount of data makes it groupable, comparable and anonymous. Abstraction helps us see the similarities.



I use data from Twitter, Facebook and LinkedIn, including full name, member since, personal description, status updates (total, average and recent), percentage of conversations vs. monologues, number of friends, groups, recommendations, etc.

Combining these data points in different ways lets me draw conclusions like «consistent» (same name, website and time zone on every account) or «active» (many status updates and blog posts).

Active Identity Anatomy of an Identity

The human eye is very good at recognizing form, color, motion and spatial position. This shape can be used alone or in groups and has clear and distinct features.

The basic shape has three dimensions that define its outer form.



If the dimensions are in equilibrium, the shape is symmetrical. Low values lead to a meager, high values to a full shape.



Using a punch hole and a red marker, values that should be paid attention to can be pointed out. E.g. if someone has few sources, the data may be incomplete or fake.



Color indicates changes in activity. If someone suddenly becomes very active, this may be suspicious, so it is highlighted with red.



Active Identity **Typological Analysis**

The chosen form allows identities to be visually grouped. This makes it easy to look for identities of a certain type.

$\checkmark \lor \lor \lor \lor \lor \lor \lor \lor \lor$ **,** ,

Active Identity Level of Detail

The human visual system is a powerful pattern seeker. Providing details makes reading the graphic easier, not more difficult. Spatial position creates groupings.



Active Identity **P2P-Lending Scenario**

P2P lending requires trust. Trust requires identity. Identity cannot be communicated through large data tables, instead a visualization can make people discoverable.





