Understanding your Online Identity:
An Overview of Identity

In 1993, when "nobody knows you're a dog," Internet users felt shielded behind an electronic veil of anonymity, taking on any persona they pleased. Since then, web-based businesses from Amazon to Zappos have adopted technology that builds profiles of their customers, offering product recommendations and keeping personal histories that go back more than a decade. While some Internet users appreciate the convenience these digital identities bring, others wonder about how much information is being kept about them, and how this information is being shared.

This paper will help you understand the various different identities and profiles that represent you online.

"On the Internet, nobody knows you're a dog."

What is your Identity? And what is your Identity, on the Internet?

Identity has lots of definitions, but without getting too metaphysical, we can sum it up in a few words: "you are who you are and what you do." A person's identity is the sum of their characteristics: their birthplace and birthday, the schools they went to, their shoe size, and so on. Some of these characteristics never change, such as your birthday—and some change over time, such as your hair color.

When you are using the Internet, you **also** have an identity, made up of the sum of your characteristics and interactions. You interact differently with each web site you visit and so each will have a different picture of "who you are" and "what you do." We sometimes call each of these different representations of who you are partial identities, because none of them has the full and true picture of who you are.

Your online identity is not the same as your real-world identity because your characteristics online differ from your characteristics in the physical world. In addition, every web site you interact with has a different idea of your identity, because each sees you and your characteristics differently. For example, Amazon has a partial identity for you based on the products you buy, whether you're at the keyboard or you're letting someone else use your account. Yahoo! Finance has a partial identity for you based on the stocks you are following, whether you actually own those stocks or not. Neither of these web sites has your full identity, even if they were to add up their partial identities.

The result is that you have one true identity, and a number of partial identities. Some of this partial identity information is under your control, but other information may be out of your control and even completely invisible to you. All combine to make up "who you are and what you do."

What is an Identifier? And how is that different from my Identity?

An identifier is a way of referring to a collection of your characteristics, a collection that is one of your partial identities. For example, if you have an Apple MobileMe account, your identifier at MobileMe might be something like "isoc@me.com." Most web sites, including search engines, prefer to have you sign up and create an identifier so they can maintain information about your identity, such as to maintain a profile for you or to store your profile information more securely.

You may not always know what the identifier is, and it may be quite invisible to you, such as an account number you never see. For example, if you use Microsoft's Bing to search for something on the Internet, Bing will assign you an identifier and store it in your web browser as a cookie. Every time you use Bing, the cookie Bing stored in your web browser acts as an identifier to link all of your characteristics together into Bing's idea of your identity. If you use Bing from both your laptop and your smart phone, you may even have two (or more) identifiers, both representing "you" to Bing, yet completely disconnected from each other.

The identifier that Bing or Apple (for example) has doesn't actually refer to you as a human being. It is simply a way of pointing to, or tagging, a set of characteristics that have been collected to form a profile of you. Some of these characteristics might match your real identity, or some of them might not. When you provide information to a web site operator, such as your name, age, and hometown, you are creating your own profile, a partial identity called a persona.

The table on the next page summarizes some of the terminology used in describing identity and identifiers.

Term	Explanation	Example
Identity	The complete set of characteristics that define you	Facts about you, your name, nicknames, and anything else that makes you who you are
Identifier	A way of referring to a set of characteristics	Your email address (isoc@me.com) or user name (RaulB) or account number (7633)
Partial Identity	A subset of your identity—a subset of the characteristics that make up your identity	The demographic information about you stored in your account at an online store or your purchase history
Profile	Information about your actions and characteristics, collected by others	You searched for "discount belts" or the list of web sites you visited
Persona	A partial identity created by you to represent yourself in a specific situation	A social network account or your online blog

Why are web sites assigning me identifiers and building profiles about me?

You probably have figured out why various web sites are asking you to create an account with an identifier—they need a way to maintain information about you so they can provide you with a personalized experience. Beyond the information you explicitly provide, you may be wondering why these web sites are also building profiles based on what you search for, what links you click on, your location, and so on.

One of the reasons that web sites want to build a more extensive profile about you is security. Web sites that are engaging in commerce, such as your bank, have serious concerns about online fraud. By profiling your interactions with them, and then noticing changes in your behavior, they can act more intelligently to protect your interests, and theirs.

Another reason for creating a profile about you is behavioral targeting, a fancy buzzword that means "they want to make money by selling ads aimed specifically at you." A significant portion of the information available on the Internet is surrounded by this type of advertising. Without the revenue provided by advertising, many of the most used web sites on the Internet would cease to exist. Most of the free content on the Internet is available due, in part, to this model.

In the physical world, not every advertising spot has the same value: a billboard downtown costs a lot more than one on a lonely highway in the countryside. Further, the more relevant an ad spot is to the audience, it more valuable it is to the advertiser. The same is true on the Internet: an ad for baby clothes being shown to someone who has just been shopping for baby clothes is a lot more valuable than the same ad being shown to a biologist looking for information on leaf shapes. The more that a web site operator knows about you, where you've been, and what you're doing, the better they are able to give you targeted advertisements which get them the highest revenue.

Use the information in this paper to help direct how your partial identities and identifiers are linked together, and how you present yourself to various web sites you use. Leveraging different personae and different identifiers will give you more control over how your identity is stored and shared on the Internet.
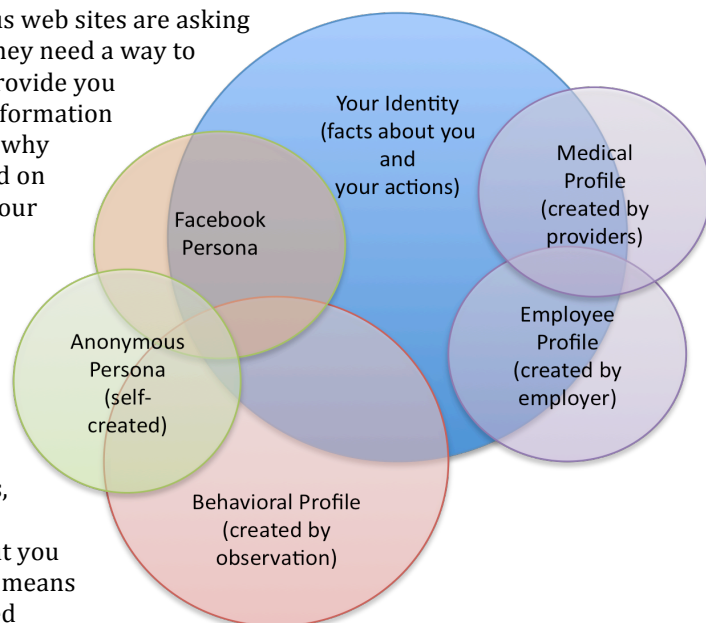
About the Internet Society

The Internet Society (ISOC) is a nonprofit organization founded in 1992 to provide leadership in Internet related standards, education, and policy. We are dedicated to ensuring the open development, evolution and use of the Internet for the benefit of people throughout the world.

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