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Personalization is Over-Rated

by **JAKOB NIELSEN** on October 4, 1998

Topics: Strategy

A reader asked:

> We have a debate flaming amongst a few of us here at XX Corp. and I'd love your perspective. Do you think there's a difference between customization and personalization of websites? In your opinion, what are the differences?

It is a matter of definition what one might mean by these two terms. I don't know of clean definitions that are commonly accepted. My take is that:

Customization
is under direct user control: the user explicitly selects between certain options (a "portal" site with headlines from the *New York Times* or from the *Wall St. Journal* ; enter ticker symbols for the stocks you want to track). (See separate research study of customization usability .)

Personalization
is driven by the computer which tries to serve up individualized pages to the user based on some form of model of that user's needs.

Web **personalization is much over-rated and mainly used as a poor excuse for not designing a navigable website** . The real way to get individualized interaction between a user and a website is to present the user with a variety of options and let the user choose what is of interest to that individual at that specific time. If the information space is designed well, then this choice is easy, and the user achieves optimal information through the use of natural intelligence rather than artificial intelligence. In other words, *I* am the one entity on the world to know *exactly* what I need right now. Thus, I can tailor the information I see and the information I skip so that it suits my needs perfectly.

The natural intelligence approach only works if the choices are

1. easy to understand so that users *know* what they will see if they click a link and know what they deselect by not following other links
2. comprehensive in coverage of the things users want and need (if something is not there, you can't choose it!)

Having the computer personalize the website to the user assumes that the computer can guess the user's needs. This is difficult to do and even more difficult when you consider that the same person may have different desires at different times. It is annoying to have the computer try to be smarter than it really is and second-guess your needs, only to have to spend extra time to correct it when it gets it wrong.

Leave it to the user to choose from a set of easily navigable options. In user testing of sites with personalization features, users say things like "don't stereotype me - just give me the options because I prefer choosing for myself rather than having the computer

tell me what's good for me" - exactly because what they want on one visit may be very different from what they want on the next.

Personalization does work in a few, limited cases that are characterized by being

1. very **simple to describe** in machine-understandable ways, and
2. relatively **unchanging**

A good example is the weather forecast. 95% of the time people want the weather forecast for the area where they live (so it's unchanging). But 5% of the time they will want the weather for some other area, so personalization does not free the designer from providing a way of choosing another location. Also, it is easy to describe the desired area: simply type in city name or ZIP code and you have uniquely defined the area you want covered. (In case of non-unique city names, the system can easily come back with a question, "do you mean this city or that city?", after which it can store a unique city descriptor in its internal database).

But consider a Web service that would provide **"The Daily Me" - the personalized newspaper** , an important concept in ten years, but not now. Matching technology is not sufficiently well developed to allow the computer to safely predict what stories will be of most interest to me. Also, my interests change from day to day. Negroponte has the example that if the computer knows that I am going to Athens, it will give higher priority to Greek news as the travel date approaches. All very well (and I do believe this idea will come true in 10 or more years), but how is a website going to know my travel schedule? A lot of privacy concerns have to be addressed before users will be willing to give out as much personal info as is necessary for good personalization.

Good personalization requires the system to know a lot about the user. In addition to the privacy issue, this also is in direct conflict with the paradox of the active user - a well-known phenomenon in user interface design: people are more motivated to start *using* things than to take the initial time to learn about them or to set up a lot of parameters. This problem is exacerbated on the Web where users are particularly fickle and jump from site to site. Web users are extremely impatient and want to get something useful out of a site immediately: they **don't want to spend time setting up complex personalization features** . This is one of the main reasons Firefly failed.

Because of the paradox of the active user, even a website that relies on personalization needs a good default design to greet first-time users. Again, personalization is proven not to substitute for good basic design. Second, the personalization features have to be extremely easy to set up: no complex or long-winded interactions - or users won't take the time.

Example: Amazon.com's Book Recommendations

Amazon.com has a much-vaunted personalization element that gives each customer individualized recommendations of books. Even though this feature is far from perfect, it usually succeeds in including *some* relevant titles.

The book recommendations succeed for two reasons:

1. Users do not need to do anything to set it up: the system learns their preferences by recording what books they buy. This is not perfect, since people sometimes buy books for presents even if they don't like the books themselves.
2. By watching millions of buyers, the system learns which books are similar: if many people who buy my books also buy Don Norman's books, then it is a good idea to recommend Norman's new book to somebody who has bought my books in the past, even if they have never bought any of his books.

Note that both steps happen **without imposing any extra work on the users** . Also, the fact that somebody buys a book is a pretty strong signal that they have an interest in the book: much more reliable data than most preference settings one can collect from users.

Amazon also uses the similarity data to include hypertext links between related books. Thus, when you are browsing the page for one book, you see links to three other books you are likely to want. This use of the data is much better than the personal recommendation list because the hypertext links are embedded in the context of the user's natural behavior. When the user goes to a book page, that user will be shown recommendations that **match his or her specific interest in that moment** (as opposed to being derived from a generic model of the user's average interests).

Back to Basics

Rather than spending extensive resources on personalization, Web designers should:

1. run usability studies
2. structure the site according to the user's view of the world
3. write content that is optimized for the online medium

Of course, these steps do not have the magic ring of "let's fix it with some cool technology", but they do have the advantage of working every time (and being cheaper, too).

Update: Personalization on Intranet Portals

Additional insight from our new project about the usability of intranet portals : role-based personalization worked well, individualized personalization less so.

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