

Make It Easy On Yourself

An 8-step guide
to buying easy-to-
use products



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This is a translation of the article 'Maak het jezelf makkelijk - In 8 stappen naar een gebruiksvriendelijk product', published in the Dutch 'Tijdschrift voor Ergonomie' (Ergonomics Magazine), volume 33, issue 1 (February 2008).

Somehow I always end up at people's DVD-player. "Now this is what I call a stupid product. Can you figure it out? Here, take a look at this!" Or someone wants to buy a new mobile phone and will get the question what the most user-friendly model is. I may be working on a PhD on consumer product usability, but for one I don't know the whole product portfolio of Nokia, SonyEricsson and Motorola by heart, and it is simply very hard to determine which phone would be best for someone. It really all depends. What are you good at, what do you want to do with it? Consumers should be able to assess for themselves which product works best for them. However, usability is not like styling, brand or price: it's hard to experience a product's usability without using it. Therefore: this step-by-step guide to enable consumers to purchase their your very own usable product.

Are we paying attention?

When we purchase electronic products we look at the explicit product properties: the ones you can judge by looking at the product appearance or information card in the store. We pay attention to performance (battery time, resolution, size), styling ('design'), price, and the feature set a product has. But once we get home and start using the product, all of a sudden other issues, such as usability, become much more important. And it's these issues that are hard to judge before buying the product. Research into the relation between the appearance of the product and the expected usability – performed with heart rate monitor watches as the stimulus material – indicated that users assessed the expected usability primarily on the basis of the brand, screen size and the number of buttons (Keinonen, 1997). And the size of the screen might be an indicator for ease of use, but a combination of few controls and lots of functionality can lead to, for example a disastrously deep and wide menu structure. In exploratory studies we performed on expected usability it became apparent that a child-like, playful aesthetic appearance, and controls that were placed out of sight would – unjustly – raise the expected usability of a product. The appearance of a product can be deceiving if you are trying to learn something about the usability of a product.

Effects of poor usability

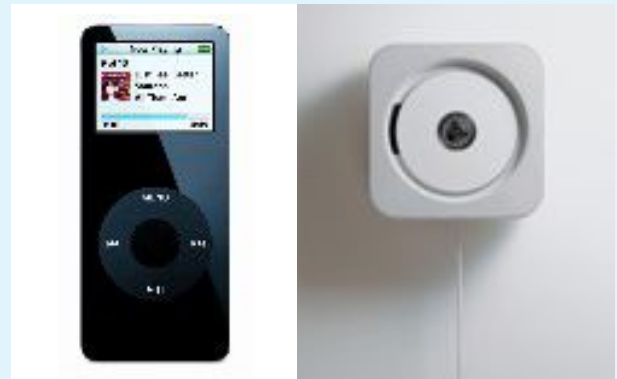
Is it a problem if a product is not usable? Well, it's not the end of the world, but a product that is hard to use can cost a lot of time and even more frustration. The do-it-yourself-Internet-cable-modem-install-package-feeling, if you will. A waste of time, energy, and you might not be able to fully use a product's functionality. It is fantastic that your new plasma television has picture-in-picture, but if it's hard to access this feature or you just never use it, why pay for it? It can even be that you stop using a product, simply because it is too cumbersome to use. A food processor can do anything from cutting carrots to grinding tomatoes. But because cleaning the device takes more time than cutting the vegetables yourself, a lot of people have the product stashed away on the bottom shelf of their kitchen cabinets.

What is usability?

The ISO definition of usability (ISO, 1998) points out that the usability of a product does not exist, one can only evaluate the usability of a specified product, in a specified context of use, while being used by a specified user

group, that has a specified goal of use with that particular product. So usability is a construct that is situated. It will vary with changing contexts and users. What is plain and simple for one person can be a bridge too far for the next. There are people that enjoy to explore how a product works, that devour manuals, and that always think it is a shame that a product does not do that and that as well. But there are also people that would like their newly purchased DVD-player to 'just work'. All the more reason to enable people to determine for themselves what usability means to them.

Delightfully simple



Apple iPod

Almost too ubiquitous to mention, but worthwhile mentioning, because on the iPod it's not just the user interface that's easy to use; it's also very well integrated with the computer hardware and software that you use with it. For a large number of users operating an mp3 player is doable, however, where do you download digital music files (legally)? Apple integrated the iPod with iTunes, software that provides users an easy way to convert CDs to digital music files that can be listened to on the iPod. In addition iTunes offers the possibility of purchasing music online in a fairly straightforward way.

Muji CD-player

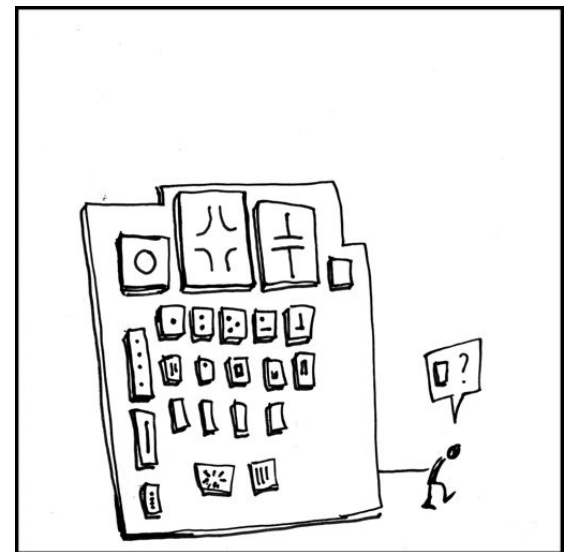
Playing music around the house can be this simple: a CD, an on/off switch and volume settings. That's all it does, and that's all it needs to do really.

AN EIGHT-STEP GUIDE TO BUYING A USER-FRIENDLY PRODUCT

In the following step-by-step guide 'the consumer' is led (the side of people that buys stuff) through the buying process, in each step it is indicated what considerations can be taken into account, and finally a number of rules of thumb are given to assess the usability of a product. All this to ensure that 'the consumer' will not make 'the user' despair later on.

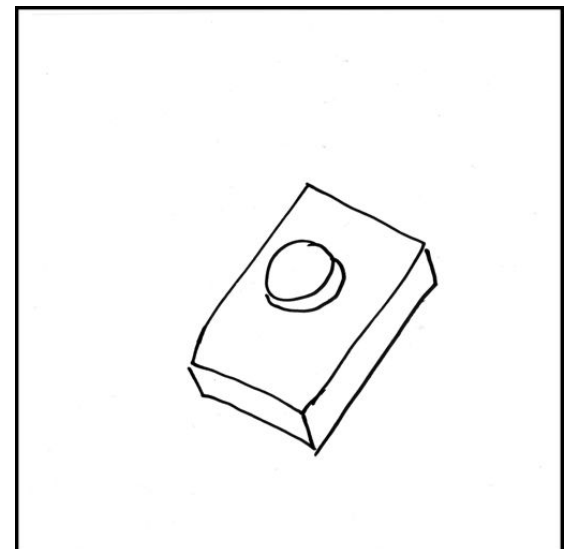
1. **Functionality: What will you (really) do with the product?**

In most product categories you can choose products with only a the basic, or lots of functions (also called 'features'). Consider what functions you will actually use. The more functions a product has, the harder it usually is to operate it. Compare it to looking for a beige marble in a bowl filled with white marbles. The more marbles in the bowl, the harder it is to find the beige one. For example, if you are planning to buy a DVD-recorder, think about what functions on your VCR you have used in the last three months. That's your basic need for this product and more than that is not really essential for you. Make this list before you go visiting stores, because by time you actually go shopping you might become a victim of the "I-might-need-that-function-one-day-and-then-it-would-be-convenient-to-have-it-syndrome".



2. **Interaction: What is usability to you?**

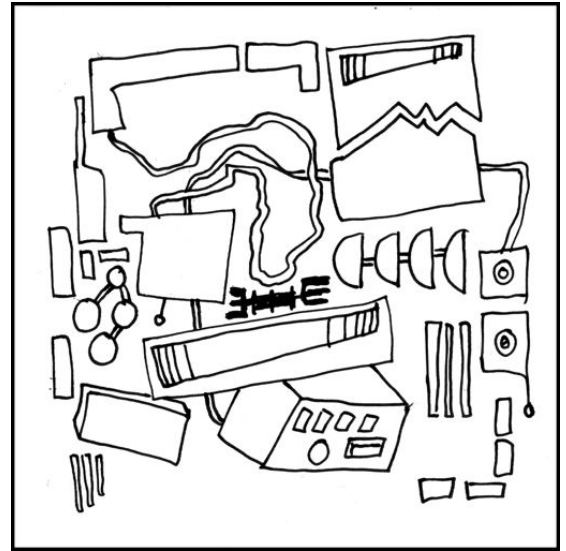
Consider the products you enjoy using, and what the user interface of these products looks like. Keep these properties in mind when looking for a new product. You hated the remote control of your old TV because it had so many buttons? See whether you can find one that has less. You don't like devices with menus and dialogues? Don't buy a washing machine with a touch-screen.



3. Determine the context of use: environment and network

How usable a product is also depends on the environment in which it is used. A remote control might be easy to use in a room with office lighting, but can become utterly unreadable under the dimmed lights of a living room. If you plan to use your mp3-player to listen to music while cycling, it may not hurt to choose one that's easy to operate blindly (in your pocket...) and with one hand.

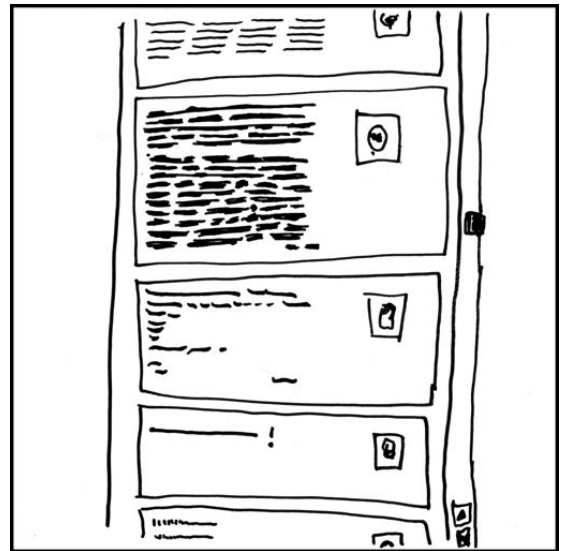
Then there are networking issues. A DVD-player gets hooked up to a television, a cable decoder and a stereo set. Even if all individual products are easy to use, the combination of these products might produce something that is still hard to use. In some cases devices of the same brand are designed to work together, although this is not always the case.



4. Collecting opinions: the Internet and your friends

Besides comparison tests of for example Consumer Report, the Internet features many discussion forums and websites where products are reviewed by professional journalists, as well as users. Often usability is one of the aspects that a product is judged upon.

Also ask friends and colleagues about their experiences with a particular product. And while you're at it, ask them if you can try it out sometime. There's no better way to judge the usability of a product than to try it yourself.



5. Support and manuals

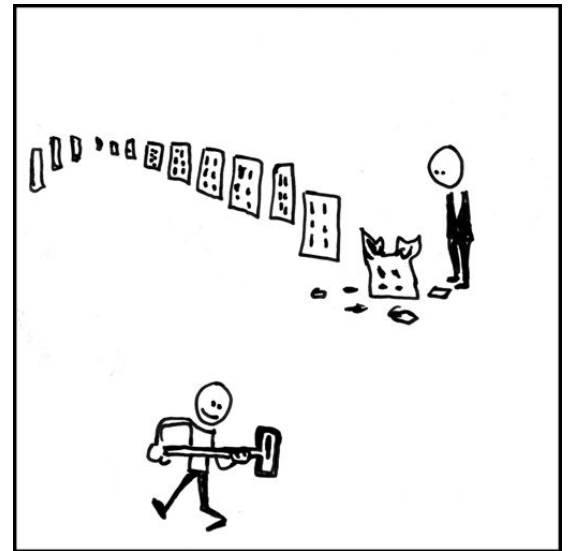
Check out the website of manufacturer whose product you are considering, to see whether the company offers customer support. Should you run into trouble with the product, do they have a help desk or service organization in your country?

Another issue is whether the manufacturer offers manuals of its products online. A company that does this apparently is concerned with how its customers are doing after they have purchased the product. Take a look at the manuals if they are online; if the manual is unclear, you could wonder whether the product will be much better.



6 ■ In stores: take a test drive

Always take a product for a 'test drive', as products that look simple can turn out to be hard to operate. You wouldn't buy a car without trying it out first; why would it be any different for consumer electronics? Unfortunately, in a lot of stores products cannot be used. They're not installed properly, batteries are missing, or there are only non-functional demos. It makes sense that you can't test-wash your laundry in a store, but at least you should be able to experience how to operate the machine. And for devices with a remote control: try that remote. That's what you really interact with, not that big black box that hangs on your wall, or stands in the cupboard.



7 ■ Sales 'advice': always add a pinch of salt

In general, shops make more of a margin on the higher-priced, more advanced products. If you are looking for something user-friendly, a product with slightly less functionality might be a good option. However, these products are usually in the lower price segment, and it might be that a sales person would rather sell you a product with elaborate functionality (and thus with a higher margin). Good advice can be valuable, but keep in mind that sales people can have different interests than you.

It also makes sense to critically review claims about the usability of the products ("New! Ergonomically designed!"). Ask what specifically makes this product so easy to use, also in comparison to other products.



How usable is Easy?

The ITT Easy 5 is a mobile phone aimed at people that find a regular mobile phone too hard to use, but do need to be able to call a limited amount of people (i.e., in case of an emergency). The phone is basic enough: the numbers on the keys correspond with names that are written on the back. You punch the number, you call. However, to enter the numbers in the phone, you have to write the numbers to the SIM-card in a particular way. So the phone maybe basic (too basic maybe even), but setting it up takes some experience with mobile phones.



8. Do-it-yourself usability evaluation

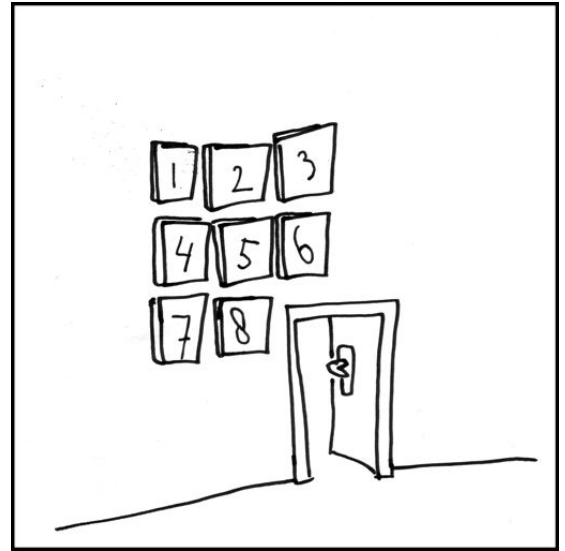
Below, a number of rules of thumb to help you to evaluate the usability of a product in the store, partly based on the usability heuristics of Jakob Nielsen (Nielsen, 1992).

- 1. Language:** does the product communicate in your own language? The terminology on a product can be hard enough to interpret as it is, without having to translate it in addition.
- 2. Labelling:** are the symbols and texts on the device understandable to you?
- 3. Feedback:** does the product give clear feedback when you have done something, or when the device is busy and you should wait?
- 4. Feedforward:** does the device indicated clearly what you are expected to do in the following step of the interaction? Does it guide you through the interaction?
- 5. Exit:** can you exit menus easily, should you want to? It is utterly frustrating to be trapped in a menu or to be forced to finish a complete dialogue while all you want to do is quit.
- 6. Physical aspects:** how do the controls feel? Can the buttons be pushed comfortably? Does a phone fit your hand, fit your pocket, and how does it feel when you hold it at your ear?
- 7. Installation & configuration:** How is the installation of the product? Does it work straight out of the box or does it require you to make all kinds of settings?
- 8. Functions & options:** generally speaking, the more elaborate the number of functions and options, the harder it is to operate a product.

(9.) Learning something new takes time

Finally, there is no getting around it: consumer products are getting more and more complex (Den Ouden, 2005); current DVD-harddisk-recorders can do a lot more than the VCR of twenty years ago. And up to a certain point it is unavoidable that you will have to put a little more effort into a figuring out a product with a lot more functionality, even though more advanced technologies enable more advanced user interfaces.

So take your time when installing and trying out a new product. At the very least read the 'quick start guide' that usually accompanies the product, that contains the most important pointers for using the product. But it also never hurts to take a quick look at the manual.



Frustratingly complex



MMS

The 'advanced' successor of SMS that allows the transmission of video and sound as well as text. Unfortunately, the first generation of MMS-enabled phones required an 'MMS profile' to be set, in addition to which detailed settings for something called a 'GPRS server' had to be entered. And all that just to send someone a picture.

Digital Watches

Remember those digital watches from the eighties? They featured two buttons, mode and set, that allowed you to control every function on the watch by holding them for a longer or shorter time. For most (non-English speaking) people the terms mode and set are meaningless, which makes it hard to remind the right button (combinations).

Discussion

Besides all the questions about the usability of consumer products that people pose, a second reason for writing this article lies in interviews that were conducted as part of a case study on usability in the practice of the development of electronic consumer products (Kuijk et al., 2007a; Kuijk et al., 2007b). During the interviews it turned out that a lot of product developers would like to develop more usable products, for example by limiting the functionality of these products. However, the interviewees feared that consumers would not accept products with reduced functionality. Besides that, the interviewees believe that consumers hardly consider the usability of a product a purchase criterion. This article might be a first step to get consumers to critically review the usability of the products they buy. As a consumer, in the end you get what you are asking for. If consumers would demand more user friendly products (and would actually buy them as well), companies would get the opportunity to invest in usable products.

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