

## UX Criteria and Examples

This document describes the UX aspects that should help reviewers in the UER to structure their feedback. These UX aspects are not independent, i.e. they have semantic overlaps. Therefore, examples of one UX aspect may fit another aspect of the list in some cases.

The examples are intended to help reviewers to better understand the meaning of UX aspects. The examples in this document are the first draft and therefore probably not yet optimal in some places. If you can think of better or more examples, it would be nice if you could send them to the contact listed on [www.uer.ueq-research.org](http://www.uer.ueq-research.org). If the examples fit, we will include them in the next version of this document.

### Content Quality

The information that the product provides to the user is of high quality and interesting. The information is up-to-date and reliable.

Positive examples:

- A contribution on a web page for children is interesting and written in a language suitable for the target group.
- A course in a learning platform is well designed and interesting for the target group.
- The explanations and help in the control software are presented in a way that is easy for the user to understand. Tax terms are explained in generally understandable language.
- On the website of a municipality, all relevant information for citizens about opening hours and contact persons in the administration are available.

Negative examples:

- A post on a web page is sloppily formulated and contains many spelling mistakes. The interesting article looks therefore untrustworthy.
- The product description in a web shop misses relevant information. This makes the decision to buy the product more difficult for the user.
- In a web shop there is no easy way to compare several products. This makes it more difficult for the user to find the product that best fits his needs.
- A company web page does not contain any useful traveling directions, so that potential visitors must find them elsewhere.

### Adaptability

The user can easily adapt the product to his personal preferences or personal working style. Existing customization options are easy to find and understand for the user.

Positive examples:

- The user can hide not needed fields in a form of a business application using an easy-to-find dialog.
- The user of a social network can use the privacy settings to easily regulate who is allowed to see the information entered by him or her. The settings offered are well described and explained.

- A word processor allows the user to determine which types of input should be automatically corrected by means of easy to find and simple autocorrection settings.
- The user of a business application can adjust the width of the columns in a table by dragging the mouse. The next time the screen is called, these settings are still available.

Negative examples:

- A business application sends information to the user for certain actions of other users or for certain system events. However, there is no mechanism that allows the user to filter out information that is not relevant to him or her.
- The privacy settings offered in a social network does not cover all needs. It is unclear what certain settings really do.
- It is not possible to reset personalization settings to the default once they have been made.
- The user can adjust the width of the columns of a table by dragging with the mouse. The next time the page is called, however, these settings are no longer available.

## Perspicuity

It is easy for the user to understand and learn how to use the product. The underlying concepts are clear and logical. The product helps the user to easily learn the operation by trial and error.

Positive examples:

- The editing of data in a business application is implemented consistently on all pages.
- The current processing status of a transaction is always clearly visualized and makes it easier for the user to recognize what to do next.
- The individual screens of an application display short, easily understandable texts that explain what the user can do on the screen.
- The navigation between individual screens of an application is consistently solved and easy to understand.
- The software always offers unobtrusively useful help during work steps - this makes the user more productive and helps to learn how to use the software without much effort.

Negative examples:

- The name of a button in the user interface does not correspond to the common terminology and is therefore difficult to understand.
- If an incorrect entry is made in a field of a form in a software program used to create an income tax return, a message appears that uses complicated tax terms that are difficult for the user to understand.
- A hyperlink to the navigation has the same colour as the surrounding text and no other highlighting. Therefore, the navigation possibility is difficult to recognize at this place.
- The application has a navigation menu with many levels. It is therefore difficult for the user to find out which options are offered.

## Efficiency

The user can achieve his or her goals with little effort. To perform typical tasks, no unnecessary actions are required. The product responds quickly to user input and instructions.

Positive examples:

- Switching between different screens of a business application is very fast and enables the user to work fluently.

- Fields in an application are always filled with meaningful default values, so that the user only must make a few entries for the most common scenarios.
- To enter all the data for a business transaction, the user must call many individual screens one after the other. The resulting unnecessary navigation makes the process very inefficient.
- An input is required on one screen. However, the user first must laboriously collect the necessary data on another screen, although it could easily be displayed directly.

Negative examples:

- The start page of a web shop takes several seconds to load.
- Fields are pre-set with default values, but these are unsuitable for many common scenarios. The user must therefore first remove the default values and then enter the correct values, which causes unnecessary work.
- A value entered on a page of an application must be re-entered later, as the application obviously did not remember this value.

## Intuitive Use

The user can operate the product immediately and without training or instructions. The user does not need help from other people and does not need to read any information material or documentation to properly operate the application.

*Note: Intuitive operation has many overlaps with Perspicuity. It usually makes no sense to use both criteria in a review. Ultimately, an intuitive, easy-to-use application is always easy to understand. I.e. for applications that are a bit more complex and where you already accept at least a short familiarization phase, you should use Perspicuity. If this is not the case, Intuitive Use is the better choice.*

Positive examples:

- The application uses interaction patterns that the user already knows from common applications such as social networks.
- The navigation between different parts of the application is completely clear and logical.
- The application guides the user through more difficult steps via a wizard.
- The installation assistant of an application requires only a few necessary and clearly understandable inputs. All necessary installation steps are then performed automatically.

Negative examples:

- Some terms on the user interface are not understandable without more complex explanations.
- An installation wizard requires complex technical details from the user before starting the installation.
- The application works very differently than other very common applications, although the actual usage scenarios are similar.
- Saving entered data is not realized consistently within the application. In some screens the entries are saved implicitly, in other screens the user must first press *Save* explicitly.

## Usefulness

Using the product brings benefits to users. It makes it easier for them to achieve their goals. Users save time and become more productive.

Positive examples:

- A municipal web service allows citizens to submit certain applications online, thus saving them a visit to the municipal administration.

- A business management software offers the possibility to send requests directly from an administrative process to other employees also involved in this process. This saves time for communication.
- A business application allows data to be exported in tables directly to Excel. This makes it easier for users to transfer the data to other media, e.g. to integrate the data into a Power Point presentation.

Negative examples:

- The usage scenarios realized by the application can be realized more easily without the application.
- Operation of the application is cumbersome and inefficient.

*Note: It is difficult to find really good concrete examples of lack of Usefulness at an appropriate level of abstraction. Somehow usefulness has a strong relation to Efficiency, at least in one direction. If an application is totally inefficient, it can't actually be useful. However, one can well imagine that an application is efficient in itself, but the use case shown in it is completely useless.*

## Novelty

The product looks interesting. It already arouses the interest of users due to its special design. The product is distinguished by its design from products with similar functionality.

Positive examples:

- The visual design of the product is unusual.
- The application realizes a typical user interaction in a new and original way.
- The application allows a new, previously unknown usage scenario.

Negative examples:

- The product looks almost the same as other common products with the same functionality.

*Note: It is very difficult to find negative examples of novelty. Negative is actually the absence of new or original elements, i.e. somehow you can't tell this well by examples.*

## Beauty

The design of the product is beautiful and appealing. The design will be attractive to the target group of the product.

Positive examples:

- The colour design of an application is harmonious.
- The pictures contained in a web page are interesting and fit the target group.
- A web page contains some beautifully designed graphic elements, which also fit well into the design of the page.
- Different elements are very nicely separated from each other by the use of empty space. The page looks very balanced and clear.

Negative examples:

- There is far too much content placed on a web page. Different contents are also not well visually separated from each other. This makes the page appear overloaded.
- Individual contents on a user interface are not clearly aligned visually. This makes the layout look unattractive.
- The design of a web page seems monotonous and boring. Attractive or interesting visual elements are completely missing.

- A web page appears visually very unbalanced, since almost the entire content is pushed to the left.

## Controllability

The product responds predictably and consistently to user input and commands. The user always has the feeling that he has full control over the interaction. The product helps the user to avoid mistakes and to correct errors with little effort.

Positive examples:

- The status of a processing operation in a business application is always clearly visualized.
- A business application offers an easy-to-find undo function that makes it easy to correct erroneous entries.
- An application issues consistent messages when an action by the user has been successfully executed. The user always has clear feedback on all actions initiated by him or her.

Negative examples:

- Response times in an application vary greatly and are not predictable. The user is therefore uncertain whether the respective inputs and commands will be processed correctly or not.
- An application sends error messages that are very technical and incomprehensible to the typical target group of the application.
- An application starts a longer running process without informing or asking the user beforehand.
- In the event of an error an application issues a message that leaves open how the user should react.
- The system reacts with a delay to inputs and the user does not receive any reliable feedback regarding the current status of a process.

## Stimulation

Users find the product stimulating and exciting. It's fun to deal with and work with it. The product motivates the user to use it more frequently.

Positive examples:

- A business application gives the user the opportunity to gain interesting insights (e.g. data analysis functions). It is interesting to look at these data.
- A web page contains a gamification element that motivates users to work with it more frequently.
- A web page contains very exciting and well-prepared content. It is fun to read the contributions.
- A business application contains current links to interesting external content (e.g. business news).
- The software offers an interesting representation of the work progress. This is not only informative, but also increases the fun at work.

Negative examples:

- The software does what it should, but the operation is boring and the interface does not offer any attractive visual features.
- Apart from the purely numerical presentation of results in a table, I would also like to see an appealing graphical presentation - this is not absolutely necessary, but it would be more fun.

- The contents of a web page are relevant for the target group, but boring and not very appealing.

## Clarity

The user interface of the product looks tidy and clear. Users can easily find the information that is relevant to them and orient themselves visually in the user interface without effort.

Positive examples:

- Elements on the UI are neatly aligned and beautifully separated from each other by empty spaces. This makes it easy to orient yourself visually.
- The most important information on the interface is clearly highlighted, while details are less prominently displayed and placed.
- After starting the software, I immediately see which things have changed since the last start and where I have to continue working.

Negative examples:

- The user interface is overloaded with information. Important information is not visually highlighted and gets lost in the wealth of information.
- Information is displayed that is not important for the typical usage scenarios of the application.
- Different areas of the screen are not visually well separated from each other.
- In order to get important information, I have to actively search for it on the interface, because the amount of information is overwhelming.
- Since different functions are very similar, I have to read the explanatory texts each time to use the right function.

## Trust

The application gives the user the impression that his or her entered data is in safe hands and not misused to harm him or her.

Positive examples:

- A web shop gives clear feedback on all the actions taken by the user.
- A web page makes a high-quality visual and a professionally designed impression. This also increases confidence in the quality of the information published on the site.
- A web shop sends information at regular intervals after an order is submitted, which informs the buyer about the status of the delivery and the expected delivery date.
- The company logo and name are clearly visible on a commercial web page. The user can recognize this with the first view.
- In a business application, important actions, such as saving a longer work process, are reliably confirmed and the user is given the opportunity to check the results again if necessary.

Negative examples:

- The entry page of a web shop is sloppily designed and contains obvious spelling mistakes. Visitors to the shop therefore rate it as not very trustworthy and are unlikely to place any orders.
- A user receives an order confirmation in a web shop, but no further information about the further course and delivery date.
- The user can often not verify which steps he or she is currently in and which actions are required from his or her side.

- Decisive work steps in a business system, such as deleting a large object or forwarding information to customers, are not adequately secured by the system. Such steps should still be confirmed explicitly.
- The consequences of possible navigation steps are not always clear. The user is not sure whether he or she will lose any data entered during navigation.
- The collaboration function of the system leaves the user unclear as to whether important data has been changed by colleagues and which data created by him or her could be seen by others.

*Note: Trust has a strong relation to Controllability, so that many of the examples listed here also fit to Controllability. Controllability is more about the feeling of being in the driver seat of the interaction, i.e. the user always feels in control. With Trust the focus lies rather on the perception that personal data or important inputs are processed securely, i.e. do not get lost or into wrong hands.*

## Value

The product makes a high quality and professional impression. It communicates a certain exclusivity.

Positive examples:

- The visual design is very sophisticated and professional.
- The product gives the user the feeling of being something special.
- The forms are thoughtful and well-designed. Everything is where it should be and there are no superfluous "gimmicks".
- The arrangement of the control elements looks like a unified whole - at no point does one get the impression that things have been left to chance.

Negative examples:

- Although the operation basically works, one has the impression during the construction of the form that essential operating procedures have not been sufficiently thought through.
- The surface of the product contains superfluous elements, which are more for decoration than for serious work.
- The terms used on the surface are supposed to make the product look modern - for the professional, however, they appear arbitrary and not sufficiently precise.
- The design contains a lot of small unpleasantness, e.g. not cleanly aligned fields. Therefore, it looks sloppy and made with little care.

## Immersion

Users forget time when they use the product. The design contains elements that capture their complete attention and let them sink in the occupation with the product.

Positive examples:

- Already the registration process gives me the impression to enter another world. I can hide my environment immediately.
- The data input is so ingeniously designed that this process immediately captures me. A mechanical activity in itself becomes an exciting story here.

Negative examples:

- The diverse and constantly changing information that the surface confronts me with makes it difficult for me to concentrate and immerse myself in my actual work.
- The product is boring and not very interesting.
- The constant interruptions and waiting times prevent me from getting into a satisfactory workflow.

## Identity

The product helps the user to make contacts and to present himself or herself positively. The user can obtain prestige from ownership or access to the product.

Positive examples:

- The user can style the interface according to his ideas (background image, colour scheme, personal decorative elements) and thus also present his personal style.
- The presentation of the product conveys a high brand prestige and gives the user the feeling of being something special.
- A social network for researchers makes it easy to find people with similar research interests and encourages them to contact them.
- The design of the product is very noble, high-quality and elitist.
- The presentation of the weekly results of each employee enables the user to present his performance in his department in a good way.

Negative examples:

- The design of the product contradicts current stylistic ideas - one can work with it, but would not like to be associated with it.
- The software is not suitable for visualizing personal successes and exchanging them with colleagues.
- The design of the user interface seems loveless and uninspired. Does not look very professional.

## Loyalty

Even if there are other, equivalent products for the same tasks, user will most likely not change the product. The design and placement of the product supports a feeling of loyalty.

Positive examples:

- The unique visual design of the product sets it apart from competing products.
- The integration of the product with other products of this manufacturer offers a clear added value.
- Users are encouraged to form a community. This promotes the connection with the product and makes it unlikely that the users will later exchange the product for another product for a minor reason.
- A social network reminds logged-out users in an unobtrusive way to drop by again. This helps to keep users.
- The special navigation structure needs some time to get familiar with it, but is very advantageous after familiarization - I would not like to think of another principle. Users will tend not to change the product later.

Negative examples:

- Even if the operation of the product is largely ok, the design of the interface no longer meets today's standards - competing products can already do this better.
- The product has all the necessary functions, but the operation is much less fun than with comparable products, because the playful parts have been completely neglected.