

NID - NetInteractive Document

NIDs are documents transformed into web files that enable interaction with the material presented and allow communication with other readers, the authors or administrators of the document, experts, teachers, librarians, etc.

The possibilities of NID:

1. NID is a completely new approach to working with documents on the Internet: Until now, digitized documents have remained isolated objects without the possibility of adding to them, making notes, asking questions or exchanging information with other users.
2. With NID, everything that is on the web can be seamlessly included. For example, a few pages of NID text can provide access to and interaction with any number of other sources.
3. NID readers can add comments for themselves, for a specific group or for all users, and they can create links to other pages in a NID document or on the web.
4. NID readers can ask questions, start discussions, or contribute to them. They can give their opinion on the document read or on a specific aspect of it. They can also anonymously send comments to the administrator of the document.
5. In a NID collection, documents can be linked to other documents or parts of documents, turning a static collection into a network of interactive resources.
6. The inclusion of texts, images, media clips, links and the possibility of communication turns a collection of static documents on the Internet into a new kind of experience.
7. It is the first time for information providers that they know what users think or want. They can react to this or point out new acquisitions, new results or additional information in a NID document.
8. Users can support each other or point out important aspects. Certain aspects can only be discussed with groups of selected people or questions can only be addressed to suitable experts.
9. NID enables communication within organizations as well as cooperation with outsiders (other organizations, members of a working group or association, etc.)
10. When using NIDs in the classroom, any existing E-learning modules, tests, etc. can be integrated.

The technology of NID

In order to put NID to practical use, documents of any size are installed on a WWW server, using PDF, Power Point or Word files as the source material.

- A NID document can have a bibliographic page (information on title, author, year of publication, etc.). For large documents (books) this is important, for short documents it is only used as background material

- Users can log in and add notes only for themselves (private), for a group defined by them or for the public. Most documents can also be used anonymously (without registration), but the person responsible for a document can specify that registration is necessary.

- Documents can be looked at page by page, or displayed in a number of other ways, e.g. as clickable "thumbnails".

- Links are indicated by colored outlines. They enable unlimited exploration of the digital world and today's digital knowledge.

Examples of NID documents:

- ➔ Typical booklet: <https://nid.iicm.tugraz.at/Home/BookDetail/199>
- ➔ Page with discussion: <https://nid.iicm.tugraz.at/Home/ViewBook/230/8/view>
- ➔ Document with video clips: <https://nid.iicm.tugraz.at/Home/BookDetail/350>

Further features of the NID system

- ♣ Documents can be managed in selectable categories and sub-categories
- ♣ Documents can be searched in full text or by "metadata", even groups of documents at the same time, for example all in a category, all by one author, all in a certain language, etc.
- ♣ Documents can have a table of contents that can be called up at any point.
- ♣ It is possible to change the appearance of a page (brightness, colors, enlargement or reduction, moving a section of the page, etc.).
- ♣ One can define a sub-area of a page, for example to email a link to exactly this part of the page to someone.
- ♣ Links and comments are shown by a border that can be freely designed in a color and thickness of one's choice. Areas marked in this way show information with "mouse-over", e.g. images, texts or links to any internet-content, including videos, audio files or interactive applications.
- ♣ NID documents can also be made searchable for image elements (!). If you then search for "tie", for example, you get all the pages where a person with a tie can be seen
- ♣ In preparation is the possibility that pages with concise phrases automatically (!) refer to pages in other documents with similar phrases. This and the aforementioned property are made possible through the use of artificial intelligence methods that are further refined over time.

♣ NID uses the so-called IIIF format, as used by all major libraries in the world (from Stanford to the Bavarian State Library). This way, while reading a page in an NID document on one server, one can put the page of another server next to it. In the resulting (up to 4) windows one can scroll, zoom or carry out other activities independently.

Thus, one can put two pages from different documents in the international IIIF standard (also from other sources) next to each other:

Two concrete examples of “simultaneous reading” with NID

Fig.1 shows a page from the document “Around the World with Incidents... and more” from a server at TU Graz next to the famous old Portulan world map from the Bavarian State Library. Fig. 2 shows one and the same document page in two different languages from a translation and that the two parts can be now worked tight independently of each other.

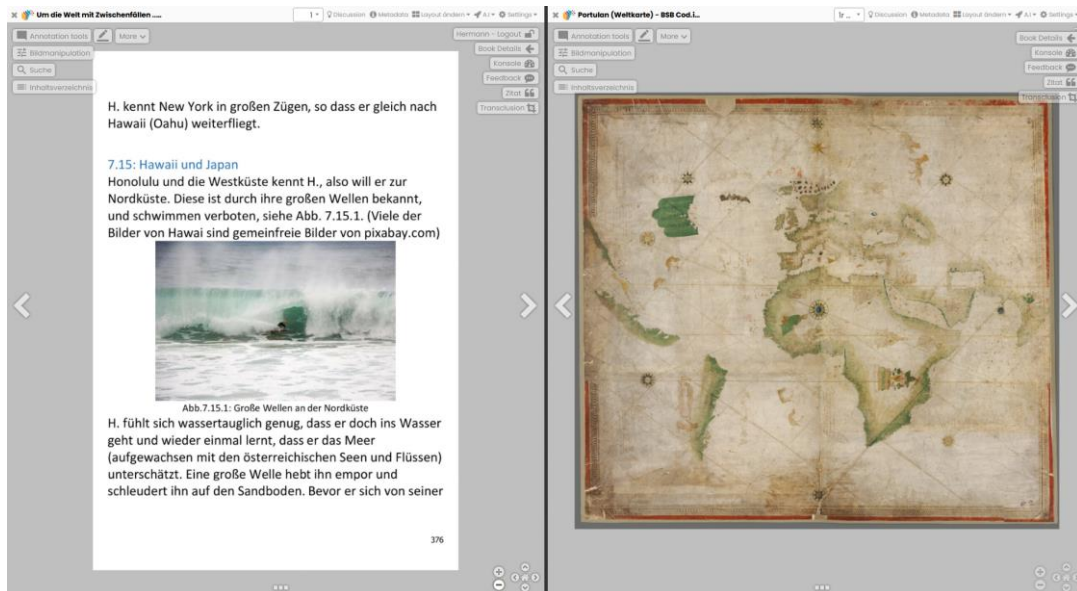


Fig.1: Two pages of different books side by side



Fig.2: The same page taken from two books in different languages shown simultaneously.

NID is revolutionizing the management of information

Providers of collections of digital documents often regret that they do not receive any feedback from users. If NID is used, readers can send messages (even anonymously), point out errors or additions or invite a discussion on every page.

Conversely, users can also create notes: Just for themselves or a group of their choice, stimulate a discussion, ask a question on each page, etc.

NID can be used for small collections of documents up to large document holdings.

NID expands the internal flow of information

An organization can offer materials that are only accessible to members of the organization or only for parts of it, so that members can help each other through questions, tips or discussions.

NID complements distance learning

Lecturers offer material that they can supplement with explanations (e.g. through video clips). Learners can ask questions that are answered professionally, helping all other learners. Learners can supplement the material with their own ideas or research for themselves or for others. In the "seminar mode", such services can be also used for assessment purposes: NID also provides several types of quizzes: those that point out weaknesses in order to explain how they can be remedied, but also those that test understanding and can therefore also be used to assess performance, or point out weaknesses in the documents.

NID offers even more ...

Substantial documents (books) can be provided with reviews. Registered users can contact selected others via email. The system also allows simple Word documents to be imported without any changes, allowing them to refer to NID documents or vice versa.

A test run with NID is easy and inexpensive.

If there is a server that can be reached via the Internet (a better PC is sufficient), the NID team installs the software and 50 documents (number is negotiable, if documents are smallish) for 5000 euros. As a start, this can also be on a server of the NID team, allowing thorough testing without any effort.

Further additions and improvements are in preparation and will then be installed without any further charges.

For more information, or a Webex or Zoom meeting or such with a personal demo, contact: hmaurer@iicm.edu