Terminology

For HCI experts, V1.3

Legend:

- + new notion, having no antecedent in the HCI.
- * old term, but here used with more complex or extended or more accurate meaning.
- {i} the notion is domain independent, i.e. standard part of the HCI, works for every service.
- {d} the notion is domain dependent. **Domain**: the specialty (professionalty) the eservice deals with.

General notions

Formázott: Betűtípus: 14 pt, Aláhúzás

There are commonly used terms, having more precise meaning in our approach;

Office (software): Well known software products, applications for operations on documents (i.e. on objects). E.g. MSoffice, Open Office.

Document store (service): to store documents with synchronizing features. (Dropbox, Googl+)

Virtual office (service): Document store with a limited embedded Office functionality (Google+, MS SkyDrive, etc.)

*e-service, *interactive service:

For the business:

'portal', 'electronic content', 'e-content', 'electronic service', 'e-service', 'Internet service', 'interactive service' are used here as equivalent terms. We use the term *e-service* – or with traditional words: *interactive service* - for all of them.

Technically: Services, requiring human interactivity (of the service provider, of the clients, of the technical staff, etc.)

WIMP operating system

They are use Window, Icon, Menu, Pointer in the HCI. (MSWin, LINUX, etc...)

Platform, vs. application

Platform:

HW + WIMP operating system + mail-software, installed:

- on the server/cloud (either as native platform for the operation of the server/cloud, or as PaaS Platform as a Server)
- or on the desktop

Törölt: To avoid the misunderstanding here we fix some widely used common name differing from those of the our URM.

Application:

Software, installed on the desktop, or on the server/cloud, over the platform.

+Platform-based e-service

E-service, requiring some *platform* to operate over, both on the server (if exists), and the client. Non platform-based service are e.g. the telephony or the elevator control.

Information Architecture (IA)

<u>Hypernym</u> of the Usability, connected the e-sovereignty. See: <u>http://en.wikipedia.org/wiki/Information_architecture</u>

+e-sovereignty

Hypernym of the Usability, general term of our research for the 'wellness and efficiency of the client working with professional e/service'. It's components, in order of importance: semantics, security feeling, ergonomics.

+URM (Usability Reference Model):

It is the top level of the HCI-ontology, defining 8 levels of the interactivity. Its more correct name is *IARM* (Information Architecture Reference Model). For the simplicity we use the URM.

+URM philosophy:

we often refer the '*URM philosophy*' or 'requirements': The consistent summarization of this philosophy and its 'requirements' will based on the HCI-ontology and will be the result of the 1^{st} phase of the r+d.

Notions connected to URM 2-3 level (operations, etc)

Formázott: Betűtípus: 14 pt

*Real office (formal definition):

In our **real office** we have **real objects** (papers, folders, subfolders, many kind of documents, certificates, scheduling, etc.) in the **real space** (on the table, in the binder or filing cabinet), containing our **information**. The objects are charged with **meta-information** (signature, creation date, check time, endorsement, stamp, classification, expiration date, key word, etc.). We have also

- Office tools to operate (create, annotate, read, verify, encrypt, decrypt, sign, compare, update, delete, synchronize, endorse, file, group, ungroup, classify, authorize, grant, publish, revoke, etc) on OUr objects;
- Search/recovery tools (catalogues);
- Security practices and tools (key, door, alarm, etc.)
- Maintainer (deals with the readiness of the building, the office tools, the electricity, the water, etc.)

We can also correspond with other actors (services, clients, authorities, colleagues, etc.)

*Virtual Office Technology (for the URM):

Desired hypothetic software technology for the implementation of the **real office**. The correspondence of the notions:

 real object (cf. the list above) real space (cf. the list above) meta-information 	object virtual space meta-information
 real office tools search tools security maintainer 	interactive tools interactive search tools IT security (e.g. door/key: authorization) portal technical staff
 operations (cf. the list above) correspondence actor (cf. the list above) 	operations mail actor (user, client)

*virtual office:

Virtual space, managed by the Virtual Office Technology.

+ Collaborative Virtual Office

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*Virtual space, +object, *actor are the basic *domain dependent* entities of the URM philosophy.

*virtual space = the structure of a portal (e.g. the directory structure)
+object = the thing the user manages in the space (e.g. files, directories)
*actor = users and software agents, being capable of doing actions (operations
and communications)

*desktop, *tools, *setup tools, *positioning tools, *searching tools are the basic *domain independent* entities of the *URM philosophy*, to manage the *domain dependent* space, object and actor entities.

*desktop = our screen forming the windows into the virtual space, holding the tools. It is undecided whether the desktop itself must be in the virtual space or not.
*tools = things to perform operations, some tools generally are in the desktop.
*setup tools are for configuring the desktop, e.g. the visibility and the position of the tools
*positioning tools are for navigation in the virtual space, e.g. scroll bar.
*searching tools can be counted as a special positioning tool.

*information and *meta-information

*Information is the content of the virtual space whether it is on the screen or not. In our idea we see **objects**, and **tools** to operate on them. (NB: To communicate with the actors, practically, is to use special tools, i.e. the message tools on then one hand and to operate on the special objects, i.e. the message box on the other hand.)

*Meta-information: Objects beyond carrying information are charged with meta-information (e.g. creation date or other attributes of the files). The meta-information is to find, understand the objects, and generally is not seen in the

virtual space. The Comprehension Assistant is for displaying the metainformation for users demand (for help).

Notions connected to URM URM 6. level (communication, etc.)

Role:

Group of users, having own <u>special</u> authorization, and own <u>special</u> required competency.

+User:

General term for everybody using the HCI. 3 main groups: users of the domain interest (client, administrator, process owner, clerk, sponsor, help desk, CGO, CIO, etc), of the eservice interest (designer, developer, programmer, tester, ux-designer, system manager, system operator, salesman, sponsor, etc.), of the quality assurance (ITsec-auditor, legal-auditor, domain-auditor, etc.) (NB: the user categories can be endlessly complicated theoretically. These are base examples.)

*Communication and *operation:

The client *communicates* with the *actors*, and *operates* (generally) on the *objects* and (rarely) on the *virtual space*. The mail is communication. With the Office software we operate (on sg).

Other notions

+IConS (Interactive Contents & Services):

the "term for work" of the planned and hypothetic new CMS-technology (or in other words HCI-technology) complying with the URM requirements.

+Contents engine:

software engine of the hypothetic IConS technology introduced, managing the contents table and the semantic and the searching technologies of the *portal*. There are not antecedents in the recent portal technology.

+Activity assistant:

software element of the hypothetic IConS technology managing the client's activities. There are not antecedents in the recent portal technology. The notion comes from Leontiev's Activity Theory.

+Comprehension Assistant:

it is the hypothetic service dialog interface of the IConS technology, descendant of the context sensitive help. : e.g. for the right click on an *object* shows the object's meta-information.

Ontology:

Conceptual establishment of a discipline. Generalization of the lexicons: contains information on "what is what of what".

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+Ontology driven (semantic driven) HCI:

HCI, being integrated with ontologies, so that:

- the user can be given a report on the meanings and functions of the elements on the screen (on the virtual space and on the desktop)

- the user can arrange the elements on the screen in different ways, to display the different connections among the objects.

The \sim needs 2 independent ontologies: HCI ontology (o. of the domain independent e-service philosophy itself) and domain ontology (o. of the profession the e-service deals with).

HR ontology (or competency, role or user ontology):

Obligatory part of both HCI and the domain ontology. The different competences have different knowledge so may differ in comprehension capabilities, and may need different part of HCI and Comprehension Assistant. (NB: the ontology of the 'users of the domain interest' and 'of the quality assurance' are parts of the 'domain ontology', the ontology of the 'users of the 'users of the e-service interest' are in HCI ontology.)

Collaboration architectures

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Web-based Collaboration File-based Collaboration

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+Object-Based Collaboration

Slogans

For the business:

To manage, to govern and to make decisions, to perform any professional activity need professional and correct tools.

The matter is not how fast can you build e-services, but how correctly.

Slogan of the popular world of nowadays: "Customer experience instead of products/services." Our slogan for the professional world: "Client sovereignty beyond products/services." or: "Client sovereignty beyond experience."

Don't assign riddles to your client!

Without technological innovation the usability issues will return with renewed effort.

Effectiveness is how fast you find what you need. Competitiveness is how fast you comprehend what you may need.

For the profession:

The service is not more than we see at the screen.

There is not excellent practice without well elaborated theory. There is not theory without conceptual foundation, i.e. ontology.

The behavior of the virtual **objects** and virtual **actors** mustn't essentially differ from that of their real world ancestors.

Information sciences / Info-Communication Technologies are not bitches. Being counted as bitches, they will behave and return profit as bitches.

If it is easier to reinvent than to understand and to get to use – it is not a service, it is a riddle.