Evaluation of a User Interface of the User-Managed Access Authorisation Manager

Maciej Wolniak, Maciej Machulak, Lukasz Moren, prof. Aad van Moorsel
(Newcastle University)
Presentation:

• model authorisation manager
• definition of usability factors
• first interface
• research study
• study results
• new interface
Problem:

• Focus only on UX in relation to the UMA protocol
• Evaluate if users find authorisation manager useful
• Evaluate it AMs user-interface is user-friendly
Introduction:
User scenario:

Step 1. Login at AM

Step 2. Register a photo at AM

Step 3. Choose contacts
  - Step 3.1. Manage contacts

Step 4. Set up permissions

Step 5. Share

Sample task
Usability factors:

- learnability – users grasp it themselves
- efficiency – users achieve their goal
- memorability – users reproduce after a break
- errors recovery
- satisfaction – overall impression
Login view
smartam. - your one place to protect your online data

My Applications

My Shared Items

People I want to share with

Advanced Permissions

home page
### My Applications

<table>
<thead>
<tr>
<th>Application</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td><a href="http://www.facebook.com">http://www.facebook.com</a></td>
</tr>
<tr>
<td>Google Docs</td>
<td><a href="http://docs.google.com">http://docs.google.com</a></td>
</tr>
</tbody>
</table>

---

### ‘My applications’ view
### My Applications

<table>
<thead>
<tr>
<th>Applications</th>
<th>URL</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td><a href="http://www.facebook.com">http://www.facebook.com</a></td>
<td>Share Item</td>
</tr>
<tr>
<td>Google Docs</td>
<td><a href="http://docs.google.com">http://docs.google.com</a></td>
<td>Share Item</td>
</tr>
</tbody>
</table>

*Registering resources*

*‘My applications’ view*
‘My shared items’ view
‘My shared items’ view

new policies
‘My shared items’ – sharing settings
‘My shared items’ – sharing settings
### People I want to share with

**Manage people with whom you want to share your data**

<table>
<thead>
<tr>
<th>List</th>
</tr>
</thead>
<tbody>
<tr>
<td>My family</td>
</tr>
<tr>
<td>My friends</td>
</tr>
<tr>
<td>Companies</td>
</tr>
</tbody>
</table>
## People I want to share with

Manage people with whom you want to share your data

- My family
- My friends
- Companies

### Sharing Details:

- Name:
- Username:
- Password:

[Add] [Update] [Remove]
Initial research study:

- 34 participants
- men and women, aged 19-50
- questionnaire: interviews and online form
- sample task
- participants’ feedback
Study results:

- users found the manager complex due to many steps in the process
- confusing colour scheme
- respondents reported the layout to be comprehensible
- they stated it could have been better
- major flaw, confusing headlines
General ease:
<table>
<thead>
<tr>
<th>My Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facebook</strong></td>
</tr>
<tr>
<td><a href="http://www.facebook.com">http://www.facebook.com</a></td>
</tr>
<tr>
<td>Share Item</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Google docs</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://docs.google.com">http://docs.google.com</a></td>
</tr>
<tr>
<td>Share Item</td>
</tr>
</tbody>
</table>

Users found layout to be illogical – not corresponding with the sample task
Initial restrictions screen confusing accordion module vague form fields counter-intuitive drag boxes poor use of colours help requested.

Users comments

My Shared Items

My Shared Item:
Current CV (http://docs.google.com/private/docs/last_cv.pdf)
Located At: Google docs

Current CV

Your current sharing settings
Share my business items - Items I share with company

Restrictions
You must acknowledge to not provide

Available
You must acknowledge to be over

Share With:

Name: Share my business items
Description: Items I share with companies: CV's, cover letters, etc. Look at connected claims

Share It!
User-required improvements:

- more intuitive
- more logical
- more visual
- more colours
- more precise form fields
Smart AM 2.0:
Functional factors (again):

1. login
2. registering resources
3. choosing contacts
   3.1. optionally managing contacts
4. setting permissions
5. sharing
User scenario:

Step 1. Login at AM
Step 2. Register a photo at AM
Step 3. Choose contacts
Step 3.1. Manage contacts
Step 4. Set up permissions
Step 5. Share
The application Gallerify.me at http://www.gallerify.me would like to have access to your account and to:

- Allows the application to register resources.
- Allows the application to validate requests to your files.

**Gallerify.me**

Online photo management tool

Allow **Gallerify.me** access to your account?

Deny  Allow
smartam.

dogs
http://www.gallerify.me/

Permissions:
There are currently no permissions set.

add people
close X
Permissions:
There are currently no permissions set.

1) Choose contacts
You have no contacts yet, click "get contacts" button to add your friends from Facebook.
Permissions:
There are currently no permissions set.

1) Choose contacts

Bob Umanitarian  Andrew  Maciek Wolniak  Luke Kowalski  Łukasz Moreń

make public
add people
get contacts
close X
Permissions:

There are currently no permissions set.

1) Choose contacts

2) Choose policies

- Users at the external apps will be able to download your shared photos
- Gallerify users will be able to see your shared albums
smartam.

dogs
http://www.gallerify.me/...

Permissions:
There are currently no permissions set.

1) Choose contacts

Bob Umanitarian
Andrew
Maciek Wolniak
Luke Kowalski
Tomasz Moran

2) Choose policies

- Users at the external apps will be able to download your shared photos
- Gallerify users will be able to see your shared albums

save »
Notification after sharing an item
New interface:

satisfies sample task:

• user can register resources
• user can choose contacts
• user can set up sharing settings
Comparison:

- Dynamically registered resource
- Sharing
- Choosing contacts
- Choosing policies
- Saving
Comparison:

- Single screen
- Visual emphasis
- Ordered steps
- More colours
- Rewritten form fields
Lesson learnt:

- keep it simple
- emphasise key features
- show only options necessary now
- indicate current stage in the cycle
Future work:

• conducting another research
• include at least the same number of participants or preferably more
• perform a new user evaluation study based on the new user interface
• apply the same questionnaire try thinking aloud method or voice recording
Do you think new interface...

... satisfies usability factors:

• more intuitive
• more logical
• more visual
• more colour
• more precise form fields
Acknowledgements
Thank you

Maciej Wolniak
maciej.wolniak@ncl.ac.uk

Łukasz Moreń
lukasz.moren@ncl.ac.uk

prof. Aad van Moorsel
aad.vanmoorsel@ncl.ac.uk

Maciej Machulak
m.p.machulak@ncl.ac.uk

www.smartam.net