tOSSad OSS 2006 Workshop

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A F/OSS Usability Study: tOSSad Case

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Damiano Verzulli
tOSSad Project
damiano@verzulli.it

Our “Usability Study”: why?

- **tOSSad**:
  - you just know about it, so I'll skip ;-)
- **WorkPackage3**:
  - Within tOSSad, WP3 “mission” is to share usability aspects and requirements, also by carrying out F/OSS usability tests;
  - One of the outcome of WP3 is “Deliverable 10” (D10): “***F/OSS Usability Report, Part A***”

This presentation contains the main outcomes of tOSSad D10 as it has been produced by WP3 partners

Why _exactly_ those three questionnaires?

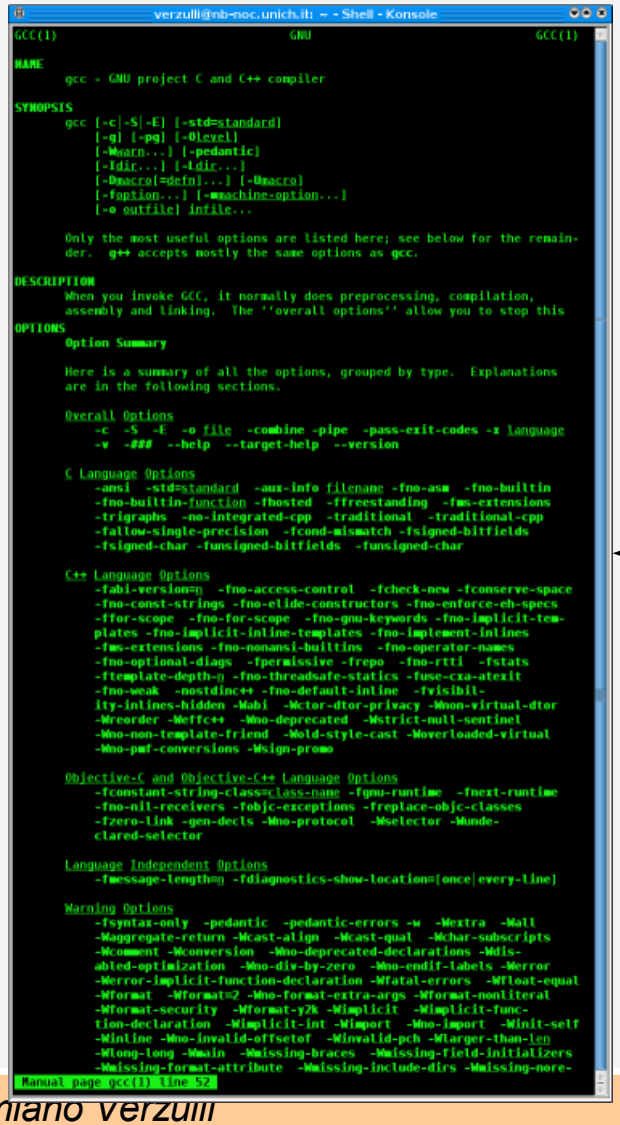
- Our goal:
  - "Get an overview of the «general-user» perception of F/OSS applications usability level"

Even if we tried to refer to a (relatively) specific target (...the «general-user») we had the problem of the extremely wide application base:

F/OSS applications range from "gcc" to "xclock" and they definitely have different usability requirements, as they surely target very different set of users!

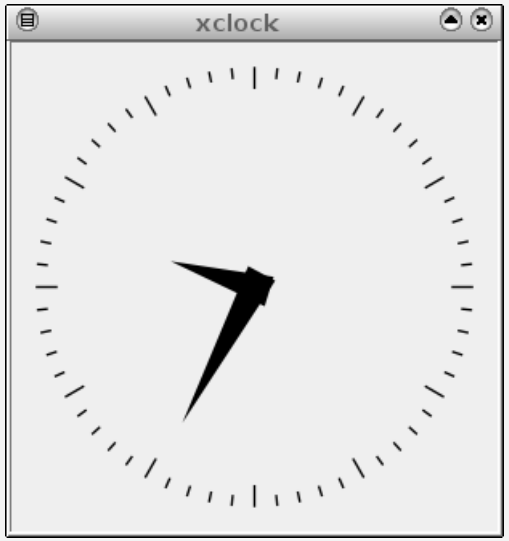
Should you not be familiar with above two "guys", here they are... ⇨

“gcc” vs. “xclock”: usability requirements



XCLOCK:

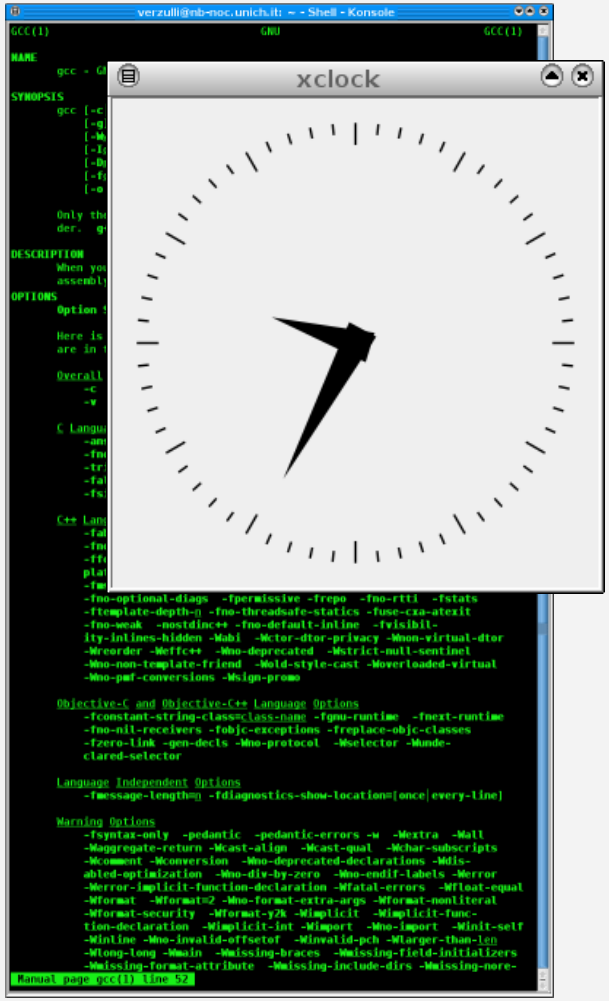
- GUI based;
- totally usable without any parameter...
- ...and without any skills



GCC:

- command line based;
- several hundreds of possible “parameters”;
- mainly used by “geeks”

The “target”: is it important?



- As you'll see, defining the right target is a key-point to correctly address any usability issue
- For example, if you focus on “blind people”, they could find much easier to **USE** “gcc” than “xclock”. This surely involve “accessibility” issues as well but... it's also related to “usability”

Back to our problems: Choosing the applications to study

- Choosing a proper set of F/OSS applications to "study" still remain a problem **also** avoiding "CLI-based" ones;
- We decided to focus our study on:
  - **a "simple" application**: one with few functionalities and usable also with very low ICT skills;
  - **a "medium" application**: one with a wide set of functionalities (basic and advanced), usable by both unskilled and skilled users;
  - **a "complex" environment**: a whole "operating-system" whose functionalities, interfaces and customization possibilities, let a "usability study" (...and even a simple "comparison"), mostly impossible.

The three applications

- A mostly instantaneous consensus was established within WP3 partners.
- We decided to focus our study on:

  - **“simple” application**: Firefox, as one of the “killer” F/OSS applications, widely disseminated within both proprietary and F/OSS environments;

  - **“medium” application**: OpenOffice.org, as the only Office-Automation suite that can seriously impact the current monopoly, based on one proprietary product;

  - **a “complex” environment**: the “Linux-Desktop”... with deliberately no further specification.

A quick recap...

- Up to now, I've just exposed:
  - the reason of our “Usability Study”;
  - the reason of the choice of the previous three applications.
- In the following few slides, I'm going to speak about the “methodology” and, finally, the results

The “methodology”

- WP3 partners quickly agreed on following points:
  - in the set “telephone-interviews, self-administrated interviews, personal-interviews”, it was decided for **self-administrated interviews;**
  - questionnaires were made available on tOSSad website and **performed on-line**;
  - possibility to **fill only <u>some</u>**, and not necessarily all the three, questionnaires (even only 1);

and finally, the most important requirement:

Respondents should have been able to finish the survey in around 15 minutes!

The “questionnaires”

- 15 questions about FireFox; ← **Q.1**
- 18 questions about OpenOffice.org; ← **Q.2 and Q.6**
- 17 questions about Linux. ← **Q.3**

Of above questions, a minor number were intended to (try to...) identify the type of user.

We registered:
- 196 respondent for OpenOffice.org questionnaire;
- 205 respondent for the Firefox questionnaire;
- 274 respondent for the Linux questionnaire;

“Results” highlights: FireFox

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How long have you been using Firefox?

Label	Value	Count	Percentage
Less than 3 months	1	19	9%
3 to 6 months	2	15	7%
6 months to 1 year	3	51	25%
More than 1 year	4	119	58%

Functionality provided by FireFox

(1 – bad/lacking funcs, 6 – good/satisfying funcs.)

Label	Value	Count	Percentage
1	1	1	0%
2	2	2	1%
3	3	3	1%
4	4	15	7%
5	5	83	41%
6	6	100	49%

Comprehensibility of terms, names, abbreviations or symbols in forms / menus, etc.

(1 is completely incomprehensible - 6 is easy to understand)

Label	Value	Count	Percentage
1	1	1	0%
2	2	0	0%
3	3	3	1%
4	4	14	7%
5	5	68	33%
6	6	118	58%

Ease of use

(1-very complicated, 6-very easy to use)

Label	Value	Count	Percentage
1	1	0	0%
2	2	2	1%
3	3	1	0%
4	4	11	5%
5	5	59	29%
6	6	131	64%

“Results” highlights: OO, part 1

Why did you switch to OpenOffice.org?

Label	Value	Count	Percentage
I started with OpenOffice.org	1	15	8%
Because security is better due to general availability of source code	2	36	18%
It has lots of features	3	67	34%
It is user-friendly	4	71	36%
It does not crash	5	42	22%
It is free	6	148	76%
I like the F/OSS (free/open source software) idea	7	117	60%
I think the quality of F/OSS is better	8	64	33%
F/OSS is more open to standards than commercial software	9	92	47%
There are no constraints due to legal commitments (licenses)	10	75	38%
I use both Microsoft Office and OpenOffice.org	11	46	24%
OpenOffice.org is our company/organization policy	12	19	10%
I did not switch from Microsoft Office	13	13	7%
Other	14	19	10%

Interesting points about OO users:

- *10% use it because it is their company policy;*
- *7 % declare that they did not switch from MS Office*
- *8% started with OpenOffice.org (they have not used other similar product)*

Note:
- 54% of OO users used 1.1.X
- 38% used 2.0 alpha/beta

“Results” highlights: OO, part 2

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Stability (compared to Microsoft Office
(1 – completely unstable, 6 - very stable)

Label	Value	Count	Percentage
1	1	2	1%
2	2	5	3%
3	3	8	4%
4	4	30	15%
5	5	69	35%
6	6	81	42%

Functionality provided by OO
(1 – bad/lacking funcs, 6 – good/satisfying funcs.)

Label	Value	Count	Percentage
1	1	2	1%
2	2	5	3%
3	3	8	4%
4	4	30	15%
5	5	69	35%
6	6	81	42%

User interface
(1 – bad interface, 6 – excellent interface)

Label	Value	Count	Percentage
1	1	2	1%
2	2	6	3%
3	3	20	10%
4	4	49	25%
5	5	85	44%
6	6	33	17%

Overall impression of OpenOffice.org
(1 - very bad, 6 - very good)

Label	Value	Count	Percentage
1	1	1	1%
2	2	8	4%
3	3	13	7%
4	4	45	23%
5	5	81	42%
6	6	47	24%

Note: 54% of OO users used 1.1.X and 38% used 2.0 alpha/beta

“Results” highlights: Linux

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What Linux distribution do you use?

In terms of user interface, even if GNOME and KDE are the default choice for lot of distributions, due to the flexible nature of any Linux systems, it's easy, for the user, not only to adopt a third, different, user interface but also to continuously switch between them.
So....

Label	Value	Count	Percentage
Mandriva (formerly known as Mandrake)	1	36	13%
SuSe/Novell	2	72	26%
Debian GNU/Linux	3	72	26%
Gentoo	4	51	19%
TurboLinux	5	0	0%
Slackware	6	12	4%
Knoppix	7	25	9%
Red Hat Enterprise Linux	8	40	15%
Fedora Core	9	29	11%
Ubuntu	10	51	19%
Pardus	11	7	3%
			5%

Should we have asked users more details regarding “user-interface”?
We think NO! To really (try to...) understand the usability of a Linux Desktop, a much more “deep” (...and focused) study is needed!

‘Results” highlights: Linux

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How long have you been using Linux?

Label	Value	Count	Percentage
less than 6 months	1	26	9%
6 to 12 months	2	45	16%
more than 12 months	3	203	74%

Was it easy to start using Linux?

(1 – very difficult, 6 – very easy)

Label	Value	Count	Percentage
1	1	8	3%
2	2	28	10%
3	3	67	24%
4	4	83	30%
5	5	66	24%
6	6	22	8%

Is your Linux system stable?

(1 – very unstable, 6 – very stable)

Label	Value	Count	Percentage
1	1	6	2%
2	2	2	1%
3	3	11	4%
4	4	16	6%
5	5	65	24%
6	6	174	64%

Overall impression of Linux

(1 - very bad, 6 - very good)

Label	Value	Count	Percentage
1	1	4	1%
2	2	2	1%
3	3	8	3%
4	4	24	9%
5	5	78	28%
6	6	158	58%

‘Results” highlights: Linux

(1 – very negative, 6 - very positive)

Q.14: “What is your overall impression of the Linux Operating system?”

Label	Value	Count	Percentage
1	1	4	1%
2	2	2	1%
3	3	8	3%
4	4	24	9%
5	5	78	28%
6	6	158	58%

Not positive

Positive

Q.3: “How long have you been using Linux?”

Label	Value	Count	Percentage
less than 6 months	1	26	9%
6 to 12 months	2	45	16%
more than 12 months	3	203	74%

Young

Old

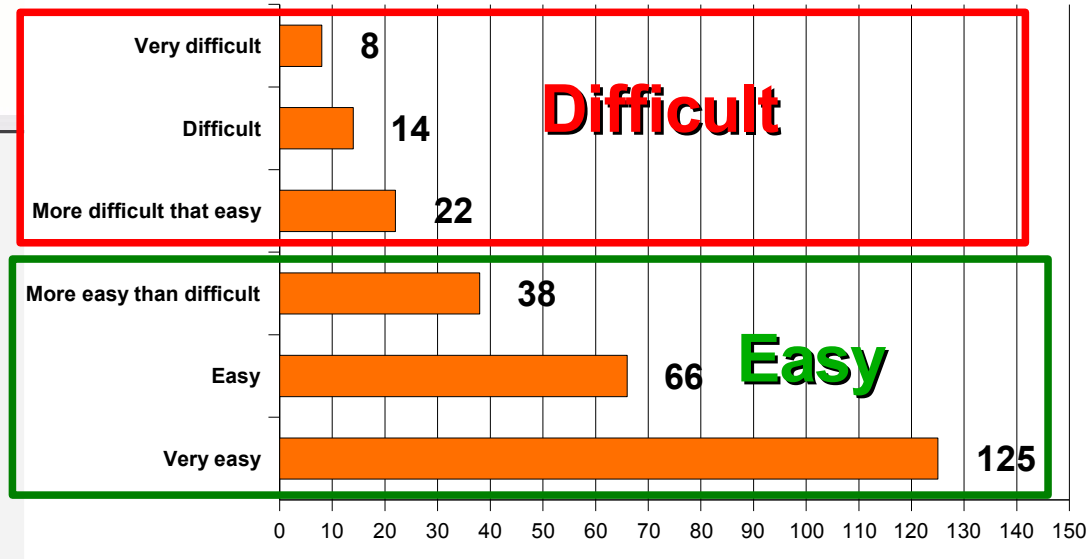
Experience	*Impression*	*Count*	*%*
Old	Positive	181	66,30%
Young	Positive	54	19,78%
Old	Not Positive	21	7,69%
Young	Not Positive	17	6,23%

We derived that
More experienced users have the more positive impression

As it seems that “user experience” is an important factor, we went further…

“Results” highlights: Linux

Q.11: “Is it easy to install/uninstall software under Linux on your computer?”



Q.3: “How long have you been using Linux?”

Label	Value	Count	Percentage
less than 6 months	1	26	9%
6 to 12 months	2	45	16%
more than 12 months	3	203	74%

Young

Old

Easy/Diff	Young/Old	Count	%
Easy	Young	50	18,32%
Easy	Old	179	65,57%
Diff	Old	23	8,42%
Diff	Young	21	7,69%

The difficult of software [un]installation does NOT depend on the user experience

Conclusions

- We are aware that “usability” is still not the first priority of F/OSS developers, as they targeted high-end users for several years;
- We've tried to identify main usability problems in three different “areas” (simple/medium/complex);
- Our surveys shows that:
  - after a few years of improvements, some of the main F/OSS applications are “friendly” and... “usable”;
  - in order to get further/deeper results, especially for “complex” applications, very focused usability-studies need to be performed.

That's all!

Thanks for your attention!

- The full deliverable (currently under revision), together with the full proceedings of this conference, are available on-line on tOSSad Website:

http://www.tossad.org

- For any further information don't hesitate to contact us at:

info@tossad.org

or, if you prefer, me at:

damiano@verzulli.it