

AMMITEC – Software Quality Survey Results

Tasos Makris
IT & Usability Consultant
AMMITEC BoD



One year ago.....

AMMITEC's 2017 AGM, decided to conduct a Survey on "ERP Software Quality".

The questionnaire was modeled on "SUS" and "PSSUQ" questionnaires – a quick and dirty usability scale, used to measure user satisfaction, taking into account "AMMITEC Guidelines on Software Quality"

We received 64 answers.

Software Quality Questionnaire p.1

Presentation Notes: AMMITEC's Questionnaire

Το ερωτηματολόγιο:

AMMITEC Software Quality Questionnaire v1.3

Dec. 2017

Software Maker______ Application Name______

○ Office Software ○ Vessel Software

#	STATEMENT	Strongly disagree				Strongly agree
		1	2	3	4	5
1	I am satisfied with this software's ease of use					
2	I easily learned how to use the program					
3	The software gives error messages that clearly tell me how to fix problems.					
4	Whenever I make a mistake using the software, I can recover easily and quickly					
5	The information (eg: online help, on-screen messages, manuals, FAQs and other documentation) provided with this software is helpful.					
6	It is easy to find the information I need.					

Software Quality Questionnaire p.2

7	The info on the screen is well organized			
8	I am satisfied with the look and feel of this software			
9	This software has all the functions and capabilities I expect it to have.			
10	I often need to call the technical support/helpdesk in order to perform routine tasks.			
11	I think there is too much inconsistency in this software.			
12	I need to learn a lot of things before I can do my job with this software.			
13	This software helps me be more productive.			
14	Overall, I am satisfied with this software.			
15	I would recommend this software to a colleague			
16	Comments & Suggestions	Free text, 1500 characters		

The questionnaire was sent to IT Managers, AMMITEC's members.

We asked them to reply as representatives of their users (Office and Vessels), regarding the quality of the ERP they use.

м

Sample#1: 50% dissatisfied

AMMITEC Software Quality Questionnaire 2018

Question 7: The information (eg: online help, on-screen messages, manuals, FAQs and other documentation) provided with this software is helpful

Strongly Disagree	Disagree	Neutral		Strongly Agree
18,75%	32,81%	39,06%	9,38%	0,00%

Sample#2: 48% satisfied

AMMITEC Software Quality Questionnaire 2018

Question #13: This software helps me be more productive.

Stronlgy Disagree	Disagree	Neutral	Agree	Strongly Agree
9,38%	10,94%	31,25%	40,63%	7,81%

Sample#3: balanced

AMMITEC Software Quality Questionnaire 2018

Question #16: Overall, I am satisfied with this software.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9,38%	17,19%	35,94%	35,94%	1,56%

Sample#4: balanced

AMMITEC Software Quality Questionnaire 2018

Question #15: I would recommend the software to a collegue

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
14,06%	17,19%	29,69%	35,94%	3,13%

Conclusions:

In a nutshell it seems that:

1/3 are disatisfied

1/3 are satisfied

1/3 stand in the middle



Conclusions:

- There is a definite improvement of ERPs during the last decade, regarding their functionality and quality of use.
- The survey result is worrying, particularly for the vessel ERP, because:
- a) It's about a lasting, recurring malfunction
- b) the Distance with the vessel and the different Time Zone, impose communication difficulties
- c) the Training received by the seamen is not sufficient
- d) Resolution of even small problems can take up to 72 hours and more.
- e) Clerical work onboard and at the office has increased a lot.



Conclusions:

- Need for improved software, especially it's "Help"
- Need for brake on "Customizations"
- Need for an increase on followers of AMMITEC Guidelines
- Need for an increase on the Developer's "Company Usability Index"
- Need for IT Dept. and Management to seek Quality not only Functions.



Quality for every piece of software onboard

Bridge Software: the replacement of the paper map by the electronic map, brought new headaches and delays to crew and IT staff on shore!!

Updates and Licensing errors are very common and bring frustration and humiliation to good technology practices.

Part of these failures is caused by the fact that satellite networks lack the quality of land networks.

AMMITEC's next project will research the Quality of Bridge, Engine and other special software.

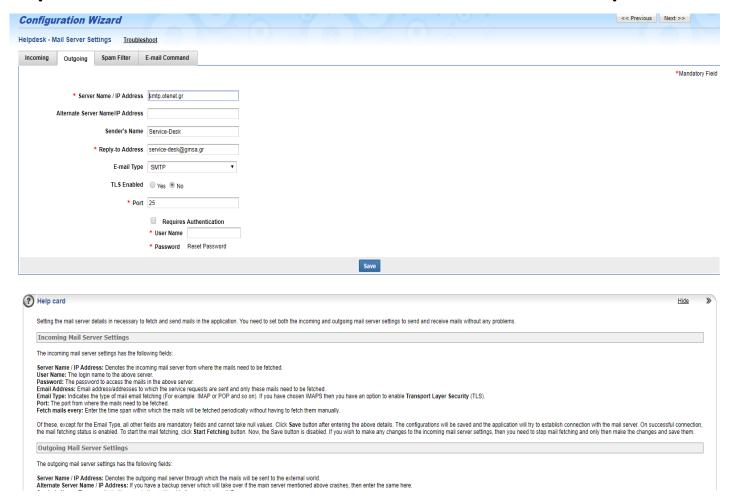


Minimum Usability

Could we agree that the following 6 principles will guide next year's code development? The first 3 can be implemented with minimal code modifications.

- Mark required fields (*)
- 2. Reduce Number of Clicks
- 3. Put Help text exactly where it is needed (ie: on the screen)
- 4. Error Prevention (Murphy's Law: if something can go wrong, it will)
- 5. Error Recovery
- 6. Don't Make Me Think (long transactions should be made simpler)

Example: detailed instructions on every screen



Useful Quotations:

■ "For every computer problem, even many hardware problems, there is a simple solution to the user interface, often as simple as improved wording." (Bellis' Law)

If something can go wrong it will. (Murphy's Law)

The software must be so productive, as is powerful and flexible. м

Our advice to software designers and programmers, is to:

- 1) Bear always in mind that the software they build it will be used at sea, by not-well trained seafarers, who lack the "luxury" of our land office.
- 2) ... and that the software they build is only a small part of the chain of tools that make a vessel Seaworthy.



Making Life Easy



It's a happy coincidence that tomorrow (8/11) the world celebrates the World Usability Day, or "Making Life Easy!" Day. (see https://worldusabilityday.org/events/). There are many events scheduled around Europe, USA, Brazil and Indonesia!

It is also a happy coincidence that the first WUD celebrated in Greece was 10 years ago in Piraeus, with an extensive participation from the Maritime world (https://usability.ntlab.gr/2008/gr/participants/).

Bad design makes life difficult



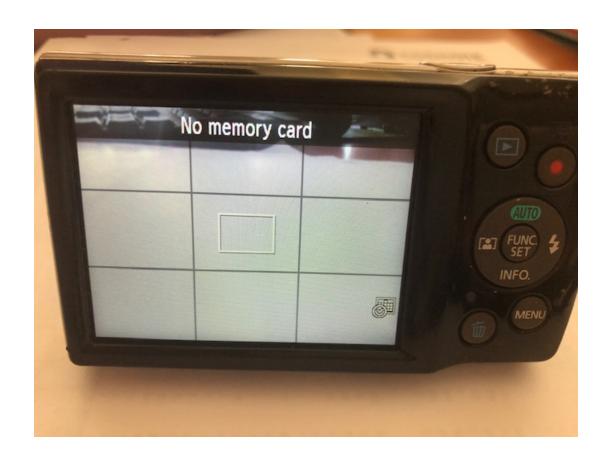
T. Μακρής - Software Quality Survey Results

Unambiguous design: do this or that



T. Μακρής - Software Quality Survey Results

Ambiguous design: no action is suggested



T. Μακρής - Software Quality Survey Results

Reading List

Χρήσιμοι σύνδεσμοι:

- https://www.nngroup.com/articles/usability-101-introduction-to-usability/
- https://www.usability.gov/how-to-and-tools/methods/running-usability-tests.html
- http://www.uxbooth.com/articles/the-art-of-guerrilla-usability-testing/
- https://www.nngroup.com/videos/attention-leans-left-websites/
- https://www.nngroup.com/articles/test-when-you-know-answer/

Eυχαριστώ! - Thank you!