HIGHER SCHOOL OF ECONOMICS –
NATIONAL RESEARCH UNIVERSITY

Ergonomics of Human-Machine Interaction

IMPROVING OZON.RU DESIGN

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Website:

https://www.ozon.ru

Website description:

Ozon is the most popular Russian online store selling Books, Movies, Music, Software, etc. It has been working since 1998 and selling goods worldwide to customers in 56 different countries.

Project description:

When a user buys a particular item there is a chance he might want to buy something else connected with his current purchase. To help him understand what he wants Ozon.ru has special *Suggestions pane*. It presents several connected items and allows user quickly add them to the cart. The problem is that users are getting confused when they see so many options to pick from. The goal is to to improve efficiency of *Suggestions pane*. We highlighted one suggested item to attract users.

Fig. 1. Ozon Suggestions pane

Fig. 2. Suggestions pane improvement

Independent Variables:

The fact of displaying the improved recommendations pane to user.

Dependent Variables:

Fraction of suggested items that has been added to cart.

Research plan:

1. Attract as much participants as possible
2. Ask every participant to pick 5-10 items for their imaginary newborn child
3. Record the results for each participant
4. Analyze gathered data with the help of Pearson's Chi-Squared Test

Null and alternative hypothesis:

H_0: there is **no** significant difference between old and new design
H_A: there is significant difference between old and new design

Prototype:

Out team developed user script that modifies suggestions pane on product description page. Script was written with means of Tampermonkey extension for Firefox web browser. Script detects which items were picked from suggestions pane.

Criteria:

In this work we used *Pearson's Chi-Squared Test* to determine whether our changes are statistically significant

Research results:

Observed:	# of users	Items in cart	recommended items	not-recommended items	% of recommended items
Classical pane	36	277	21	256	0,075812274
Pane with highlighted item	34	261	36	225	0,137931034

Expected:	# of users	Items in cart	recommended items	not-recommended items	% of recommended items
Classical pane	36	277	29,34758364	247,6524164	0,105947955
Pane with highlighted item	34	261	27,65241636	233,3475836	0,105947955

Chi-square:	recommended items	not-recommended items
Classical pane	2,374374447	0,281370776
Pane with highlighted item	2,519929968	0,29861956
Chi-square:	5,474294751	
df:	1	
p-value (5%):	0,019346	

Conclusion:

Our experiment demonstrated that highlighting one of the items in *Suggestions pane* influences the number of suggested items that had been added to cart.

References:

1. Scott I. MacKenzie. "*Designing Human Computer Interface Experiments*":

http://www3.cs.stonybrook.edu/~mueller/teaching/cse323/05-DesigningHCIExperiments.pdf

2. Online store Ozon.ru :

https://www.ozon.ru

3. Userscript manager Greasemonkey :

https://addons.mozilla.org/ru/firefox/addon/greasemonkey/