Website User Interface of Marine Bio-Tourism Destination for Today Digital Environment

Rudy Aryanto, Mulyani

*Abstract***:** *This quasi experimental research investigated the influence of user interface from tourism destination website toward the attitude of youth tourist. Paper reviewed website persuasion and examined the level of influence website user interface persuasion based on the method ELM toward youth tourists' attitude i.e. attitude to website, attitude to tourism destination, attitude on bio-tourism and visit intention. Data analysis MANOVA GLM generated the website information in the form of peripherals routes has effect most powerful to influence tourists' attitude especially visit intention. It indicates tendency that youth tourists still more careful attention to learn content message and they were more cognitive response to powerful argument about the importance of the protection and preservation of marine tourism destination. The youth tourist instead influentially by experiential, with this result that the peripheral form of bio-tourism website user interface design which explored about the adventure tourism destination visit experiences is recommended. This research useful to know the attitude of consumers after they observe marine tourism destination web site then management can design customer interface of websites effectively in conformity with expectation of consumer.*

Keywords : website user interface, marine bio-tourism, elaboration likelihood model, digital environment, digital marketing

I. INTRODUCTION

The research of consumer attitudes response and impacted by the website user interface is always held in order to understand the basic behavior of consumer, because attitude is consistent, the attitude is also resistant to change, once that attitude is formed it is difficult to change. However, experts always try to change it. The aim is to strengthen the positive attitude of consumers [1], because positive attitudes will be generated purchases, and recommendations, while negative attitudes will result in rejection [2]. To shape and change the attitudes of need persuasion [3], because of persuasiveness to behave using promotional communication [4]. The current powerful persuasion of the internet media is tourism destination website that will affect the attitude of tourists, especially in adolescence or youth,

because the largest internet access in Indonesia is 64% are teenagers [5], the majority of internet users in Indonesia aged 18-25 years and fall into the category of 'digital natives' [6].

The use of the website as a tool for persuasion to influence consumer attitudes for Indonesia is needed in such areas as Jakarta. Based on UNIDO research [7] DKI Jakarta has become one of the fastest growing cities in the world. But this city has a problem because it is 40 percent below the sea level [8]. Therefore, the role of conservation, preservation and preservation of natural bio-tourism destinations is needed for life support systems in DKI Jakarta. Areas of natural bio-tourism destinations include coastal and marine areas, acting conservationists of coral reef ecosystems and marine biology, which are used to absorb marine sedimentation, abrasion, and phytoplankton producers in the form of exudates that play a role in freezing clouds and rain. This role of the coastal area needs awareness of the community to preserve it, especially the youth generation. This marine tourism area is managed by Destination Management Organizations (DMO). The main task of the DMO is to communicate with prospective tourists, and implement sustainable tourism through the concept, planning and destination marketing strategy [10]. Because tourism is an industry that is information intensive, the year 2005 United Nations Conference on Trade and Development (UNCTAD) proposed a web marketing strategy called e-tourism and Destination Management Systems (DMSs), namely the use of ICT by DMO [9].

Exploring on the marine tourism website is directed not only to attract tourists but also changes the attitude of tourists to preserve its biodiversity and conservation areas [10]. In accordance with the goal of creating an area of bio-tourism as a concept tourism that aims to protect the environment and cultural conservation, natural resources and biodiversity [11]. Bio-tourism is an ecological part of sustainable ecotourism which includes promotes water conservation [12]. One of the famous areas of marine bio-tourism destination around Jakarta is the Thousand Islands National Park (TNKpS) as one of the biosphere reserves that is useful for protecting the city of Jakarta, the manager of this area has a website as information for tourists. However, in order to further improve its function as a means of persuasion, the manager wants to improve knowing the most appropriate and effective design.

Thus, the website of the marine bio-tourism destination is increasingly important, because it gives advantages as accessibility, interactive communication, and no limit services [13].

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To design the appropriate user interface and communication system, the method of ELM can observe the view of consumers and changed it with different ways of persuasion, namely the manner of central routes manner of peripheral routes.

The purpose of this research is to find out the type and form of information in a format of marine bio-tourism destination website which is most appropriate to change the attitudes of young travelers according to the level of concern for their environment, whether information that central routes type compared with peripheral.

II. LITERATUR REVIEW

The theory of Elaboration Likelihood Model (ELM) created by Richard E Petty and John T Cacioppo [14], explains how a persuasive message working to transform and influence the attitude of recipient. Central and peripheral route: both are effective technique of persuasion style, and yet each had the strategy and the principles of a guide to make information more effective. Central Routes is messages sent through the central route of persuasion, straight forward and complete. The central route consists of "thoughtful consideration of arguments (ideas, content) in messages". While the Peripheral Route of persuasion route is successful for messages with recipients whose involvement is low, recipient motivation is low, and messages are weak [15].

Central/Middle/Center route is a method of messages transmitted via the route of central persuasion must be straight forward and complete, then Recipient careful in learn about the contents of the message and evaluate the subject of an idea. Messages are transmitted via this route must have a high level of involvements; the receiver should really care about and associated with the subject [16].

Peripherals route of persuasion peripherals succeed to a message for a receiver involvement, motivation accepter low, and the message is weak. Not like central route, messages are transmitted via the route of peripheral not processed in cognitive. On the contrary, peripheral said that is the route ' if someone unable to decipher extensively; so they can still be seduced by factors which had nothing to related with the contents of the message itself' [17]. Catchy song, bright colors, and support a celebrity are all way of peripheral persuasion. The message will try to attract attention by making the recipient thinking about something they were familiar with and have a mind positive about.

Attitude is a learned predisposition to behave in a consistently favorable or unfavorable way with respect to a given object [2]. Persuasion of information and advertising will form a change of attitude, namely attitude to advertising, attitude to brand especially toward the brand of tourism destination, and purchase intention. Meanwhile, the persuasion of tourist destination of course will affect toward attitude to ecotourism.

Attitude toward the website interface as predisposition of respond in a favorable or unfavorable manner toward stimulant during an exposure occasion [18]. Ability of information to create attitude often depends on attitude consumers with the ads interested or evaluated favorably. Effective information can produce a more positive attitude to products. The unfavorable information possible can reduce intention to buy products by consumers [19].

Common pattern of previous research shows that the consistency of the deployment of positive stimuli at a brand can create the attitude of consumers to the brands [20] in this research context is marine tourism destination. Positive attitude of consumers will be valuable for the company assets because the deep positive attitude will help customers to forget various mistakes that might be done by brands accidentally [21]. The attitude assessment is a description of the attitude of tourists to the whole, both the products and services offered, namely the facilities and activities, as well as the brand of the tourism destination.

Attitude to bio-tourism is attitude and concerns on environmental issues a reflection on commitment activity to the environment resulting from tourist, it's default position about the level of ecotourism insight. Attitude to bio-tourism describing the involvement level and participation toward conservation and advocacy [22].

Visit intention is something associated with consumer plan to purchase and how many tourism product units required for the time period. Intention is mental statement of consumers reflecting plan to purchase of products with certain brands [23] in this research context is marine tourism destination. Intention is the basic unit of the networked plan that will emerge when individuals doing the cognitive activity toward the future, such as planning, dreaming, contemplation, mental simulation.

III. METHOD

This scientific research used the method of quasi experimentation with the type of completely randomized design in posttest only group observation. Louisa [24] recommends that experimentation is the best method to test the effects of online advertising and the most used method in research of published. The subject of this study are youth tourists, by giving stimuli of central and peripheral rotes advertising form, to determine the relationship of the independent variables on the dependent variable. The primary data sources obtained through the distribution of questionnaires with a sample obtained from the two groups experiment (between-subject experimental) amounted to 90 people, correspond to Hair et al [25] recommended minimum cell size is 20 observations per cell (group). The data processed using Multivariate Analysis of Variance General Linear Model (MANOVA GLM), research wants to know the attitude of tourists who had received stimuli of central routes advertising, peripherals, and control procedure on the tourism destination TNKpS website.

This research produced an idea of how the stimuli given to travelers has been influenced to respondent attitude to advertisements or information, attitude toward tourism destination, attitude toward ecotourism, and purchases intention on TNKpS tourism destination web site. Time horizon used in this research is cross-section, data collected only once days, maybe during a period of week or month with the purpose to answer questions research [18].

IV. RESULT AND DISCUSSION

Initially step, validity tests on indicators / elements, consistency of reliability test and normality test were carried out. The results show a Validity Test in the form of Corrected item-total Correlation rsquare > rtable/critical (0.3 > 0.05) interpreted as valid, Cronbach's Alpha > 0.70 that is reliable, and the One-Sample Kolmogorov - Smirnov Test at each variable average Sig>0.05 this bell-shaped curve [26] describe normal distribution.

From the table 1 seen the BOX'S M is 31.516 with figures sig. 0,003, and from the table levene test seen the significance for the two variable dependent far above 0.05 and the others bellow. This diversity of results shows the existence of homoscedasticity on several other dependent variables, so from this result no corrective correction is needed anymore [25]. In addition, MANOVA is not influenced by variance especially if each group has approximately the same number [27], MANOVA remains robust so analysis can proceed for next step [28].

TABLE - I. Box's M and Levene Test

Box's Test of Equality of Covariance Matrices

Box's M	31.516
F	2.659
df1	10
df2	3748.207
Sig.	.003

Levene's Test of Equality of Error Variances

	F	df1	df2	Sig.
Attitude to Website	.825	1	28	.371
Attitude to Tourism Destination	9.354	1	28	.005
Attitude to Biotourism	6.879	1	28	.014
Visit Intention	13.708	1	28	.001

Table 2 shows test using procedure of Pillai, Wilk's Lambda, Hoteling and Roy's. All procedures denote number of significances of the same 0.018 < 0.05, then Ho rejected. This would mean stimuli from tourism website concurrently and simultaneously affect to the attitude to website, attitude to tourism destination, the attitude of bio-tourism, and intention to purchase.

TABEL - II. Output Test for Multivariate Significance

Effect	Value	F	Sig.	η^2
Pillai's Trace	.369	3.650	.018	.369
Wilks' Lambda	.631	3.650	.018	.369
Hotelling's Trace	.584	3.650	.018	.369
Roy's Largest Root	.584	3.650	.018	.369

Look up on the table 3 for dependent variable: attitudes to website, attitude to tourism destination, the attitude of bio-tourism, and intention to purchase, are significance under 0.05 (i.e. 0,000 until 0,003) most powerful. Thus, to test the variable of Y1, Y2, Y3, and Y4, decided to reject Ho. It means individually dependent variables influenced by central routes of advertising persuasion, peripherals, and procedures control.

TABEL - III. Tests of Between-Subjects Effects

Dependent Variable	ELM Test	Mean	Average	Type III Sum of Squares	F	Sig	η^2
Attitude to Website	Peripheral	4.700	4.3310	4.085	11.086	.002	.284
	Central	3.962					
Attitude to Tourism Destination	Peripheral	4.717	4.2587	6.293	12.867	.001	.315
	Central	3.801					
Attitude to Bio-tourism	Peripheral	4.844	4.3980	5.967	13.258	.001	.321
	Central	3.952					
Visit Intention	Peripheral	4.957	4.6637	2.587	10.567	.003	.274
	Central	4.370					

The tourism destination web stimuli of ELM help respondents to choose tourist locations, having performance that marine tourism web has been ideal (consistent with expectation) especially content on web site, able to provide conservation and natural protection education to tourists, interest and intention to information on the web sites of natural is highly important valued information about tourist destination for tourists.

Inferential from research obtained the most influential relationship toward the visit intention is peripheral routes (means 4.957 and significance 0.000 < 0.05), and indicator Q35 is most powerful, namely "the website remind my previous experience, then I would increasingly like to visit natural tourist destinations again". The second influential relations toward the attitude to bio-tourism, and indicator Q29 is most powerful, namely "this website can improve attitudes and concerns for natural tourism objects and the community environment". The third influential relationship attitude to website namely peripheral routes, and indicator Q8 is most powerful, namely "i feel that web information helps to choose a natural tourist destination". The last influential relationship with the attitude to tourism destination, and indicator dependent Q13 is most powerful, namely "the impression after seeing this website increases the feeling of being very like toward TNKpS natural marine tourism destination".

V. CONCLUSION

Overall, experiment analysis after MANOVA GLM multivariate test and through some test goodness of fit and significance, ascertainable that peripheral routes forms of web site information has effect most influential to tourists' attitude to website, attitude to tourism destination, attitude to bio-tourism and visit intention. It indicates tendency that youth tourists more careful attention to learn content message and exposing response cognitive sufficiently powerful argument of the importance of conservation and preservation of marine tourism destination. This research reveals that youth tourist influenced by experiential, so, the peripheral methods of bio-tourism website design may explore to attract visitor intention. However, this research analyzed the attitude of consumers after they observe marine tourism destination website, then recommend management to design customer interface of websites effectively in conformity with expectation of consumer.

REFERENCES

1. R.D. Blackwell, P.W. Miniard, & J.F. Engel. (2006). Consumer Bahavior. Thomson/South-Western.
2. G.L. Schiffman & L.L. Kanuk. (2010). Consumer Behavior (10th Ed). New Jersey: Prentice Hall, Pearson Education Inc.
3. G. Bohner & N. Dickel. (2010). Attitudes and Attitude Change. Annual Review Psychology, 62:391-417.
4. J.P. Peter dan J.C. Olson. (2014). Consumer Behavior and Marketing Strategy. Salemba Empat.

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5. D. Rosdianah. (2009). Pengguna Internet Indonesia didominasi Remaja. Jakarta Kompas.Com. 20 Maret 2009.
6. APJII & Puskakom UI. (2015). Profil Pengguna Internet Indonesia 2014. Asosiasi Penyelenggara Jasa Internet Indonesia UI.
7. UNIDO. (2015). Independent UNIDO Country Evaluation in Indonesia. United Nations Industrial Development Organization.
8. RJPMD DKI Jakarta 2013-2017.(2013). Rencana Pembangunan Jangka Menengah Daerah – Bappenas.
9. K. Klimek. (2013). Destination Management Organisations and Their Shift to Sustainable Tourism Development. European Journal of Tourism, Hospitality and Recreation. Vol. 4, Issue 2, pp. 27-47.
10. R. Aryanto, D. Wulan, H. Sarjono, I.G. So. (2014). The Difference in Eco-Tourist Preferences to Marine Tourism Destination Base on Biocentrism Segments. International Symposium on Technology Management and Emerging Technologies (ISTMET).
11. A.V. Arvanitis. (2013). The value of biotourism". In Proceeding Innovative Practices in Biotourism. The IPA Cross-Border Program. Greece-Albania.
12. B. Pan and D. Fesenmaier. (2006). Online Information Search". Annals of Tourism Research. Elsevier. Vol 33 No 3, pp 809-832
13. H.K. Young, Y. Jingxue, K.G. Ben, and M.A. John. (2009). Web Marketing in Food Tourism: a Content Analysis of Web Sites in West Texas". Journal of Culinary Science & Technology. pp 7: 52 – 64
14. R.E. Petty, and J.T. Cacioppo. (1986). Communication and Persuasion: central and peripheral routes to attitude changes. Springer-Verlag.
15. T. Shasha, K.W. Khong K.W, & W.W. Goh. (2014). Persuasive Communication: A Comparison of Major Attitude Behaviour Theories in a Social Media Context. Handbook on the Emerging Trends in Scientific Research.
16. W.L. Benoit, M.T. Stephenson, & D.A. Tschida. (2001). Testing the mediating role of cognitive responses in the elaboration likelihood model". Volume 52, Issue 4. Routledge.
17. G. Kerr, D.E. Schultz, P.J. Kithcen, Mulhern, & P. Beede. (2015). Does Traditional Advertising Theory Apply to The Digital World? Journal Of Advertising Research.
18. S. MacKenzie, R. Lutz, and G. Belch. (1986). The role of attitude toward the ad as a mediator of advertising effectiveness: a test of competing explanations. Journal of Marketing Research. Vol 23
19. F.J. Engel, D.R. Blackwell, and W.P. Miniard, (1995). Consumer Behavior (6th Ed)". New York: The Dryden Press.
20. B. Gibson. (2008). Can Evaluative Conditioning Change Attitudes toward Mature Brands? New Evidence from the Implicit Association Test". Journal of Consumer Research, Vol. 35.
21. E. Ferinadewi. (2008). Brand and Consumer Psychology. Graha Ilmu. Yogyakarta.
22. S. Tanuja, M. Slotkin, and A. Vamosi. , (2007). Attitude toward ecotourism and environmental advocacy: profiling the dimensions of sustainability. Journal of Vacation Marketing. Vol 13 No 2. pp 119-134
23. J. A. Howard. (1994). Buyer Behavior in Marketing Strategy (2th ed.). New Jersey: prentice Hall.
24. Louisa Ha. (2008). Online Advertising Research in Advertising Journals: Review". Journal of Current Issues and Research in Advertising. Vol 30 No 1.
25. J. Hair, W. Black, B. Babin, and R. Anderson. (2010). Multivariate Data Analysis. Pearson Education.
26. G.D. Garson. (2015). Multivariate GLM, MANOVA, and MANCOVA. David Garson and Statistical Associates Publishing.
27. A. Taylor. (2011). Multivariate Analyses with MANOVA and GLM. Macquarie University.
28. I. Ghozali. (2013). Aplikasi Analisis Multivariate dengan Program SPSS 21. UnDip Semarang.

AUTHORS PROFILE

Dr. Rudy Aryanto having gained a doctoral of research in management degree. Orcid ID: 0000-0003-4935-8815 Scopus ID: 36781766900 ResearcherID: L-4376-2013. Subject area in business management, engineering, computer, entrepreneurship, tourism, marketing, and environmental science. Editor in chief of journal the winners: economics, business, management and information system journal eISSN : 25412388 pISSN : 25412388, Member of international council for small business, central board member of Indonesia management forum and central board member of Indonesia entrepreneurship department alliance

Dr.Mulyani, graduated from Doctoral of economic program. Mulyani have a passion in research about art and humanity, management and leadership. She is a lecturer of Entrepreneurship program of BINUS University. Her concern about teaching and research made her become part of lecturer association namely Ikatan Dosen Republik Indonesia.