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THE DESCRIPTIVE ANALYSIS OF AESTHETIC APPEAL, LAYOUT AND FUNCTIONALITY, AND FINANCIAL SECURITY: CASE STUDY FOR THE INDONESIAN E- COMMERCE

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ABSTRACT

The purpose of this study is to investigate the e-servicescape of Indonesian website based on customer perception in Surabaya - Indonesia. E-servicescape concept comprises three main components; firstly is website aesthetic appeal which evaluate design originality, visual appeal, and entertainment aspect; secondly is website layout and functionality which evaluate features functionality, information relevancy, customization features, and interaction features; finally website financial security which evaluate perceived security and payment easiness. There were 200 respondents who frequently purchase product via online are collected through purposive sampling technique. Structural equation modelling was used to analyze the research data. The findings revealed descriptive characteristic of online shopping behavior as well as the customer evaluation on web e-servicescape.

Keywords:

e-servicescape, aesthetic appeal, layout and functionality, financial security, online shopping behavior

1. Research Background

The utilization of internet technology has been widely used in several aspects of human life including in business activities. This phenomenon has significantly affected the development of global business worldwide (Negash et al [13], 2003). The utilization of internet technology is the innovative business way which is known as electronic commerce / e-commerce or electronic business / e-business (Wang et al [23], 2001). The scope of e-commerce comprises business transactions, information sharing, the operation of management functions, customer relationship management, etc (Zwass [25], 2003). E-commerce facilitates business processes which creates advantages both for business vendor and for customer as well. For business vendor, e-commerce expanding its business borderless to reach as many as customer as possible. On the other side for customer, e-commerce provides wider product selection, option for product comparison, and payment alternatives (Grandon & Pearson [10], 2004).

Harris and Goede [12] (2010) argued that one of the factors that affecting customer trust to purchase product via online is e-servicescape dimension. This concept refers to the quality of a certain website in facilitating the creation of online purchasing activities. E-servicescape has three main components; they are aesthetic appeal, layout and functionality, and finally financial security. Urban et al [21] (2000) supported this findings by revealing that the product warranty, the comprehensive and accurate information, and the clarity of order and delivery procedures affected customer trust to purchase product via online.

Realizing the importance of e-servicescape that affecting customer online shopping behavior therefore the purpose of this research paper is to investigate customer online shopping behavior as well as customer evaluation towards e-service dimation which cover aesthetic appeal, layout and functionality, and financial security.

2. Litterature Review

2.1 *E – servicescape*

The servicescape concept according to Bitner [2] (1992) is the concept which refers to the environment atmosphere, layout, function as well as signage, symbol, and other accessories Further research adopted and applied the concept on the offline service industry context (Wakefield and Blodett [22], 1996). Servicescape concept in the offline context could be

extended into online context. Wolfinbarger and Gilly [24] (2001) conducted research that emphasising on customer evaluation toward a certain website which comprises convenience, features selection, information level, and interaction level.

Szymanski and Hise [20] (2000) explained significant correlation among customer convenience, merchadising, website design, financial security, and online satisfaction. This findings is supported by Zeithaml et al [27] (2002) which argued that online service quality covers efficiency aspect, fulfillment aspect, and privacy aspect. The study of online service vendor is not only related to the result of performance such as satisfaction, service quality and customer loyalty but also related to the nature and the dynamic of e-servicescape. There are three main components of e-servicescape; the aesthetic appeal, layout and functionality, and financial security.

2.2 Aesthetic Appeal

Aesthetic appeal refers to the atmopshere of online condition and connected to customer interpretation of servicescape which could be perceived as attractive thing. Previous research revealed that aethetic appeal aspect is one of the crucial component in e-servicescape performance (Zeithaml et al [27]., 2002; Grewal et al [11]., 2003). In addition, Evan and King [8] (1999) emphasize on the importance of online video and audio as the guidance in evaluating e-servicescape performance. The differences of computer hardware produce complicated effects and not often this effect tend to transform as a negative effect. Therefore on the setting of online context, website graphic along with its pages will create strong force for customer to visit the website (Dreze dan Zufryden [6], 1997). This thought is supported by Ekhaml [7] (1996) that explained the nature of website, online graphics, font size, and overall presentation affected customer evaluation toward particular website.

Nicotera [16] (1999) explained that the appropriate website background, the consistent selection of typography types have been significant factors for the overall website appearance and the customer perception on the website originality. In addition the color variation is commonly used to highlight different feature functions. Moreover Fusaro et al [9] (2002) argued that customer perception on modern website design is crucial component in e-servicescape context.

2.3 Layout and Functionality

Website layout refers to the arrangement, management, structure, and adoption of a website meanwhile website function referst to the component that facilitate the achievement of service organizational goals (Bitner, 1992) [2]. Therefore website layout put the focus on the management as well as the arrangement of website function. Previous research showed that layout and functionality are the critical point for website based on customer evauation (Donnelly [5], 2001; Zeithaml et al [27], 2002). The empirical as well as conceptual study is also explaining the attitude differences toward website design and customer evaluation (Nielsen [17], 2001; Kim et al [14], 2003). Moreover the functionality aspect is important for customer to evaluate website performances which includes information sharing, the level of interaction between seller and buyer (Srinivasan et al [19], 2002; Bauer et al [1], 2006; Zeithaml et al [27], 2002).

2.4 Financial Security

Financial security refers to the customer perception towards the payment procedures and website general policy. Payment easiness is one of the example on financial security that created website performances based on customer evaluation (Zeithaml et al [27]., 2002; Montoya-Weiss et al [15]., 2003, Chang and Chen [3], 2008). In addition other researcher emphasize on the importance of customer perception toward the payment security in the context of online purchase transaction (Szymanski dan Hise [20], 2000; Schiffman [18], 2011). Customer satisfaction on online purchase is influenced by perceived website security. The increase of customer perceived website security will increase satisfaction and intention to purchase product via online. Therefore this finding explained that perceived security is the crucial aspect on e-servicescape (Szymanski dan Hise [20], 2000; Montoya-Weiss et al [15], 2003).

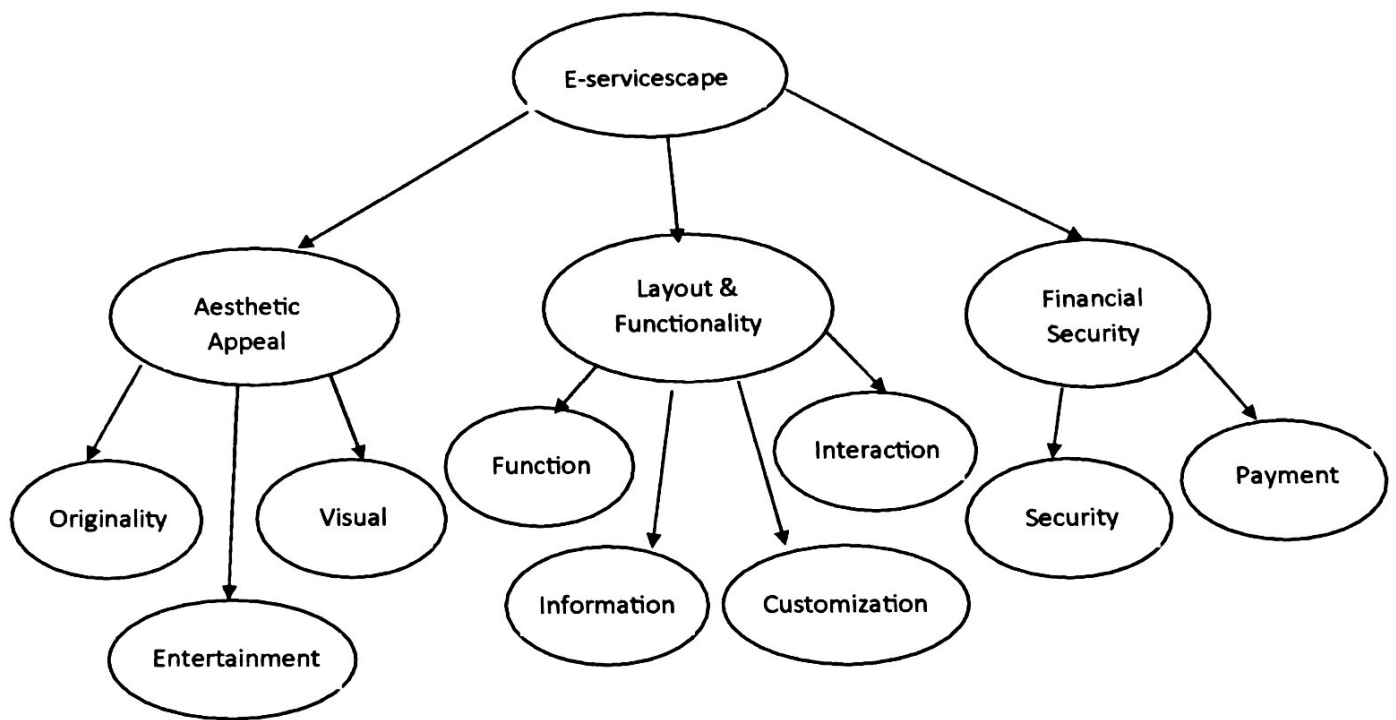


Figure 1. Research Framework

This research examine the characteristic of e-servicescape performances on Indonesian website. There are three main dimention of e-servicescape. Firstly is Aesthetic Appeal which is measured by using three indicators; they are webiste design originality, website visual appeal, and website entertainment; secondly is Layout and Functionality which is measured by using four indicators; they are function features, information sharing, customization features, and interaction features. Finally is Financial Security which is measured by two indicatos; they are perceived security and payment easiness.

3. Research Methodology

Zikmund [26] (1994) argued that causal research is the type of research which is designed to identify cause effect relationship between variables in which research problem has been obviously formulated. Therefore causal research was chosen by consider that this research will conduct hypothesis testing through structural equation modelling.

The research population is the customers which lived in Surabaya, Indonesia who purchase product via online. The numbers of customers who purchase product online can not be identified by considering the privacy as well as the personal security of customers therefore the nature of research population is infinite. Non probability sampling technique was used through purposive sampling method to gather the respondents. This sampling technique was used to ensure only selected and potential samples that meet with the established criteria were chosen as research samples (Cooper dan Schindler [4], 2003). There are two sample criteria; firstly is the respondents' age are suppose to be minimum 18 years old by considering of the minimum legal age as adult person to be responsible for their response towards the research questionnaire; secondly is the respondents who have been purchase product via online in the past three months when responding to the research questionnaire. Pearson correlation through SPSS and descriptive analysis were used to analyze research data. Total 110 respondents were collected in this research as samples.

4. Research Findings

4.1 Measurement Model

The measurement model by using pearson correlation coefficient showed that all research indicators were valid which means that all indicators were constructing the research variable. Meanwhile cronbach alpha statistic was used to measure research data reliability and the result showed that all research indicator were reliable.

4.2 Descriptive Analysis

There are three main research data for descriptive analysis; firstly is the respondent profile which comprises respondent gender, age, marital status, income, and education; secondly is online shopping behavior which comprises favorite website for online shopping transaction, online shopping product category, money spent, payment method, time spent, and loyalty level; finally is the research variables which comprises aesthetic appeal, layout and functionality, and financial security.

Table 1. Respondent Profile

Profile	Percentage
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Gender	Male	45,9
	Female	54,1
Age	19-22	53,2
	23-30	22,5
	31-45	10,8
	46-55	7,2
	> 56	6,3
Marital Status	Single	37,8
	Married	61,3
	Other	0,9
Monthly income	<4 mil	43,2
	4.1 -8 mil	7,2
	8.1-10 mil	14,4
	10.1-15 mil	24,3
	> 15 mil	10,8

Based on table 1, it can be seen that the profile of customers who is actively engage in online purchase behavior are balance between male and female. This data showed that both male and female enjoy and love to purchase product via online. Next, the majority is younger generation, this is because younger generation adopt internet technology faster and more advanced compared to the older generation. Moreover most of the customer marital status were married and there were two group of income that dominated the profile; the first group is middle low income customer (< IDR 4 million) and second group is middle up income customers (IDR 10.1 – 15 million). This phenomenon revealed that online purchase activities was commonly used by customer regardless their social economic status.

Table 2. Online Shopping Behavior

Indicators	Item	%
Top 5 favorite website	Tokopedia	34,2
	OLX	13,5
	Traveloka	11,7
	Amazon	8,1
	Zalora	7,2
Visit frequency	1-2x	71,2
	3-4x	12,6
	5-6x	9,9
	>6x	6,3
Time spent per visit	<1 hr	73
	1 hr	22,5

	2 hrs	2,7
	3 hrs	1,8
	>3 hrs	0
Top 5 product category	Fashion	41,4
	Flight ticket	10,8
	Hotel voucher	8,1
	Furniture	8,1
	Electronics	7,2
Money spent per visit	< IDR 100,000	45
	IDR 100,000-300,000	30,6
	IDR 300,001-500,000	9
	IDR 500,001-750,000	5,4
	IDR 750,001-1,000,000	6,3
	IDR 1,000,001-3,000,000	1,8
	IDR 3,000,001-5,000,000	0,9
	> IDR 5,000,000	0,9
Payment	Credit Card	31,7
	Third Party	11,2
	Transfer	57,1
Recommendation	Yes	55,9
	No	44,1
Offline comparison	Yes	71,2
	No	28,8
Repetition	Yes	60,4
	No	39,6

Table 2, revealed Indonesian online shopping behavior, the characteristic are as follow: the customer visit their favorite shopping website at least 1 – 2 times per month; spent time minimum less than one hour to one hour; fashion is the most favorite product category to be bought via online; money spent for online shopping is IDR 300.000,- maximum; transfer and credit card are commonly used for payment transaction; customer always compared the product on the offline setting before purchase the product via online; and finally the level of loyalty is on average level.

Table 3. Descriptive Aesthetic Appeal

Aesthetic Appeal		Mean
Design Originality	Elegant	3,98
	Classic	4,20
	Cartoon	4,13

	Modern	4,23
	Futuristic	4,27
	Total	4,20
Visual Appeal	Graphics	4,25
	Colorful	4,11
	Total	4,18
Entertainment	audio	4,18
	video	4,25
	games	4,16
	Total	4,28
Grand Total		4,22

Table 3, showed customer evaluation towards aesthetic appeal of Indonesian website performances. Overall score revealed that Indonesian website has a very good aesthetic performance (4,22). The performance of design originality as well as entertainment showed a very good score, meanwhile the performance of visual appeal is considered good based on customer evaluation. The highest indicator performance is futuristic design theme (4,27) and the lowest indicator performance is elegant design theme (3,98).

Table 4. Descriptive Layout & Functionality

Layout & Functionality		Mean
Function	Facilitating	3,13
	Visibility	3,90
	Total	3,52
Information	Relevancy	4,20
	Understandable	4,19
	Total	4,20
Customization	Personal	4,22
	Fulfilment	4,24
	Total	4,23
Interaction	Staff	4,17
	Experience	4,20
	Total	4,19
Grand Total		4,04

Table 4, showed customer evaluation towards layout and functionality of Indonesian website performances. Overall score revealed that Indonesian website has a good layout and functionality performance (4,04). The lowest performance is function dimension especially

on indicator that the website features facilitating shopping processes (3,13). On the other hand the highest performance is the customization features that could fulfill customer need in shopping processes (4,24).

Table 5. Descriptive Financial Security

Financial Security		Mean
Perceived Security	Secure Payment	4,62
	Secure Delivery	4,29
	Total	4,45
Ease of Use	User Friendly	4,22
	Payment option	4,43
	Total	4,26
Grand Total		4,35

Table 5, showed customer evaluation towards financial security of Indonesian website performances. Overall score revealed that Indonesian website has a very good asethetic performance (4,33). The highest indicator performances is the security of payment transaction processes (4,62), meanwhile the lowest indicator performances is the level of user friendly of the payment features in shopping transaction processes (4,22). However this indicator has showed a very good performance based on customer evaluation.

5. Discussion and Implementation

Based on the research analysis it can be concluded that the e-servicescape of Indonesian website is relatively very good, including the performance of aesthetic appeal, layout and functionality and also financial security. From the aesthetic appeal perspective, the Indonesian website vendor need to impove the performance of color management in purpose to enhance the performance of visual appeal dimention. In addition, the Indonesian customer prefer video as the media for website entertainment aspect. Website vendor is suppose to create interactive video to increase the performance of entertainment aspect. Based on online shopping behavior data it can be concluded that the customer spent maximum only one hour on browsing their favorite website. The vendor could increase time spent by offering many

videos and games to the customer. More time spent on website will stimulate impulse buying behavior.

Moreover from layout and functionality perspective, the weakness indicator is on functional features dimension. Therefore Indonesian website vendor need to emphasize in providing several simple features which is the shortcut for facilitating online shopping experience on the strategic location to improve visibility. The improvement of functional features will create customer convenience when doing online shopping. Considering the customer online behavior that showed the customer maximum spending per online transaction is IDR 300.000,- maximum; the improvement of functional features could increase the possibility for customer to spend their money more for online shopping. Finally from financial security perspective, the entire indicators are in good performance based on customer evaluation. The Indonesian customer tend to use bank transfer and credit card as the payment media instead of using third party for instance PayPal, Payoneer, etc. Therefore website vendor need to expand its partnership with local bank to provide wider payment options.

REFERENCES

- [1] Bauer, H. H., Falk, T., & Hammerschmidt, M, E-TransQual: A transaction process-based approach for capturing service quality in online shopping. *Journal of Business Research*, 59(7), 866–875, 2006. <http://dx.doi.org/10.1016/j.jbusres.2006.01.021>
- [2] Bitner, M.J, “Servicescapes: the impact of physical surroundings on customers and employees”, *Journal of Marketing*, Vol. 56 No. 2, pp. 57-71, 1992
- [3] Chang, H. H & Chen, S. W, The impact of online store environment cues on purchase intention Trust and perceived risk as a mediator, *Online Information Review*, Vol. 32 No. 6, pp. 818-841 Emerald Group Publishing Limited, 2008.
- [4] Cooper, D. R. & Schindler, P. S.. *Business research methods*, 8th ed. Boston: McGraw Hill Irwin, 2003
- [5] Donnelly, V, *Designing Easy-to-Use Websites*, Addison- Wesley, Guildford, 2001
- [6] Dreze, X. & Zufryden F, Testing Web Site Design and Promotional Content, *Journal of Advertising Research*, 37 (2), 77-91, 1997.
- [7] Ekhaml, L.T, “Make your presence known on the web! Tips for writing and publishing web documents”, *School Library Media Activities Monthly*, Vol. 12, pp. 33-5, 1996.