Visual Aesthetics and Websites Credibility of Indonesia Stock Exchange

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Visual aesthetics might respond credibility of website as a part of the first impression of interfaces. Moreover, the website that used by investors on the stock exchange market played a major role for the presentation of price flow, stock notification, and transaction information. In case of Indonesian stock exchange (IDX), this study applied visual aesthetics in order to influence website credibility. At the same time, semantic differential as bipolar differences was adapted for 30 indicators of visual aesthetics and three indicators of website credibility. As the result of time-equivalent design sample, this experiment showed that visual aesthetics did not give a significant effect toward website credibility. Consequently, this study discussed the reason why visual aesthetics had not contribute to website credibility. Other significant variables that have already affect both visual aesthetics and credibility of website.

Keywords: Visual Aesthetics, Credibility, Bipolar Emotional Response Testing, Time-Equivalent Design, Experiment.

1. INTRODUCTION

The visual aesthetics might response credibility of online sites. Recent research into websites has showed that visual aesthetics play an important part of the first impression of interfaces.\(^1\) It develops the brand images for an organization to attract viewers and communicate.\(^1\) Previous study emphasized that visual is one key element in websites credibility. Failure to develop a credible website will decrease user’s satisfaction\(^2\) and trust\(^3\) in the organization.

The credibility of the websites is important for the stock exchange market. Websites are used by investors to track the prices flow, stock notifications and other information.\(^4\) People who have an interest in the stock exchange also access the website to obtain statistical data, transactions, rules and regulations of the stock exchange.\(^5\)

Website is the medium of Indonesian Stock Exchange (IDX) to disseminate information and issuers’ openness to the public. Modern stock exchange utilizes electronic networks than conventional recording.\(^6\) Besides, websites play a major role for the presentation of information because there is a shift from paper-based reporting system to a paper-less reporting system.\(^7\)

IDX states idx.co.id official website can be a mainstay for market players because it presents information in a fast, accurate and high value. Moreover, the website is one way to improve the image of the Indonesian capital market. Website is also a “front office,”\(^8\) representing performance,\(^9\) and shaping organization image.\(^10\) So that website becomes an extension of the organization and can attract the target market and potential consumers.\(^11\) Various stock exchange over countries was relaunching and upgrading their websites with a more sophisticated design interface e.g., Nigerian Stock Exchange (NSE)\(^12\), Baku Stock Exchange (BSE) in Azerbaijan\(^13\), Irish Stock Exchange\(^14\), and Stock Exchange of Mauritius (SEM).\(^15\)

Websites credibility measurements have been done on a variety of specific websites, e.g., online news,\(^16\) e-government,\(^17\) online forum,\(^18\) e-commerce,\(^19\) and the travel websites.\(^20\) However, the credibility of the stock exchange websites is still a lack of attention. Therefore, this paper discusses the influence of the visual aesthetics to the Indonesia Stock Exchange (IDX) website’s credibility.

2. VISUAL AESTHETICS AND WEBSITES CREDIBILITY

Aesthetics are first conceived and interpreted through our senses.\(^1\) Visual aesthetics have specific elements e.g., pattern, shape, motion, and color. Some studies confirmed that visual elements as the major aesthetics dimension for the websites.\(^20\),\(^21\) In addition, aesthetics elements of the websites can be identified by tone, style and combination of visual elements.

Websites credibility is defined as the belief, both believed to the source of information and the person or company/institution.\(^22\)
Websites credibility is determined by quality and user’s perception. The quality of the websites is a level of communication messages that is good or superior from the clarity, coherence, comprehensiveness, and conciseness. The user’s perception toward websites credibility also shows perception toward websites quality. Perception can be assessed by comparing user’s perception of trust, reliability, fairness, impartiality, balance, community relations, easy to use, completeness, tranquility, hospitality, accuracy and attractiveness of each site.

The websites categories have its attribution in websites credibility assessment. For example, the company’s reputation and customer service determine e-commerce websites credibility. Online news websites credibility is examined by three factors, expertise, trustworthiness and attractiveness. Also, images and artistic design are considered important for travel websites. The design aesthetics appearance determines potential customer’s trust to the websites. Visual aesthetics can be identified by 30 components; (1) adorable, (2) balanced, (3) bright, (4) calm, (5) classical, (6) colorful, (7) concise, (8) conventional, (9) cute, (10) deluxe, (11) elegant, (12) familiar, (13) fresh, (14) futuristic, (15) hopeful, (16) mystic, (17) plain, (18) popular, (19) powerful, (20) promising, (21) sexy, (22) sharp, (23) simple, (24) static, (25) strong, (26) surreal, (27) tense, (28) vague, (29) valuable, and (30) vibrant. Meanwhile, websites credibility is observed by three indicators: (1) expertise, (2) trustworthiness and (3) attractiveness. So that the research hypothesis is visual aesthetics with eight indicators was confirmed valid (0.617) and not vibrant.

Second variable, websites credibility consists three indicators, (1) expertise (amateur vs. professional), (2) trustworthiness (trusted vs. not trusted) and (3) attractiveness (attractive vs. not attractive).

Linear regression was used to examine hypothesis proving there is or there is not influence of websites visual aesthetics toward websites credibility.

The experimental design used Time-Equivalent Design Samples. This design does not do the pretest and does not have a control group. Assessing website idx.co.id credibility does not require pre-test and control groups. A given pre-test to both groups tends to lead to bias when participant do a post-test. This experiment involved voluntary participants who had registered before the experiment conducted. Each participant was selected following the requirements (1) never access website idx.co.id within the past week and (2) have used laptop or smartphone to access other websites.

This experiment required 30 participants, because the ideal number participants of each group experiment are at least 30 participants. Participants were asked to access website idx.co.id on the personal computer (PC) that was already available in the experiment room. Participants accessed the website for 10 minutes and answered the questionnaire for 30 minutes.

Data validity was done in two ways, (1) content validity and (2) concept validity. Content validity examines the results of scale items by using KMO and Bartlett Test of Sphericity. Concept validity refers to concepts and theories that be used in the literature. Reliability measurement was tested the scale item of BERT by Cronbach Alphas.

Validity and reliability testing reduced visual aesthetics indicators from 30 indicators to eight indicators. Nineteen indicators were eliminated due to the factor loadings were not valid and reliable. The reduced indicators were considered irrelevant to the context website idx.co.id visual aesthetics measurement. Visual aesthetics with eight indicators was confirmed valid (0.617) and reliable ($\alpha = 0.758$).

The adorable visual design is an important component in interacting with digital artifacts. The adorable website visual appearance is one factor that influence perceived usability.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Factor loadings</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expertise</td>
<td>0.873</td>
<td>Valid</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>0.861</td>
<td>Valid</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>0.695</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: SPSS data processing.

### Table II. Factor analysis results of variable websites credibility.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Factor loadings</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adorable</td>
<td>0.618</td>
<td>Valid</td>
</tr>
<tr>
<td>Classical</td>
<td>0.728</td>
<td>Valid</td>
</tr>
<tr>
<td>Concise</td>
<td>0.762</td>
<td>Valid</td>
</tr>
<tr>
<td>Conventional</td>
<td>0.666</td>
<td>Valid</td>
</tr>
<tr>
<td>Powerful</td>
<td>0.770</td>
<td>Valid</td>
</tr>
<tr>
<td>Sharp</td>
<td>0.876</td>
<td>Valid</td>
</tr>
<tr>
<td>Strong</td>
<td>0.726</td>
<td>Valid</td>
</tr>
<tr>
<td>Vague</td>
<td>0.727</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: SPSS data processing.
attractive and interesting website’s design also can encourage users to access continually and even make a purchase. It may be caused by viewing websites visual design shapes users perception toward the websites. Meanwhile, a classical visual design is associated with the classical concepts of antique and unique. The classical design also emphasizes on neatness and clarity aesthetics.

The concise design relates to the human visual sight that desires simplification. Websites conciseness also considers the image size, the font size and the writing letters forms. Besides the conventional design shows the layout that allows users to search and understand visual display. For example, the company logo is at the top left corner and the link always has at the bottom of the homepage. Meanwhile, the powerful design refers to design patterns that usually used. Many design patterns that can be made but humans can only recognize some of the patterns of the sense of sight. So the selection of patterns determines the powerful of the websites design.

The sharp visual design is important to understand the user’s ability to distinguish the basic color (background) and themes. Websites color theme consists of primary and secondary colors. The proportion of color sharpness allows users to differentiate the buttons and navigation at the websites. It is also related to the color resolution that allows the websites display still look great in a variety of devices. Meanwhile, the strong design creates users good mood. The strong design refers to line shape, straight, solid, upright, soft, or vertical. Finally, vague visual design can make users confused and contain incomplete patterns. Meanwhile, all the indicators of websites credibility variable can be continued in subsequent analysis. Websites credibility variable was proved valid (0.694) and reliable (α = 0.882).

The hypothesis testing shows there are not a significant effect of website visual aesthetic toward websites credibility (R Square = 0.006).

4. EXPERIMENTAL RESULT

Websites development has been increased dramatically, but at the other side, the quality of information has been decreased, such as websites contain false news. Users become skeptical and aware of the online information. So that, websites credibility measurement becomes significant to increase user trust, a particularly website that is related to finance such as e-commerce. There are two factors determine online buying: (1) consumer characteristic and (2) seller characteristic. Consumer characteristic is related to consumer needs, and meanwhile seller characteristic is associated with integrity. When the business transaction is mediated by websites, the credibility of the websites determines initial consumer trust toward seller integrity. Official website of Indonesia Stock Exchange (IDX), idx.co.id should have the characteristic of credibility and integrity to attract investors. Moreover, currently, websites are used as a digital institution representative.

Websites credibility became a study Fogg and his colleagues (2001; 2003) to conduct research on the user’s perception of the websites credibility. They adopted two concepts of credibility from Howland (1951), trustworthiness and expertise. The study shows that websites credibility is mainly determined by visual appearance. Unfortunately, this research reveals that visual aesthetics has no significant influence to affect websites credibility. These findings indicate that users perceive websites visual aesthetics not important for a finance-related website such as idx.co.id.

5. CONCLUSIONS

Visual aesthetics may not have a significant affect toward the credibility of website especially on Indonesian stock exchange website. Other variables such as trust, user’s perception, and expertise are still needed to explore more on the website credibility. Therefore, further study should include trustworthiness, expertise, and user’s perception in order to develop the credibility.

References and Notes

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