

# *Effect of Financial Information Transparency on Website Popularity*

Case of Indonesian General Insurance Company

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**Abstract**— The researchers conducted present study with objectives to measure website popularity based financial information transparency with case of Indonesian general insurance company. The sample size comprised totally of 81 general insurance companies in Indonesia. This study used an approach for data collection and measurement: by using Alexa, Majestic SEO and Google search engine. Website rank based on all variables are presented in a descriptive study, while the relationship between the popularity of a website with a level of transparency tested with independent sample t test. The results showed that 82.7% general insurance company in Indonesia already has an official website. Website popularity of general insurance company in Indonesia is very diverse views of popularity and richness of content.

**Keywords**—financial, insurance, website, popularity, indonesia

## I. Introduction

The insurance industry in Indonesia is facing a variety of regulatory changes, including a plan addendum act no. 2 1992 of insurance, the enforcement of IFRS (International financial Reporting System), as well as the assessment of bank health. The issue of transparency in the financial report on the internet are listed in the Regulation of the Minister of Finance No. 35/PMK.010/2012. Article 43 states that the company must publish an annual summary of the financial report on the Company's website no later than April 30th of the following year and quarterly financial report later than 1 (one) month after the end of the relevant quarter.

Demands transparency is also influenced by the growth of the information society in Indonesia are getting used to finding information on the internet. Regulation and the demands of society have to be anticipated by the management of the insurance company's website. Reference [1] stated that when financial institutions are very fast in the use of the Internet to

achieve sustainable competitive advantage, even insurance companies slow to adopt e-commerce. Referring to [2], the main characteristics of the insurance business, such as complexity and abstract character of insurance products pose significant challenges in the development of insurance services electronically.

The insurance industry in Indonesia is experiencing rapid growth, including general insurance or non-life insurance. According to [3] in 2011, non-life insurance premiums in the emerging markets grew by 8.9% where the strong growth was recorded in Emerging Asia (12.8%), particularly in China (15%), Indonesia (10.3%), and Vietnam (6.9%). According to reports from the Sigma [4], Indonesia ranks 34 out of 88 countries based on the total premium that is equal to USD14092. When viewed from the type of insurance, life insurance at rank 30 with a value premium of USD 9437 Millions, while the non-life insurance premium number 42 with a value of USD 4.655 Millions. If calculated per capita, Indonesia ranks 76 for the total premium and 67 for the percentage of premium to GDP.

One branch of insurance in Indonesia is the highest amount of general insurance is 81 companies. The purpose of this study is to map the general ownership of websites that general insurance companies. Each website was evaluated contents relating to the financial report. The difference in the level of transparency of financial report in the next websites linked to the level of popularity of the website.

## II. Theoretical Framework and Previous Research

### A. Internet Financial Report

Reference [5] stated that the diversity of insurance coverage, consumers and intense competition is a driving factor for the insurance company in order to test the products before deciding to apply information technology based business processes. Integration of Information and Communication Technology (ICT) is considered to improve transparency, high productivity, and the promotion of corporate image and increase sales [6]. Reference [7] stated that the Internet could change the way the insurance industry to run its business processes. Examples of generic models for the implementation of information technology in insurance company can be seen in the figure 1 below.

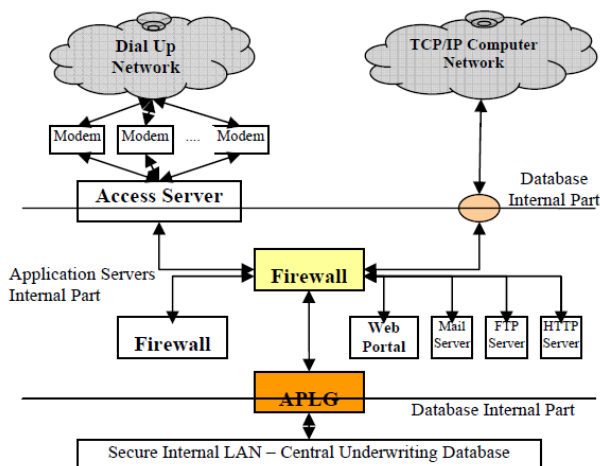


Figure 1. Generic Model of The Insurance Company Underwriting Site [7]

Research on the implementation of ICT in the insurance company has done in other countries by some previous researchers, including ref. [2] on the performance of insurance website, ref. [1] and [7] on e-commerce or e-business in the insurance industry, ref. [8] about the technology and CRM in the insurance company, as well as [6] and [9] on e-insurance.

Opportunities for companies to publish financial information is not only influenced by individual characteristics, but the combination of the interaction between firm characteristics (size, leverage, and profitability), the type of industry, and country [10]. Research of [11] in Thailand found that companies provide financial information on the Internet as a complement to paper-based financial report or in the traditional way. From the perspective of the user or external stakeholders, users of financial report demonstrate high expectations for transparency in corporate financial report [12].

Various studies indicate that the variables determining IFR practices (Internet Financial Report) varies with the test results of different significance. Reference [13] mentions that the profitability and is an important determining factor in the implementation of IFR, while firm size, liquidity, and the use

of the auditor had no significant effect. According to [14], profitability, stock registration (listing) in abroad, separate industry sector is a decisive factor number and presentation of information disclosure on the company website.

IFR research mostly done in the capital markets with associated company performance or stock price. Reference [15] examined the impact on IFR toward stock prices with results showing abnormal profit companies that use IFR were higher than companies that do not apply the IFR. Research of [16] in the Malaysian capital market indicates IFR scores ranged from 48.27 to 78.16 percent with an average of 65.10 percent. IFR score range is considered good. According to [17], based on empirical data that companies that apply IFR bigger and profitable, as well as more shares are actively traded on the stock exchange.

### B. Web Evaluation

The study of [18] measured attributes such as the web size, connectivity, site visibility and format distribution [18]. Dhyani conducted a well-known metrics survey for the web relating to the measurement of the amount of function. Based on multiple measurements attributes later classified into several categories; web graph properties, web page significance, usage characterization, web page similarity, web page search & retrieval and information theoretic [19]. According to research of [20] about a usability analysis of company websites, web usability advocates stress clarity importance and simplicity as well as web design consistency so that users can perform operations efficiently and effectively. Reference [20] also stated that websites can be improved with respect to link appearance, navigation, and positive features such as breadcrumb trails and search boxes. Reference [21] stated about commercial websites evaluation that the web page is a good concept, it has flexibility for improvement, and with proper improvement the website could become a big success. Reference [22] stated that company should evaluate their website then compare with other websites.

## III. Methodology

The research sample was 81 general insurance companies in Indonesia. Evaluation of the first phase is the mapping of the ownership of the official website managed by company. Website popularity measured by *referring domain* [23], also known as "ref domain", is a domain from which a backlink is pointing to a page or link; *external backlink* [24], also referred to in SEO as an external "inlink"; and global traffic rank as a measure of website popularity. According to [25], the traffic rank is calculated using a combination of average daily visitors to a website and pageviews on a website over certain periods. Referring domain and external backlink obtained from majesticseo.com and data of world traffic rank from www.alexa.com.

The rich of information is measured by the number of web pages indexed in Google search engine. The number of documents is measured by the number of documents to pdf / ps, doc / docx, xls / xlsx, and ppt / pptx format. Measuring the level of disclosure of financial information adopted from the

Internet Financial Report (IFR) model, but just take the dimensions of its content only. It is because this research is at the preliminary stage to know the initial mapping on the use of the website a new study to determine the preliminary stage of preliminary mapping on the use of the website as a publication media of financial report in a general insurance company in Indonesia. The scale of financial report disclosure is a score of 1 if there is no content of financial report, a score of 2 if only a summary of financial information or financial news html format only, a score of 3 if there are summary of financial report to pdf format, and a score of 4 if available financial report and their full analysis, including annual reports to pdf format. Measurements were taken on the same day for each parameter. It is done to reduce the fluctuations in search results with the search engines which sometimes differ from time to time. Website rank based on all variables are presented in a descriptive study, while the relationship between the popularity of a website with a level of transparency tested with one way ANOVA.

#### IV. Result and Discussion

General insurance company in Indonesia (81) more than life insurance company (46). This study only observed a general insurance company. The results showed that the general insurance company in Indonesia which already has an official website are 67 of 81 companies or 82.7%. Ownership of website on general insurance is higher than life insurance amounted to 72.7%, but lower than [26] research that examined banks and insurance that 24 of 26 or 92.3%. An overview of performance indicators from 67 websites can be seen in the table 1 below.

TABLE I. AVERAGE OF PERFORMANCE INDICATORS OF WEBSITE

	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Std. Deviation</i>
World Traffic Rank	-	27319797	7647325.42	8057974.843
Reffering Domain	1	9998	372.03	1243.177
External Backlink	1	925574	25833.96	121235.946
Number of Webpage	4	335000	6438.06	41211.039
Total Document	0	6840	176.28	935.469

Website popularity of general insurance company in Indonesia is very diverse views of popularity and richness of content. There are 7 websites that do not have a world rank because the number of visits is very low. Comparison of world traffic of general insurance with life insurance within the last 6 months can be seen in the figure 2 below.

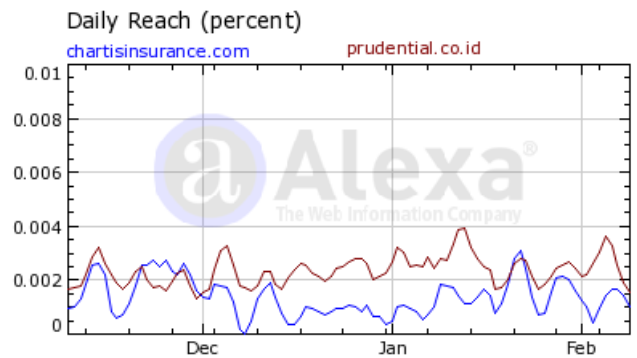


Figure 2. Traffic Comparison (Source: www.alexa.com)

The picture above shows a comparison of traffic between general insurance and life insurance are equally first ranked in the group. Both companies are PT. Chartis Insurance Indonesia (blue line) and PT. Prudential Life Assurance (red line). The graph shows the traffic of general insurance companies is lower than life insurance within three months. Observation of the two companies is not enough to decide the conclusion that the popularity of general insurance companies is lower than life insurance. Research still needs to be deepened by looking at the design and features of the website from all insurance companies in Indonesia. When referring to the report of [27], general insurance companies tend to use the internet for selling than life insurance and pension fund management company.

Domain referring value ranges from 1 to 9998 with an average of 372. This figure is low, or in other words that people rarely visit the website of general insurance companies. Though the number of external backlinks is relatively high with an average of 25.834. This suggests that the link from another site is not enough to help the real visit to the company website. As the distribution of the value of world traffic rank, domains referring value and external backlinks also showed a very high level of diversity or the data are normally scattered.

PDF is the most widely used as a document formats with a total of 11,063 documents or 93.67%. The results are consistent with reference [28] and [17] which stated that many companies use pdf format for documents uploaded to the website. The number of web pages on the website of the general insurance companies are also considered low, with an average of 6438 pages. The number of web pages has not been able to raise the popularity of the website. Opportunities for website visited will be higher if the amount and quality of content increases, especially if supported by a website design that is search engine friendly.

A visit to a website can be raised from the keywords entered by the visitors to the search engine. General description of the anchor text of a general insurance company is ranked first for traffic rank world can be seen in the figure 3 below.

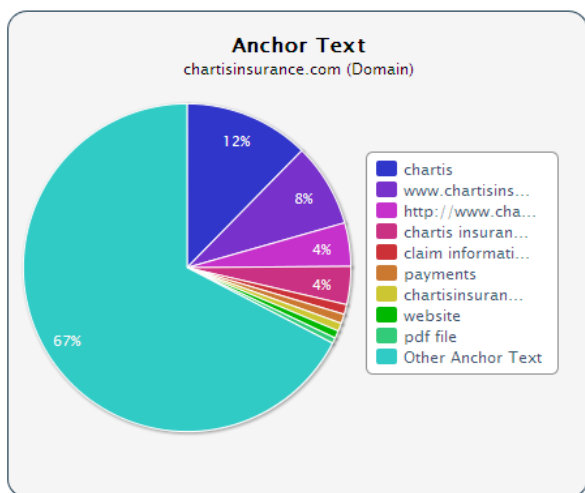


Figure 3. Anchor Text for the Best Traffic (Source: www.majesticseo.com)

The picture above shows that the visitors are more likely to use keywords that are related to a name or company profiles, including the URL address of the website. Keywords relating to insurance products is still very small. This shows that the general insurance companies have not utilized as media campaigns or website an effective marketing tool. More people still seek general information.

Moreover, the general features of the website is still standard that is merely informational website, or non-transactional websites. Visitors, especially corporate customers, can not interact or conduct transactions through the website. The results of this research give the information from research of [1] on the insurance industry delays in implementing e-commerce.

The number of companies that uploaded the complete financial report in the form of the annual report are 12 companies or 17.9%, while the balance sheet only shows as many as 19 companies (28.4%). Distribution of the number companies based on the level of financial transparency is presented in the figure 4 below.

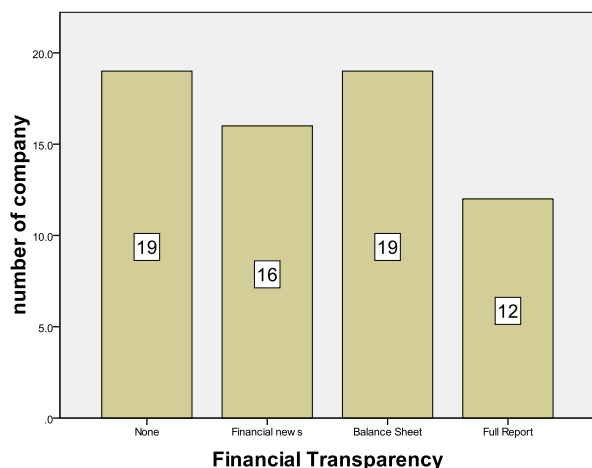


Figure 4. Frequency Distribution of Financial Transparency

Websites that minimal showing of financial information in the form of news are the 47 companies or 71.6%. The percentage is higher when compared to the study of the [29] amounted to 63.8%. But if put insurance companies that do not have a website, it becomes a lower percentage is only 58.02%.

From five web indicators, only referring domain and external backlinks that show striking differences if seen from the level of financial transparency, while three other indicators do not show a clear pattern of relationships. An average external backlinks based transparency level of financial report can be seen in the figure 5 below.

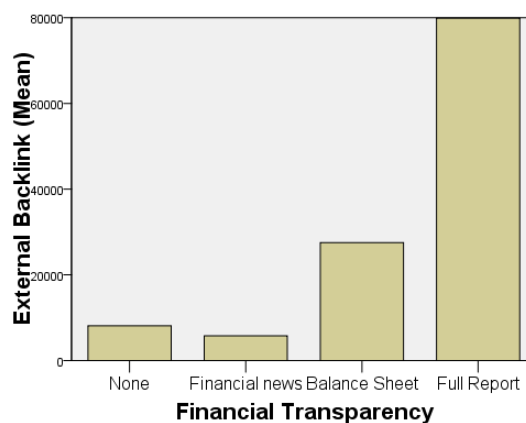


Figure 5. External Backlinks Differences Based on Transparency

But the statistical test using ANOVA showed that there were significant differences only for global traffic rank based on the transparency level of financial report, while referring domain, external backlink, the number of web pages, and number of documents did not show significant differences.

## v. Conclusion

The results showed that 82.7% general insurance company in Indonesia already has an official website. Website popularity of general insurance company in Indonesia is very diverse views of popularity and richness of content. PDF is the most widely used as a document formats with a total of 11,063 documents or 93.67%. The number of web pages on the website of the general insurance companies are also considered low, with an average of 6438 pages. The number of web pages has not been able to raise the popularity of the website. Opportunities for website visited will be higher if the amount and quality of content increases, especially if supported by a website design that is search engine friendly. The number of companies that uploaded the complete financial report in the form of the annual report are 12 companies or 17.9%, while the balance sheet only shows as many as 19 companies (28.4%). Websites that minimal

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As the distribution of the value of world traffic rank, domains referring value and external backlinks also showed a very high level of diversity or the data are normally scattered. From five web indicators, only referring domain and external backlinks that show striking differences if seen from the level of financial transparency, while three other indicators do not show a clear pattern of relationships. The results of the ANOVA test showed that there were significant differences for referring domain and external backlinks based on the transparency level of financial report, while world traffic rank, the number of web pages, and number of documents did not show a difference

## References

- [1] M. Grossman, R.V. McCarthy and J.E. Aronson. "E-commerce adoption in the insurance industry," *Issues in Information System*. 5(2), 2004.
- [2] A. Ahonen and R. Windischhofer. "The web performance of different types of online insurance providers – A wake up call to traditional insurance providers," *Proceedings of the Fifth International Conference on Electronic Business*, Hong Kong, December 5-9, 2005: 245-252.
- [3] Global Insurance Review 2011 and Outlook 2012/2013. Swiss Reinsurance Company, Zurich, Switzerland, December, 2011.
- [4] Sigma World Insurance in 2011: Non-Life Ready for Take-off. Swiss Reinsurance Company, Zurich, Switzerland, December, Swiss Re, Sigma no3/2012.
- [5] K.H. Hanaee and L. Karimian. "A New approach to electronic shopping in insurance industry," *Interdisciplinary Journal of Research in Business*. 1(4): 136-144, 2011.
- [6] F.S. Odoyo and R. Nyangosi. "E-insurance: An empirical study of perceived benefits," *International Journal of Business and Social Science*. 2(21), Special Issue, 2011.
- [7] A. Sanayei, M.S. Torkestani and P. Ahadi. "Electronic insurance security," *IADIS International Conference WWW/Internet*, 2008.
- [8] B. E. A. Oghojafor, S. A. Aduloju and F. F. Olowokudejo. "Information technology and customer relationship management (CRM) in some selected insurance firms in Nigeria," *Journal of Economics and International Finance*. 3(7): 452-461, 2011.
- [9] M. Alipour, H. Dorodi and S. Pishgahi. "Feasibility Study of E-Insurance Services in Iranian Insurance Companies (Asia Insurance Co.)," *International Journal of Business and Social Science* Vol. 2 No. 10, June 2011.
- [10] Tariq H. Ismail. "An empirical investigation of factors influencing voluntary disclosure of financial information on the internet in the GCC countries," *Working Paper Series, Social Sciences Research Network*, 2002.
- [11] H. Davey and K. Homkajohn. "Corporate internet reporting: an Asian example," *Problems and Perspectives in Management*. 2004 (2): 211-227.
- [12] A. Turel. "The expectation gap in internet financial reporting: Evidence from an emerging capital market," *Middle Eastern Finance and Economics*. 8: 94-107, 2010.
- [13] B. K. Agyei-Mensah. "Corporate financial reporting: Firm characteristics and the use of Internet as a medium of communication by listed firms in Ghana," *African Journal of Business Management*. 6(6): 2299-2309, 2012.
- [14] D. Aly, J. Simon and K. Hussainey. "Determinants of corporate internet reporting: evidence from Egypt," *Managerial Auditing Journal*. 25(2):182-202, 2010.
- [15] C.S. Lai, C. Lin, H. C. Li and F.H. Wu. "Empirical study of impact of internet financial reporting on stock prices," *The International Journal of Digital Accounting*. 10:1-26, 2010.
- [16] M.N.A.A. Khan and N.A. Ismail. "The level of internet financial reporting of Malaysian companies," *Asian Journal of Accounting and Governance*. 2:27-39, 2011.
- [17] Ivica Pervan. "Financial reporting on the internet and the practice of Croatian joint stock companies quoted on the stock exchanges," *Financial Theory and Practice*. 29(2):159-174, 2005.
- [18] T. Bray. "Measuring the web," In 5th International World Wide Web Conference. Paris, France, 1996. Ivica Pervan. "Financial reporting on the internet and the practice of Croatian joint stock companies quoted on the stock exchanges," *Financial Theory and Practice*. 29(2):159-174, 2005.
- [19] Dhyani, NG. Devanshu, Wee Keong and W. Bhowmick Sourav. "A Survey of Web Metrics," *ACM Computing Surveys*, Vol., 34, No. 4 pp 469-503, 2002.
- [20] J. J. Cappel and Z. Huang. "A Usability Analysis of Company Website," *Journal of Computer Information Systems*, 2007. J. J. Cappel and Z. Huang. "A Usability Analysis of Company Website," *Journal of Computer Information Systems*, 2007.
- [21] Z. Hazem and M. Handzic. "Commercial Websites Evaluation," Third International Symposium on Sustainable Development, Sarajevo, 2012.
- [22] M. A. Hussain and Dr. K.V. Sambasiva Rao. "The Role of Commercial Websites in the Improvements of E-Business," *International Journal of Computer Trends and Technology*, 2011. Ernst and Young. "Voice of the customer Time for insurers to rethink their relationships,". Global Consumer Insurance Survey 2012.
- [23] Referring Domain – Majestic SEO. Accessed 11 February 2013 from <http://www.majesticseo.com/support/glossary#RefDomain>.
- [24] External Backlink – Majestic SEO. Accessed 11 February 2013 from <http://www.majesticseo.com/support/glossary#Backlink>.
- [25] World Traffic Rank – Alexa. Accessed 11 February 2013 from <http://www.alexa.com/help/traffic-learn-more>.
- [26] D. Lamani and L. Çepani. "Internet financial reporting by banks and insurance companies in Albania," *The Romanian Economic Journal*. 14(42):159-174, 2011.
- [27] Ernst and Young. "Voice of the customer time for insurers to rethink the relationship," Global Consumer Insurance Survey, 2012.
- [28] Barry Smith. "An investigation of the integrity of internet financial reporting," *The International Journal of Digital Accounting Research*. 5(9):47-78, 2005.
- [29] D.G. Barako, Rusmin and G. Tower. "Web communication: An Indonesian perspective," *African Journal of Business Management*. 2(3):053-058, 2008.