ANALYSIS ON UTILIZATION OF FREE FACILITY IN INTERNET AS MEDIA OF MARKETING COMMUNICATION FOR SME (CASE STUDY AT PIK PULOGADUNG)

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Abstract: This study discusses how small and medium enterprises use of information technology, especially communication is provided free of charge by Google for use in its marketing communications activities to Achieve local and global markets. The study focused on the use of information communications technology Provided free by Google that includes Google Search Engine, Google Mail, Google Weblog (Blogger), Google Social Media (Google+), Google Groups (Mailing List). The analysis was conducted to answer the question of how and what considerations SMEs in using information communication technology, especially the free facilities to be used as a marketing communication media. Analyses were performed using the approach of the Technology Acceptance Model (TAM) by analyzing related to: perceived ease to use (X1), perceived usefulness (X2), attitude towards using (X3), and the actual usage (Y). The sample data taken from SMEs in PIK Pulogadung using convenience sampling technique. Validity and reliability is done to Ensure that the data meet the eligibility qualifications in testing the hypothesis by using statistical methods Confirmatory Factor Analysis. For the analysis of the existing problems, the testing is done by using path analysis (path analysis). The analysis Showed that perceived ease of use has a total influence directly or indirectly to the use of the facilities free of google at 54.3%. And perceived usefulness has a total effect of directly or indirectly, to use the facilities free of google at 40.2%.

Keyword: Communication Marketing, SME, Free Facilities, Technology of Acceptance Model

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INTRODUCTION

1. Background of The Problem

Internet and the world of business, especially small and medium enterprises (SMEs) current like motors and gasoline, without the support of the Internet, an SME can only embrace the narrow local market, while the increasing number of SMEs led to increasingly fierce competition so inevitably SMEs have to glance at the wider market is a global market and seek to achieve it, and one way is to harness the power of a broad range of information and communications technology (ICT).

The development of information and communications technology and its application in Indonesia is growing rapidly, according to Internet World Stats, until the end of 2011 internet users in Indonesia is estimated to reach 55 million people, or about 22.4% of the population of Indonesia. This is all due to the cheapening of tariffs and devices such as modem internet connection and netbooks today, coupled with the presence of tablet PC devices that are popular today. And most people already make it a shopping transaction media such as e-tickets and e-banking.

According to Internet World Stats, the world's data as of June 2012 showed that as many as 34.3% of the total world population are Internet users, specifically in the US e-commerce transactions in the retail sector (non travel) as much as \$ 130 million from as many as 220 million Internet users.

But the huge market potential is not yet an option to develop online marketing channels by SMEs. Business week Bloomberg data shows that 40% of SMEs in Indonesia is closed in the first year, and 60% of which still survive, 80% of which will fall in year five. This is due to the difficulty of conquering the market and limitations of venture capital.

Indeed, for SMEs that want to actually use ICT, will be faced with another obstacle, as is necessary 'development costs' and human resource costs are huge, so only businesses with large capital are able to apply ICT in their business activities.

This condition causes more elimination of the role of SMEs in seize global market share compared to the large capital entrepreneurs. However, amid the rapid growth of Internet-based information technology applications in the world, SMEs actually have an alternative media of business communication and marketing through internet media distributed for free. Among them social networking sites such as Facebook, microblogging site Twitter and so on, also the first site for free web-based email providers Google and Yahoo are also a provider of free blog sites. Everything that can be used as an inexpensive alternative media of business communication and also even more effective because the number of users who become our target market had already use it as a medium of communication day-to-day and ready to wait for the products offered by SMEs there.

However, there are many businesses that have not implemented the use of 'alternative information technology' which is available free on the internet. This is caused by many factors including distrust in media of marketing communications provided by the internet. Also the perception that assumes that its use of the Internet as a medium free of of marketing communications will reduce the prestige of the business organization, and so forth.

Based on some of the facts mentioned above, it is necessary to analyze and discuss the benefits of marketing communication media available on the internet for use by SMEs in Indonesia.

2. Formulation of The Problem

Based on this background, the key issues to be examined in this study are the factors that influence the intention to adopt the technology 'marketing communication' which is cheaper for SMEs. In detail the problems that will be asked include:

- a. Is the perception of ease of use affects the attitude to use of SMEs in using the 'free facility' on the internet.
- b. Does the perception of usefulness affects attitude to use of SMEs in using the facilities for free on the internet.
- c. What attitude to use SMEs affect actual use of SMEs to use the facilities for free on the internet.
- d. Whether perceived ease of use directly affects the actual use of SMEs in using the facilities for free on the internet.
- e. Does the perception of usefulness directly affects the actual use of SMEs in using the facilities for free on the internet.

This study uses the Technology Acceptance Model (Davis, 1986) as the basic theory in the adoption of information technology in the form of free communication facility on the internet by SMEs. TAM is a theory of information systems designed to explain how users understand and use an information technology. TAM using the Theory of Reason Action (TRA) of Fishbein and Ajzen (1980) as a theoretical base that is used to see how the rate of adoption of the respondents in receiving information technology.

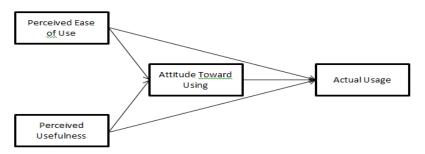
LITERATURE

1. Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) introduced by Davis in 1986 is an adaptation of the Theory of Reasoned Action (TRA) was first proposed by Ajzen and Fishbein in 1975. This theory was compiled using the basic assumption that humans behave

in a way that is conscious and consider all information which is available. TAM aims to explain the behavior of computer users. TAM using TRA as a theoretical basis for specifying the causal relationship between the two key beliefs that perception usefulness and perceived ease of use. TAM is much more specific than the TRA, as TAM is intended only for the behavior of the use of computer technology (Davis et al, 1986). TAM model is not only able to predict, but can also explain that researchers and practitioners can identify why a particular factor is not acceptable and give the possibility of appropriate steps. The main objective of the TAM actually is to provide a basic measure of the impact of external factors on internal beliefs, attitudes and intentions. TAM is designed to achieve these objectives by identifying some basic variables suggested in previous research that agreed with the factors that affect the cognitive and affective at reception computer and using the TRA as a theoretical basis for determining the model 'relationship study variables'. TAM position the two trust, namely 'perceive usefulness' and 'perceived ease of use' as a major factor computer acceptance behavior (Figure 1).





In this study the concept of TAM (Davis et. Al, 1986) modified into four variables:

- a. Perceived ease of use, defined as the extent to which a trust that uses a technology would be free of effort.
- b. Perceptions of usefulness, is defined as the extent to which a trust that uses a technology will improve performance.
- c. Attitudes toward the use of technology, defined as the evaluation of users about their interest in using the technology.
- d. Adoption real use of a technology (or actual usage) are defined in terms of the measurement of the frequency and duration of use of a technology.

Based on the above model, TAM is formed from two individual beliefs are perceived ease of use and perceived usefulness is the basis for this study. Perceived ease of use and perceived usefulness is indicated affect the attitude toward using on the use of free applications on the Internet that is provided by Google. Attitude toward using then affect actual usage directly. Perceived ease of use and perceived usefulness also affect the actual usage indicated the use of free applications on the Internet from Google directly without going through the attitude toward using as shown in Figure 1.

2. Small and Medium Enterprises (SMEs)

According to Law No. 20 Year 2008 on Micro, Small and Medium Enterprises (MSMEs), Small Business is a business stand-alone productive economy, which is done by the individual / entity which is not a subsidiary / no 'branch company-owned', controlled by, or be part either directly or indirectly, of a medium or large businesses that meet the criteria:

- a. Rp. 50 million <Asset ≤ Rp. 500 million
- b. Rp. 300 million <Turnover ≤ Rp. 2.5 billion

Medium Enterprises (FME) is a productive economic activities that stand alone, which is carried out by individuals or entities that are not subsidiaries or branches of companies owned, controlled, or be a part either directly or indirectly by small businesses or large enterprises that meet criteria:

- a. Rp. 500 million <Asset ≤ Rp. 2.5 billion
- b. Rp. 2.5 billion <Turnover ≤ Rp. 50 billion

BPS (Indonesian Central Bureau of Statistics) developing SME category based on the number of workers. According to BPS, the SME is a business entity that has a workforce of less than 100 people, with details as follows: household business (or known as micro enterprises) consists of 1 to 4 workers, small businesses are said to include small businesses according to BPS if the number of its workforce from 5 to 19 workers, and medium-sized enterprises are said to include medium-sized enterprises according to BPS if the number of its workforce from 20 to 99 workers.

- a. Small businesses financed by savings and private and internal financing for the whole activity, every penny spent for taxes means less working capital (Bulloch, 1978). Characteristics of SMEs (Berry et al, 2001):
- b. SME performance is better than micro-enterprises in developing employees, more employment, and able to pay attention to the potential growth of employees.
- c. SMEs receive increased productivity through investment and technological change as part of its dynamics.

d. The flexibility of SMEs is much easier than large companies in any condition including rapidly changing market conditions will not significantly affect SMEs.

3. SME Marketing Communications Mix

SMEs are no different from business organizations in general. To increase sales, the various steps of the 'marketing strategy' is done, including marketing communications. Mix Marketing Communication (Kotler, 2008) which may be carried out by SMEs are not much different with business organizations in general, which includes Advertising, Sales Promotion, Public Relations, Personal Selling and Direct Marketing. Implementation of all five of the marketing communications mix a little different with the presence of 'new technology of Internet-based communication media'. And the use of creative 'new technology of Internet-based communication media' can increase sales organization. Utilization email, mailing lists, weblogs, chat engines, and others can be done in advertising, sales promotion, public relations, personal selling and direct marketing to the impact of which would be much cheaper and wide-ranging.

- According to the marketing communications mix (Kotler, Philip and Kevin Lane Keller, 2009) consists of eight main communication models, namely:
- Advertising: It is the structure of information and non-personal communication arrangement financed and persuasive and promotion of products, services or ideas by identified sponsors through various media.
- Sales promotion: Various short-term incentives to encourage trial or purchase products or services.
- Events and experiences: Activities and company-sponsored programs designed to create the daily interaction or interaction associated with a particular brand.
- Public relations and publicity: A variety of programs designed to promote or protect the image of the company or individual products.
- Direct Marketing: The use of mail, telephone, fax, e-mail, or the Internet to communicate directly with or requesting a response or dialogue from customers.
- Interactive Marketing: Activities and online programs designed to engage customers and directly or indirectly increase awareness, improve the image, and creating sales of products and services.
- Word of mouth marketing: Communication oral, written, and electronically between communities associated with excellence or experience to buy or use a product or service.

- Personal Sales: face-to-face interaction with one or more prospective buyers for the purpose of making presentations, answering questions, and procurement orders.

4. Internet Based ICT Media For Marketing Communications of SMEs

Here a variety of applications of information and communication facilities for free on the Internet that can be used as a marketing communication media by SMEs in its efforts to penetrate the global market. In this paper the authors put forward the application of the free internet facilities offered by Google.

- 1. Google Search, the application of information retrieval on the Internet that can be used by SMEs to explore all sorts of information related to the source of the product or product market. www.google.com.
- 2. Google Mail and Google Talk, an electronic mail application that can be used for internal and external communications for SMEs, between leaders and employees, with suppliers or with customers with a wide scope (global). Another benefit is the Google Mail can be used as documentation media business letters either internal or external. Besides being able to be used for marketing communications asynchronously in Google Mail facility is also attached to a Google Talk facility that can be used to perform synchronous communication. www.gmail.com.
- 3. Google Groups, is a mailing list by using Google Mail which can be utilized to form a community organization as a step to build an intensive communication with suppliers or even customers related industry.
- 4. Google Plus, is' social networking site like Facebook released by Google with excellence indexed in Google search engine to facilitate the search on the Internet using Google Search Engine that is widely used by the public. www.plus.google.com. Google Plus benefits the same as Facebook, can be used as a 'medium of communication' intensively with customers and community organization or a company. It is flexible with its facilities Hangout allows Google Plus can serve as a medium of communication that once synchronous or asynchronous. Can serve as a public relations communication media. An example is Google Plus of Coca-Cola soft drink products. www.plus.google.com/+TheCoca-ColaCompany.
- 5. Google Translate, are machine translators who can translate more than 20 languages worldwide. Despite having validity Indonesian translation English approximately 60%, but quite a lot of help and can be used to help create documents, brochures, sales letters, proposals and other business documents in English. Thus allowing SMEs to solve the language barrier

in the global market. Can undertake large-scale translation and techniques presented in the pronunciation. www.transalate.google.com.

- 6. Google Docs (Google Drive), an office application facility as "computing clouds" which allows SMEs to practice computerized administrative office (word processing, spreadsheet, presentation, drawing and form design) without having to install the program and office applications such as Microsoft Office or Star Office. Advantages of this application that can be used by SMEs is the ability to collaborate in a good document that word, spreadsheet or presentation, so that SMEs can prepare documents anytime and anywhere together, also can be used as online storage media that can later be accessed using the device whatever, and anywhere along with internet connection. www.drive.google.com.
- 7. Google Blog (Blogger), is the facility of making free weblog from Google that can be used as a medium for the publication of an organization or business that is inexpensive. The advantage is that it can be used as a medium of communication and publication of the product and the company's internal information regarding the agenda and activities of the company's work. Is one way, but available space for member comment for visitors weblog. Can replace the function of the company's website, but free and more powerful because of the ease of doing an update. For the effectiveness of the domain name, can buy a suitable domain name that will be in-direct it into the weblog address. For example is the weblog of Muslim clothing wholesale trading company. www.grosir-baju-muslim.blogspot.com/
- 8. Google Video (YouTube), cloud computing applications that are used to store and play videos online. Popularity of YouTube has made Brigadier Norman and also "Sinta-Jojo So Nice" and suddenly became popular artis. Youtube can also be used by SMEs to communicate new products in the audio-visual, communicate information product creation process, how to install the product or how to use the product. Audio-visual documentation that can be attached to its access in SMEs weblog. www.youtube.com.
- 9. Google Photo (Picasa web), almost like the Google Video but only stores in and share photographs, can be used to communicate the product or used as a product catalog. www.picasaweb.com.

RESEARCH METHODS

1. Population and Sample

The population is all SMEs in PIK Pulogadung of approximately 1000 SMEs are divided into several centers accordance with its business. There are five centers

in PIK Pulogadung namely metal centers, centers of convection, leather centers, centers of culinary and traditional crafts and centers of furniture, with metal centers proportion of the population is 30%, the central convection 30%, 20% leather centers, centers of culinary and traditional crafts 15% and 5% of furniture centers. Secondary data on SMEs profiles in PIK Pulogadung issued by the Unit Pengelola Kawasan Pusat Pengembangan Usaha Mikro, Kecil dan Menengah serta Permukiman (UPK PPUMKMP) Pulogadung.

The sampling technique in this research is purposive sampling that samples were selected based on certain considerations. Considerations used are: line of business, size of business, the use of Internet-based information technology.

Minimum number of samples was determined by Slovin models with an error rate of 10% in order to get 91 SMEs were sampled in this study. Then 91 samples of the SMEs into five centers distributed proportionally ie metal centers 30% = 27, the central convection 30% = 27, the center of the skin 20% = 18 culinary center and traditional handicrafts 15% = 14 and a center of furniture 5% = 5.

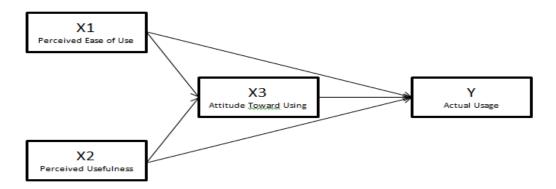
2. Variables and Research Model

Research variable used herein is based on the Technology Acceptance Model which includes the following modified as follows:

- X1: Perceived Ease of Use
- X2: Perceived Usefulness
- X3: Attitudes Towards Using
- Y: Actual Usage

So that the model used to be:

Figure 2: Research Variable Model



The hypothesis of the research is:

- 1. Hypothesis 1 : Perceived Ease of Use (X1), Perceived Usefulness (X2) and Attitude Toward Using (X3) direct effect on Actual Usage (Y)
- 2. Hypothesis 2 : Perceived Ease of Use (X1) and Perceived Usefulness (X2) direct effect the Attitude Toward Using (X3)

3. Analysis Method

The analysis used in this research is path analysis that aims to explain the direct and indirect result of a set of variables, as cause variable to a set of other variables which are result variable.

3.1. Test the validity, reliability and normality

Test the validity of the method of Construct Validity shows that the Total Score of the R Calculate for all item of question above 0.30 indicates that as valid all. Reliability test by the method of Spearman Brown split half declared reliable because it has Ri = 0.91 > 0.60. And the normality test showed by Normal Probability Plot concluded that the data to be analyzed is normally distributed because the real data follow a diagonal line.

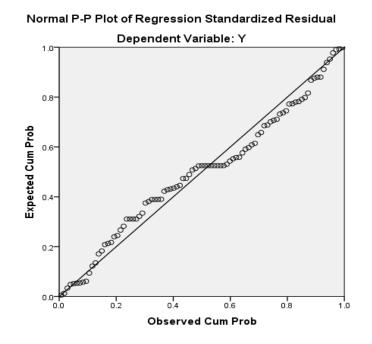


Figure 3: Normal P - P Plot of Regression Standardized Residual

RESULTS AND DISCUSSION

Based on the results of processing the collected data using SPSS V.22 then showed the following results:

1. Hypothesis Testing Results ($\alpha = 10\%$)

1.1. Hypothesis 1 : X1, X2 and X3 directly effect to Y.

- Ho: X1, X2, and X3 has no direct effect significantly to Y
- Ha: X1, X2, and X3 has direct effect significantly to Y

Based on the results of data processing P-value is calculated using SPSS showed the following results:

- Sig. (P-value) = 0,000 <10% means that the partial X1 significant effect on Y.
- Sig. (P-value) = 0,004 <10% means that the partial X2 significant effect on Y.
- Sig. (P-value) = 0,000 <10% means that X3 partially significant effect on Y
- Sig. F = 0.000 means simultaneously X1, X2 and X3 significant effect on Y

It can be concluded that in partially proved that the perceived ease of use of the facilities provided free of charge on the internet Google has a significant influence on their use. Similarly, the perception of usefulness and attitude to use it also has a significant influence on their use. And simultaneously turns the perception of ease of use, perceived usefulness and attitude to use has a significant influence on the use of SMEs to use the free facilities.

1.2. Hypothesis 2: X1 and X2 directly effect to X3.

- Ho: X1, X2 has no direct effect significantly to X3
- Ha: X1, X2 has direct effect significantly to X3

Based on the results of data processing P-value is calculated using SPSS showed the following results:

- P-value = 0,000 <10% means that the partial X1 significant effect on the X3.
- P-value = 0.001 <10% means that the partial X2 significant effect on the X3.
- Sig.F = 0.000 means simultaneously X1 and X2 significant effect on X3

For hypothesis 2 calculations of data using SPSS showed that partially perceived ease of use significantly affect the attitude to use, as well as perceptions of the usefulness of free facility in the Internet is partially significant effect on the attitude to use. And simultaneously perceived ease of use and perceived usefulness has a significant influence on the attitude to use the free facilities on the Internet that is provided by Google. Based on the obtained data processing using SPSS models with values of influence as follows:

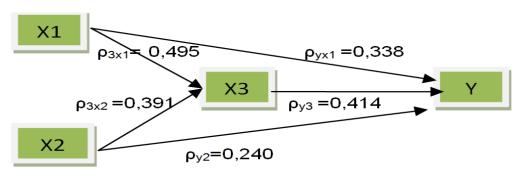


Figure 4: The value of influence between variable

- X1 direct influence on Y = 0.338 = 33.8%, indirect influence X1 to Y = 0.495 x 0.414 = 0.205 = 20.5%. So the total effect of X1 on Y = 0.338 + 0.205 = 0.543 = 54.3%
- X2 direct influence on Y = 0.240 = 24.0%, indirect influence of X2 to Y = 0.391 x 0.414 = 0.162 = 16.2%. So the total effect of X2 to Y = 0.240 + 0.162 = 0.402 = 40.2%
- The direct effect X1 to X3 = 0.495 x 0.430 = 0.213 = 21.3%, direct influence on the X3 X2 = 0.391 x 0.351 = 0.137 = 13.7%

Based on the above data obtained an idea that perceived ease of use of the free internet is a reason that is preferred to the perception of usefulness to use the free internet in marketing communications.

CONCLUSION & RECOMMENDATIONS

Based on all the above results it can be concluded that:

Direct influence on the use of free facilities on the internet is more due to its perceived ease of use to be used as a medium for marketing communication SMEs. That is equal to 33.8% compared to the direct effect given by the perception of the usefulness of the free facilities at the internet to its use by 24%.

Likewise indirectly perceived ease of use has an influence on the use of free facility in the internet that is 20.5% greater than the influence of the perception of usefulness of which 16.2%.

Data show that the attitude to use of 41.4% influence on the use of free facility on the internet to be used as a medium for marketing communication where the SMEs attitude toward using is influenced by the perceived ease of use by 49.5% and the perception of usefulness by 39, 1%.

For that we need for SMEs to be reassured that they can use easily free facilities on the internet is provided by Google for use as a medium for marketing communication through related trainings so that SMEs will be able to better in using free facility on the internet provided by Google to be used as an effective and low cost medium of marketing communication.

For the relevant government especially the Ministry of Cooperatives and SMEs, needed to improve the organization of training on how to use free facility on the internet to be used as a medium of its marketing communications.

It is also necessary for the government to concerned to improve the quantity and quality of internet technology for public infrastructure in Indonesia, especially for SMEs.

References

- Agarwal, R. and Prasad, J. (1999)," Are Individual Differences Germane To The Acceptance Of New Information Technologies?", *Decision Sciences*, Vol.30 No.2,pp.361-91
- Badan Pusat Statistik, www.bps.go.id
- Belch, George E., and Belch, Michael A., 2004, Advertising and Promotion : An Intergrated Marketing Communication Perspective, New York : McGraw-Hill/Irwin
- Bovee, Courtland L., and Thill, John V, 1998, *Business Communication Today*, Sixth Edition, Prentice-Hall International Inc.
- Compeau, D.R. and Higgins, C.A. Computer Self-Efficacy: Development of a Measure and Initial Test., *MIS Quarterly* (19:2), 1995, pp. 189-211.
- Cooper, D.R., Schindler, P.S. (2003). Business Research Methods, 7th ed. NY: McGraw-Hill.
- Davis, F.D. (1986), "Perceived Usefulness, Perceived Ease of Use And User Acceptance of Information Technology", MIS Quarterly, Vol. 13 No.3, pp.318-39
- Davis, Fred D., 1986, "Measurement Scales for Perceived Usefulness and Perceived Ease of Use", http://wings.buffalo.edu/mgmt/courses/mgtsand/success/davis.html, (retrieved 23 Desember 2005) dasril.wordpress.com/e-commerce
- Fill, Chris and Graham Hughes, 2005, *Marketing Communication*, Elsevier Butterworth Heinemann.
- Kotler, Philip and Gary Armstrong, 2008, *Principles of Marketing*, 12th Edition, Pearson Prentice Hall.
- Ghozali, I. and Fuad. 2005. *Struktural Equation Modelling*. Semarang: Badan Penerbit Universitas Diponegoro.
- Kotler, P. (2000). Marketing Management: The Millenium Edition. Prentice Hall.

- Lee, Jungwoo and J. Runge. 2001. Adoption of Information Technology in Small Business: Testing Drivers of Adoption for Entrepreneurs. *The Journal of Computer Information System*, Fall, 42, 1, hal 44.
- Legris, P., Ingham, J., Collerette, P. (2003). Why Do People Use Information Technology?: A critical Review of The Technology Acceptance Model. *Information & Management*, 40, 191-204.
- Murphy, Herta A and Hildebrandt, Herbert W, 1997, *Effective Business Communications*, Mc. Graw-Hill Inc.
- Raymond McLeod, and George P. Schell, 2004, Ninth Edition, Management Information Systems, Prentice Hall, ISBN : 0-13-123021-2, p. 89.
- Santoso, S. (2007). *Structural Equation Modelling*, Konsep dan Aplikasi dengan AMOS. Elex Media Komputindo, Jakarta.
- Sekaran, Uma. 1992. Research Methods for Business. John Willey & Sons: New York.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D, (2003), User acceptance of information technology: Toward a unified view, MIS Quarterly, 27(3), 425-478.

Data of Bloomberg Business Weeks, No. 11 – 21 April 2010.

www.internetworldstats.com/stats.htm

www.internetworldstats.com/top20.htm