Internet Usage in Cyber Café and Human Sustainability in Kedah

Noraniza Yusoff

School of Government
UUM College of Law, Government and International Studies (UUM COLGIS)
06010 UUM Sintok, Kedah Darul Aman, Malaysia
noraniza@uum.edu.my

ABSTRACT

The Internet has developed into a vital element of their usual community and commerce living. While rivalry among cyber cafes expands, user knowledge, distinguished utilities, working steadiness, charges, web action, preservation as well as management are main causes that impact cyber café existence. This study proposed to examine the purpose of internet usage using quantitative approach for data collection. Data analysis for primary data acquired via written questionnaire employing mode and percentage. The result showed that internet users who used e-mail was intended to send information. The purpose of internet usage for research was for personal research on certain subject. Suggestion for improvement in the internet usage was to establish organization which focuses on cybercrimes.

Keywords:

Internet use, human sustainability, cyber cafe, development, internet user

INTRODUCTION

The internet has developed into a vital element of their usual community and commerce living (Bughin et al., 2011). Technology growth of the internet provides the capability if suitably deployed to be a supporter of a better continuous expectation (Ahmed and Hardaker, 1999). Strandberg and Brandt (2001) represented that internet course of study in sustainable development have been embark on towards six years at the Division of Industrial Ecology, Royal Institute of Technology, Stockholm.

ICTs are execute unendingly more vital task in accomplishment of Millennium the Development Goals (MDGs), just as influential instrument to contend poverty, enable female, enhance the education status, and enhance ecological control. The Republic of Azerbaijan a head between Commonwealth Independent States/CIS nations when testing the denseness of Internet users throughout end three years. In 2012, this statistic raised from 65% to 70%. Similarly, the standard of the internet utility including the exterior internet connectivity raised by 2.2 times in 2012. Values also decreased by nearly

INTERNET USAGE IN CYBER CAFÉ AND HUMAN SUSTAINABILITY IN KEDAH Noraniza Yusoff



contrasted to 2011 reported by the World Economic Forum. The IGF 2012 Baku was gathered by the order to consider civic approach matter associated to main component of internet rule to stimulate the sustainability, validity, protection, constancy and growth of the internet in the underdeveloped worldwide (United Nations, 2013).

When consumer get worn to the distinction of implicit deal and the technology towards involvement on the internet get greatly acquirable, the allocation of value-added utility, like virtual source, e-reserves and WiFi networking also provide to deal and utility conventionally produced by body like libraries. These utilities and deal employ dealings validate endowment paradigms to continuing aid. It can be challenge that libraries necessity continue alongside of recent paradigms of e-commerce to produce pertinent utilities and establish data where required, to forecast alter and appropriately adjust their approach of interchanging online or execution commerce, whether it is unpaid, unpaid-forutility or charge-repair (von Retzlaff, 2006).

The internet-based process and utilization considerably presented can reinforce community situations in large-scale tragedy province, decrease person unhappiness and contribute precise and worthwhile method of encourage save and release utilities (Barak, 2010). In Malaysia, Kutty and Sreeramareddy (2014) discovered compulsive internet use scale (CUIS) associated with internet consume that is $0.242 \ (p < 0.001)$. Abedalaziz et al. (2013) in research on Malaysia discovered respondents have a high rank awareness of the utility and their rule of the computer and internet, no important dissimilarity were discover among participants' manner towards the internet and computer connected with gender, domain of investigation and ethnicity as well postgraduate students' manner towards computer and internet utilization is connected. Lean (2008) found that confidence, comprehend utility, comprehend comparative benefit and comprehend representation severally has a straight affirmative important connection concerning aim to employ eutility and comprehend government complication has vital uncooperative a connection concerning aim to employ egovernment utility.

The internet and online community web have altered the obtainability of data and chances for community relationship for those that have prepared path to them. The possible function of the internet in disagreement is a rising precedence in intergovernmental consideration across cybersecurity. There is, nevertheless, proof that ICTs and the internet can provide absolutely to the reinstatement regularity. The effect of ICTs and knowledge communities ecological on acceptability, nevertheless, is more contentious. Large corporations, specifically usefulness, have started to employ knowledge technology to administer power yield and arrangement, conveyance and other extensive methods, with large power effectiveness. Commerce policy adviser should strive to maximise environmentally affirmative effects of ICTs and knowledge communities, like carbon-saving 'smart systems' for power yield distribution. The internet improves civic utility and stimulates political involvement, but also promotes recent types of offence (Souter, MacLean and Creech, 2013).

ICTs and the internet are extensively professed to have had or to empower transformative



effects on path to several important wellbeing and occupation sources, and to empower larger authorization and involvement in community. The internet has made huge sources of data openly accessible. The internet has empowered inhabitant to avoid lawful restrictions and community norms that would antecedent have constrained facets of conduct. In the manner that online shopping overwhelms disparities in path to products and utilities. The internet had pervasive the conduct of non-compliance with copyright, which weakens the sustainability of intellectual possessions regulations. Recent channel and the internet enable persons, not fewest to do what was antecedent unfeasible or prohibited, and facilitate recent types of community connection. The ways in which ICTs and the internet have altered the dynamics of association among dispersion and residence societies, or their ability to empower more quick transmit of payments (Souter, 2012).

It moves lacking remark that one of the means to accomplish economic self-sustainability is protection assets and repeated charges cheap. Assets charges encompass hardware, software (if bought), web apparatus, the material property, arrangements certify and link charges, etc. Repeated charges rest mainly with internet and telephone use charges, electric energy, rental, preservation and restore, and wage (Best and Maclay, n.d.).

By comprehension the link of occurrences that cause to the development of language and the arrival of the awareness instrument of conversation, literature, math, science and computing, it will be better capable to comprehend how these instruments can be arranged to assure the sustainability of person existence entirely (Logan, n.d.).

Merely one quarter of the citizens in the underdeveloped mankind was online in the last of 2011. This small amount of internet users in underdeveloped nations considered for growth attempt in formation and implementing suitable approaches to facilitate continually for person to employ the advantage of the internet and improve sustainable development (United Nations, 2013). Internet usage and online involvement are anticipated to contribute a favorable approach for reviving democracy in the digital age. The internet is varying communities by promoting passage to data and interchange association (Park and Perry, 2008).

In various technologically directed productions, knowledge with the internet is required to acquire an occupation in the top position. The capability to revive data on-line is a vital proportion of numerous employees' everyday standard: secretaries, like consume the internet to revive link data, get references to investigation documents, arrange meetings, and discover statistical information. Among 2000 and 2001, United States employees who utilized the internet enhanced their incomes at a quick proportion than their offline peers (DiMaggio and Bonikowski, n.d.).

It must be the occurrence that association will expand proximity and familiarity considerably rapid across the internet than will association start off-line, as of the higher simplicity of self-disclosure, including the establish of the association on much substantial foundation, like common concern (as contrary to physical attraction solely). If it is the occurrence that these associations build on the arrangement of profound and much substantial causes, one inclination anticipate not merely that these associations will fit close rapidly, but that they will be steady across period. Connections build



on these bases should also be capable to further exist direct session. when access characteristics cause reach into process. Strongly, people are usually prevented from creating connections for somewhat of the preceding causes, people possess a vigorous, unfulfilled want to exhibit his or her actual self. Therefore it would anticipate public who are isolated or are socially upset in customary, direct communication surrounding to be inclined to experience stronger capable to manifest their actual self across the internet and therefore to expand intimate and worthwhile connections there. The results represented reducing in isolation and despair and rising in the extent of one's sociable circumference afterwards 2 years of internet usage (McKenna et al., 2002).

While rivalry among cyber cafes expands, user knowledge, distinguished utilities, working charges, web steadiness, action, and preservation and management are main causes that impact cyber café existence. As a cyber café is limited of accomplished web process and preservation peoples, hindering possible dangers and accept preventative scale are difficult (One Net, 2011).

Not merely does the internet contribute the required channel to speak however further empower dissimilar persons to manage various other actions like hardware acquire, arrange and aid, online meeting investigations, everyday surveys and portraying, occurrence conversation spaces, card reader mark swipe unification, link management and advancement, printing management, customized position display documents, investigation, e-commerce, e-mail, business, conferencing, computer entertainment and numerous others. The utility industry might be so considerably planned concerning essence and physical characteristics but still fail to incline buyers particularly in the utility marketplace. The cyber café arrive at the flexible resolution of society informatics, and besides stands apart as various cyber cafés are mercantile, and provide for those with existent expertise, looking for suitability and sociability, instead of generally for training and data. Numerous buyers did not consider the technical utilities as the vital or one cause why they visited the cyber cafés. The surroundings, the familiar workers, the opportunity to encounter and use time with intimates, the music and decoration performed vital function because buyer attractiveness to the cyber cafés (Somoni et al., 2010).

Compare to other civic internet passage location, cyber cafes are perform pivotal function because the most usual internet passage location in the urban and rural region in Malaysia (Alam et al., 2009). The internet has aid an astonishing arrangement of novelty; basically transform our being, from the means people join with each other to their purchases practices. The industrial internet will notably enhance yield and efficacy, decreasing charges and encouraging economic progress. The internet has basically altered the means individuals join with one another—and the industrial internet is more varying the method people join with industry and substructure (Creating possibilities: the industrial internet and sustainability, 2014).

The digital gap is moreover important for students of community classification as an instance of what numerous trusts to be the more vital effect of technological path and knack on community disparity in an age in which quick technological alteration has develop into the



rule. Particularly insufficient economic investigation has addressed internet usage, nonetheless. Furthermore, nearly all economic investigations of impacts of technology utilize have incomes demonstrated deficiencies. First, they mainly have applied cross-sectional information. Second, they have expected technology usage affects revenue via a one tool - i.e., that any valid impacts of technology usage on revenue manifest advancements in individual assets and yield (DiMaggio and Bonikowski, n.d.).

We cannot consider 'Internet usage' as a common circumstance; alternatively, investigators should designate what type of usage they investigate (Blank and Groselj, 2014). In 2011, better Americans linked to the internet than ever previously, whilst dissimilarities persisted to exist among those with employ and those without (File, 2013).

Technology is one of the strategic causes compelling the growing usage of the internet by terrorist organizations and their followers for a broad extent of intends, containing enlisting, funding. disinformation. instruction. provocation to perform behave of terrorism, and the assembling and distribution of data for terrorist intends. Whereas, the numerous advantages of the internet are undeniable, it may moreover be employed to promote connection inside terrorist institutions and to disseminate data on, including matter assist for, organized enactments of terrorism, all of which need particular technical information for the efficient research of these violations. In the noted instance of R versus Tsouli and others, Younes Tsouli, Waseem Mughal and Tariq al-Daour appealed convicted to accuse subject to the Terrorism Act 2000 of excite killing for terrorist intends by creating and preserving vast

amounts of internet sites and conversation forums utilized to publicize data instigate enactments of terrorist killing, mainly in Iraq (United Nations Office on Drugs and Crime, 2012).

The internet is an important component of the learning procedure whichever sources for knowledge and teaching are execute into teaching design and assignment everyday (Dunn, 2012). There was basic message distribution concerning the paramount significance of protected a safe and ensure internet for teenager and the generations to occur. It was agreed that particular novel cyber dangers like identity stealing require specific consideration and inventive regulative as well as lawful plan resolutions. It was accentuate that these rising challenges would solely enhance as people move further into the digital period and that will require to be addressed with immense extent and various resolutions (United Nations, 2013).

MATERIAL AND METHODS

The objective of the study was to determine the demographic background of internet users in cyber cafes and to determine the purpose of internet usage. The basic research proposed to explore internet use situation using quantitative approach of data collection. Written questionnaire distributed to respondent via purposive sampling at cyber café in Kedah Darul Aman, Malaysia. The samples were composed of individuals who used the internet in cyber café at Alor Setar and Kulim, Kedah. The number of respondents was about 70 respondents. The Cronbach's Alpha was 0.989 for 238 items. The index categories were using the rating scales namely dichotomous scale,



categories scale and Likert scale (including do not know, strongly disagree, disagree, agree and strongly agree). Data analysis for primary data acquired via written questionnaire using mode and percentage.

Variables included the purpose of internet use in cyber café containing email, MUDs, latest news, message board, IRC, shop, educational, finding things, travel, financial and research. Figure 1 show general mental picture of variables. Significance of the study were may obtain information or data related to behaviour and may test respondents' knowledge on current issues etc. Research questions included what is demographic background of internet user in cyber café? What is the purpose of internet use in cyber café? Usage indicates by Steel (2000) is the action performing thing with a device, a thing, a mean and others for a particular aim. While, the internet is a computer web arrangement throughout the world which a web of web in which consumers at whichever one computer can, if they have approval, obtain data from whichever other computer (and occasionally speak at once to consumers at other computers (SearchWinDevelopment, 2012). In which instance, internet consume is the activity of applying computer web arrangement global for a particular aim.

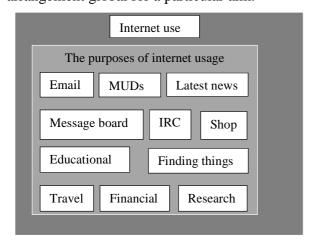


Figure 1: General mental picture regarding internet use in cyber café

RESULT AND DISCUSSION

Demographic Background of Internet User

Mode of gender variable was 1.00, about 59 respondents (94.3%) were male and 11 respondents (15.7%) were female. File (2013) found that 69.4% of Americans male and 70.1% of Americans female accesses the internet from some location. Singh (1998) represent that of the 83 respondents, about 19.3% were males and 80.7% were females. Table 1 shows the gender statistics of internet users in cyber cafes.

Table 1: Gender of respondents

Gender	Frequency	Percentage
Male	59	84.3
Female	11	15.7
Total	70	100

Mode of respondents' age was 2.00, about 33 respondents (47.1%) were in age category of 11 to 20 years old, 19 respondents (27.1%) were in the age group of 21 to 30 years old, 4 respondents (5.7%) were aged 31 to 40 years old and 12 respondents (17.1%) were aged 41 years old and above. File (2013) found that 60.2% of Americans on years 3 to 17, 82.0% of Americans on years 18-34, 81.4% of Americans years 45 to 64 and 45.4% of Americans years 65 and older retrieves the internet from



many place. Singh (1998) represent that the average old age of respondents was 39.5, with the youngest frequent 24 and the oldest frequent 50 old age. Table 2 shows the statistic of the respondents' age.

Table 2: Categories of respondents' age

Age	Frequency	Percent
categories		
11 to 20 years	33	48.5
old		
21 to 30 years	19	27.9
old		
31 to 40 years	4	5.9
old		
41 years old	12	17.6
and above		
Total	68	100

Internet Use and Human Sustainability

The result showed that internet users who used e-mail was intended to send a message (70% of respondents), information (78.6%), documents (62.9%), using webmail (32.9%), using a POP3 e-mail services (7.1%), using IMAP emails (8.6%) and MAPI email server (5.7%). Singh (1998) found that 97.3% or 73 respondents used email services. Eurostat newsrelease (2013) represented 39% individuals consume egovernment for asking private report. Ahmed and Hardaker (1999) professed stakeholders will approach to assume a high degree of clarity and the internet by means of facilitating this change will be the flashlight for moral and sustainable behavior. Online societies can and choose perform a growing function influencing institutions to turn moreover responsive to subject of sustainable growth. The internet promoting further efficient and clarity data move.

Internet users for Internet Relay Chat or Internet Relay Chatrooms (IRC) was to transfer text (24.1%), transfer files (8.6%), chat (31.4%), forum communications (21.4%), oneto-one communication (37.2%), connecting to a Windows client (17.1%), connecting on Unix and Linux clients (12.9%), connect to Mac OS X client (8.6%), connect to iOS (21.4%) and connect to Android client (12%). Palesh et al. (2014) found that chatting (24%) just as one of the major intention of internet consumers. Kang and Yang (2006) found that customers of IRC are typically unknown and comprise with topic basis group discourses. Ahmed and Hardaker (1999) represented the online forum is an everchanging discourses group concerning on topics associated to sustainable growth like CESD Sustainable Development Forum which links to other sustainable growth discourse.

The purpose of internet usage for Multi-User Dungeons (MUDs) was for fighting (10.1%), trap (10%), puzzles (11.4%), magic (2.9%), the simple economic system (2.8%), using MUDs Hack and slash elements (7.2%), player versus player MUDs (13.3%), role play MUDs (12.9%), social MUDs (20%), MUDs talkers (10%), education MUDs (24.3%) and graphic MUDs (17.2%). Sanchez (2009) found that Second Life is the biggest community virtual mankind with above fifteen million enlisted consumers and it has a big society of librarians and educators. Five discoveries on the history of virtual mankind are multi-user dungeons (MUDs), tinyMUDs, Multi-User Dungeons Object Oriented (MOOS), Massive Multiplayer Online Role-Playing Game (MIMORPGs) and 3-D social virtual worlds. Townsend and Heron (n.d.) represented the lasting sustainability of a



MUD is consequently interconnected with its society. A MUD as a different scholarly type is ruled by a developer's purpose to yield twain a sociable and inventive text: to foster an active and sociable society of various performers inside the design of an electronic text of literary works.

The purposes of internet usage for message board were to send messages (62.3%), sending public messages (52.9%), read messages (61.4%) and provide feedback to the messages (60%). Gross et al. (2002) girls use internet for message boards average 4 minutes per day whereas boys 6 minutes per day. Accrete et al. (n.d.) represented 9.0% respondents chat/instant messaging as strategies to hold a voice in sustainability actions.

The purpose of internet usage for research included personal research on certain subject (something which stated in news, health problem etc.) were more than 85.7% of respondents, students research (85.7%),journalists research and other writers (48.6%) and scientific research (70%). Evan (2014) represented there a pervasive concern and usage of internet technology by psychologists in South Africa to retrieve psychological data, encourages expert growth, manage their way, and publicize their utilities. Good (2006) professed the internet has contribute numerous environmentalists with the desire that it will become a profitable appliance in the strain for sustainable individual action.

The purpose of travel as to find travel information (87.2%) and created a travel information space (64.3%). The purpose of internet usage for build websites were more than 55.7% of respondents. Morton (2006) found that 15% or higher of consumers favour a

variety of actions that are presumably to be value complement, time-savers, or costeffective: acquire data regarding yields or utilities, obtain data concerning hobbies or particular attention, scrutinize reports and climate, buy things online, discharge invoice, monetary management and venturing, creation journey designs or organizations and acquiring data regarding health or illness. Ali and Frew (2013) represented that sustainability could be betterment via utilize of Web 2.0 instrument like wikis, blogs and podcasts. An assessment of Web 2.0 and its exercise and instance will be acquire accompanying a knowledge of social media and webs, their employ and how they can assist sustainable touristry growth.

The internet usages for financial purpose were for information services (82.9% respondents), transaction services (54.2%), retail brokerage (30%), online banking (38.5%), credit card (20%), mortgage (12.9%), insurance (28.5%), information (72.9%),product financial information (50%), news services (78.6%), evaluation and comparison (68.6%), planning and banking investment (41.5%) and customer financial (35%). Eurostat newsrelease (2013) represented 82% persons employ e-government for revenue tax affirmations in Estonia country and 32% persons utilize e-government for asserting community safety advantages. Sakalauskas et al. (2009) represented that the smaller indication rate for e-banking mode between computer consumers implies shortage of abilities in monetary management arena in both states. The somewhat greater rate of sustainability indication of all classifications implies improving sustainable growth Hungary in contrast to Lithuania.

Internet usages for educational purpose were for reference materials and online libraries



(85.5%), new knowledge (85.7%), learning (48.6%) and examination (70%). Grazzi and Vergara (2014) professed the proof advocate that although technological abilities essential to entirely utilize internet capacities, persons situated in rural regions are further probably to consume the internet for teaching aim, confirmative the possible connectedness effect on individual assets. Bidin et al. (n.d.) represent that students' goal to employ the internet for educational intentions could be forecasted from their manner, non-objective standard and discerned conduct command at 41% degree. Strandberg and Brandt (2001) proposed that the internet could be utilized as a learning platform connection, for example, dissimilar universities and provincial societies in the European Union in a learning project for sustainable growth.

The internet usages for shop were shopping (51.4%) and business undertaken (52.9%). Shim et al. (2014) found that 91% of commerce utilizes the internet for email. NewsRx (2011) represented seven parts of worldwide questions where Nokia can perform the greater notable function as portion of a resolution which are economic growth, occupation, weather alteration and power utilize, health, persons justice and principles, learning including source consume and creation discourse. The internet uses for hearing audio transmission were listened to Radio Wi-Fi audio transmission (10%) and enter to the RealAudio audio transmission (8.6%). Shah et al. (2001) found that 10.8% respondent utilized internet to buy music and 6.9% to buy video. Boulahya et al. (2005) represented that RANET's influential radio-internet connection arrangement dangers breaking down at two vital connections: the computer-enabled multimedia connection with the outward world (the main challenge for

Niger) and the spreading of weather data by viva-voce and radio (the major question for Uganda). Li et al. (2013) represented the society engagement in ecological detection applying their instruments and distribute data with the ecological division employing existent cellular and internet connection support like 3G, GPRS, WiFi etc.

The purpose of finding things which in common is difficult to find are to find things that are generally difficult to find (91.4%) and finding people which generally difficult to find (68.6%). Mascheroni and Olafsson (2013) found that 21% male child and 16% young women of 9-12 old age scrutinized data or contented their concern while thing concerned them as everyday online actions. While 46% and 50% young women of 13-16 old age scrutinized data or contented their concern while thing concerned them as everyday online actions. Ahmed and Hardaker (1999)represented the internet assists dismiss conventional levels and refines which frequently weaken and add 'noise' in the connections among the institutions and its buyer. By shedding out the levels, advance and better efficient discussion among the buyer and institution can be encourage and steady.

The purpose of using the internet for the latest news were latest news on new events (85.8%), latest news about something which unknown (81.4%), latest news related with something lately occurred (88.6%) and latest news about the strange (81.5%). Gross et al. (2002) found that young women utilized internet for list-servs and newsgroups mean 2 minutes per day while male child mean 1 minute per day. Pike (1998) represented Mallpark contribute connections to ecological sources and the same value and amount of ecological and society data



can be acquired via Mallpark by method of the enviro-malls investigation. Women sector attributed an online "Women's Wire" network magazine that contains women's information, private capital data information, fashion information, commerce and health and fitness sources.

CONCLUSION

Cyber cafes are performing pivotal function because the most usual internet passage location in the urban and rural region in Malaysia. The result showed that internet users who used e-mail was intended to send information. The purpose of internet usage for research was for personal research on certain subject (something which stated in news, health problem etc.). Suggestion for improvement in the internet usage was to issue regulations as produced by the countries in the world. Clause 13 of the Model Law on the regulative arrangement of the internet contributes paradigm clause with regard to constraining the usage of the internet for unlawful intends (United Nations Office on Drugs and Crime, 2012).

Establish organization which focuses on cybercrimes can also be made as The International Telecommunication Union (ITU) is an intensive organization of the United Nations that performs a principal function in cybercrime concerns. ITU has expanded the Toolkit for Cybercrime Legislation in 2010 to stimulate correspond nationwide cybercrime enactments and adjectives regulations, containing with regard to enactments of terrorism involved by applying the internet (United Nations Office on Drugs and Crime, 2012). The United States Department of

Homeland Security has generated a worthwhile review of this action in a manual titled "Best practices for seizing electronic evidence: a pocket guide for first responders". This manual framework maintains proof in association with unlawful inquisitions including computing appliances (United Nations Office on Drugs and Crime, 2012).

ACKNOWLEDGEMENT

The author thank to Universiti Utara Malaysia for the support given.

REFERENCES

- [1] Abedalaziz, N., Jamaluddin, S. and Leng, C. H. (2013). Measuring attitudes toward computer and internet usage among postgraduate students in Malaysia. *TOJET: The Turkish Online Journal of Educational Technology*, 12 (2), 200-216.
- [2] Acerete, B., Yetano, A. and Royo, S. (n.d.). *E-participation and climate change: are local governments actively promoting responsible behaviours and offering opportunities for citizen involvement?*. Retrieved 21 August 2014, from http://www.aeca1.org/pub/on_line/comunicaciones
 _xvicongresoaeca/cd/100f.pdf
- [3] Ahmed, P. K. and Hardaker, G. (1999). The role of on-line communities on the internet for sustainable development.



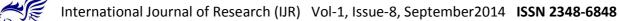
Business Strategy and the Environment, 8, 75-81.

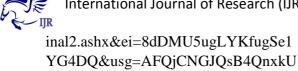
- [4] Alam, S. S., Abdullah, Z. and Ahsan, N. (2009). Cyber café usage in Malaysia: An exploratory study. *Journal of Internet Banking and Commerce*, 14 (1), 1-13.
- [5] Ali, A. and Frew, A. J. (2013). Information and communication technologies for sustainable tourism. Oxon: Routledge. Retrieved 20 August 2014, from http://books.google.com.my/books?id=y1fk5FOhU80C&pg=PA197 4&lpg=PA1974&dq=Multi+user+Dung eon+and+human+sustainability&source =bl&ots=kyrGONyt9I&sig=kqPftGejflv bEU2KwCPXHzNz8qs&hl=en&sa=X&ei=myz0U-utNJGKuATaoIHwCw&ved=0CBsQ6A EwAA#v=onepage&q=Multi%20user%
- utNJGKuATaoIHwCw&ved=0CBsQ6A EwAA#v=onepage&q=Multi%20user% 20Dungeon %20and% 20human%20sustainability&f=false
- [6] Barak, A. (2010). The psychological role of the internet in mass disasters: past evidence and future planning. In Brunet, A., Ashbaugh, A. R. and Herbert, C. F. (2010). *Internet use in the aftermath of trauma*. Retrieved 24 July 2014, from http://books.google.com.my/books?id=wEQy6xtbcN0C&pg=PA38&lpg=PA38&dq=internet+use+and+huma n+sustainability&source=bl&ots=7hi7zI D-

bG&sig=e0JAiSU2k6K0FHV55P_jvD Niikg&hl=en&sa=X&ei=aVHQU4HU MI

qjugSFr4LoDw&redir_esc=y#v=onepag e&q=internet%20use%20and%20huma n%20sustainability& f=false

- [7] Best, M. L. and Maclay, C. M. (n.d.). Community internet access in rural areas: Solving the economic sustainability puzzle. Retrieved 23 July 2014, from http://unpan1.un.org/intradoc/groups/public/documents/apcit y/unpan008658.pdf
- [8] Bidin, Z., Shamsudin, F. M., Sharif, Z. and Md Hashim, M. F. A. (n.d.). Determinants of students' internet usage for academic purposes. Retrieved 14 August 2014, from http://www.wbiconpro.com/469-Faridah.pdf
- [9] Blank, G. and Groselj, D. (2014). Dimensions of internet use: amount, variety, and types. *Information, Communication & Society*, 17 (4), 417-435.
- [10] Boulahya et al. (2005). Climate, communications, and innovative technologies: potential impacts and sustainability of new radio and internet linkages in rural African communities. *Climate Change*, 70, 299 310.
- [11] Bughin, J., Corb, L., Manyika, J., Nottebohm, O., Chui, M., Barbat, B. M. and Said, R. (2011). *The impact of internet technologies: Search*. Retrieved 21 July 2014, from http://www.google.com.my/url?sa=t&rc t=j&q=&esrc=s&source=web&cd=9&v ed=0CFcQFjAI&url=http%3A%2F%2F www.mckinsey.com%2F~%2Fmedia%2Fmckinsey%2Fdotcom%2Fclient_serv ice%2Fhigh%2520tech%2Fpdfs%2Fim pact_of_internet_technologies_search_f





8958,d.c2E

[12] Creating possibilities: the industrial internet and sustainability. (2014). Retrieved 23 July 2014, from http://www.gecitizenship.com/blog/feat ures/creating-possibilities-the-industrial-internet-and-sustainability/

YNLtmJFPyKNfhFphA&bvm=bv.7119

- [13] DiMaggio, P. and Bonikowski, B. (n.d.). *Make money surfing the Web?: The impact of internet use on the earnings of U.S. workers.* Retrieved 22 July 2014, from https://www.russellsage.org/sites/all/file s/u4/Bonikowski%20%26%20DiMaggi o_Make%20Money%20Surfing%20the %20Web.pdf
- [14] Dunn, J. (2012). *The importance of internet access in schools*. Retrieved 13 August 2014, from http://www.edudemic.com/the-importance-of-internet-access-in-schools/
- [15] Eurostat newsrelease. (2013). *Internet access and use in 2013*. Retrieved 14 August 2014, from http://epp.eurostat.ec.europa.eu/cache/I TY_PUBLIC/4-18122013-BP/EN/4-18122013-BP-EN.PDF
- [16] Evan, D. J. (2014). South African psychologist' use of the internet in their practices. *South African Journal of Psychology*, 44 (2), 162-169.

- [17] File, T. (2013). Computer and internet use in the United States: Population characteristics, Issued May 2013, 20-569. Retrieved 21 July 2014, from http://www.census.gov/prod/2013pubs/p20-569.pdf
- Good, J. (2006). Internet use and [18] environmental attitudes: A social capital environmental approach. The communication yearbook, 3, 211-233. Retrieved 18 August 2014, from http://eds.b.ebscohost.com.eserv.uum.ed u.my/ehost/detail/detail?vid=2&sid=3a3 8c403-7788-4e7e-a0cd-2f55f5fd489e%40sessionmgr112&hid= 106&bdata=JnNpdGU9ZWhvc3QtbGl2 ZSZzY29 wZT1zaXRl#db=psyh&AN=2006-07732-010
- [19] Grazzi, M. and Vergara, S. (2014). Internet in Latin America: who uses it?...and for what? *Economics of Innovation & New Technology*, 23(4), 327-352.
- [20] Gross, E. F., Juvonen, J. and Gable, S. L. (2002). Internet use and well-being in adolescence. *Journal of Social Issues*, 58(1), 75-90.
- [21] Kutty, N. A. M. and Sreeramareddy, C. (2014). A cross-sectional online survey of compulsive internet use and mental health of young adults in Malaysia. *Journal of Family & Community Medicine*, 21 (1), 23-28.
- [22] Lean, O. K. (2008). Factors influencing intention to use e-government services among citizens in



- Malaysia. Master of Business Administration report, Universiti Sains Malaysia. Retrieved 10 August 2014, from http://eprints.usm.my/25374/1/FACTO RS_INFLUENCING_INTENTION_ TO_USE_EGOVERNMENT.pdf
- [23] Li, C., Wei, D., Vause, J. and Liu, J. 92013). Towards a societal scale environmental sensing network with public participation. *International Journal of Sustainable Development & World Ecology*, 20(3), 261-266.
- [24] Logan, R. K. (n.d.). Sustainability, knowledge management and the internet. Retrieved 23 July 2014, from http://www.eolss.net/Sample-Chapters/C13/E1-45-04-05.pdf
- [25] Mascheroni. G. and Olafsson, K. (2013). Net children go mobile: mobile internet access and use among European children. Initial findings of the Net Children Go Mobile project. Retrieved 17 August 2014, from http://www.google.com.my/url?sa=t&rc t=j&q=&esrc=s&source=web& cd=304&ved=0CDQQFjADOKwC&url =http%3A%2F%2Fwww.netchildrengo mobile.eu%2Fwpcontent%2Fuploads%2F2013%2F10%2 F1stShortReport_webcolori.pdf&ei=Y0XwU9a3 Aca_uAShkoKgDA&usg=AFQjCNEm j_o_aJpyrTzYff7cShhlG_g&bvm=bv.73 231344,d.c2E

- [26] McKenna, Y. A., Green, A. S. and Gleason, M. E. (2002). Relationship formation on the internet: What's the big attraction? *Journal of Social Issues*, 58 (1), 9-31.
- [27] Morton, F. S. (2006). Consumer benefit from use of the internet. In Jaffe, A.B., Lerner, J. and Stern, S. *Innovation policy and the economy*, 6, 67-90.
- [28] NewsRx. (2011). Internet technology; Nokia 2010 sustainability report. Retrieved 18 August 2014, from http://search.proquest.com.eserv.uum.ed u.my/docview/874952564/fulltext/5DB 703 DDC400439 FPQ/16?accountid=42599
- [29] One Net. (2011). Cyber café network solution. Retrieved 22 July 2014, from enterprise.huawei.com/ilink/cnenterpris e/.../HW_U_151041
- [30] Palesh, O., Saltzman, K. and Koopman, C. (20104). Internet use and attitudes towards illicit internet use bahvior in a sample of Russian College students. *CyberPsychology & Behavior*, 7(5), 553-558.
- [31] Park, H. M. and Perry, J. L. (2008). Chapter 10: Does internet use really facilitate civic engagement?: Empirical evidence from the American national elections studies. Retrieved 22 July 2014, from http://www.indiana.edu/~jlpweb/papers/Park_Perry_2008_Internet_Use.pdf
- [32] Pike, C. L. (1998). Socially responsible business on the internet:



- Assessing the impact of electronic networks on sustainable development. Master Thesis, California State University, Fullerton. Retrieved 21 August 2014, from http://search.proquest.com.eserv.uum.ed u.my/docview/304428945/fulltextPDF/1443D 8F2A9DB4027PQ/4?accountid=42599
- [33] Sakalauskas, V., Kriksciuniene, D., Kiss, F. and Horvath, A. (2009). Factors for sustainable development of e-banking in Lithuania and Hungary. *5th International Vilnius Conference*. Retrieved 24 August 2014, from http://leidykla.vgtu.lt/conferences/KOR SD_2009/PDF/254-259-p123-Sak-49.pdf
- [34] Sanchez, J. (2009). A social history of virtual worlds. *Library Technology Reports*, 45(2), 9-12. Retrieved 17 August 2014, from http://eds.b.ebscohost.com.eserv.uum.ed u.my/ehost/detail/detail?vid=6&sid=46a3c7b0-e032-450a-b0c5-4a8b84a6f390%40sessionmgr113&hid=116&bdata =JnNpdGU9ZWhvc3QtbGl2ZSZzY29 wZT1zaXRl#db=aph&AN=37251466
- [35] SearchWinDevelopment. (2012).

 Definition internet. Retrieved 3 May 2012, from http://searchwindevelopment.techtarget. com/definition/internet
- [36] Shim, S. J., Kumar. A. and Hakami, H. (2014). Internet usage trend and postal service performance in

- Australia. Journal of Internet Banking and Commerce. 19 (1), 1-10.
- [37] Singh, D. (1998). The use of internet among Malaysian librarians. *Malaysia Journal of Library & Information Sience*, 3 (20), 1-10.
- [38] Somoni, J. B. M. M., Martin, L. O. and Kebabe, N. C. (2010). Consumer preference of different cyber café services in Kenya: A critical evaluation of the factors that influence preference for different cyber café services in Kisii Town. *African Journal of Business & Management (AJBUMA)*, 1 (2010), 282-291.
- [39] Souter, D., MacLean, D. and Creech, H. (2013). Towards knowledge societies for peace and sustainable development. In *ICTs*, the internet and sustainability. Retrieved 24 July 2014, from http://ictstheinternetandsustainability.w ordpress.com/
- [40] Souter, D. (2012). ICTs, the internet and sustainability: A discussion paper. Retrieved 23 July 2014, from http://www.iisd.org/pdf/2012/icts_intern et_sustainability.pdf
- [41] Strandberg, L. and Brandt, S. (2001). "Sustainable development in theory and practice": An inter-Nordic internet course for regional and local officials and practitioners. *International Journal of Sustainability in Higher Education*, 2 (3), 220-225.



- [42] Steel, M. (2000). *New oxford english-english-malay dictionary*. Shah Alam, Selangor Darul Ehsan: Penerbit Fajar Bakti.
- [43] Townsend, J. and Heron, M. J. (n.d.). Authorship and Auteurship in the collaborative development process of text-based games. Retrieved 24 August 2014, from conference.eliterature.org/.../The%2520 Collaborative%2520Developmen...
- [44] United Nation. (2013). Internet governance for sustainable human, economic and social development. *The Seventh Internet Governance Forum*, Baku, Azerbaijan, 6-9 November 2012. Retrieved 23 July 2014, from http://www.intgovforum.org/cms/2013/contributions/IGF%202012%20
 Proceedings%20Book_Baku%20Azerbaijan%20copy.pdf
- [45] United Nations Office on Drugs and Crime. (2012). The use of the internet for terrorist purposes. New York: United Nations. Retrieved 21 July 2014, from http://www.unodc.org/documents/frontpage/Use_of_Internet_f or_Terrorist_Purposes.pdf
- [46] von Retzlaff, L. (2006). E-commerce for library promotion and sustainability: how library technicians ca market themselves and their library's services online. *Australian Library Journal*, 55(2), 102-130.