Information Revelation in Online Social Networks

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ABSTRACT

In this paper I will present my study on a Slovenian news portal Vest.si. The goal of my study was to understand how and which personal information is revealed trough posting in this online social network. Because posting in this online community can either be anonymous or not I have studied which kind of personal information contributors when being anonymous fell freer to reveal in their posts. To get data I used empirical study of this online community during a period of one month in fall 2009.

Authors Keywords

Information Revelation, Vest.si, posting, commenting empirical research.

1 INTRODUCTION

Online social communities have become a part of everyday routine in the recent years for a large number of people. We are using them to communicate with friends, to understand them, to know what they are doing or thinking, to express ourselves and to get and share different information or goods. To be more precise let us look at Facebook[1] which is one of most popular social sites in the last year. Their instant messaging function is connecting people and has 1 billion messages sent per day via Facebook chat. That is 4-5 chat messages per person per day in average. (1) If we look further into Facebook statistic page[2] we can see that 50% of active users access their account daily and that every active user updates his status in average 0.15 times per day, and shares 1,5 pieces of content per day. Facebook Data Team blogged a research where he focused on content of Facebook status updates. (2) Status updates in Facebook can either be studied at a matter of public trends or from more private perspective which becomes interesting because of four properties of mediated publics. Those are: Persistence, Searchability, Replicability and Invisible audience. (3) This means that information we leave in social community as Facebook will stay published, users will be able to search it and we will not know for sure who read it or not. In my research I chose online social community that offers users to decide if they want to participate anonymously or not. I will study information that is being revealed trough participation in this community.

1.1 VEST.si

Main goal of vest.si[3] website is to provide visitors with current news from Slovenia and abroad. Vest.si started publishing articles in May 2007. Direct translation of word vest from Slovenian can be interpreted as both conscious and as single news. Their way of providing news to public is a bit different from other Slovenian sources. Fourteen starters of this portal wrote their presentation when the portal was published for the first time: *"we are the riders of new technologies, the critics of over lived patterns and messengers of news. Good news do not need any outfit, just a path to the ears. Question of yellow print is unreal, there is just decency. Argument is the king; right to correction is sacred, critical judgment preserves common sense. If a story is being watched, it will be revealed by her own."* It also states as towards the reader: *"You forgot: News is not to be traded, the truth is not an idea. Truth is one, given to no one. Contempt will be replied with contempt. You were a servant, and you will stay one."* Then there are given seven guidelines for the journalists to respect them and guide their articles: *"You, who are being called a journalist: Respect single news and every person. Report clearly, exact, and in well augmented language. People have names, places live in their time. Take notes of public affairs, respect private ones. Choose carefully your style and genre of writing. Be without mercy when revealing unrespectable acts. Without the source, a story is just a story. Feel your conscious."* Those statements are written and signed on vest.si presentation site.[4]

I think upper paragraph offers reader of this paper a good insight of how creators of www.vest.si are preparing and publishing content on the internet. Most of the creators when they created this portal were already either well read bloggers in Slovenia, promising young journalists or middle aged journalists that for different reasons were not very known writers. Combination of their youth, different

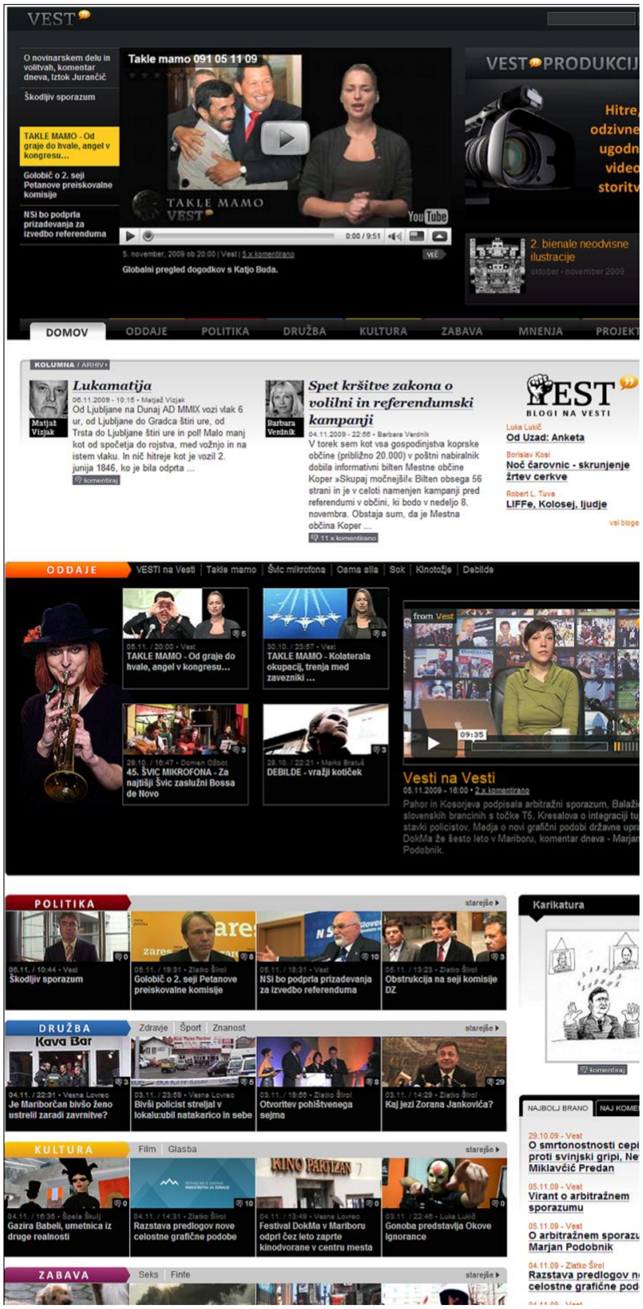
[1] www.facebook.com

[2] www.facebook.com/press/info.php?statistics

[3] www.vest.si

[4] www.vest.si/o-vesti

aspects of their lives and different experience levels, created great team that searches and prepares news on their own successful way so a lot of people in Slovenia read their contents daily.



5. november, 2009 ob 20:00 | Vest | 5 x komentirano

Globalni pregled dogodkov s Katjo Buda.

Lukamatija

06.11.2009 - 10:15 • Matjaž Vizjak

Od Ljubljane na Dunaj AD MMIX vozi vlak 6 ur, od Ljubljane do Gradca štiri ure, od Trsta do Ljubljane štiri ure in pol! Malo manj kot od spočetja do rojstva, med vožnjo in na istem vlaku. In nič hitreje kot je vozil 2. junija 1846, ko je bila odprta ...

komentiraj

Spet kršitve zakona o volilni in referendumski kampanji

04.11.2009 - 22:56 • Barbara Verdnik

V torek sem kot vsa gospodinjstva koprske občine (približno 20.000) v poštni nabiralnik dobila informativni bilten Mestne občine Koper »Skupaj močnejši!« Bilten obsega 56 strani in je v celoti namenjen kampanji pred referendumi v občini, ki bodo v nedeljo 8. novembra. Obstaja sum, da je Mestna občina Koper ...

11 x komentirano

Luka Lukič — Od Uzad: Anketa

Borislav Kosi — Noč čarovnic - skrunjenje žrtev cerkve

Robert L. Tuva — LIFFe, Kolosej, ljudje

05.11. / 20:00 • Vest — TAKLE MAMO - Od graje do hvale, angel v kongresu...

30.10. / 23:57 • Vest — TAKLE MAMO - Kolaterala okupacij, trenja med zavezniki ...

29.10. / 16:47 • Domen Ožbot — 45. ŠVIC MIKROFONA - Za najtišji Švic zaslužni Bossa de Novo

28.10. / 22:21 • Marko Bratuš — DEBILDE - vražji kotiček

Vesti na Vesti

05.11.2009 - 16:00 • 2 x komentirano

Pahor in Kosorjeva podpisala arbitražni sporazum, Balaži slovenskih brancinih s točke T5, Kresalova o integraciji tu stavki policistov, Medja o novi grafični podobi državne upr DokMa že šesto leto v Mariboru, komentar dneva - Marjan Podobnik.

06.11. / 10:44 • Vest — Škodljiv sporazum

05.11. / 19:31 • Zlatko Širol — Golobič o 2. seji Petanove preiskovalne komisije

05.11. / 18:31 • Vest — NSi bo podprla prizadevanja za izvedbo referenduma

05.11. / 13:23 • Zlatko Širol — Obstrukcija na seji komisije DZ

04.11. / 22:31 • Vesna Lovrec — Je Mariborčan bivšo ženo ustrelil zaradi zavrnitve?

03.11. / 23:59 • Vesna Lovrec — Bivši policist streljal v lokalu:ubil natakarico in sebe

03.11. / 19:56 • Zlatko Širol — Otvoritev pohištvenega sejma

03.11. / 14:29 • Zlatko Širol — Kaj jezi Zorana Jankovića?

04.11. / 16:36 • Špela Škulj — Gazira Babeli, umetnica iz druge realnosti

04.11. / 14:31 • Zlatko Širol — Razstava predlogov nove celostne grafične podobe

04.11. / 13:49 • Vesna Lovrec — Festival DokMa v Mariboru odprl čez leto zaprte kinodvorane v centru mesta

03.11. / 22:46 • Luka Lukič — Gonoba predstavlja Okove Ignorance

komentiraj

29.10.09 - Vest — O smrtonostnosti cepi proti svinjski gripi, Ne Miklavčič Predan

05.11.09 - Vest — Virant o arbitražnem sporazumu

05.11.09 - Vest — O arbitražnem sporazu Marjan Podobnik

04.11.09 - Zlatko Širol — Razstava predlogov n celostne grafične pod

Figure 1: VEST.si homepage

Content of Vest.si is divided in different groups:

- *Shows*
  differently scheduled shows most important is daily show “Vesti na VESTI”, which is an overall summary of vest.si content. This show serves like a content introduction.
- *Politics*
  Reports and comments of current political affairs mostly from Slovenia, but also from Europe and World.
- *Society*
  Comments on most known social events and social life in Slovenian area.
- *Culture*
  Articles about cultural events in progress. This group often serves as a guide to some interesting events that do not get much media support.
- *Fun*
  Usually visitors find videos that trough different aspects of our everyday life often offer critical view on society
- *Opinions*
  Video articles of guests that present their versatile, often provocative opinions.
- *Projects*
  Variety of projects that are being differently connected or sponsored by vest.si
- *Columns*
  57 different public columnists write their articles that are usually one of the most commented content of vest.si.
- *Blogs*
  Public users sharing their opinions. For now there are active 30 bloggers.

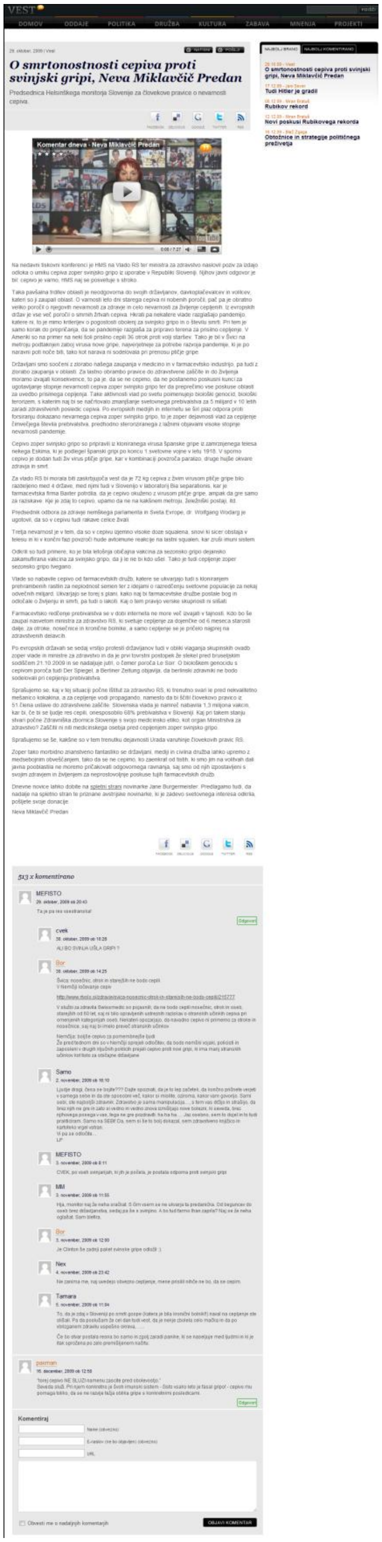
All video material, also video inserts in articles, is published on YouTube[5] or Vimeo[6]

Users contribute on vest.si online social community when they are posting comments. They can post comments on every article, blog, show or column and also on other comments. If a user decides to comment some content he has to fill in his name, e-mail, text and URL. URL textbox is usually used to prove your identity. Users fill in their blog URL usually. In this kind of a system it is not necessary to fill in your true name. Users can use aliases or even every time different name. But this usually does not happen because users want to backup their opinions with their social status which is hidden behind their alias or name. In my research I have also come across user stealing else identity. One of the users used alias of some other user and wrote a comment that was shortly recognized not to be from the right person because content of the comment did not match that user’s behavior. User was usually criticizing work of one of Slovenian politician and in that case he was doing the opposite, and when one of the observers replied his

[5] vimeo.com/omg

[6] www.youtube.com/user/vestinavesti

assumption also owner of the alias confirmed what happened.



29. oktober, 2009 | Vest

O smrtonostnosti cepiva proti svinjski gripi, Neva Miklavčič Predan

Predsednica Helsinškega monitorja Slovenije za človekove pravice o nevarnosti cepiva.

29.10.09 - Vest
O smrtonostnosti cepiva proti svinjski gripi, Neva Miklavčič Predan

17.12.09 - Jani Sever
Tudi Hitler je gradil

08.12.09 - Miran Bratuš
Rubikov rekord

12.12.09 - Miran Bratuš
Novi poskusi Rubikovega rekorda

16.12.09 - Blaž Zgaga
Obtožnice in strategije političnega preživetja

Na nedavni tiskovni konferenci je HMS na Vlado RS ter ministra za zdravstvo naslovil poziv za izdajo odloka o umiku cepiva zoper svinjsko gripo iz uporabe v Republiki Sloveniji. Njihov javni odgovor je bil: cepivo je varno, HMS naj se posvetuje s stroko.

Taka pavšalna trditev oblasti je neodgovorna do svojih državljanov, davkoplačevalcev in volilcev, kateri so ji zaupali oblast. O varnosti leto dni starega cepiva ni nobenih poročil, pač pa je obratno veliko poročil o njegovih nevarnosti za zdravje in celo nevarnosti za življenje cepljenih. Iz evropskih držav je vse več poročil o smrtnih žrtvah cepiva. Hkrati pa nekatere vlade razglašajo pandemijo, katere ni, to je mimo kriterijev o pogostosti obolenj za svinjsko gripo in o številu smrti. Pri tem je samo korak do prepričanja, da se pandemije razglaša za pripravo terena za prisilno cepljenje. V Ameriki so na primer na neki šoli prisilno cepili 36 otrok proti volji staršev. Tako je bil v Švici na metroju podtaknjen zaboj virusa nove gripe, najverjetneje za potrebe razvoja pandemije, ki je po naravni poti noče biti, tako kot narava ni sodelovala pri prenosu ptičje gripe.

Državljani smo soočeni z zlorabo našega zaupanja v medicino in v farmacevtsko industrijo, pa tudi z zlorabo zaupanja v oblasti. Za lastno obrambo pravice do zdravstvene zaščite in do življenja moramo izvajati konsekvence, to pa je, da se ne cepimo, da ne postanemo poskusni kunci za ugotavljanje stopnje nevarnosti cepiva zoper svinjsko gripo ter da preprečimo vse poskuse oblasti za uvedbo prisilnega cepljenja. Take aktivnosti vlad po svetu poimenujejo biološki genocid, biološki terorizem, s katerim naj bi se načrtovalo zmanjšanje svetovnega prebivalstva za 5 miljard v 10 letih zaradi zdravstvenih posledic cepiva. Po evropskih medijih in internetu se širi plaz odpora proti forsiranju dokazano nevarnega cepiva zoper svinjsko gripo, to je zoper dejavnosti vlad za cepljenje čimvečjega števila prebivalstva, predhodno steroriziranega z lažnimi objavami visoke stopnje nevarnosti pandemije.

Cepivo zoper svinjsko gripo so pripravili iz kloniranega virusa španske gripe iz zamrznjenega telesa nekega Eskima, ki je podlegel španski gripi po koncu 1.svetovne vojne v letu 1918. V sporno cepivo je dodan tudi živ virus ptičje gripe, kar v kombinaciji povzroča paralizo, druge hujše okvare zdravja in smrt.

Za vlado RS bi morala biti zaskrbljujoča vest da je 72 kg cepiva z živim virusom ptičje gripe bilo razdeljeno med 4 države, med njimi tudi v Slovenijo v laboratorij Bia separations, kar je farmacevtska firma Baxter potrdila, da je cepivo okuženo z virusom ptičje gripe, ampak da gre samo za raziskave. Kje je zdaj to cepivo, upamo da ne na kakšnem metroju, železniški postaji, itd.

Predsednik odbora za zdravje nemškega parlamenta in Sveta Evrope, dr. Wolfgang Wodarg je ugotovil, da so v cepivu tudi rakave celice živali.

Tretja nevarnost je v tem, da so v cepivu izjemno visoke doze squalena, snovi ki sicer obstaja v telesu in ki v končni fazi povzroči hude avtoimune reakcije na lastni squalen, kar zruši imuni sistem.

Odkrili so tudi primere, ko je bila letošnja običajna vakcina za sezonsko gripo dejansko zakamuflirana vakcina za svinjsko gripo, da ji le ne bi kdo ušel. Tako je tudi cepljenje zoper sezonsko gripo tvegano.

Vlade so nabavile cepivo od farmacevtskih družb, katere se ukvarjajo tudi s kloniranjem prehrambenih rastlin za neplodnost semen ter z idejami o razredčenju svetovne populacije za nekaj odvečnih miljard. Ukvarjajo se torej s plani, kako naj bi farmacevtske družbe postale bog in odločale o življenju in smrti, pa tudi o lakoti. Kaj o tem pravijo verske skupnosti ni slišati.

Farmacevtsko redčenje prebivalstva se v dobi interneta ne more več izvajati v tajnosti. Kdo bo še zaupal nasvetom ministra za zdravstvo RS, ki svetuje cepljenje za dojenčke od 6 meseca starosti dalje, za otroke, nosečnice in kronične bolnike, a samo cepljenje se je pričelo najprej na zdravstvenih delavcih.

Po evropskih državah se sedaj vrstijo protesti državljanov tudi v obliki vlaganja skupinskih ovadb zoper vlade in ministre za zdravstvo in da je prvi tovrstni postopek že stekel pred bruseljskim sodiščem 21.10.2009 in se nadaljuje jutri, o čemer poroča Le Soir. O biološkem genocidu s cepivom poroča tudi Der Spiegel, a Berliner Zeitung objavlja, da berlinski zdravniki ne bodo sodelovali pri cepljenju prebivalstva.

Sprašujemo se, kaj v tej situaciji počne Inštitut za zdravstvo RS, ki trenutno svari le pred nekvalitetno mešanico kokaina, a za cepljenje vodi propagando, namesto da bi ščitil človekovo pravico iz 51.člena ustave do zdravstvene zaščite. Slovenska vlada je namreč nabavila 1,3 miljona vakcin, kar bi, če bi se ljudje res cepili, onesposobilo 68% prebivalstva v Sloveniji. Kaj pri takem stanju stvari počne Zdravniška zbornica Slovenije s svojo medicinsko etiko, kot organ Ministrstva za zdravstvo? Zaščiti ni niti medicinskega osebja pred cepljenjem zoper svinjsko gripo.

Sprašujemo se še, kakšne so v tem trenutku dejavnosti Urada varuhinje človekovih pravic RS.

Zoper tako morbidno znanstveno fantastiko se državljani, mediji in civilna družba lahko upremo z medsebojnim obveščanjem, tako da se ne cepimo, ko zaenkrat od tistih, ki smo jim na volitvah dali javna pooblastila ne moremo pričakovati odgovornega ravnanja, saj smo od njih izpostavljeni s svojim zdravjem in življenjem za neprostovoljne poskuse tujih farmacevtskih družb.

Dnevne novice lahko dobite na spletni strani novinarke Jane Burgermeister. Predlagamo tudi, da nadalje na spletno stran te priznane avstrijske novinarke, ki je zadevo svetovnega interesa odkrila, pošljete svoje donacije.

Neva Miklavčič Predan

513 x komentirano

MEFISTO
29. oktober, 2009 ob 20:43
Ta je pa res vsestranska!

cvek
30. oktober, 2009 ob 10:28
ALI BO SVINJA UŠLA GRIPI ?

Bor
30. oktober, 2009 ob 14:25
Švica: nosečnic, otrok in starejših ne bodo cepili
V Nemčiji ločevanje cepiv
http://www.rtvslo.si/zdravje/svica-nosecnic-otrok-in-starejsih-ne-bodo-cepili/215777
V službi za zdravila Swissmedic so pojasnili, da ne bodo cepili nosečnic, otrok in oseb, starejših od 60 let, saj ni bilo opravljenih ustreznih raziskav o stranskih učinkih cepiva pri omenjenih kategorijah oseb. Nekateri opozarjajo, da navadno cepivo ni primerno za otroke in nosečnice, saj naj bi imelo preveč stranskih učinkov.
Nemčija: boljše cepivo za pomembnejše ljudi
Že pred tednom dni so v Nemčiji sprejeli odločitev, da bodo nemški vojaki, policisti in zaposleni v drugih ključnih poklicih prejeli cepivo proti novi gripi, ki ima manj stranskih učinkov kot tisto za običajne državljane.

Samo
2. november, 2009 ob 16:10
Ljudje dragi, česa se bojite??? Dajte spoznati, da je to šele začetek, da končno prižnete verjeti v samega sebe in da ste sposobni več, kakor si mislite, oziroma, kakor vam govorijo. Sami sebi, ste najboljši zdravnik. Zdravstvo je sama manipulacija…, s tem vas držijo in strašijo, da brez njih ne gre in zato si vedno in vedno znova izmišljajo nove bolezni, ki seveda, brez njihovega posega v vas, tega ne gre pozdraviti. ha ha ha…. Jaz osebno, sem to dojel in to tudi prakticiram. Samo na SEBI! Da, sem si še to bolj dokazal, sem zdravstveno knjižico in kartoteko vrgel vstran.
Vi pa se odločite…
LP

MEFISTO
3. november, 2009 ob 8:11
CVEK, po vseh svinjarijah, ki jih je požrla, je postala odporna proti svinjski gripi

MM
3. november, 2009 ob 11:55
Hja, monitor naj že neha sračkat. S čim vsem se ne ukvarja ta predanička. Od beguncev do oseb brez državljanstva, sedaj pa še z svinjino. A bo tud farmo fhan zaprla? Naj se že neha oglašat. Sam blefira.

Bor
3. november, 2009 ob 12:00
Je Clinton še zadnji paket svinske gripe odlizil :)

Nex
4. november, 2009 ob 23:42
Ne zanima me, naj uvedejo obvezno cepljenje, mene prisilil nihče ne bo, da se cepim.

Tamara
5. november, 2009 ob 11:04
To, da je zdaj v Sloveniji po smrti gospe (katera je bila kronični bolnik!!) naval na cepljenje ste slišali. Pa da poslušam že cel dan tudi vest, da je nekje zbolela celo mačka in da po vbrizganem zdravilu uspešno okreva,……
Če bo stvar postala resna bo samo in zgolj zaradi panike, ki se naseljuje med ljudmi in ki je itak sprožena po zelo premišljenem načrtu.

pakman
16. december, 2009 ob 12:58
"torej cepivo NE SLUZI namenu zascite pred obolevostjo."
Seveda služi. Pri njem konkretno je šibek imunski sistem - čisto vsako leto je fasal gripo! - cepivo mu pomaga toliko, da se ne razvije težja oblika gripe s kroničnimi posledicami.

Komentiraj

☐ Obvesti me o nadaljnjih komentarjih

Figure 2: Full article with comments and form for adding comments

1.2 Other Studies

Ralph Gross and Alessandro Acquisti studied information revelation on Facebook on CMU students. They studied which information Facebook users fill in their personal profile and found that most than 50% of user keep their address, phone number and summer job field private. Less than 20% of users keep their profile image, birthday and high school field private. Other fields are between those values. They also found that 89% of users use their real name, 61% of users use profile picture that is suitable for direct identification (this percentage is dramatically different compared to Friendster). Combining all the data they came up to some interesting result: 16% of female and 21% of male user's identity and location can be discovered. (3) If we would ask users if they feel like their identity and location can be discovered and if they are worried about it I think we would be surprised by the results. A study of OUT-LAW tested how hard it is to get Facebook friendship of an unknown person. According to their research 46% of young people accepted friend request and revealed personal information to strangers. 10 years ago we would need a con-artist to get this kind of information about a person. (5) Harvey and Soltran study can also serve some interesting results regarding privacy information revelation. Half of studied users are not or are a just a little concerned about their privacy. There are also some gender differences: men talk less about themselves. (6)

1.3 My Focus

In my research I have focused on web site Vest.si with purpose to study how is personal information being revealed trough principle of commenting content. The Executive Office of the President of the United States of America defined personal information as information which can be used to distinguish or trace an individual's identity, such as their name, social security number, biometric records, etc. alone, or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, mother's maiden name, etc. (8) In European Union a similar term personal data. It is defined as any information relating to an identified r identifiable natural person; an identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity. (7) In Australian law they have a little more technical definition used also for Health Records. They define personal information as information or an opinion (including information or an opinion forming part of a database and whether or not recorded in a material form) about an individual whose identity is apparent or can reasonably be ascertained from the information or opinion. (9) (10)

The purpose of my study is to find any parts of personal information in online users participation records. I am arguing that users protected by their online anonymity are more likely to reveal personal information. I think that users feel freer if their identity is not known. To confirm that I had to find which information are users more likely to reveal, how often does that happen and how users use their privacy options.

2 METHODOLOGY

Main goal of this research was to observe social behaviour on my portal and study it. After defining my objectives and focus I decided to use empirical (observation) method. Next step was collecting data from website. In the beginning I was hoping on cooperation with site owners, but after some requests sent to Vest.si administration they all hit dead end. Then I focused on different methods saving comments data. After some observation I have found that the easiest method to retrieve comments data is via Vest.si comment RSS feed[7]. To manage the data I used Google reader[8], web application that helps user to save, view, mark the RSS elements and supplies us with basic statistical analysis. In the beginning I was expecting up to 50 comments posted per day. That is the reason I started thinking of getting a secondary source of data. After some research I came up with option of using web crawling on my target website. I found a directly enumerated link to all articles. By using link formed like *www.vest.si/?p=30150*. P parameter in that case represents article identification. Using .NET platform I started working on a desktop application that retrieved html data from URL, from different range of parameter p in the URL. When testing the Vest.si server permissions I retrieved 1080 html pages in 3 hours. Interval parameter was set to 10 seconds. Purpose of second stage of establishing crawler was to retrieve comments data from html code using .NET XML handlers. After successfully realized second stage already in average 140 comments per day were retrieved via feed. That in reality takes up to half an hour to read every day. Time depends of topic. My plan was to read comments for one month, so by simple calculation this means around 4000 comments. That was by my estimations enough for my study. I was expecting in average for every 20th comment to be revealing personal information. That would in the end bring 200 personal information revealing comments.

After collecting data analysis took part. In process of analyzing individual comment first was reading it. If comment included some personal information it was bookmarked as "comment useful for my research" and prepared for continuing. After collecting useful comments, they were tagged by type of information. Those types are:

- Education (Parts or full information about ones educations. This Includes place of study, facility and course)
- Age (Revealing information on participant's age)
- Location (Different information about locations of living, working or maybe just revealing of current location)
- Work (Information about profession,)
- Identity (Full name or just parts of users name combined with some other types)
- Relations (Relations information are usually based on referring to people user knows. Sometimes users want to back up their statements by referring to family, friends, siblings or maybe some people that they shared experiences)

The last part of analysis was determining the level of information revealed by categories:

- Low (If occurrence is marked as low. This means that information cannot be identifying but in case of connecting it with some other information this could be possible)
- Medium (Medium category means that information is partly identifying)
- High (High category is directly identifying)

3 RESULTS

My data collection lasted from 13th of November 2009 to 13th of December 2009. After that observation my collection included 5346 comments data that came from 94 recorded articles. In average that numbers mean 3 articles per day, 172 comments per day and 57 comments per published article. Comment distribution during weekdays is presented in Figure 3.

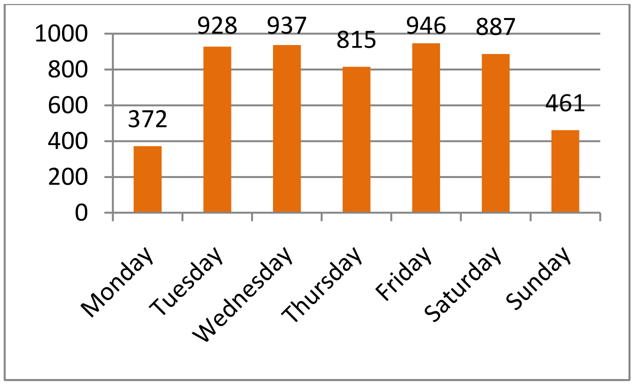


Figure 3: Weekly distribution of comments

Out of 5346 comments there were 47 comments useful for my study. That is 0.9 % of all comments. This was a lot under my expectations.

[7] www.vest.si/comments/feed/

[8] www.google.com/reader/

After assigning types to useful comments I have come up with results presented in Figure 4. Most users gave away information on their location and about education. Least users gave away their information on their personal relations.

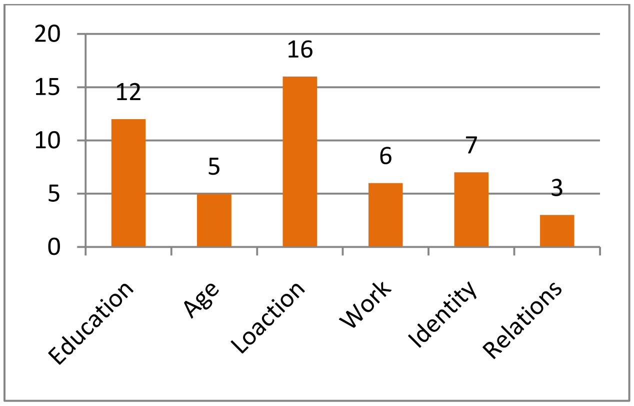


Figure 4: Useful comments types distribution

Next stage was determining the level of information revealed. Fixture 5 shows us distribution on education information revealing. Most of the occurrences were not well defined. 9 users defined facility or university where they studied or went to school. Only 3 users defined which course they attended at university. There are no users that would completely define when and what did they study.

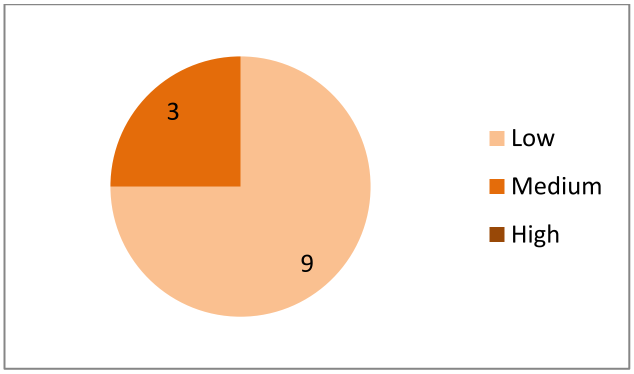


Figure 5: Revealing level distribution on education type of information

Focusing on age, 1 user wrote his age numerically and 1 wrote his year of birth, 2 users wrote indirectly how old are they. For example, one user wrote that when Slovenia became independent he was serving army which means he was from 20 to 25 years old. 1 user wrote he is young. Graphical representation is shown in Fixture 6.

In total 6 contributors wrote about their work. 4 users defined where they work and 2 users defined what their position in company they work. Graphical representation is shown in Fixture 7.

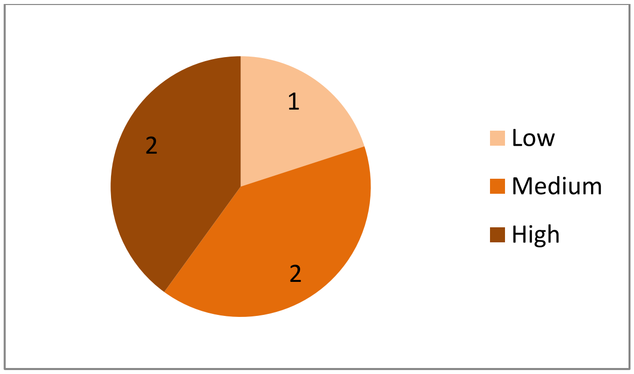


Figure 6: Revealing level distribution on age type of information

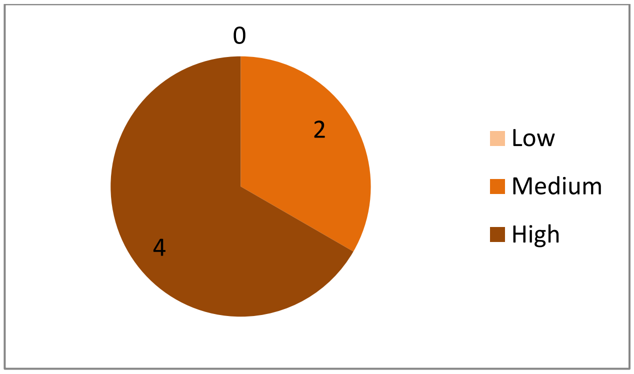


Figure 7: Revealing level distribution on work type of information

There were 7 contributors that wrote about their identity. 2 of them completely defined who they are. One of those two examples was a female posting complete letter she wrote with her name and address. 3 of them wrote their name and street they live and 2 of them wrote their name and age. Numbers are presented in Fixture 8.

Most occurrences of personal information revealances were noted in category location. 2 of the users wrote in which street they live, the most – 12 users wrote name of the city they live in and 2 merely defined their region of working. Fixture 9 represents that.

Last category to study is personal relations. 2 contributors were referring on their previous co-worker and one was referring on personally knowing one of Slovenian politicians. This is presented in Fixture 10

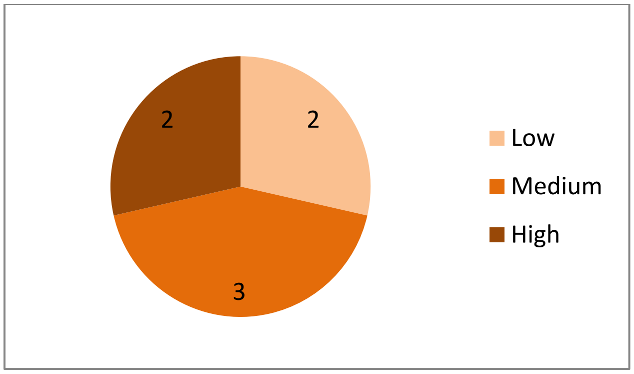


Figure 8: Revealing level distribution on identity type of information

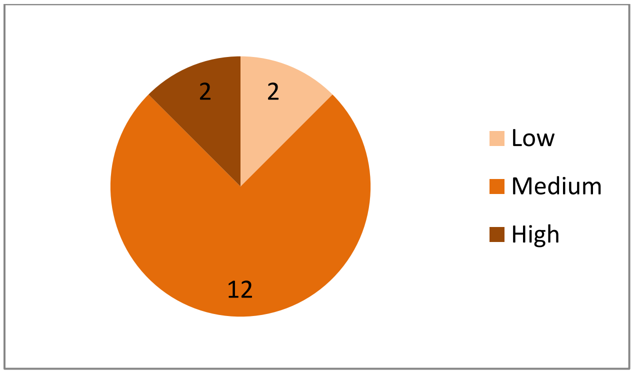


Figure 9: Revealing level distribution on location type of information

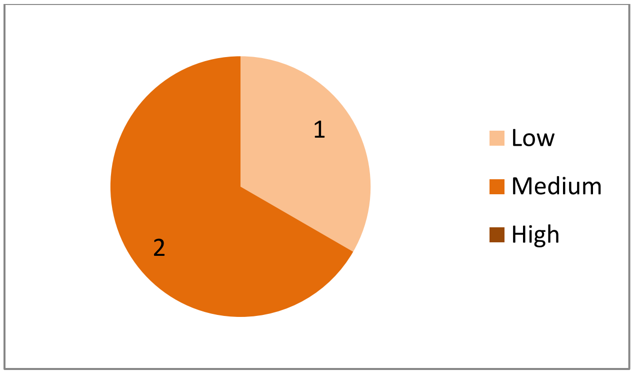


Figure 10: Revealing level distribution on location type of information

The last part of my research was to note which of useful comments were anonymous and which were signed. For a comment to be signed, it had to fulfil criteria: signed with name used more than once, either this can be real name or alias which can be connected to real name (some contributors use the same aliases that they use on their blogs). If I was able to get their identity information I marked comment as signed. Otherwise it was marked by unsigned. Results by category show that in category education 3 high level comments were signed. In category age 1 medium level comment was signed. In category location 2 high level and 2 medium level comments were signed, meanwhile in category work 1 high level and 1 medium level was signed. In category identity 3 high level and all three medium level comments were signed. All comments in category relations were unsigned. This in total means that 30 % of comments were signed. Fixture 11 shows that values in partial presentations.

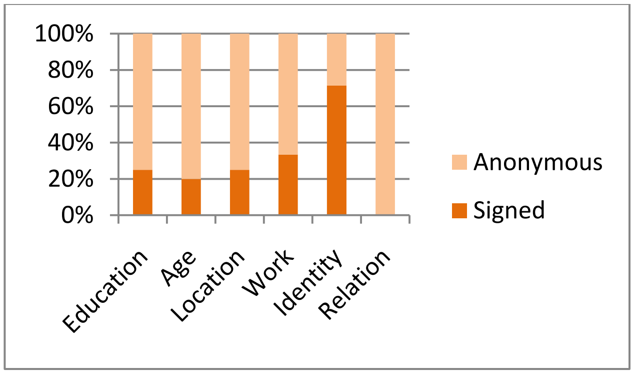


Figure 6: Percentage of signed comments

4 CONCLUSIONS AND DISCUSSION

I was surprised over number of useful comments. I was expecting number around 5 % of all comments to be revealing information but on the end of my research the number was much lower. Only 0.9 %. I find commenting distribution interesting. I think it shows when contributors have the most time to use online news sources. Sunday and Monday came out as least popular for contributing.

After grouping comments I confirmed my thinking that most users will reveal their location and education. I think this is because Vest.si has mostly political issues and some statements are stronger if supported by strong identity of user.

Comments grouped by type of revealing show that contributors feel freer to give away more detailed information about their work and age and the least detailed about their education and location.

A bit surprising were the numbers on signing comments. I was expecting bigger percentage of signed comments at education and relation however results show that users feel most free to sign their statement about their work, identity and education. Also surprising is that no comment in group relation was signed. I am explaining this so that people who back up their statements using relation references are usually newbie’s or not so experienced members and do not feel comfortable to sign their statements.

I was arguing that users protected by their online anonymity are more likely to reveal personal information. By my research this statement was confirmed. 30% of comments that revealed some personal information in part or whole was not signed in the way that signature can be interpreted into real life identity.

I will also like to add that information gained from vest.si may not be entirely correct. One of possible reasons is to short observation time. I think research would be a lot more representative if it would be possible to collect and analyze data over longer period of time. I think that if I would have that amount of data and analyzing compatibility cross reference of data may also bring a lot of interesting results. I think that if we would do that by aliases we could combine all information about one person. I am wondering how much this would be. Also Vest.si's topics are quite sensitive for discuses. Those are political views and I think some people do not feel comfortable signing those statements. One of possible reasons is fear from that those information could harm them some time later.

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