Computerisation, data privacy and scientific excellence; Where are we going?

Ažurirana verzija pozvanog predavanja na ITI'08

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Challenging common wisdom?

- Information technology is a great danger to personal privacy
- Hiding information is the best way to protect from identity fraud
 - Wikipedia:
 - The strongest protection against identity theft is *not* to identify at all thereby ensuring that information cannot be reused to impersonate an individual elsewhere.
- Scientific excellence is demonstrated publicly by number of publications
 - No definition in Wikipedia
- Data privacy vs. Identity confusion
- Data privacy vs. Transparency
- Number of publications vs. Relevance to society

Privacy

- Abuse of privacy
 - Big Brother on TV
 - Ubiquitous gossip about celebrities
 - E-mail spam
 - Incorrect blogging
 - Pushy / fraudulent commercials
- Do the human rights activists care?
 - Hardly!
 - Care about how to hide some true information
 - Were rather rare in communist times (or in similar systems)
 - Well alive in emerging democracies and financed from abroad
- Privacy ≠ Hiding of identity
- Privacy ≠ Confounding of identity
- Privacy ≠ Hiding personal facts relevant to other people

Data privacy - Wrongly understood

- Right to pretend
 - I am the best student around
 - Nedavne aktivnosti studenata FF Zg
 - Da li je svima bilo poznato što, s kakvim uspjehom i koliko dugo studiraju?
 - Da li je svima bilo poznato koliko su potrošili hraneći se na X-ice?
- Right to abuse someone's confidence
 - I am rich and unmarried
- Right to let the others pay
 - I have no unpaid loans, you can grant me one
 - Početak krize u USA 2008?
- Right to steal someone's identity
 - I can collect someone else's social aid
 - I can sell someone else's real estate
 - OIB (Nakon nepotrebne pauze od 8 godina!)

Data privacy - Wrongly understood

- Why?
 - imitation of misunderstood foreign practices
 - to show some activity
 - to assure personal existence
 - ignorance
 - technophobia

Personal Identification Number in Croatia (1)

- Introduced in early '70-ties
- Ubiquitously applied as (alternate) primary key for person's identification
- Knowing the primary key does not imply any right to access the records!
- Information revealing:
 - Date of birth
 - Sex
 - Location of birth

Personal Identification Number in Croatia (2)

- Abolished in 2002
 - removed from all personal documents
 - it reveals everything about a person
 - objections against removal:
 - knowledgeable MPs (minority!)
 - banks
 - professionals
 - the Author ("Substitute it with another non-revealing number!")
 - Are people with very common names (John Smith, Josip Horvat) happy with it?

Personal Identification Number in Croatia (3)

- Higher probability of fraud
 - more expensive bank loans
 - PIN revealed only with the person's consent
- Special certificate / old document required
- Ministry of finance did not respect the (absurd) act
- Bearing the same name as someone in high places could be an advantage
 - Return of a towed away car
- In 2009 Personal Taxation Number was (re)introduced
 - hundreds of million HRK could have been saved
 - no public protest against the new "all-revealing number", yet

Subsidised nourishment of students

- Food coupons substituted with credit cards
 - to avoid misuse
- Some goods bought at subsidised prices, obviously for resale
 - Package of 27 (33) puddings as the only meal
 - Abnormality in statistic distribution
 - Exposed cases on Web
 - Ministry forbade offending of abusers' rights
 - The taxpayers are paying...
 - Are the vast majority of honest students just fools?

Student administration (1)

- Entrance examination
- Croatian Personal Data Protection Agency
 - To hide all the information and reveal it only individually to each applicant
 - abolish decades long efforts
 - for transparency
 - against corruption
 - against manipulation

Student administration (2)

- Student examinations
 - University tradition (from medieval times?) and statutory confirmed:
 The examinations are to be performed in public...
 - Now the grades visible only to course examiner
 - Mentoring /advising students (Author: currently mentoring about 50 students):
 - who is inclined towards which field?
 - how long does s/he study?
 - which patterns of grades predict success in what field?
 - remains a secret to the mentor!

Student administration (3)

- Bologna (ECTS) grades
 - to be distributed normally
 - Author's students preferred the visibility to nontransparent distribution of grades
 - does not prevent the students from (old tradition of) cheating
- Students caught in obvious cheating
 - publicly announced and warned
 - Data privacy activists objected
 - what should have been done instead?

Student administration (4)

- Valuable data warehouse
 - very restricted access
 - does it anyone use?
- Who are our best students?
 - a few pro mille become known for public rewards
 - the rest remain unknown:
 - to educators
 - to industry
 - to colleagues
 - to parents
 - ...
 - Pretenders benefit, the good ones punished
- All these for taxpayers' money
 - even if tuition paid, it is only a fraction of costs
- Educational results are always an achievement!

Scientific excellence

- Generally available information
- Regarded only as achievement
 - not as lack of it!
 - e.g. Current Contents
 - Not aimed to guarantee personal reference
 - In Croatia it has become (nearly) the only criterion of quality
 - No guarantee against identity confusion
 - Refereeing:
 - personal promotions
 - curricula approval
 - project proposals
 - http://bib.irb.hr/ has done a good job!

Example from the Current Contents: Who is me (if our names started with the same letter)?

- Kalpic ?. Bernus P. Muhlberger R. Business process modelling and its applications in the business environment. [Article] INTELLIGENT KNOWLEDGE-BASED SYSTEMS: BUSINESS AND TECHNOLOGY IN THE NEW MILLENNIUM, VOL 1: KNOWLEDGE-BASED SYSTEMS. PG. 288-345. 2005.
- Fertalj K. Kalpic?. Mornar F. Krajcar S. Credit card system for subsidized nourishment of university students. [Article] ANNALS OF CASES ON INFORMATION TECHNOLOGY. 4 PG. 468-486. 2002.
- Kalpic ?. Bernus P. Business process modelling in industry the powerful tool in enterprise management. [Article] *Computers in Industry.* 47(3):299-318, 2002 Mar.
- Kalpic ?. Polajnar A. MODEL OF THE HOLISTIC INFORMATION INTEGRATION OF AN ENTERPRISE [Review]. [Review] *Strojarstvo. 39(6):275-280, 1997 Nov-Dec.*
- Kalpic ?. Mornar V. Baranovic M. CASE STUDY BASED ON A MULTI-PERIOD MULTI-CRITERIA PRODUCTION PLANNING MODEL. [Article] *European Journal of Operational Research.* 87(3):658-669, 1995 Dec 21.

Scientific excellence...

- ...and how to get it (in Croatian Higher Education)
- Repeat the loop of futility
 - Find a *publishable* (usually irrelevant) niche
 - Repeat (thread #1)
 - Invent a non-existing problem
 - Speculate about solution (do not solve it!)
 - Find an obscure, but CC referred journal
 - Publish your speculations (*write only* paper)
 - Repel students (due to irrelevance of your niche)
 - Obtain scientific novices (due to scientific excellence measured in CC count)
 - Being free of students and real-world projects, they produce new CC stuff
 - Increase your CC count
 - Until enough (if ever?)
 - While (thread #2)
 - let the others teach for the same salary as yours
 - Forever (if possible)
- Until legislation changes (if ever?)

Scientific excellence...Why so?

- Croatia is a small semi-developed country
- Science is universal and global criteria should be applied
- ZPR/FER has successfully solved any professional realworld problem that had ever appeared
 - not because we are so clever
 - the requirements were modest
- Tesla / Ružička, Prelog
 - in US / CH, not in HR
- World renown HR-scientists
 - demand founding from HR, not from the World
- Terrible waste of talent and effort

Scientific excellence...Na što podsjeća?

Wall Street 2008!

Daljnja zbivanja (1)

- Prijedlog NVZ
 - Uvesti impact factor
 - Dokaz da i od lošeg može biti lošije!
- Koliko imamo temeljem toga izravnih stranih investicija?
- •Koliko je otvoreno novih radnih mjesta?
 - •Pri tome ne treba računati mjesta znanstvenih novaka koji su financirani iz proračuna i tako još državi povećavaju trošak bavljenja nečim što ne nalazi kupca. Radna mjesta trebaju biti financirana od novostvorene vrijednosti.
- Koliko je povećan BDP?
- Koliko je povećan izvoz?
- •Koliko je povećana kvaliteta života nekih kategorija građana RH, po nekome od mjerila?
- Koliko je privučeno stranih studenata?
- •Bilo koja opipljiva korist za građane Hrvatske?

Daljnja zbivanja (2)

NZV:

Manji broj kvalitetnijih radova, može zadovoljiti kriterij prije no velik broj loših radova

Slijedi:

Manji broj "kvalitetnijih" znanstvenika, može zadovoljiti potrebe Hrvatske bolje no velik broj "loših" znanstvenika

- "Loši" jer uzalud pokušavaju publicirati nešto "atraktivno"
- Bave se studentima i strukom, unaprjeđujući HR, umjesto da najbolje godine provedu u inozemstvu i vrate se u HR donositi zakone i pravilnike

Daljnja zbivanja (3)

Konjunkturne struke

- -tko će ih zamijeniti na sabbaticalu?
- –kako naći pomladak?
- -teže objaviti rad
 - područja jako istraživana
 - nedostatak vremena
- -umjesto članka
 - projekti
 - odgojeni studenti

Daljnja zbivanja (4)

- Što je važnije?
- -most ili članak koji spekulira o mogućoj izgradnji mosta
- -informacijski sustav ili razmatranje n+1 metodologije po kojoj bi ga se eventualno moglo razviti?
- -brod ili članak o mogućoj izgradnji
- Arhitektima je jedino priznato da projektirana zgrada vrijedi barem kao i opisi rada nekog drugog arhitekta

Daljnja zbivanja (5)

Od malog broja, zaista izvrsnih, znanstvenika ne treba tražiti da donose prihode i gomilaju studente

- moraju biti zaista izvrsni
- neka ih ne bude previše!

Ti su ljudi rijetki (i moraju ostati rijetkima!) i potencijalno korisni, ali nikako ne treba tjerati sve u visokom obrazovanju da budu takvima!

Znanstvene novake bi trebalo prvenstveno odobravati onima koji

- privlače studente
- unaprjeđuju život u HR

Future?

- Personalised abusive junk mail from unknown sender
- Abusive information from blog /chat /forum
 - One our extremely sober professor indicted to be "always drunk" (his nickname was "cork" in Croatian, after his similarly sounding family name)
 - blackmailing in future?
- How to find the true information about someone?
 - truth hidden
 - lies might explode
- How to avoid futility in science
 - As an alternative to CC, recognise also the added value achievements

Conclusion

- Basic personal data should be made public from a trustworthy source
- Unique personal identifier is indispensable
- Taxpayers have the right to know what is their money spent for
- Any results achieved in education (like in science, or sport) are object of pride, not shame
- Abusers should be known in public (at least) for some short period of time
 - especially if it remains the only penalty
- Stop punishing good guys and favouring the villains
- Be proud to your achievements, whatever they are!
- If you do not agree, act quickly!
 - The (u to vrijeme) coming Olympic games in Beijing may reveal information about contestants' sporting achievements!



The Author would like to thank you for your attention

