

Rules for policy and technology development to feed growing global population

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Introduction

Malnourishment of majority of World population is caused by export of dumped food overproduction. Dumping is called 'Agricultural Policy', which dumped technology and protects it by author's rights. For example, US exports of GMO food products are supported by suing EU, which can resist for a while oppose to the rest of the World. The GMO Panel² provides independent scientific advice on the safety, for example. It is our intention to face the private development with development of local knowledge. The relationship between private and open source software should model the training of skills, mobilising reserves, fighting the defensive or aggressive obsession on tested web portal.

Literature overview

Claiming that Northern farm subsidies amount to over \$1 billion a day, and that average European cow receives more subsidies than the nearly three billion people who live on less than two dollars a day, Southern governments, farmer groups, and international aid groups have demanded steep cuts in Northern agricultural subsidies. Wise (2004) concluded that "subsidy reduction is unlikely to reduce economic pressures on Mexican maize producers from below/costs US exports, nor are the measures likely to improve the economic prospects for similar small-scale farmers growing food primarily for subsistence and the internal market. Instead, policy reforms should focus on ending agricultural dumping, reducing global overproduction in key crops, and reducing the market power of agribusiness conglomerates." Some time has passed from 2004 till today and no change of agriculture policy neither power of conglomerates happened. Kumar (2009) have studied "results support that public policies geared towards increasing women's participation in SHG generate substantial income and have significance in household welfare. The quality of food consumed, the health of household members, and children's education have improved. Thus institution building contributes greatly to household welfare." Therefore, the help must be searched from bottom up between relatives. We hypothesise, that institutions with personnel and buildings with local competence can be replaced virtual institutions with global competence.

Objectives and Methods

Objective of this article is to measure impact of language, keywords and web tools on self helping behaviour. Self helping behaviour or, a development in other words, can integrate skills from technology and policy on web 4.0 portal, when excluding middlemen. Search for competing or complementing opinion or skill on web 4.0 portal may transfer the skill to people who want to participate in feeding the growing global population or just itself.

Methodology has to move from apathy and greedy ownership interests somewhere in between these two opposite extremes. Therefore, experiments with web portal were used as methodological tool to monitor the self helping behaviour.

Results

The portal has displayed sorted advertising of commodities. Offers of commodity suppliers are in the left column and demands are in the right one. Below these side columns is menu button for adding supplied or demanded item. Central window displays last commodity demands and offers inserted, last companies registered and basic instruction for users.

The portal for sorted advertising of agricultural commodities differs from other commodity exchanges by excluding middleman. Only phone number of supplier or buyer is displayed with name, volume and price of commodity. Buyer and supplier will call each other and negotiate details of contract personally without middleman. The portal charges no fee for advertisement display now. But, it is not excluded

² <http://www.efsa.europa.eu/en/gmo/aboutgmo.htm>

that some fee will be set after the traffic will increase. The portal development was paid by Union of Oilseed Producers and Processors³ in Czech Republic.

Scheme 1: The front end of the portal for sorted advertising of agricultural commodities

Traders were integrated by development of portal with sorted advertising of agricultural commodities⁴ earlier than suppliers. Geographical distribution of traders inside and between countries is seen on Google Analytics between many other indices. The difference between offer and demand is good indicator for the next year sowing.

Scheme 2: Number of visits during first two weeks



Traders have actively found the address of the portal and few of them have displayed their demand there. Farmers followed with their commodity offers later. But, all happened in first two weeks after the portal was made public. Naturally, some of agriculture oriented media registered on the portal between the first companies.

³ <http://www.spzo.cz/eng/>

⁴ <http://ikomodity.cz/>

Scheme 3: Language impact on Google Analytics

Order	Country	Visits	Pages per visit	Avg. time on site	% of new visits	Bounce rate
1.	Czech Republic	336	6.19	00:02:42	55.65%	37.20%
2.	Slovakia	5	6.20	00:01:34	100.00%	20.00%
3.	Russia	4	1.00	00:00:00	100.00%	100.00%
4.	Germany	2	3.50	00:01:00	100.00%	0.00%
5.	Ireland	1	3.00	00:00:34	100.00%	0.00%

Slovakians understand to the portal due to similar language with Czechs. Russians are sending robots or do not understand. Germans and Irish cannot understand but study the portal thoroughly. Language can be a problem but content is decisive.

Scheme 4: Keyword impact on Google Analytics

Keywords	Visits	% visits
cena pšenice (wheat price)	15	8.98%
cena řepky (oilseed rape price)	10	5.99%
obchodování s komoditami (commodity trading)	10	5.99%
mák (poppy)	7	4.19%
potravinářská pšenice (wheat for baking)	7	4.19%

The incidence of keywords shows that the combination of sorted offers and demands on the portal is attractive for suppliers, traders of commodities and food processors. But, also Matiff or other commodity exchanges are offering the same information. Therefore, the most interesting was to follow obstacles of portal developers and ways in which they agreed and continued their work.

Discussion

Joomla open source software was used and its Virtue mart, later Open Mart e-shop was modified for the purpose of the sorted advertising portal. One year of development with two or three consultations were needed to simplify pre-programmed structure of traditional e-shop. Shopping basket and payment procedures were disabled and rules for display of telephone number of commodity offering or demanding trader were discussed with the way of displaying it on the portal. Removals of functional features caused desperate feelings by programmer, who interpreted it as no real interest or lack of understanding from the client. Resignation of web portal programmed caused him to resign from author's rights when commercialisation of portal was discussed as the second step. Oppose to programmer, clients were very enthusiastic about portal's simplicity and forbidden incidental promotion of the portal before its official launch. Lastly, emailing of booked orders or offers and transparent logo display were ordered from programmer who promised to do improvements if needed based on per hour payment.

The merging the excessive knowledge and technology with simplicity for user seems to be essential difference between open sources oppose to private technologies, where the complexity protects author's rights. Researchers and suppliers should be also offered by the same portal, which will present sorted advertising of ready made findings, skills and technologies. The only obstacle is to assign impact points to researchers, which they need for employers. Therefore, we would suggest complementing the function of scientific journals with impact factors by evidence from the use of research findings in practice on such portal as the one presented here. The tracing of the use of innovations fulfils both relationship and constructivism, which can merge local skills with research findings.

Conclusions

The time spent on site in language incompatible countries during first two weeks of experiments shows that the written language is not a big problem for people with professional interest. The development, or so called self helping behaviour, has occurred on both sides the developers' and client's one. The loss of interest of programmer to pursue his author's rights is negative. But, also exclusion of programmer from scientific community by claim of publishing results in impacted journals is negative. Therefore, it was proposed to trace the use of finding on portal with sorted advertising, which is opened from both sides as the one, which was used for the experiment here. Relationship and constructivist points should be assigned and its authors evaluated in the same way as researchers are evaluated by points from impacted journals.

The consequence of the above findings and proposals is that local knowledge can be transferred through visible web 2.0 with sorted advertising to traders, while global philosophy, legislation, economics, management and marketing will sort development categories under the discussed web 4.0 scenario, which will simplify technology for self help and make it competitive with private development and therefore fulfil the function of policy.