

Colonization of the Internet

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Abstract

The internet was introduced to connect computers and allow communication between these computers. It evolved to provide application such as email, talk and file sharing with the associated system to search. The files were made available, freely, by users. However, the internet was out of the reach of most people since it required equipment and know-how as well as connection to a computer on the internet. One method of connection used an acoustic coupler and an analog phone. With the introduction of the personal computer and higher speed modems, the access to the internet became easier. The introduction of the web and graphical browser along with lap tops and smart phones made it possible for a large number of users to connect to the internet. A small number of newly established companies, supported by a large amount of venture capital and a lack of regulations have since established a strangle hold on the internet with billions of people using it. They have exploited the open nature of the internet and created a need in the ordinary person to replace the traditional way of communication with what they provide: these persons have become dependent on the service provided in exchange for giving up personal information. This information is exploited due to the lack of laws, guidelines and regulations regarding privacy and ownership of personal data. Even where there are limits, some big-tech companies have pushed the boundaries of acceptable civil behaviour and essentially colonized the internet.

1 Introduction

The internet was introduced to connect computers and allow communication between these computers. With the introduction of the portable and personal computer and higher speed modems, the access to the internet became easier. The introduction of X-windows, a graphical interface[105] and hardware incorporating such graphical interface in a closed system brought in more users

which included a cult of users of a brand and who have remained attached to this closed system and its new models! The introduction of the web, which was developed on a machine incorporating a version of this graphical interface in the mid 1990s which was followed by a graphical browser along with lap tops and smart phones made it possible for a large number of users to connect to the internet. Private capital with the tacit support of the USAian¹ government, was able to nurture the emergence of big techs: the private capital was on-side since there were no regulations and no application of the existing regulations and laws to the internet. This free for all meant that great fortunes could be reaped and existing boundaries of acceptable practice ignored by the 'platform' designation of these big-techs. The other problem was of course the lack of imagination of complacent management of the existing corporations to provide the additional services. The politicians instead of preventing monopolies in the new digital world actually promoted it to foster innovation at the expense of privacy and security. This was what prompted capital to be made available to the emerging robber barons of the late 20th century. These corporations headed by buccaneers started putting down their own rules and bought politicians. Their big purses allowed them to bend most politicians and anyone with independent thought and ideas was put down by the anti-populist forces[41].

These newly established companies, supported by a large amount of venture capital and lack of regulations have since established a strangle hold on the internet and essentially colonized it. They have exploited the opportunity and created a need in the ordinary person to replace the traditional way of communication with what they provide: these persons have become dependent on the service provided in exchange for giving up personal information. The internet, mobile phone technology, and the web, have been exploited by new companies since the original existing players in place were restricted by legislation or mostly inertia. For example, the national postal services should have been called in to provide email service to supplement the other postal service. The lack of politicians with any foresight, savvy and/or political will and the resistance to providing funds to the existing systems such as the postal service to build up the expertise and infra-structure meant that this did not occur anywhere. Some of these new tech companies, extending and scaling their infrastructure have set up cloud services(time sharing with less control). Such cloud services are tempting business to move their computing to such clouds and abandoning their existing infra-structures. Examples are the migration of operations such as the organizational email system, administrative service and so on to the cloud. The result is not necessarily an improvement or economical. One example of colossal fiasco was the migration of a payroll software system by the government of Canada to a untried system called Phoenix: 'As a result of world-class project mismanagement on the Phoenix project, the Canadian government now owns and operates a payroll system "that so far has been less

¹USAian is pronounced U-asian; it is a more appropriate term than American since USA is but one country in N & S Americas!

efficient and more costly than the 40-year-old system it replaced.” [80].



The Salt March

As in the past, the introduction of new technology has upset the status-quo. There are opportunities that are missed by the established players. Industries such as the taxi industry has also suffered with the introduction of instant communication and location broadcasting mobile phones. New players, falsely claiming to be ride-sharing, has carved out a large chunk of the taxi business. Companies and individual operators, who had paid a high price for a taxi permit, were left holding the bag. New players, breaking and challenging established regulations and using communication technology along with willing drivers with automobiles, were able to offer an alternate system and take-over a sizable chunk of the taxi business everywhere.

2 Colonization

Throughout human existence, tribes have moved from one pasture to another. In pre-historic days, it is likely that there were no other humans in the new pasture and if there were any, the existing population would either be annihilated, absorbed by the new herd or the new herd be assimilated into or driven out. The new worlds were invaded by hordes from the European countries.

Having better weapons and using the divide and conquer strategy time and again, these invaders (settlers) to the new world were able to overpower the existing population. Unfortunately, the pre-historic techniques are still being used to-date in some parts of the world[40, 107]. The practice of annihilation, dispossession and driving out was gradually replaced by the strategy of forceful conversion[69, 70, 71]:

“For over a century, the central goals of Canada’s Aboriginal policy were to eliminate Aboriginal governments; ignore Aboriginal rights; terminate the Treaties; and, through a process of assimilation, cause Aboriginal peoples to cease to exist as distinct legal, social, cultural, religious, and racial entities in Canada. The establishment and operation of residential schools were a central element of this policy, which can best be described as “cultural genocide.” ... Cultural genocide is the destruction of those structures and practices that allow the group to continue as a group.

States that engage in cultural genocide set out to destroy the political and social institutions of the targeted group. Land is seized, and populations are forcibly transferred and their movement is restricted. Languages are banned. Spiritual leaders are persecuted, spiritual practices are forbidden, and objects of spiritual value are confiscated and destroyed. ...

In its dealing with Aboriginal people, Canada did all these things.”[37, 69]
The practice of assimilation was carried out by successive governments[72] including those under a prime minister who was awarded the peace prize[60] but did nothing to solve the problems at home! The shameful practice of abducting children continued well to the end 20th century[52, 70]. The same strategy was used in the USA as reported in a recent article[35].

Similar practices were present in all the, so called, new world which included N & S Americas and Australia and to some extent Africa. However, the topic of this paper being the colonization of the Internet, we will not dwell on this any further.

2.1 Trading Colonization

The invasion of the new world and its colonization was substituted by another type of colonization that started with trading by a number of East India Companies with various European bases[94, 95, 96, 97, 98, 99, 100]. They were established to trade in spices and other resources from the Indian sub-continent and the orient. These trading companies requiring the protection of their territory initially used the company’s hired armed man[101] which was followed by the armed forces of the company’s home country[102]. Since the ‘invaded’ country had a civilization older than the colonizing one, and had a large population these trading nations were not able to annihilate the existing population. However, just as in the new worlds, using divide and conquer strategy, the existing system of governments were replaced by the governments put in place by the

colonizing country and attempts to discourage the existing culture and way of life were the norm.

3 The Internet

The colonization we are focusing-on in this article is the colonization of what was supposed to be a 'free' internet. Using the philosophy of free internet a handful of big techs have not only taken over the internet, they have created their own system to usurp private information of people everywhere. The free information on the web is in exchange for the recording of every action of the users to target them with products and services of doubtful use.

According to an article in The Atlantic[9] the internet and the web was imagined in the 1930s by Paul Otlet, a Belgian bibliographer and entrepreneur. He sketched a plan of global telescope to enable global sharing of books and multimedia[10]. So the others who followed simply implemented this plan though it required development of technologies and associated how-tos. In [45] the 'invention' of internet is not credited to one person as a number of individuals are noted for proposing some of its mechanisms including the concept of transmission of data in the form of small packets, the addressing mechanism[91] etc. Some of these had to evolve with the connection of more and more computers. Also there were two separate networks one in UK and the other in USA.

The concept of the interconnected documents was also mentioned in a 1945 article 'As We may Think' in The Atlantic by Bush[90]. This was followed by hypertext documents of various types[103]. The developments at Conseil européen pour la recherche nucléaire(CERN) in the late 1980s used this basic idea and a simple program to piggy back on the internet protocol to enable a hypertext connection between devices, one being a client the other a server. Also a rudimentary syntax for creating the textual documents and the links among these was proposed[51]. Many other people have contributed to the development of the web and hence its discovery cannot be attributed to a single person: rather its the implementation that was adopted. The current web is as different as today's airplanes from the one imagined by Icarus and Daedalus.

As noted in [23] "even before the introduction of the web, the internet had made it possible for people to communicate via electronic mail (email)[50] and on-line chat (talk), allowed sharing of files using anonymous file transfer protocol(FTP), news(Usenet News), remote access of computer (telnet) Gopher(a tool for accessing internet resources), Archie (a search engine for openly accessible internet files) and Veronica (search for gopher sites). These early systems afforded the opportunity of interconnecting people (who wanted to be connected), sharing resources without requiring anything in return and providing security and privacy; there was not yet any question of monetizing; the whole concept was to share and there was no attempt to exploit! However, these systems

were not adopted widely: the problem with these internet tools was the need to have computing savvy; the other problem was the lack of an infrastructure to transfer the know-how-tos. Incidentally this was also the requirement for the early web with the use of a user unfriendly, text-based web browser and lack of training facility and easy to learn tools to build and maintain hypertext documents. Some early attempts to create software for hypertext[106] were buried by the emergence of the early form of the tech giants who were more interested in having their system be the internet and crippling the users from learning the basics.

4 Internet Colonization

The author had chaired/co_chaired a number of workshops during the early meetings of WWW[14, 15]. A system at a clients site called WebJournal was under construction in mid 1994[24]: it was to provide a record of web sites discovered during a web journey and thus provide a record for latter reference[25]. This information was recorded locally and there was no need for searches. However, the option of using a web robot to scour the internet and to create a comprehensive list of web pages and index them was introduced later. The concept of robots as well as many other features used to track users was not part of the initial design from CERN. These were introduced by W3C, dominated by USAian business, to serve the needs for tracking.

Altavista, one of the early search engine was introduced by Digital Equipment Corp.(DEC) in December 1995[104]; it had a simple design but due to many management blunders lost the search war and was shutdown in 2013. Google which claimed to be a better search engine because the search result ranking was based on the number of 'respected' pointers pointing to the page. Even though Google, whose results in the beginning were middling as shown in the tests reported in [18, 22], soon took over the lead and now has the playing field to itself. Its sheer global coverage and complete control of the digital publicity marketing, including the publicity trading exchange, the main buyer and seller[39], has prevented local search engines from emerging and challenging this dominance[23].

Over the last few years, another USAian search engine that promises not to track users called DuckDuckGo has had some success. CLIQZ was a recent example of an European attempt to create a more open search engine integrated with a web browser[32]: on their web site they point out the colonization issue: "Europe has failed to build its own digital infrastructure. US companies such as Google have thus been able to secure supremacy. They ruthlessly exploit our data. They skim off all profits. They impose their rules on us. In order not to become completely dependent and end up as a digital colony, we Europeans must now build our own independent infrastructure as the foundation for a sovereign future. A future in which our values apply. A future in which

Europe receives a fair share of the added value. A future in which we all have sovereign control over our data and our digital lives. And this is exactly why we at Cliqz are developing digital key technologies made in Germany.”[32]

Alas, on April 29, 2020[31] Cliqz story was over. According to the team, they were able to build an index from scratch and introduced many innovation but combined with the Covid-19 pandemic and the continued dominance of the other systems it realized that there is no future for Cliqz. The CLIQZ team built a browser that protected users’ privacy using a powerful anti-tracking and content blocking technology. And of course a search engine. Yet they did it with a modest budget and attracted top talents.

Even though CLIQZ had daily users in the hundreds of thousands, they were not able to meet the cost due to the inertia of users continuing to favour the colonizing giants. Worst of all the political stakeholders, both in Germany, where CLIQZ was based and the EU, have not woken up to the fact that they are supporting a colonized Internet and the colonizing power is USAian big tech with tacit support of successive USAian governments. After a heroic attempt, the search engine has hit the dust(cloud?), the CLIQZ browser is still around - at least for a while. Currently, in most countries of the world, even though they may have a local search engine. the lion’s share of the search is using Google!

It is evident that most democratic countries need their own digital locally regulated internet infrastructure. The myth that Internet is free and open has been exploited by many. The world deserves a fairer democratic non-colonized Internet, web and online social networks(OSN).

According to [66] ”Politicians and public officials were complicit in Facebook’s legitimization as a political forum. Special credit has to go to Barack Obama, as a presidential candidate in 2008, for demonstrating that a power base located on Facebook could take you all the way to the White House.” This platform has been used by other politicians, dictators and political parties, and others to swing elections and mold peoples perception of reality and present an ’alternate’ reality which is usually a mirage at best and in reality an untruth. “But the company has repeatedly failed to take timely action when presented with evidence of rampant manipulation and abuse of its tools by political leaders around the world” [48, 49, 53].

The large internet companies, using the advantage of the early start, the protection of the USAian government and the guise of net freedom have been enjoying a non-level playing field in web technology. The presence of a colossal corporation in search and on-line social networks is preventing any other attempts to fail. Every time the issue of regulating big-tech comes up in the USA, the big-techs and their allies start fear mongering about giving China the advantage. This distracts from the important question of addressing the issue of exploiting the users’ data and violating their privacy; take away the range of

choices by offering a limited number of options beneficial to the big-techs[88]. The OSNs have killed the early attempts to create software for establishing one's own web presence, not only for individuals but also for most small organizations. One of the first things these OSN did was to recruit USAian politicians and showed them the ease with which they can, with very little computing savvy, set up their interactive web presence and share it with their electors. Others followed and they all joined in like lemmings. In a way the OSNs have become a road-block for personal and community based sharing systems with no central control.

Another problem has been the lack of imagination and inaction of most western governments, postal services and telecom utilities to provide the tools. The government have a false faith in free market which has never been free: the big ones dominating any start-ups and competition. These giants have become too large to regulate, and they have a large network of lobbyists and lawyers with direct access to the legislative and executive bodies of the USAian government.

There is not a single international search engine of any size that is not headquartered in the USA. The attempt by Cliqz failed in spite of their success in creating their own system and integrating it in a privacy preserving browser. Another example of this imperialist push, as noted in [23] was the attempt by Facebook to have a completely controlled free service provided by Indian telecom carrier which would have Facebook as the center with a few other services chosen by Facebook. This was an attempt by Facebook to make itself the Internet for potentially over a billion users on the sub-continent.

Most governments have not come around to adequately tax these foreign companies. Even the recent attempt by the G7 countries to impose a paltry 15% income tax[68] has loopholes and most of these big-techs hardly pay a tax of even 4%[68]. One wonders why the governments do not tax these companies on the revenues earned in the country, regardless of the location of the big-tech. It is so easy with today's database and data analytic tools to determine the revenue earned in each country and tax the companies on this revenue and not allow them to play the shell game. However, incompetent politicians would not listen to even their own civil servants much less ask them to implement the system and put in laws. Of course these laws would have to override any 'free' trade agreement or even walk out from them.

A limited number of colonizing on-line social networks have attracted people from all parts of the world and given the despots around the world the ability to be heard everywhere without any checks and balances. The other issue is that some governments are trying to control such networks who have to comply so as not to lose their income from the country. Case in point is the recent attempt in India to remove contents critical of the government. China is forcing Apple to host all data of their citizen in China. In this case this data would likely be accessible to the communist government: Apple has no choice but to comply

since it would risk a large portion of its global business in China and most of their manufacturing facilities: The company Apple has become an instrument to present a government-controlled version of the internet[56].

5 Closed Systems

The marketing of computing systems in the early days included the bundling of basic software support. This included the operating system, the compilers and libraries as well as training manuals. An organization would either buy the bundle or lease it and develop the specific software applications for its own use in-house. Computer Science evolved to train people who would develop this application software. The competitors to IBM, the most successful manufacturer of bundled systems, were software only houses. These competitors, using the courts and USA's anti-trust laws, were successful in un-bundling software from the hardware. The anti-trust case was based on the rationale that people who wanted software should not have to buy the hardware as well. This anti-trust case was finally dropped but it gave rise to a number of software houses. This and the idea of one size fits all led to the establishment of software houses which produced sets of generic software that could be used for many businesses and replace the in-house systems. The concept of a bundled system that IBM used in the mid-sixties for its System 360 was subjected to litigation and prompted the unbundling of software and hardware. This un-bundling and the introduction of the PC by IBM which was an un-bundled hardware system gave rise to the birth of one of the five big-techs: sometimes called the fearsome five[63].

What has happened now is closed devices are sold today that have the software, including tracking sub-systems, built into them[43]. All the software applications(apps) created by independent software houses are installed via the operating system of the device and the device maker imposes a percent of any revenues earned by the application. There is no move anywhere to unbundle software, including the applications and the hardware. This is clearly against the spirit of the System 360 settlement. However, it has been, to date successfully used by the big-techs and is being imitated by others. One would expect that since such close-device makers are controlling the 'application store' they would have some diligence in ensuring the quality of the software they make available and take a hefty percent of the revenue earned by the application maker. Recent articles in the press have shown that some of this software, as usual has bugs and security loopholes which could be hacked by spyware makers. One of these is attributed to a spyware firm in Israel which has targeted activists[75]. These systems, especially Internet of Things (IoTs, cell phones being one of them!), lock in the users data without providing a method for user to take care of their own data. A solution to address this problem was presented in [1, 20].

The latest trend is abandoning in-house systems including email system and move them to a cloud run by one of these tech giants. The promise of tremen-

dous cost savings is often an illusion. From the experience reported in a report by the Canadian Senate and the Wikipedia page[80, 89], one can see the fiasco caused by the system “Phoenix”, mentioned earlier, bought by the Harper government to save money. After five years of continued complaints about underpayments, over-payments, and non-payments, due to a software system that was supposed to save \$70 million a year, to fix Phoenix’s problems it will cost Canadian taxpayers up to \$2.2 billion by 2023 according to a Senate report.

The truth of the matter is that these big-techs are too big and have colonized the internet. The big-tech business model is to get as many people as possible to spend as many hours as possible on its site or their device so that they can sell those people’s attention to advertisers. The myth that the internet is free is a farce. Each society, each city, each community must have their own contents under their own jurisdiction and control of accountable elected officers.

Some of the for-profit big-techs that run social media, make a claim that they support social justice; however, their product and their marketing models do not reflect this lip-service[47]. They claim that they spend billions of dollars for work on AI to address these problems, but their model uses the research which shows that divisive contents attract and keep the audience. Also, how much of these billions is to support tools to weed out objectionable material including hate speech, pedophilia and false claims[81]. The USA’s administration was headed by one who is known for promoting “divide and conquer” practised by invaders over centuries. By inventing a tag such as “newsworthy” for any contents that violate accepted decorum but coming from some political figures is allowed because such contents are judged, not by independent observers but the big-techs themselves, to be ‘newsworthy’. The label does not consider inaccuracies or falsehoods nor whether it is hateful[26, 64, 87].

6 Fallout from the Colonization

The big techs have convinced billions of users that the service they are getting is free. If we ignore the intangible cost in terms of the loss of privacy and hawking of personal data, images, opinion etc. to anyone who is willing to pay for them, the service offered by these big-techs is really NOT free! In order to access their service or any other, there is the cost of device and bandwidth needed to access these services. The device will cost from several hundred dollars to a couple of thousands. The communication costs, ranges from 50 dollars to up to 100 per month. So the consumer is paying. In addition to these fake free services, business such as utilities, credit card companies and others want their customers to be billed electronically. This would save them the mailing costs but they do not discount the users bill by a corresponding amount. There are no regulations about passing such costs back to the customer and one wonders if there ever would be! One can set up a personal mail service for a few dollars a month. As noted in [42] when a product is free, the user is the product.”

These companies are invading new territories where there are no regulations. Another such plan hatched is Amazon's Sidewalk[3]²: Amazon is one of these big-tech businesses and Sidewalk is a bridge-scheme they have hatched to 'steal' a users bandwidth with no remuneration and no guarantee that it could be used to hack into a persons system! Amazon Sidewalk works by creating a piggy low-bandwidth network using someone's smart home devices the person has purchahsed; it also uses the persons telecommunication bandwidth without any permission except an opt-out. The system would likely be extended to devices and applications from third-parties that Amazon would later license. Since there are no regulations, this company is basically stealing the bandwidth, however small, from customers who are naive enough to pay for a untried product that they may not really need just because, as usual, they are hyped up and marketed to target a persons insecurity, concern for safety and security.

Since there are no regulations and laws to control the internet and its components such encroachment on privacy and security will continue. The internet including the mobile phones, have become a gold rush of our times and anyone can stake a claim. Systems are designed as close systems and they allow any third-party and applications to access the users data. The rush to grab all possible types of user data, this includes financial institutes which charge a fee for a customers account. Recently, RBC, the largest bank in Canada made a condition of the on-line banking for its customers to give permission to use, anonymized data of their on-line transactions in any way they see fit to any third party they choose without concern for thier customer privacy[61]. As usual, the on-line form for giving this permission was innocuous but when one follows the link there is a 37 page document with all the legalese. One wonder where the regulating agency is and what are they regulating? If lawsuits and litigation, mostly based on monopoly legislature, are the only way[36], the entire system is going to be bogged down for years to come and may not be satisfactorily resolved. A lawsuit against Facebook, launched in British Columbia, Canada is going back and forth from one court to the another since 2013[28]

One of the reasons that these big-techs have become so large lies squarely with the media - to these one can add governmental agencies, public institutes - including universities and private businesses. They have all rushed in to get 'free' exposure. They are providing legitimacy to these robber barons of our age by strategically displaying the logos of these mammoths on their own web sites; these logos take visitors to these sites to the big-techs sites where they may require tehm to sign-in/log-in for interaction. This gives these big-techs new victims to mine their personal data. For example most universities have presence on the big-tech sites because the others are there -even though they have their own web site over which they have complete control. Makes one

²Running out of monikers - this word reminds one of the fiasco Google made with its version of Sidewalk in Toronto waterfront project and withdrew when they did not get their slice of the cake[2].

World · Editor's Note

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Social media attacks on our journalists and the subjects of our stories is something we take seriously



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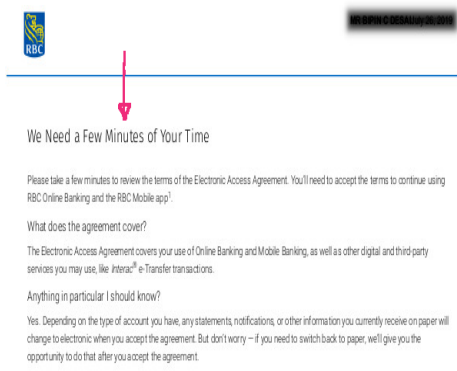
Not practicing what you preach!

wonder what the I in the new high office called CIO stands for!

Why can't universities, centers for education, manage their own interactions with their customers and not have to go through these third parties. Furthermore, many organizations allow/encourage users to log-in to their systems using the credential for Facebook or Google! Effectively they offer their customers as sacrificial lambs to these tech giants who push the boundary of civic decencies for a greater share of the market. The media is full of items chock full of quotes of posts and twits; these in turn lure more unsuspecting souls to be trapped in the web of these monopolies and provide them with more tons of personal data.

6.1 Survival of Newspapers and Journalism

Another fallout of the monopolies established in email, web search social networks, cell phones, computing devices and shopping is the effect it has on journalism and local newspapers. Recently, an open letter to the Prime Minister of Canada was published in many Canadian newspaper[54] to communicate the following:



Read & understand 37 pages of legalese in minutes!

“For months, you and the Minister of Canadian Heritage, Steven Guilbeault, have promised action to rein in the predatory monopoly practices of Google and Facebook against Canadian news media. But so far, all we’ve gotten is talk. And with every passing week, that talk grows hollower and hollower.

As you know, the two web giants are using their control of the Internet and their highly sophisticated algorithms to divert 80% of all online advertising revenue in Canada. And they are distributing the work of professional journalists across the country without compensation.

This isn’t just a Canadian problem. Google and Facebook are using their monopoly powers in the same way throughout the world – choking off journalism from the financial resources it needs to survive.

. . .
In fact, the health of our democracy depends on a vibrant and healthy media. To put it bluntly, that means that you, Prime Minister, need to keep your word: to introduce legislation to break the Google/Facebook stranglehold on news before the summer recess. It’s about political will – and promised action. Your government’s promise.

The fate of news media in Canada depends on it. In no small way, so too does the fate of our democracy.”³

If one looks at the fight put up not only by Google and Facebook which amount almost to blackmail but also by the USAian government recorded in the submission[6] one understands the part this government plays in this type of colonization. It is hard to understand how these submissions fail to see that

³Alas, nothing was done and summer recess has been called. In the meantime these companies control completely the digital advertisement market[39].

Australia was addressing the market failures with digital news content and digital advertising by combining elements of the French Press Publishers' Rights the collective bargaining of publishers' licensing against the market power of publishers, as well as a novel process for the negotiation and, if necessary, arbitration of prices[12, 73].

The USA, which has put in a 'platform' designation for many of these big-techs and thus exempted from all requirement of diligence of what appears on their site seems to be behaving like the colonial governments did in the early days of the East India Company; they made it easier for these companies to exploit people, enslave them figuratively or literally using their military power and using the divide and conquer rule. In the case of the Australian draft law to require Google and Facebook to deal with a consortium of news media it is just to provide a balance. It submitted an opposing brief as being not appropriate to put in collective bargaining by any number of media players to bargain together as not respecting the principles of competition⁴[33]. The tech giants using their size and the political connections, are able to dictate their own unfair terms to news media for the use of their content. Even the treatment of their own employees could also seem to be callous.[55]

One also notes the submission [5] which includes self praise and point to the initial design of the link and free access without any mention of the monopolization of the internet and exploitation of personal data for exorbitant private profit. One wonders what part was played by W3C[109] in the introduction of cookies and tracking and other tools not in any design since Otlet!. There is no concern about copyright, fair practice, ownership, privacy etc.: no credit to all the others who had put forward the ideas of hypertext. The reading of such submissions make one think of the famous lines, attributed most likely to some prolific author uttered so often to the delight of the class, by many high school teachers to one of their unruly students: "It is better that you keep your mouth shut"

7 A solution

In addition to the introduction of regulations and legislation to protect privacy and stop the trade of user data by tech companies and businesses the only way to liberate ourselves from this internet colonization is to stop using these colonizing, so called, 'free' services[44].

The teaser figure above shows the statue of the salt march which was the start of the struggle against the British colonization of India[86]. Similarly, the fight against the colonization of the internet and to stop the violation of human rights by hijacking of peoples privacy must start. This fight should involve not

⁴Are the big-techs respecting the principle of competition?

only ordinary users but also organizations. The latter should stop using the logos of these big-techs on their web site. Since most of these organization already have a web site, they should invest in infrastructure to add interaction with their users and customers. This would not only remove duplication but also stop sacrificing their users and clientele to feeding the big-techs.

The big-techs, specially the OSNs, have marketed that the traffic to the organizations web site hosted without charge on the OSN 'free' site would increase because of the large numbers of OSN users. However, one link is just as good as another and any user with any brains should be able to find the organization because of all the search engines including those that do not track. Furthermore, the presence of the independent organizations' pages are instrumental in increasing the number of users and traffic on the OSNs.



Do they need these OSN? They have own Web sites!

For the ordinary user, there is another way to get a web presence and sharing without using OSNs. Since these users need to use an internet service provider(ISP) most of them also provide a web presence and email service: users should look at these services as an alternative. As more people use these alternatives, the services would gradually improve and additional services may be added. One can, using open source system such as Linux set up one's own server. Linux has many distributions; some of them are for not too technical savvy and help is provided via numerous discussion forums.

In [20], a scheme to protect the users' privacy by keeping all digital data of

IoTs, including cell phones, under control of the user was introduced. It is also needed to introduce regulation and legislation to crack open the closed system used by many of these big-techs. Democratic countries must not wait for the USAian government to start the process since USA is protecting its big-techs as evidenced by the presentations made by various USAian agencies during the Australian senate hearings on news media[6]. Any sane judge would uphold laws and regulations allowing a balance in negotiation between a giant and a consortium of local small publishers. Also, according to the legal opinion cited in[73], the most recent trade agreement between Canada, Mexico and USA, there is the “ability to take legitimate policy actions in the public interest, including with respect to health, the environment, indigenous rights, and national security; and for Canada to take measures to promote and protect its cultural industries. Action taken under the authority of the exceptions is permitted even if it otherwise would have violated obligations in the Agreement.”

The newspaper publishers should also provide access to their digital contents either free or for a very small fee; many newspapers already do this. This access, in addition to providing content, could be extended to include community discussions and forums. Also to provide the subscribers means to interact with others, set up forums to discuss local concerns, provide pointers to local resources and provide the civil network for the community. If more readers go directly to the media’s web sites, they would be tempted to make a voluntary contribution to support these services. Recently, Le Presse, a French language newspaper in Montreal, went all digital and became a non-profit organization. In this way they could accept donations from readers. However, since most news media are privately owned by for profit corporations, they would not be willing to give up the ownership. However, some means of opening up and providing more community services would be one way for them to survive. The cost of creating an application for interactions and feedback is not astronomical! Over the years, the author has assigned a group project to students in an undergraduate course in databases. The project usually requires a web based application to mimic one of the social media systems. Most of the implementations are better than the initial system developed by some drop-outs and pushed with the help of some incompetent USAian politicians and businesses around the world and groupie users.

This model could be extended to other media such as videos , and then the community could have a streaming service not controlled by giants but by local consortium. As one notices, the giant streaming services are controlling the production of, at most mediocre, contents. The best content, the classical ones are no longer to be found. The irony of this is that the production by these giant streaming services is financed by our taxes awarded by naive politicians looking for a trickle down effect. Alas there is none since the rich management of all these giants have built dams to prevent this loss!

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