# Personalized Social Connectivity and Reputation



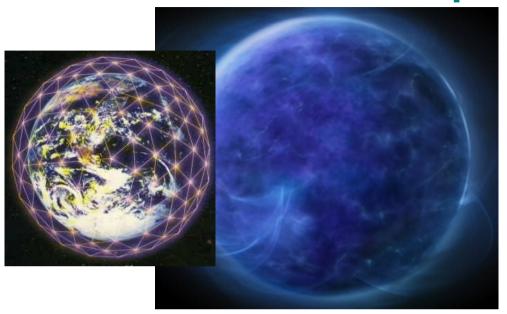
Monitoring dynamics in online networks with Aigents platform

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## Standing Questions

- Are we parts of huge, planet-size computer, performing some unknown task?
- Do we want to have understanding of the programs being uploaded to it an executed by us?
- Do we want to have a bit of control over the tasks being executed?

### Social Computing Systems





Collective intelligence is phenomena or emergent cooperation of multiple individual autonomous agents interacting on basis of social consensus.



Consensus is mechanism enabling multiple independent members of society to cooperate towards reaching shared beneficial goals.

### Human Brain and Human Community

~80 billion neurons,

~16 – in neocortex

~8 billion people on Earth,

~3.5 – connected online

~100 m/s - speed of neural signal ~30000000 m/s - speed of transmission

electromagnetic waves

~1 ms – time to transmit signal between brain hemispheres

~100 ms – time to transmit signal between earth hemispheres

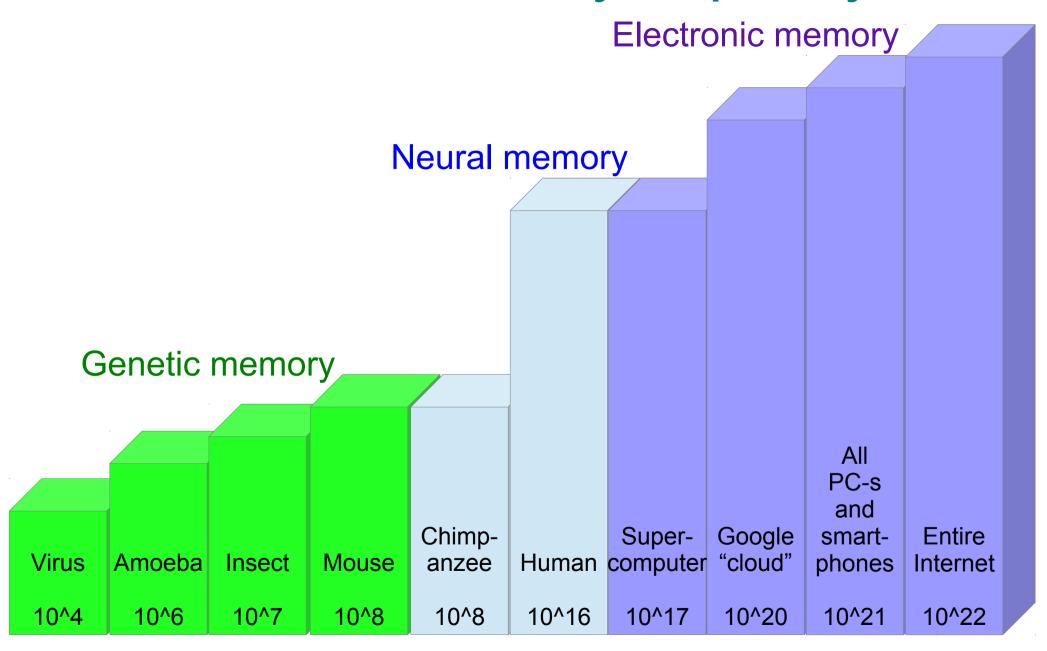
~1 ns – time to transmit signal between columns in the cortex

~1 ns – time to transmit signal within data center

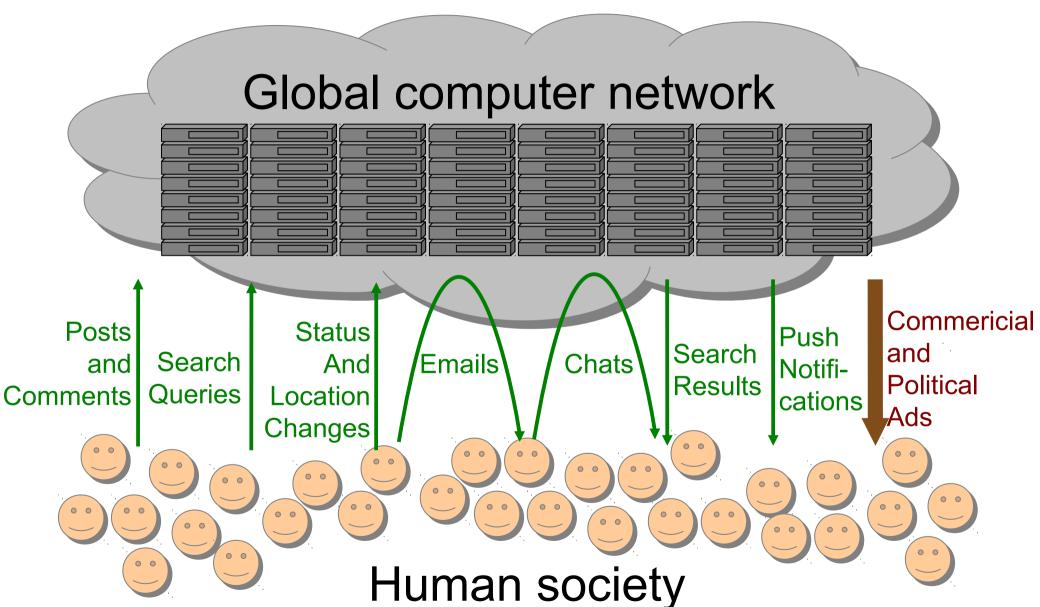
Control roles of cells in human body is differentiated to cells of central neural system (~0.2% of total amount) and the rest

Control role of humans in society is differentiated to managing elites (~0.7% USD millionaires of population) and manageable audience

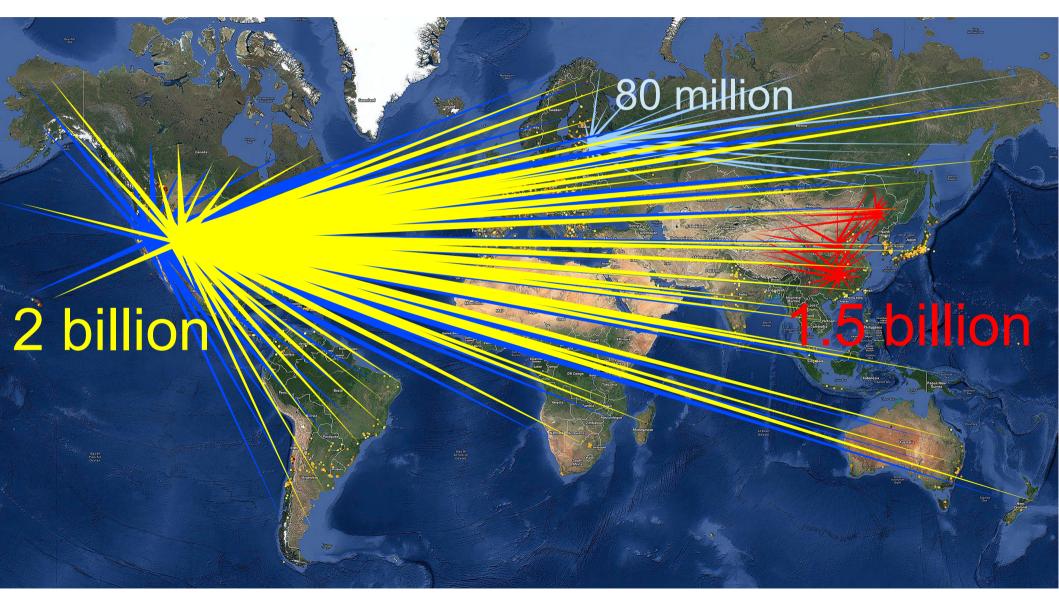
### Evolution of memory capacity, bits



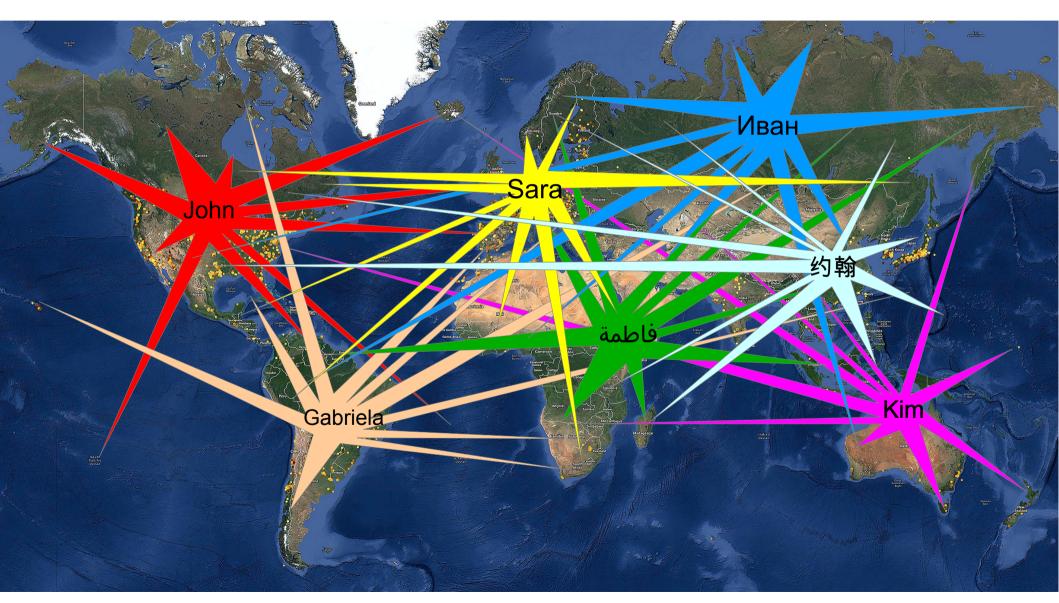
## Hybrid human-machine social computer ("global brain") overall architecture



# People connected to "planetary intelligence" monthly: Google+Facebook – worldwide, VK – in Russia WeChat+Baidu+QQ etc. - in China

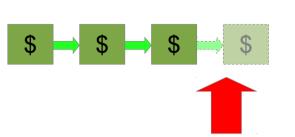


# Challenge: provide every user with personal "planetary intelligence" agent



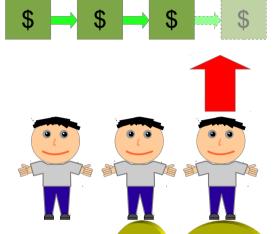
Consensus – technology to govern distributed multi-agent systems such as blockchains or societies, resistant to takeover and scam.

Proof-Of-Work

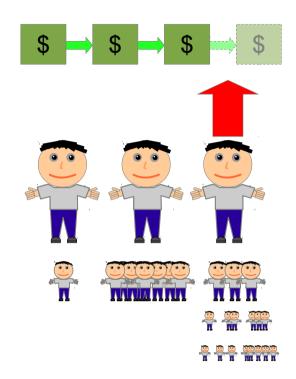








#### **Proof-Of-Reputation**



$$R_{i} = \sum_{t} \sum_{j} (R_{j} * V_{ijt})$$

#### **Force is Power:**

Those who own more computing resources govern the network.

#### **Money is Power:**

Those who have more money govern the network.

#### **Reputation is Power:**

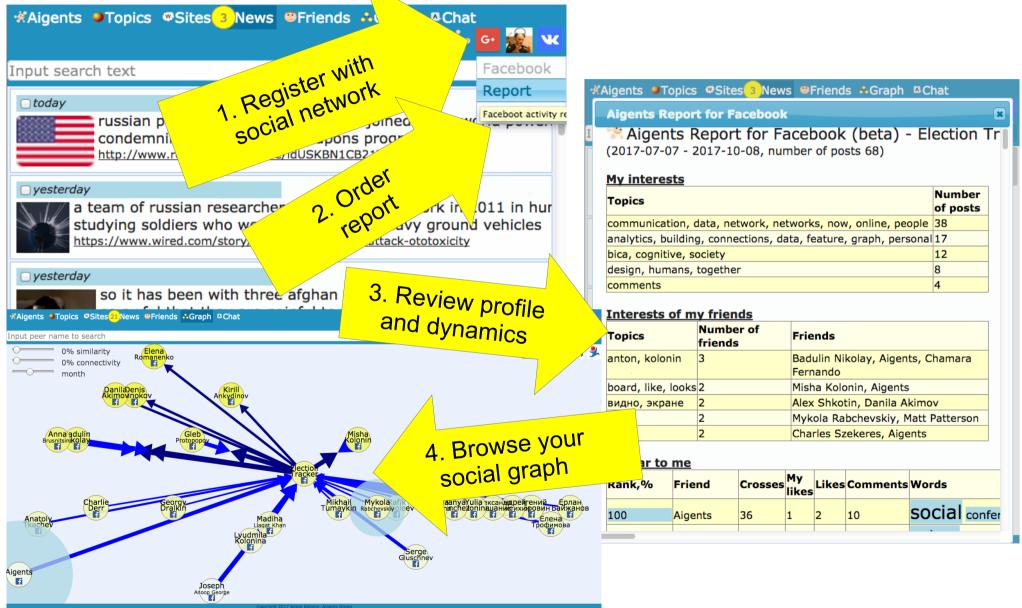
Those who earn deeper reputation and greater long-term audience base govern the network.

### **Aigents Social Computing**

provides "magic mirror" in the world of social and informational networks to recognize your preferences, let you know your friends and find what you need



# Personal Social Analytics Start using at https://aigents.com/ today!



Personal Social Analytics Domain Model (original data) **Topic** Me Friend Like, Vote Like, Vote Word, phrase **Post** Use Calendar Comment period

### Personal and social analytics - relationships

Best friends

$$B_{ij} = L_{ij} * (L_{ji} + C_{ji}) / Max_{j=1,J} (L_{ij} * (L_{ji} + C_{ji}))$$

Fans

$$F_{ij} = ((L_{ji} + C_{ji})/(1 + L_{ij} + C_{ij}))/Max_{j=1,J} ((L_{ji} + C_{ji})/(1 + L_{ij} + C_{ij}))$$

Like and comment me

$$F'_{ij} = (L_{ji} + C_{ji}) / \text{Max}_{j=1,J} (L_{ji} + C_{ji})$$

Authorities

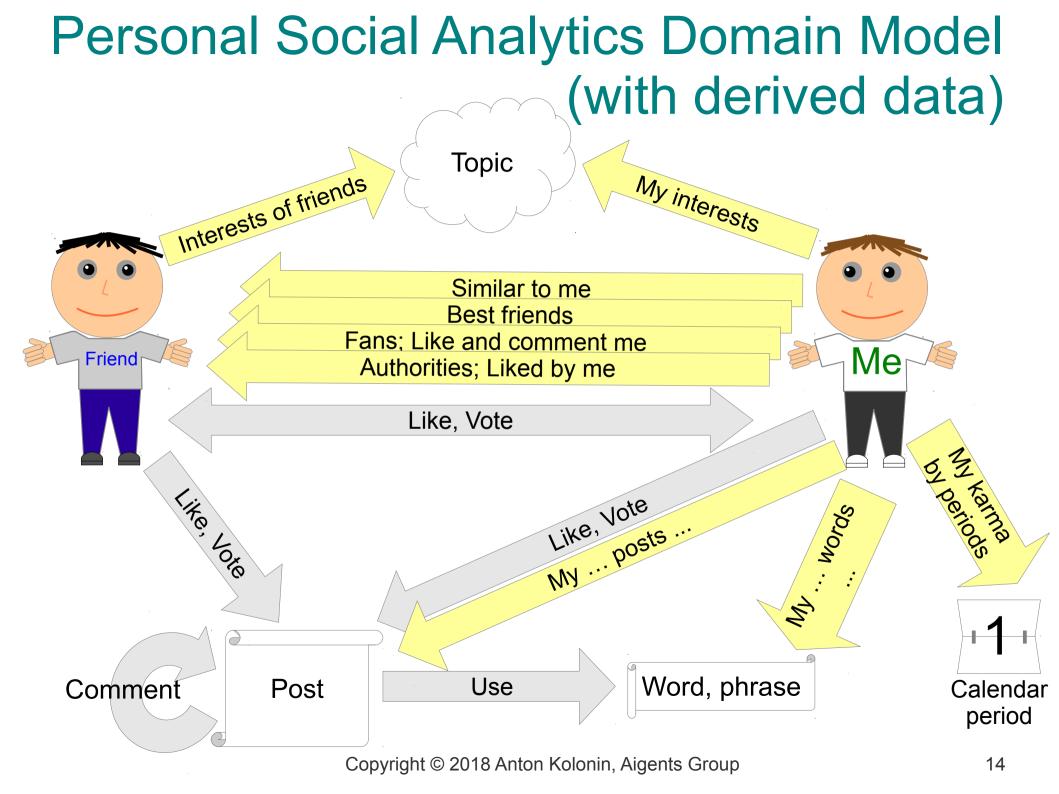
$$A_j = ((L_{ij} + C_{ij})/(1 + L_{ji} + C_{ji})) / Max_{j=1, J} ((L_{ij} + C_{ij})/(1 + L_{ji} + C_{ji}))$$

Liked by me

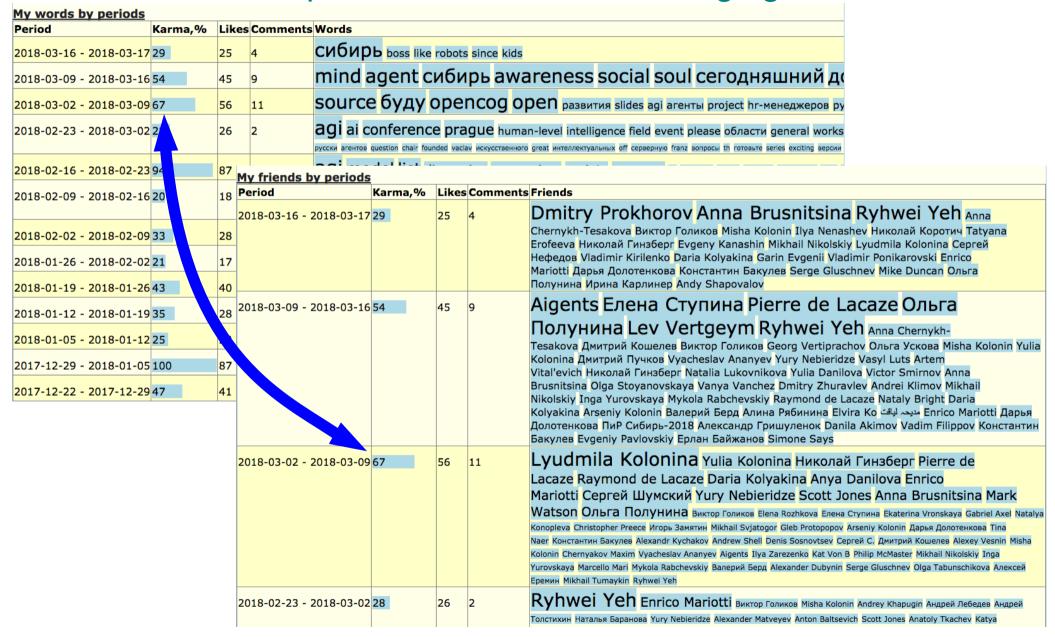
$$A'_{j} = (L_{ij} + C_{ij}) / Max_{j=1,J} (L_{ij} + C_{ij})$$

My karma by periods

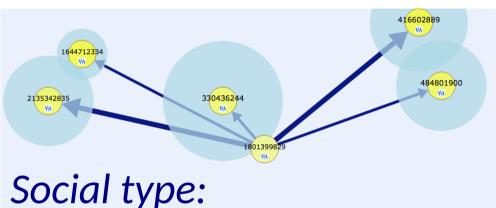
$$K_{it} = \sum_{j,t} (L_{ij} + C_{ij}) / Max_{t=1,T} \sum_{j,t} (L_{ij} + C_{ij})$$



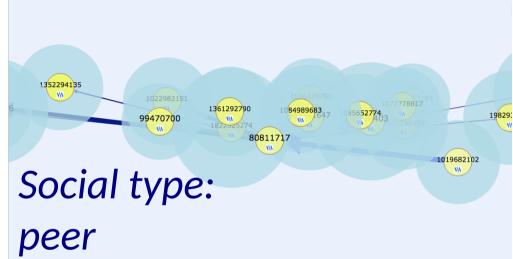
## Case 1: Helping users to improve their social capital ("karma") over time, monitoring dynamics of its change correlated with online communications, topics and connections changing over time.

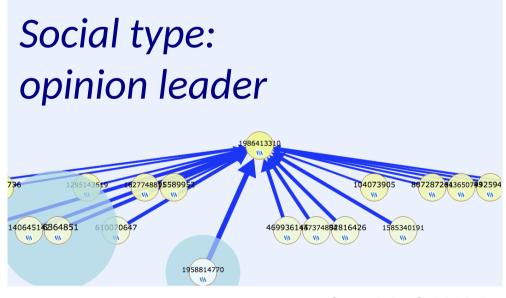


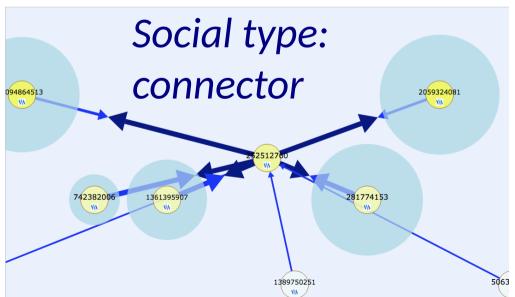
Case 2: Helping users to understand themselves better and perform more efficiently online – using their tracks in social networks and online resources, capture their interests, relationships, communication patterns and social structures.

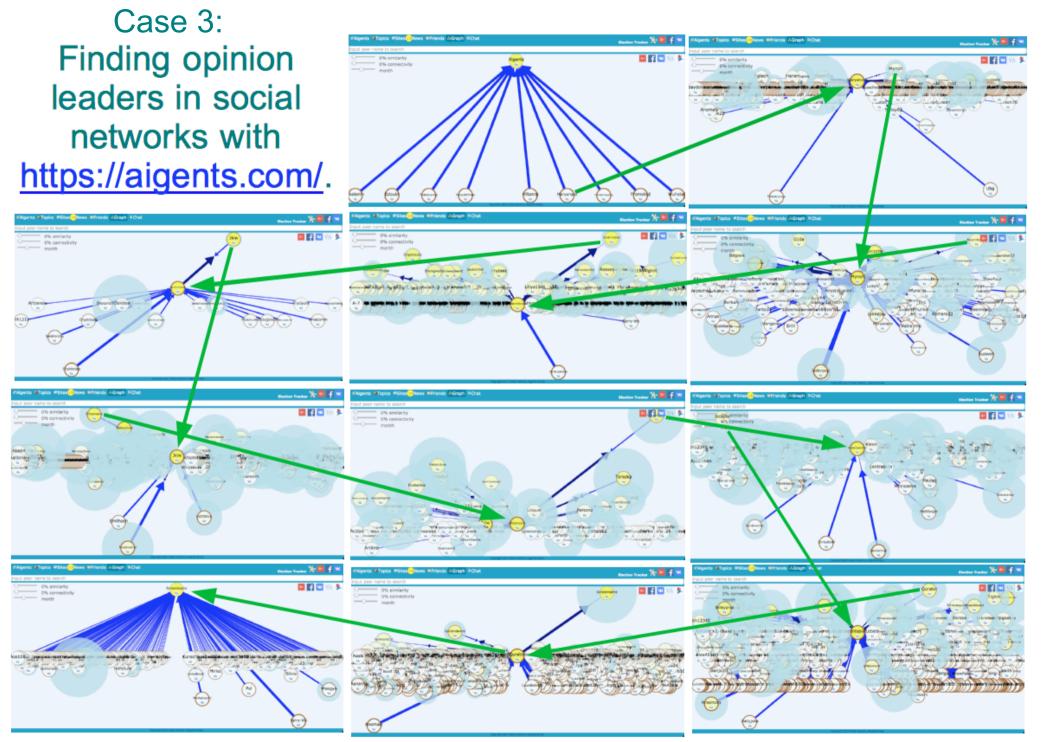


Social type: follower









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Case 4: Encouraging users to conduct positive and effective communications with partners while guarding users from being manipulated themselves or being offensive to others.



I connect my "virtual agent" to my social networks and communication channels and let it learn about my partners and preferences.



Friends Map Karma Input search text i encourage all of you to use your r o adapt to changes here at home as well. . i ection we do not all feel the same way about the **Noodpecker** http://www.reuters.com/article/newsOne/id yesterday Waterfall/ facebook ceo mark zuckerberg fam e news as a red herring that betrayed a lack of Joe https://www.wired.com/2017/02/trump-ted McLane ✓ yesterday ncluding Okay, Aigents now can be accessib capability to retrieve reports on pe with ability to configure contents of the reports m ect to your personal Aigent living at https://aic means of Since: 05.01.2017 Top: 11 Web user interface) in two alternat https://www.messenger.com/t/aige

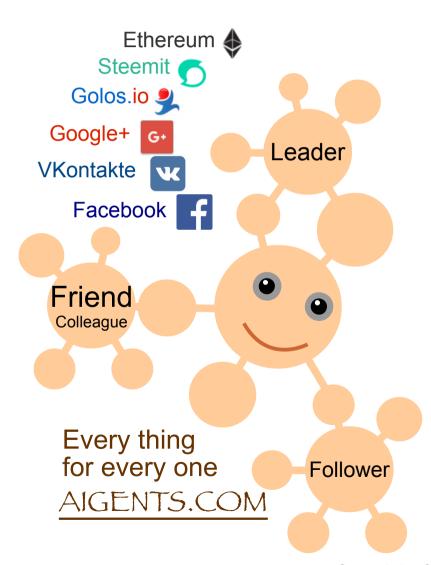
"Agent" extracts information from networks and online communications automatically, analyses all posts, comments and messages and alerts once there are important messages coming in or out – encouraging and positive or manipulative and offensive.

## Takeaways

- •We are parts of world-size machine, computing and redistributing attention, reputation, influence and power of brands, business and physical entities.
- The larger social graph is under control, the more impact on the world can be accessed, yet most of us lack tools of such control.
- •Try <u>Aigents</u> software for personal social analytics and help us to make it better.

## Thank you! Try demo:

https://www.youtube.com/watch?v=ORwodfAH2n0



### Stay in touch:

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