The forthcoming or existing challenges that humanity has to overcome from my perspective...

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Why should we do something besides doing nothing?

To begin with, the definition of the problem and the process of looking for its solution comes after consensus on the fact that the problem HAS to be solved or the challenge HAS to be faced. Otherwise, it is no real use racking our brains with anything else. Thus, the author considers all the problems mentioned in the following paragraphs to be of vital importance for saving and improving humans' well-being. He believes that human-beings, as a single population with prominent minds, have not only natural rights but also strict obligations in order to compensate for the impact they create towards the system. Under such circumstances there is no room for stalemate or long-term stagnation, because naturally every creature improves and upgrades, adapts and overcomes a range of issues.

So we can highlight the survival race among us, other populations and again – us. Let me explain. Animals for example have continuous quality of life improvements to make up for the "change of air", the only reason for a setback in their development can be a negative-impact mutation or genes' issue. People, unlike animals, playing the leading part in the "knowledge chain" may artificially slow down their own pace of development or even demolish it by means of usual :(wars or as a dreadful example a global nuclear war.

Consequently, humans should stimulate their overall development and, to boot, they had better keep an eye on the level of impact they create towards either themselves or the system. These obligations demand consistent updates and, besides already known natural scientific interest, answer the question why we should do something besides doing nothing in contrary to the followers of popular nowadays anarchoprimitivism's replies. The author himself doesn't support this idea for the fact that it requires a natural balance of thousands of years ago, which has already been violated and underwent some undisputed changes.

What about sustainability?

Here comes the concept of sustainability – a social goal for people to co-exist on the Earth over a long time [2]. Great minds from all over the world, brought together in the UN, made up a plan to maintain the development of our species and to protect the environment.



This determination covers 3 areas-milestones of human activity: economy, society, environment (see Pic. 1). A bunch of problems displayed in this article are related to a social branch.

Problem № 1 – Ideas and education's deficit

Contemporary world lacks ideas. In order to provide worldwide sustainability people need to bring scientific ideas and startups into physical existence, but their quantity (I mean the quantity of considerable ones) has continually been decreasing [1]. The toughest breakthroughs are witnessed to have been in the XXth century. It goes without saying that the general human resources involved in such fields as physics, engineering, astronomy, chemistry, etc. are facing a horrifying decline in favour of social services disciplines and, what is more, cash flows in these branches act alike. To be on the safe side, you may take a look at the average salary of workers in the department of social services and compare it to the poor income of STEM representatives. My words have a vivid local confirmation: according to the Ukrainian Centre of Education Quality Evaluation, physics (5.6 thousand people) and chemistry (2.6 thousand people) are the least popular among future applicants, the total number of whom is 200 000 apprentices [4]. Anyway there is an exception – IT related disciplines which reached an immense blossom within 20 years, but, to my mind, IT, combined with maths, also mostly belongs to social services such as statistics and analysis.

Regarding education, there is an undeniable trend – "educational devalvation". This term explains the current worldwide situation in studying: people get good grades, enrol in universities, acquire degrees with one purpose – to make money, when the minority barely does the same, but with special love and passion for what they have been doing since their first book or special equipment usage and own benefit is the last thing that can bother these chads. Therefore the majority creates an awful competition where only the best of the best are winning on points and those who studied not hard or not immersive enough have to switch their occupation interest once again. So, you can lead a boy to college, but you can't make him think.

Consequently, we can overview such data: in 2021, the percentage of all U.S. residents between 18-24 enrolled in college was 38.1%, the lowest it's been since

2006; in 2022, the college enrollment rate was 39%, which is still low compared to the previous decade [3]. Teens just see more prospects in vocational education.

Problem № 2 – Too much information

A modern student is surrounded by an infinite stream of information. And, of course, there is no spare data because even excessive knowledge has always been a power. Anyway, human memory is limited, yeah, it may be trained, broadened, freed but it still has some boundaries. The best option for the youth is to have a basic perception in every single domain and profound knowledge in one or two. That is not applicable to make either a universal trooper or completely enclosed scholar of a single direction.

On the other hand, the scale of the noosphere itself is growing rapidly. Representatives from science society admit that they can't possibly catch up with the data expansion. Scientists in the XXth century were to process far less embarrassing scales of intelligence than our colleagues. As an example: students studying history have to learn more facts every hundred years, so they choose between simplifying periods they research or almost cutting ancient ones, but the problem is that in STEM everything is interconnected, and you can't preach such a voluntarism. Yep, undoubtedly, here computers and databases come in handy, but somehow their exploitation for usual computing during both classes and exams isn't allowed for Ukrainian students up to the 11th grade.

To invent something or to form a hypothesis you don't need to learn the notable trigonometric table by heart, but it's your duty to be able to reveal essential values through complete understanding of mathematical architecture in this chapter. Only after that you can look for this table on the web with a clear conscience. Ability to understand and to create logical connections, informational structures and algorithms has to prevail over the common memory-oriented skills. This plan has to provide us with professionals able supply crises to react to or

climate/pollution/health/wildlife changes, suggesting inventions and ideas to fulfil the sustainability draft.

Problem № 3 – Science's thirst for investments

Science's thirst for investments is quite a famous thing and actually that is not so strange as you could guess. Private investors in most cases rely on fast and predictable yield and that's exactly not about science. It requires a long-term and large-capital financing that can only be provided by government, international organisations or patrons. Today's numerous crises damaged the amount of investors and their investments, dedicated to different scientific studies, whereas, to our great bewilderment, the current war in Ukraine may even have a positive impact on some special directions, as a rule, connected with the military-industrial sector.

Moreover, there is a negative effect when a recognized scholar or a group of scholars, still being interested in their favourite occupation and the job of their life, appeal to extensive approaches in a dash to invent something new by scaling it (Large Hadron Collider for example, but take it easy, because if a success, this project may become an extensive method for overwhelming intensive decisions) thus consuming more financial resources, instead of discovering new directions such as alternative sources of energy or getting energy from the heat. Perhaps, a more fierce competition in science can boost the significance of inventions, this way fixing financial issues but this refers us to previous paragraphs.

Problem № 4 – Bureaucracy

Bureaucracy, as far as I'm concerned, follows or, better to say, haunts me and my peers even on the ridge of only embracing adulthood. I can't but admit that especially in my country it is slightly easier to take some formal and legal steps, so I can only imagine the significance of this problem in the EU. That is the merit of our Digital Transformation department with special reference to " $\mathcal{A}IS$ " and vast diversity of " \mathcal{C} " services.

Now let me explain the gist of this challenge. Trouble never comes single-handed, so does bureaucracy which brings an executive personnel bubble, financial penalties and citizens' reluctance to take any actions, to launch businesses for example and corruption, of course. If a willing heart, it can be fixed in a very short period following the Ukrainian scenario, but making it to the end without a multitude of compromises. Stubbing bureaucracy even fits in a manifestational slogan: concentrate – optimise – combine. So, basically optimisation is a good tool to gain some leftovers having limited resources.

Problem № 5 – Arms' race

In this section I'm not going to be very talkative, but it is still important to outline the subject. During the 2nd World War and the Cold War the arm's race idea got its physical execution. To obliterate the enemy thousands of scientists on both sides worked in different directions: be it weaponry, biology, space programs or nuclear projects. No matter the intentions, those wars ended up peacefully and military achievements were converted to civil practice but at a great cost of money itself, time and human lives.

The arms' race gave science a much needed competition and financing but partially took its sacred purpose – to help ordinary people around the whole world. Further, local conflicts continued to break out, hybrid and cyber warfare found its way down to the place of ours. Then hybrid warfare was replaced by actual war in the fields and towns of Ukraine. Thus, the arms' race didn't even stop. So it's high time to choose between wartime benefits for science such as competition and peaceful artificial contest for the bloodless budget.

Problem № 6 – Equal opportunities

Equal opportunities is hell of a problem, mostly because only one side of the dialogue sets its hopes on it. Let me remind you of the first problem, mentioned in this article – ideas and education's deficit. So, concerning ideas, we can be sure that

the more people we are capable of talking to, the more unique ideas we will definitely hear. That's because every single person has its own ample scope of observation and inner world. But we also know that any ideas, inventions, new things, long story short, are just combinations of existing things. And these statements do not contradict one another, because the more brains we have – the more combining machines aka people are available, as a result – the more ideas, but with one important note – these people have to be educated and wealthy enough not just to communicate, but to bring their ideas into life. And when we are talking about the countries that are still developing, we have to remember this formula. Their integration into our society requires a lot of efforts and expenses but in the end we will finally benefit from this cooperation and our task is not to get disappointed too early. That must be a green flag of equal opportunities not only between local social groups but internationally.

Problem № 7 – Management of resources

Moving on to the management of resources. At first I would like to make it clear that this problem seems to be the deadliest one and at the same time I can't even describe it with enough precision. On the one hand governments across the globe take positive actions in this field such as decentralisation which allows to supply and to trade in regions properly. On the other hand there are a lot of cases when issues with the highest priorities are neglected and trivial ones attract excessive attention from both media and governmental structures.

Media impact is ambivalent too, for example the problem of global warming took all the trophies on the TV, governments all over the world were forced to do something and spent billions for suspicious programs, but, in fact, it revealed that this "act of God" was astronomically scheduled and money should have been dedicated to solve completely different reasons for warming (there are a lot of them and it is a complicated thing though). To manage properly, ordinary citizens should have the ability to feel like parliamentary agents with authority not ending on usual petitions but real bills so that they could bring the problems of their home state to solution. Following the rule: "Accidents will happen even in the best-regulated families", – I must mention that sometimes such a democracy may be devastating, because human minds are easily controlled, but we have nothing better and it's up for you to decide or to create a new political regime.

Problem № 8 – Propaganda vs media cutthroat competition

Sometimes you feel the victory of justice when some real problems are being discussed through the media, but when the internet or TV has the power to impact a country and citizens' well-being it feels terrible. What is more, propaganda follows you, wherever you may go: billboards, posters, advertisements, national myth, acceptable customs. Propaganda is ok if it is high-quality with all essential references and researches, it even looks like a scientific publication. In this case there is a well-known proverb: "Believe nothing of what you hear and only half of what you see", so you can stick to this rule reading my article, I assure you that I won't take offence. But the problem lies in the fact that little do we know how many people are doing at least minimal fact-check. And I must admit that it's really tiring to play a sleuth every time we watch or read something.

No matter how cautious you can be, people and the atmosphere surrounding you suppress your desire for the truth, form your personality and infect you with a "zombie-virus". The solution to this hell may be a media cutthroat competition provided by complete freedom of speech. Initially it will cause a slump in the quality of information you consume, but later those media sources survive that suggest the most objective content and that will be ensured by the ability to upload something popular even with low budget, some day YouTube had these features.

Problem № 9 – Price of humans' lives

Formally, human life is priceless but what is formally isn't usually in fact. It's understandable that for a few centuries this price was going up because people acquired more rights and could be more useful. Our time is the apogee of this trend, almost everyone is free to do anything he wants, and even though this "anything" is limited, it's still wide, we have infinite opportunities and that is why our price isn't exact and therefore estimated.

Simultaneously there is a saying that every man knows his own price assuming that we can sell our mind, body and anything else, and if arranging your own life is acceptable for me, then wiping it out by someone's command is wild. This trick is frequently exploited by the government when they sacrifice a few men for others or the county's sake. But we can't trade one life for 2, 10, 100, 1000... lives. The choice we have authority to make is to choose between saving all, providing the best conditions for heroes (those who previously would just be sacrificed), and neglecting the situation. And as neglecting is mentally, not physically right and profitable, we only have the first option.

Another wound is a process in war-torn countries called dehumanisation. The worst thing about this is that absolutely everyone connected to any of the sides is exposed to such a process. People are being deprived of human qualities by propaganda and it adds insult to injury. It wouldn't be me if I didn't offer any general solution. As for me, modern overall moral dogmas are too weak to respond to such challenges. For example, now it is ok to protect yourself if someone attacks and even kill the murderer if you feel the highest level of danger or it is acceptable to treat your enemies like they treat you. All are not saints that go to the church, - the proverb says. Throughout history almost nobody followed the dogmas in their full editions, but people did their best to stick to some of them, being afraid of the afterworld. So, what if we set new dogmas and level them up to be more kind and merciful, than they are now. Then we will get a modern idol of pure innocence and love to look up to. Thus it's expected to gain a rise in people's morality, those who killed in revenge will swear in revenge and those who were decent will be able to excuse.

Hope for the best

Despite all the problems and challenges humanity faced, faces or will face, I strongly believe that we will cope with them sooner or later. Even during the toughest times we could find some light or a lighter if there was no light. But for the numerous problems of different difficulty levels this world wouldn't be so interesting. The unexplainable interest in surroundings is the first feature in our description and we have to save it for the upcoming billions of years. "He, who makes no mistakes – makes nothing", – that's exactly about us.

Sources:

1. Alarming decline in startup creation presents challenges and opportunitiesforentrepreneurs.CrunchbaseNews.URL:https://news.crunchbase.com/venture/startup-creation-challenges-opportunities-charts-sagie/ (date of access: 16.06.2024).

2. Contributors to Wikimedia projects. Sustainability - wikipedia. Wikipedia, the free encyclopedia. URL: https://en.wikipedia.org/wiki/Sustainability (date of access: 16.06.2024).

3. U.S. college enrollment decline: facts and figures | bestcolleges. BestColleges.com. URL:

https://www.bestcolleges.com/research/college-enrollment-decline/ (date of access: 16.06.2024).

4. V UTsOIaO nazvaly naipopuliarnishi predmety za vyborom sered maibutnikh uchasnykiv NMT-2024. Nova ukrainska shkola | Veb-resurs NUSh. URL: https://nus.org.ua/news/v-utsoyao-nazvaly-najpopulyarnishi-predmety-za-vyborom-se red-majbutnih-uchasnykiv-nmt-2024/ (date of access: 16.06.2024).

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