

Innovative approach for social changes by young students

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Abstract

Complex social changes require innovative solutions. Social development went from abundance for 20% of the population to crises for many more, over the recent decades. The middle classes are decreasing and getting poorer. Only 14% of adult persons were middle class. In USA 20 year young persons had on average almost no assets and at 30 years their net worth was on average 98,000 USD in 2015.

Neoliberal economic model is more a problem than a solution. Interdependency among us is sometimes better comprehended by youngsters. Innovations need a strict understanding of its impact on future development or even existence. Knowledge shared by massive open on line sources gives educational systems a new dimension. Individual specialist as volunteers in E-NABLER create free prosthetic arms for users' worldwide. Their motives are self-actualization through creativeness, pride from being able to change users life and not greed or profit.

Youth Parliament of Alpine Convention is another social model in the making. Their ideas might appear difficult to become innovations but are much more diverse and opening new horizons. A good practice of a platform where youth are able to discuss important topics when it comes to our environment and society is YPAC-Youth Parliament of Alpine Convention. European students, coming from countries connected under the Alpine Convention gather each year to discuss, document or teach about the problem each committee is presenting.

Keywords: innovative solutions, social changes, e-NABLER, YPAC youth parliament.



1 How can we cope with social and economic changes?

Complex social changes require innovative solutions. Innovations originate in the creative processes, which can result in expressed ideas. The idea creating process can be studied in four consecutive stages: preparation, incubation, illumination and verification. In this paper we would like to address social changes proposed by young students so we need to include some of the economic theory to contribute to the understanding of the problem in the preparational phase of idea crating process.

Economic theory and economic models were developed by great philosophers and great economists for centuries. For the problems addresses in this paper we will mention only few of them, the period they have lived in and their most relevant work for social changes, economic models and innovations. E.g. Adam Smith (1723 - 1790) – The Theory of Moral Sentiments and the Wealth of nations (Blaug, 1986, p. 232-235). Keynes, John Maynard (1883 - 1946) – General Theory. Joseph Alois Schumpeter (1883 – 1950) – Theory of Economic Development (Bannock et al., 1987). So the economic models in our society were developed for centuries, yet our society is in crises.

2 Global prospects for younger generation if current economic models prevail

To have some understanding of why wealth inequality is important for our future think about the values, ethics, norms and culture of different groups of people. What type of services and products need middle class families and what is consumed by ultra-reach people? Where do you expect more concerns for a sustainable socially responsible development? One of the issues is who is more successful in evading paying taxes – a way to contribute for our common needs and our social well-being.

2

Based on data about the wealth distribution in the world we can group some countries or even regions into richer or poorer ones; most or less innovative ones. The wealth inequality even in the richer economies or countries is more important for younger generation. Zumbun (2015) based his research on Federal Reserve USA data. Wealth of individuals climbs with years. Around age 30 their net worth is on average 98,000 USD. At age 40 their net worth is 308,000 USD and the peak is at age 62 at 910,000 USA. After this time the personal wealth on average decreases due to retirement and health spending. We can conclude that in 2015 an average 20 year old person living in USA had almost no assets and an average 62 year old was nearly a millionaire. Of course, most are not millionaires. The number is so high because of the statistical impact of very rich persons' wealth.

Global prospects are even more alarming. On Credit Suisse data based analysis by Treanor (2015) showed, that global inequality is growing. Half of the world's wealth is now in the hands of just 1% of the population. The middle classes are decreasing, and getting poorer and a smaller number is getting extremely rich. Only 14% of adult persons were middle class in 2015 with assets between 50,000 to 500,000 USD. The assets are calculated from the value of property, stock market investments (including retirement savings), deposits, but excludes debts. An individual needs only 3,210 USD to be in the wealthiest 50% of the world citizens! If a person owns more than 68,800 USD that means he is in the top 10%! The richest 1% own more than 759,900 USD. Before the 2008 crises there were 2% of the richest and on average they were poorer than the richest in 2015.



Since 2008 we know, that our neoliberal economic model of 20th and 21st century should not survive. It is not sustainable. Current economic model is more a problem than a solution. Interdependency among us is sometimes better comprehended by youngsters, since they are a group most distressed.

There are several reasons why younger generation needs to demand, initiate and participate in changes of social models for sustainable future:

- according to USA study young generation is the one with the least wealth;
- employment opportunities got worse and prices went up;
- the current economic model is increasing the world inequality;
- declining size and wealth of middle class;
- extreme wealth accumulation in less than 1% of world population.

3 Younger generation and their strength

One of the strengths of the younger generation is their motivation to contribute for better world. A growing number of initiatives like philanthropic organizations, volunteers, non-profit organizations and their knowledge, know-how and experiences through www. Never in the history has knowledge been as accessible as now through internet. To participate in courses from world's best universities is at hand on different platforms like Massive Open Online Courses (<https://www.mooc-list.com/>). MOOC are online courses aimed at large groups of "students" worldwide and are tuition free. Students that fulfil the course requirements can get certificate. Verified certificates need to be paid. One can select a Berkely, MIT, Harvard course or one from UK or European universities. The number of courses is growing and this model has an impact on higher education system. Similar are free online courses EdX (<https://www.edx.org/>) like a UC Berkeley course Journalism for Social Change (<https://www.edx.org/school/uc-berkeleyx>).

3

Motivation, knowledge and a different values system could be advantages of younger generation. In this fast changing global environment the changes are so fast that without a lot of new knowledge one can soon become obsolete or incapable of remaining a valued member of his team. Younger generation has advantages at least in new technologies, skills of using internet and social media. Like LinkedIn for professional connections or Instagram as communication channel in diffusion of innovations.

So young people have quite a few advantages and can be positive change agents of our future.

4 Reasons for creativeness and innovations

Innovations are new solutions to meaningful needs that are found beneficial by their users. They should include socially responsible sustainable development. So innovations need a strict understanding of their impact on future development or even existence. This might appear a bold statement. How can we predict our future development? Innovations are based on creative processes of individuals. We all are creative. Trough creativeness we express our capabilities and perceive our highest human need – for self-actualization (Maslow, 1998, p. xx). Searching for solutions of our complex challenges and problems in our own creative way. According to Maslow we are born with our innate needs to express and experience our higher values. Our higher needs and motivations are deeply and biologically rooted. Maslow (1998, p. 11): "Every human being has the instinctive need for the highest values of beauty, truth, and justice, and so on."



Therefore, creativity is our basic human need. As well as learning, fairness, responsibility and justice. What happens during the educational process and during our professional life that the results of our human acts in adulthood do not reflect neither fairness, responsibility nor justice?

Innovations are often growth stimulators. Democracy at all levels (in family, in organizations, in social institutions ...) is a precondition for innovative societies and is commonly highly developed in most innovative countries.

5 E-NABLER as a complex new organizational model

Our global environment, modern society and present economic models are too complicated and too complex to be easily managed. Complicatedness arises from features, characteristics, attributes of increasing number of ingredients, parts, elements.

Technological development of 3 D laser printers resulted in simpler and cheaper models that can be purchased by individual enthusiast - specialists and developed into useful tools. The first elements can be the intellectual capacity, curiosity, creativity. In combination with a new type of material PETG (polyethylene terephthalate glycol) (Rečnik, 2016, p. 50; <http://enablingthefuture.org/>) the 3D laser printers are not only for experimenting and modelling. The third crucial element is the knowledge or individuals, mostly younger generation. The fourth key element is the world wide web and fifth are open-source computer programs or free applications.

The complexity relates to the growing attributes, which are caused by relations, interrelatedness of components. With all the theoretical economic knowledge and practical experience and research we as humanity have not yet captured the essence or mastered the "classical" organizational models like limited liability companies (družba z omejeno odgovornostjo) or joint stock companies (delniška družba).

How are we going to master the newer organizational models or virtual organizations? Like 7,000 specialists, connecting through internet to design, develop and print artificial arms. They provide them for free to people anywhere in the world.

These more than 7,000 specialists are not motivated by profit. We could easier explain their enthusiasm with their need to be creative to fulfil their inner self-actualization process. They are deeply motivated when they see a child using their product.

What impact will such organization have on global community? Many children do not have adequate or of the right size prosthetic hand. They can cost thousands of EUR. And they need to be replaced as a child grows. This group of passionate specialists' volunteers from all over the world at e-NABLE is using their specific knowledge, open source technology and 3-D printers to provide new custom made prosthetic hands for free. Their goal is to give the World a helping hand. Their goal is not to patent their invention but to give them as open-source and public domain. These more than 7,000 people in 2015 created more than 2,000 devices for individuals in more than 45 countries. All these devices were donated by volunteers and given free to users.



A different type of new social system is being designed by the young Alpine students developing new economic models for sustainable future.

6 YPAC

YPAC is an acronym for Youth Parliament of Alpine Convention. Alpine area was undergoing many drastic changes in the 20th century, therefore in a need for connecting all the parts of Alpine region - this was firstly done with Commission for Protection of the Alps or CIPRA (Ogrin, 2012). CIPRA was created to protect the Alpine space by different means (e.g. houses that generate energy; corridors so that animals can move; adaptation to climate changes...) (<http://www.cipra.org/en/cipra/about>). Over the years, the tendency to connect “Alpine” countries grew.

The Alpine Convention was created and signed by Germany, Austria, Liechtenstein, Italy, France and Switzerland in 1991 on November 7th. Slovenia signed the Convention in 1993, followed by Monaco two years later. In 2006, YPAC was formed. Partner schools are: Akademisches Gymnasium Innsbruck (Austria), Kantonsschule Trogen (Switzerland), Gymnasium Sonthofen (Germany), Karolinen Gymnasium (Germany), Lycee Frison Roche (France), Gian Battista Brocchi (Italy), Fachoberschule Marie Curie (Italy), Liechtensteinisches Gymnasium (Liechtenstein), II. gimnazija Maribor (Slovenia) and Gymnasium and high school Rudolf Maister Kamnik (Slovenia) (<http://www.ypac.eu/about-ypac/partner-schools>).

Held once a year in springtime with additional preparatory meetings beforehand, it is a week-long meeting of European students. Around 100 students gather each year, taking on different functions or roles. One can participate as:

1. delegate - debating under CP's guidance;
2. committee president (CP) - narrating the debates in one committee;
3. press member - writing articles for homeland's newspapers, photo-documenting, interviewing;
4. president- organization of the event, leading the general assembly;
5. platform-future member- implementing the decisions/postulation by presenting them to local governments.

Functions or roles of a delegate and a press-member can be taken by anyone fit to join the YPAC, while other three roles are awarded after a minimum of 1 year experience with YPAC. Each year, there are three presidents (one from the hosting school and two co-presidents), who are experienced, often senior students with a multiple-year history of YPAC-participation.

At the beginning of the school year, each of the member schools starts an individual selecting process to create its YPAC delegation. Each delegation consists of 7-11 students and 2 accompanying professors. After the first preparatory meeting, the umbrella topic for that year's YPAC is known, as well as specific topics for each of the 4 committees students (delegates) are divided into. An important aspect of committee-structure is its diversity; delegates are from all partner schools in each of the committees, providing the later debate to be enriched by opinions from different countries, cultures and views.



Preparations start to take place among each delegation on a local level and are in process until springtime, when YPAC takes place. The impact (and importance) of these preparations is shown through the debates that take place the first three days of YPAC- if the delegates prepared adequately, the debate will be more complex and diverse, providing more postulations. Across the first three days of the week, each committee is visited by a professional or specialist in the field about which they are debating, so delegates can get fulfilling answers and insight on what was already done in the field.

Postulations are prepositions, formed by each of the committees, which are presented on the fourth day of YPAC- the General Assembly (GA). After the GA, there is a voting process in which students vote for the 10 best postulations. Students write them down as the yearly outcomes and present to local governments by platform future members and CIPRA representatives.

Postulations might appear difficult to become innovations but are much more diverse and opening new horizons. A lot of stress is being put on formulation of the postulations, as students discovered throughout the years that the postulations that propose 'smaller' and more graduate changes are more likely to be implemented later. A good example is Sonthofen, where a YPAC postulation encouraged the government to offer additional e-bikes for rent to the society (<http://www.ypac.eu/about-ypac/implemented-resolutions>). This case shows that some postulations are realistic enough to be implemented.

Alpine Convention and its areas of interest are usually guidelines for YPAC's yearly topic. In the document of Alpine Convention, the areas in which the contracting parties should take special interest are the following:

- population and culture
- spatial planning
- prevention of air pollution
- soil conservation
- water management
- conservation of nature and the countryside
- mountain farming
- mountain forests
- tourism and recreation
- transport
- energy
- waste management

(http://mountainlex.alpconv.org/images/documents/European_agreements/alpine_convention.pdf)

Developing critical thinking is very important for young people. Another important aspect is reflection on our living space and possibilities of its improvement. YPAC offers an opportunity for students to improve these skills, as well as practice public speaking and debating as a form of exchanging ideas.

YPAC creates an opportunity for high-school students to explore the diversity between (seven) cooperating countries, learn about problems of the modern-age Alpine environment and propose solutions. This year green economy and circular economy were also discussed.



The latter is then presented to local governments, creating an opportunity for the youth's voice to be heard.

6 The findings and conclusions of the paper with thoughts and suggestions for further research

Economic models designed for centuries by great mathematicians, philosophers and economists became obsolete. In 2015 there were only 14% of adults in middle class with assets between 50,000 and 500,000 USA: Young persons at 20 year in USA have as statistical group no assets. Their employment opportunities got worse and prices went up.

Motivation, knowledge and a different values system could be advantages of younger generation. Their advantages are new knowledge, interest in new technologies, skills of using internet and social media and can be positive change agents in diffusion of innovations of our future.

7,000 volunteers in e-NABLER creating prosthetics arms with open source technology and on donations based production can be perceived as a complex new organizational model. This and other newer organizational types should be studied as innovations.

In YPAC high-school students explore the diversity between seven cooperating countries, learn about problems of the modern-age Alpine environment and propose solutions. This year green economy and circular economy were discussed. Their postulates are presented to local governments, creating an opportunity for the youth's voice to be heard. The most difficult and concerning aspect is the actual implementation of postulations to the functioning of governments. What can be done to develop their postulates as more feasible?

7

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