

Education: an Essential Tool for Reaching the UN SDGs by 2030

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During the last decades we experience tremendous changes, while we rapidly move from a traditional capitalistic economy to a new economy. The new economy is driven by very rapid and drastic technological changes. A new growing and unlimited resource – data. Information, knowledge is added to the traditional resources: land, capital and labor. Computers, communication and internet of things enable to drastically cut marginal costs of production in many areas. The concept of mass production and mass merchandizing is replaced by the ability of manufacturing small lots at low costs. We are not just living in an era of changes but rather in a change of era. Global economic growth in recent decades has been accompanied by the creation of immense environmental and societal risks that literally threaten the survival of humankind on planet Earth. Among the major environmental threats we should mention the depletion of major resources, the tremendous growth of air, water and land pollution, the rapid disappearance of plants and animals, the fast loss of resilience due to loss of biodiversity, the drastic – and faster than expected- climate changes. And above all the fact that today we globally consume 1.6 times the steady state ecological resources. Unlike a family that can temporarily live beyond its means. The entire world can't do that (As the former UN General Secretary noted: we have no plan B since there is no planet B... The societal threats are related to major demographic changes, migration, urbanization, employment insecurity, retirement insecurity and growing inequality in income distribution. The environmental and societal threats to humankind grew as a result of focusing merely on the economy and on economic growth: nations are still striving to increase their GDP, and firms concentrate on increasing their (short term) profitability and wealth. So at present we serve the economy rather than having the economy serve our values.

Metrics do not merely serve as a tool for measuring results. They actually act collectively as a compass, as a dash-board, leading us on our way! Using inappropriate metrics leads us to the wrong directions. There is no way to solve a problem by maintaining the same principles that created it. In order to move the world to a corrective path, there is an urgent need to stop neglecting non-economic dimensions. In other words, there exists a need for the world to redefine basic metrics by adding non-economic dimensions to the "dashboard". Embracing such a metrics creates a paradigm shift from an industrial world to a post-industrial

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world. We must replace the current sole goal of “maximization of economic values” with a multi-dimensional framework that besides Economic attempts to reach also, Societal, Environmental and Consciousness considerations (“ESEC”).

Attempts to mitigate climate changes, to handle environmental issues, and to correct societal issues require united global efforts, and have started already at the Rio 1992 UN Summit. But only the 2014 agreement between China and the USA, the two countries that are responsible for more than a third of the global pollution, paved the way to the 2015 Paris Accord.

The UN suggested a new set of 17 quantitative and qualitative Sustainable Development Goals (SDGs) that could serve as a new metrics. Maybe it is not the ideal metrics, however we can't let the excellent be the enemy of the good. At the end of 2015, 193 states accepted and committed to reach these targets by 2030. These ambitious targets require major efforts.

The relevant planning horizon of most leaders and executives is quite short. Moreover, they typically think in terms of hundreds of millions or billions, but seldom in terms of trillions of dollars. Leaders and executives must learn to operate on a completely unrecognized 1000X scale where more and large infrastructure projects have to be initiated and built within a short period. In order to achieve the committed targets by 2030, there is a need to reach in the near future, say by 2020, an interim goal and change the scale of thinking from \$ billions to \$ trillions (we call it “from B to T by 2020”) and acquiring the needed managerial skills and tools to activate the reform. If we shall not accomplish this interim goal by 2020, there is no chance to reach the committed outcomes by 2030 as we are talking about big projects that typically take long planning and building periods. These processes must be started as soon as possible. Reaching the goals by 2030 is quite ambitious. And a delayed start means even harder efforts. Up to a point that it will become impossible to achieve the goals, and it will be beyond a point of no return. This is only the first phase, yet a critical and urgent stage in the corrective path.

The educational challenges at this stage is centered on the need to train the leaders and managers, the engineers and designers, the accountants and planning and strategic departments. The above call for a transformation, a paradigm shift, cannot be realized with the tools of the old paradigm. It can happen only with new managerial tools. This by itself is an ambitious and enormous mission to meet. The only way to do that is by first training the leading consulting firms and the large accounting firms, with the help of the elder business mentors who know how to make a transformation happen quickly, and then to join forces in preparing the leaders and executives. We know how to do that. At YK Center, we have the right international teams of senior business mentors and experts and have developed tools for what we call “Trans-Form-Nation”. This is a method to prepare governments and large organizations to deal with these challenges effectively and with urgency. Due to the very frequent changes around us, the planning stage has to be very flexible. Therefore, the common approach that allows only continuous and smooth passage from the present to the future has to be replaced by a reversed direction: from the future to the present. In other words, it is important to redefine the (multi-dimensional) vision and values, and then agree on the desired future. Then there is a need to identify the obstacles and to find ways to deal with them. This educational approach ends up quickly with major breakthroughs (either things that were defined at first as impossibilities, or things that were not thought about earlier).

Most people have a natural tendency to fear and resist change. That fear is augmented by a weird term like “paradigm shift” that involves thousands of changes. Despite the fears, this may be complex, but not complicated! It simply requires a new way of looking at things! Those of you that watched the movie *Avatar* probably remember the situation where the hero, living

in sort of a black and white two dimensional space, is transformed into an amazing colorful three dimensional world. The audience experienced the transformation by merely wearing special glasses.

Assuming that the end result will be achieved and humankind will manage to prevent the catastrophe in time, there are two additional educational challenges. One, is to reach the fourth SDG – i.e., the education quality goal. And the other is developing the very young generation.

In order to meet the 4th SDG, we are developing Edu-Coaching programs with collaboration of many educational institutions: elementary, secondary and vocational schools as well as universities. In the past teachers had the knowledge and also the experience that was useful for the future. Now the students have access to all the knowledge in the world and the experience is quite irrelevant for the new economy. One of the goals is to reach the higher level of speech that comes from the frontal part of the brain, rather than from the ancient brains, as this brings to much better joined operation, driven by logics and better control, where the instinct reactions are suppressed most of the time.

The education of the very young generations (kindergarten kids) is also important. At that age children can absorb easily the ability of using the higher level of language, and at the same time they can be guided to use their inventive powers and be attracted to study sciences. So that later on they will love to study the more advanced sciences. And will be good at it. What you learn at very young age imprints you're your behavior and attitudes for the rest of your life (the Jews used to teach very young kids to read and write a few languages at very young ages, and rooted the basic religious ideas in their minds).

The paradigm shift requires immense investments, trillions of dollars per annum. We have a possible solution to where the money could come from. This is less relevant for the current presentation but just for satisfying the curiosity we shall devote a few words to our suggestion. The only potential sources for long term financing are (1) the public sector (governmental budgets and especially social security programs), and (2) the pension plans, retirement and saving programs, and long term life insurance products of the private sector. The financial institutions of the private sector currently manage for their customers an immense portfolio of approximately \$80T. That money was the basic target and motivation for the PRI and PSI initiatives during recent years. Unfortunately, in a world of very low (near zero, actually) interest rates, there is little incentive to save money and little appetite to finance impact investments.

Everybody must understand the key role of interest rates in creating attractive retirement plans. High yields are a necessary condition for attracting higher savings and for enabling higher investments. If we will be able to identify investments with high yields (and I will show that we can do that) then we will be able to create an accelerating self-propelling cycle: higher returns on a retirement plan's portfolio will enable the offering of attractive retirement schemes. This, in turn, will motivate larger long term savings, and thereby will enable the financial institutions to finance more impact investments. As long as these investments will continue to yield high returns, this self-propelling cycle will continue.

Is it possible to generate such a self-propelling cycle? Assume that a private investor decides to build a solar power station. The only revenue stream the investor sees comes from the sale of the electricity. However, if that investment would have been done by the public sector, it would have created a much higher yield as—from the public's point of view—there are additional direct and indirect benefits; public investments are tax exempt and, in addition, when measured correctly, the public would see other benefits like reduced carbon emissions, positive impact on population, health, job creation, etc.

Therefore, funded social security plans can easily be adjusted to offer a high implicit rate of return on their old age pensions.

Directing private insurance portfolios toward the same target is, however, somewhat more complicated. From the private sector's point of view, most of the societal and environmental costs and benefits are regarded as "externalities" and are often not considered by private industry decision makers. In order to synchronize private sector decision making with the public interest, and in order to be able to offer higher rates of return on the investment, there is a need to "internalize (endogenize) the externalities". There are many ways to do this. It is possible to use certain market mechanisms (such as pollution trading options) and to benefit the private investors by other mechanisms (through taxation, subsidization, public guaranties for minimum yields, etc.) depending on local circumstances and on ideological differences.

Many ideas can be adopted by studying the solutions that were used a few decades ago (typically after WWII) by many countries in order to finance infrastructure projects that were necessary to fuel economic development. The Israeli example is especially relevant in this case. Soon after Israel was established, the government coffers were empty due to the cost of the War of Independence together with the unusual challenges of absorbing a huge number of Jewish refugees that were expelled from Arab countries as well as holocaust survivors from Europe. The population was very young and there were no jobs. There was an urgent need to invest in infrastructures, factories, houses, creating jobs and having to deal with "melting pot" educational challenges. The government decided to do that by encouraging creation of insurance and pension arrangements as well as by establishing a social security system to take care of the population that would reach retirement several decades later. The government issued to the retirement institutions long term bonds bearing high yields and tax arrangements that enabled these institution to offer very attractive retirement plans, bearing high yields to the savers. This created a very high saving rate in the country. In addition, the government has introduced a funded social security plan that invested its funds in quite similar governmental bonds. Funds raised through these special long term bonds fed a "development budget" (separate from the government regular budget) that activated a number of specialized sectorial development banks that made the impact investments. This had been the major tool for financing the country's growth during its first four decades. Many countries, especially the developing countries, can learn from this example and can adapt it to their needs by this public-private joint effort. People may relate to this as "subsidies" but in most cases it is merely bringing back to the surface the mismeasurement of the performance that resulted from the exclusion of the external benefits from the traditional financial yield calculation.

Such ideas may, of course, face ideological criticisms as people often resist governmental intervention in the economy, as well as mistrusting government willingness and ability to honor long term goals. Therefore, many people prefer to have privatization at any cost. It is the classic debate between the late Prof. Milton Friedman's approach that "the purpose of business is merely business" and neoclassical economists that support a certain degree of government intervention in the economy, especially as the pure capitalistic theory is an unrealistic utopia. As another Nobel Prize laureate, prof. Joseph Stiglitz noted: "The 'invisible hand' is invisible since it is not always there." Capitalism does not always reach the desired theoretical optimal solutions because of lack of free competition, the existence of externalities, and the fact that some elements (e.g., "the commons" like air, natural resources, natural values, etc.) are not fully represented in the determination of equilibrium prices. Therefore, there is a justification for some intervention in the pure capitalistic system.

Opponents of any governmental intervention typically emphasize the potential inefficiency and even corruption of governmental systems. But the popular attempts in many countries in recent decades of privatizing governmental activities at any cost had exposed similar inefficiencies in the privatized industries. These actions were often discovered as means for transferring important and valuable public properties at low prices to private hands. Also in the Israeli case that I mentioned earlier, there were complaints about certain distortions in capital allocation, inefficiencies and even corruption cases despite the efforts to run a very “clean” system. A certain degree of disorder seems to exist in both governmental and private systems around the world, and can be prevented and mitigated by education, regulation and efficient controls.

Now, when almost all countries have adopted the new metrics—the SDGs—and have committed to reach these goals by 2030, it is the time to mobilize these programs. We showed above how a country can do what an individual can’t—lift itself off the ground by pulling its own bootstraps! These mechanisms can be established and activated within a short period, and can be used to simultaneously treat at least three major and pressing global challenges: mitigation of major social and environmental threats through the appropriate impact investments, creating jobs and reducing the job insecurity of Millennials, and re-establishing retirement security for Millennials and future generations. In short, hitting several ambitious and extremely urgent targets with a single arrow!

Can we do this "Trans-Form-Nation"? Yes We Can!