

Future of “*Economic-Is*m”: Repurposing of Systems Dynamics to enable convergence of multiple streams of thoughts and innovation

Partha S Ghosh

In an era of knowledge explosion, it is only natural to expect that it should be relatively easier now to spread the “enthusiasm of learning” and “beauty of enlightenment” across communities and nations, and to help organizations—corporate and government, for profit and non-profit, craft leadership/management processes that are wiser in their resolve and more genuine in their actions.

However, the unfortunate developments in the past several decades at the macro and micro levels, to name a few, the sub-prime mortgage meltdown to the financial crisis in 2007/2008, collapse of Enron, WorldCom and several others during the turn of the century, continuous erosion of ethics in industry world wide, to short sightedness of political / government leaders from North Korea to Syria, Iran to the U.S., and continuing spread in “*economic inequality*”, only underscore that we as a civilization have repeatedly failed to build on our collective wisdom. In the process, we continually get mired into acts where the trust people place on leaders is compromised; more importantly, perhaps unconsciously, leaders attach values to measures of success, which are highly limited and constrained by lower level human instincts.

It appears, that in systematic intervals, as if lower level human instincts in individuals, who are custodians of large organizations, end up abusing perfectly valid financial instruments and/or market mechanisms to meet their personal agendas. When instruments harmonize they create elevating symphony, when one or two notes gain in strength over others the sound of disharmony is indeed damaging and over powering to create the “black hole” of the socio-economic system.

I do believe that humanity is ready to make a generational shift, and I do hope this paper which views the challenges and opportunities on this planet from multiple perspectives, will provide leaders in academia, business and government the inspiration to move forward with a full range of initiatives, - large or small, in resource rich and/or resource constrained communities. The forward-looking programs must be carried out with high level of rigor and vigor, so that our future generations find economic processes and industrial models in place are sustainable, if not inspirational. If nothing else, they will thank us for saving the fragile planet for the roles that they could play in the advancement of humanity and celebrate the symphony of nature we live in.

In view of the profound challenges and opportunities the global economy is faced with, and as a result the tectonic shifts that both developed and developing economies might experience in this century, today I will like to share my views on how we might rethink the fundamental constructs of the future economy – at macro and microeconomic levels. I have organized thoughts around *three points*:

1. Future of Global Economy in the Era of Complex inter-interdependencies?
2. Beyond Capitalism and Socialism: The Next “Ism”?
3. Managing convergence of multiple disciplines: Increasing significance of the “Art & Science of Systems dynamics” & “Cross-disciplinary” interplays?

1. Future of Global Economy in *the Era of complex inter-interdependencies?*

There is an emerging consensus world wide, that the way the current global economic system has evolved in the last 500 years based on the extraction and processing of natural resources, that it is not sustainable. Particularly as (i) the current industrial models continue to fuel global warming in turn threaten the diversity of the global ecology, (ii) the economic equations enhance the divide between rich and poor, and (iii) governance/leadership models *at macro and micro levels* are increasingly short on foresight and ethics, if we do not find alternative approaches to fuel economic advance, not only will current economic constructs of G8 will be challenged, all the enthusiasm within the rapidly developing regions like Bangladesh, Brazil, China, Indonesia, India and many others, - in undergoing *over due* economic development, will be quickly derailed. In turn, international cooperative processes such as the institutional mechanisms (WTO, World Bank, IMF, UNDP etc.) for policy and monetary coordination¹, will get severely strained, their credibility undermined, and their basic survival as a result, could well be threatened.

Energy and mineral resources politics has always been complex. With increasing shortages of strategic resources in the midst of rising aspirations for economic advance in under privileged regions, the politics of earth’s resources will become exponentially more complex and viscous. Resultant stress and strain on international trade and investments, and geo political alliances could be significant, so significant that if not addressed in a preemptive fashion lot of the positive effects of socio economic advance due to the two industrial revolutions (*Steam engines in seventeen hundreds and Internal combustion and jet engines in the nineteen hundred*) and recent information revolution (*The convergence engine effects*²) could get erased in a

¹ By the Institutions that have been developing during the post World-war II and post Cold war era across national borders

² Economic value created through the *convergence* of the four Cs: Communication (*broadband wireless connectivity towards “always on” infinite bandwidth*), Computing (*distributed embedded*

hurry, and new cracks in the geo political architecture as we know it today will appear and rapidly deepen and widen.

What is more challenging is that even if we had easy access to unlimited resources, the global economic system is at that stage of its development curve where the atmosphere and the ecological dynamics of the planet itself have reached a limit in terms of how much green house gases including carbon dioxide it could accommodate without seriously damaging the hydrosphere, biosphere, and geosphere. The recent increase in the frequency of floods and droughts, typhoons and tornados on the one hand, and the drying up of rivers and lakes (e.g., Lake Chad, Dead Sea), deforestation of the Amazon, and disappearance of snow-capped mountains in the different continents on the other, rising sea levels and increasing floods, are just a few early signals underscoring the seriousness and complexity of the challenges ahead.

Especially for countries like Bangladesh and India, nations in the ASEAN, where the population density is high and seventy percent of the people live in the rural sector, the problem is even more serious and immediate.

Thanks to the marvels of convergence technologies, on one hand the world has gotten connected in turn has gotten smaller. The exponential growth in international trade and investments, spread of TV and internet/social-media culture have rapidly created a complex set of interdependencies between distant communities. However on the other hand the economic and emotional distances between richer and poorer communities have rapidly increased. As a result it seems to me we often fail to realize how perfectly well intended initiatives in one segment of the global economy, could potentially victimize the other segments, typically more vulnerable - which we often rationalize as *"unintended consequence"*. For example speculation in commodity futures in Chicago mercantile exchange could indirectly livelihood poor farmers in Brazil or Bangladesh to Cambodia or Congo.

What is more disturbing is that policy makers in governments and businesses have become quite generous in using the term *"unintended consequence"*, often not realizing that the nature of damage such shortsighted policies create. Principally because of the lack of comprehension of the all the variables that interact with each other, economic policies in benefiting a few in the privileged economies, end up hurting wider sections of the planet. Sometimes such effects often play out far away in gradual fashion over decades (such as CO₂ emission in Tokyo and London could trigger rise in sea levels affecting the livelihood of population living in low lying areas, often

intelligence with increasing processing power for crunching of data/information real time), Content (interactive knowledge- informative to promotional) and Commerce (electronic and mobile, - enabling short and long micro transactions) leading to development of mobile 24/7 knowledge based services and businesses.

in poorer nations), and sometimes far-reaching calamities occur very rapidly due to technological carelessness (e.g. *Nuclear melt down at Fukushima*). Seems to me in absence of a full perspective how various economic (incentives, reward mechanisms), cultural (preferences, work ethics) social (day to day behavioral elements) variables interact with each other, our internal difficulties as human beings to make the right judgment calls—are as serious, if not more, as the external challenges we are faced with in harmonizing exponential increase in the complexity of our challenges with global imbalances in energy/environment, ecology and ethics/equity.

Accordingly both on the supply and demand side of economic equations we need to change. *Change we me must*, not only for the short term by consuming less and/or by demanding more efficiency of what we use today, but also for the long term by inventing and putting in place processes which could fundamentally reconstitute our production and consumption instincts. Such a change cannot happen by simple linear extension of the current ways of being and economic thinking, we must first learn how to embrace exponential rise in complexity of interdependencies, - *a few visible and many less visible*, and then envision a future with a zero base mind set, with “*eco-neutral and lowered inequity*” resolve, and then work back to define the issues that we must address today.

Only, such an approach will give birth to a full range of new concepts of community, education, health care, industry and work, in turn governance, which I believe will open up new wealth creation and employment possibilities. My vision of such a dynamics will not only offset the ill effects of the meltdown (economic, and environmental) but create new growth pathways, beyond the standard choices of capitalism and socialism, which could draw significantly more people from under privileged economic backgrounds in the global market place.

2. Beyond Capitalism and Socialism: **The Next “Ism”**

There is no doubt that the economic and technological advancement we have witnessed has been possible because of the unleashing of the innovative instincts of society leading to development of market mechanisms that has further propelled development of technologies and innovation in general. Indeed, since the advent of the steam engine the world has witnessed different shades of large scale experiments with essentially two contrasting economic philosophies – market driven resource allocation triggered by power of self-interest, - which we call Capitalism, and government driven resource allocation to enable social equity which we call Socialism.

With the increasing of economic prosperity of the nations, which adopted different variations of Capitalism, and the demise of the Soviet styled socialism in ex USSR, Eastern Europe and several other nations, it has become clear that while the essential purpose of socialism is well intended to serve wider section of a nations population in an equitable fashion, it is difficult to implement a centrally controlled economic system in a disciplined, ethical and responsive fashion. As a result, socialistic economies could not deliver its promise of economic well being to its citizens, leading to the fall of the Berlin Wall, collapse of USSR, and breakdown in Eastern European socialistic economic architecture in the early nineties.

However with the increasing divide between rich and poor particularly in those nations which have celebrated purer forms of capitalism it is also clear that on the long-term capitalism as we know today could make societies unstable. This underscores what Karl Marx once stated that *"The worker becomes **an ever cheaper commodity** the more commodities he creates. With the increasing value of the world of things proceeds in direct proportion to the devaluation of the world of men"*. The widening socio-economic divide in a nation like the US which has been the flag ship of Capitalism, has created an economic pyramid which today has a fragile but expanding base that feels continually marginalized and disenchanted, a shrinking middle class, and a small segment at the top of the pyramid with massive economic, consequently political power. Naturally not sustainable long-term; - which led to the occupy Wall Street movement in 2007/2008, and many ways Trump' victory in November of 2016.

Time has come when we have to fundamentally reexamine how to manage the development of market and financial instruments that will be in harmony with the greater purpose our mind must aspire to serve, not over power it. Otherwise, we will be suffocated within the constraints of the two extreme doctrines, and be drawn into *"economic black hole"*

Indeed in shaping the future of global economy which is (i) *based on sound ethical doctrines*, (ii) *more equitable*, (iii) *ecologically healthy & environmentally friendly*, we have find ways to:

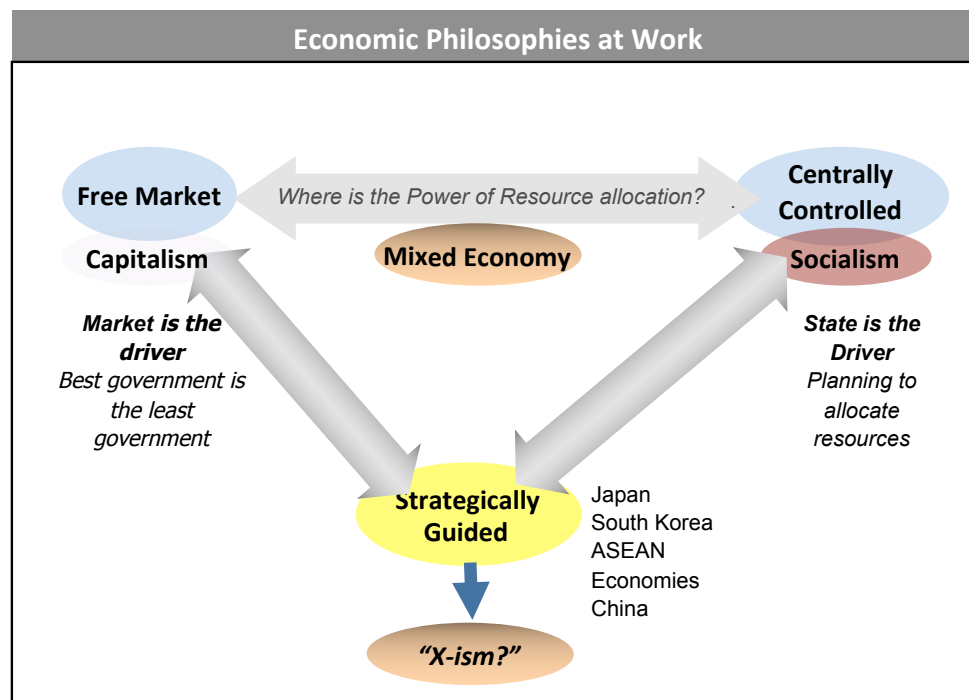
- ✓ Create and implement mechanisms that will ensure "kaizen spirit" (continuous improvement and fine tuning) is at work, - in engineering the socio-economic dynamics that will create an upward *"economic buoyancy"* at all levels of economic strata, - particularly at the base of the pyramid
- ✓ Ensure the power of self interest is continually sparked to serve a bigger vision and a social purpose an economy should strive for, *not* for the benefit of the few, but wider segment of the population. While the markets will be the principal driver of self expression in turn economic activities, the activities must take place within a system of higher order guidelines that are forward looking and serve a bigger purpose

- ✓ Enable continuous cross fertilization of scientific and technical disciplines, multiple streams of inquiry and thoughts, to create problem solving ecosystems, which are inclusive and tailored to serve different segments of society

When the above doctrines are established in (i) respecting every person's fundamental desire for "self expression" in *harmony* with the local environment, and (ii) intelligently networking & socializing with other communities (*much like the way www/internet has forms communities*) to enable exchange of best practices, a new form of "economic-ism" could indeed be in the realm of possibility, which I have often termed "**X-ism**". In other words, "**X-ism**" is an economic construct that continually evolves like a biological eco system, which continually fuses multiple disciplines, multiple lines of enquiry, and thought processes into a problem solving power, - that strategically guides the market forces toward a shared vision of the economy.

East Asian Nations such as Japan in the fifties through seventies, South Korea in the seventies through nineties and more recently China through the eighties until now, have exhibited several, not all the features of "X-ism" to drive their economic engines at during their high growth eras. (Exhibit 1).

Exhibit 1: Resource Allocation Mechanisms



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Essentially in advancing the promise of "X-ism", we need to establish better harmony at multiple levels of our being. Harmonic relationships could follow the

way nature organizes itself to serve diversity, be self-organizing, self-regulating above all sustainable.

Structuring Choices at the Point of Inflection

In order to transition toward the new “ism” which is eco-friendly, we have to go beyond “*doing more and better of the same, with less*”, so that we could give birth to fundamentally new social and economic constructs both at the macro policy and micro economic levels. In order to do so, I believe two types of strategic initiatives, not in isolation from, but in perfect sync with each other are necessary:

1. Short term “quick win” initiatives to do with less and more efficiently of the extensions of the same concepts of value propositions from the past
2. Longer term “change “ initiatives that will enable of development new path ways of social and economic advance

Below I have laid out a few initial ideas to *illustrate* the nature of changes we must consider which will enable quick wins, and yet be transformational.

- *Making Balance Sheets become more conservation inspired:* If manufactures of all durable goods from batteries, electric bulbs, to cars and home appliances instead of selling the products they manufacture, rent/lease them to their users, new forms of business models could emerge, which might trigger a fundamental change in the behaviors and economic rationale both in manufactures as well as consumers. From accounting stand point the products will be treated as assets in the balance sheets of the manufacturing company, and the functionalities the products perform and the associated services will be so priced, - that they will constitute principal source of revenues. Such a shift in business model, could lead to a range of high value added service focused opportunities which manufacturing companies could participate in, while having transformational effect on how today’s industries are structured and value propositions are defined, in turn develop eco friendly partnership with the consumers.

In fact, in the last twenty years, several forward-looking companies have made impressive progress in this direction. For example, Interface, an Atlanta based company since the middle nineties, has a tradition of evaluating the life cycle impact of its products on the earth from the raw materials to customer use patterns to the end of life cycle of its products, and in turn it recovers significant percent of its raw materials for entry into its manufacturing system. In the process company has successfully switched from selling carpets to renting carpeting services which is not only

more profitable and eco friendly (as close to ninety percent of the polymers are recycled) but it also, in the process builds an annuity business model “locking in” the customers for the long-term, with emphasis on cooperative relationship, as opposed to transaction oriented opportunistic interface, with its customers

More recently several companies such as Uber, Lyft in transportation service and AirBnB in hospitality have underscored the model of sharing existing assets to provide quality services to their customers.

- *Fast Forwarding Fad in design and manufacturing philosophy:* Since the early years of the 20th century as mass production gained in dominance, design philosophy has been essentially driven by how the point of equilibrium between flexibility (for customization), standardization (for mass production) is economically attained for securing competitive advantage. However in a resource constrained and eco sensitive environment we need to consider shifting toward a design philosophy which will (i) enable life cycle extension of products through *upgrades of only those components and functionalities which are influenced by technological changes*, and (ii) *ensure recycling of passive components (e.g. products frames, chases etc.) at the end of multiple cycles of upgrades*. As products reach the “true end of the life cycle” state, Chemical Industry particularly in concert with Convergent industry (*product of convergence of computing, communication, content and commerce*) must find ways to develop processes which will enable each industry to recycle the atoms and molecules extracted from the nature in a cost effective fashion, while helping creation of product concepts whose life cycles are extended with continuous upgrades not by disposing of products, but enabling development of the functionalities which could be achieved through digital upgrades or easy to replace modules.
- *Reinvigorating the Agro sector with a wider and a bold vision:* In parallel, leaderships of all the nations must commit to repurpose their Agricultural sector not only as source of food but as the source of a full range of raw materials which could serve as renewable resources for Construction materials, Chemicals, Dyes, Energy, Fragrances and Fibers, Polymers and Pharmaceuticals. Today we understand the science behind most of the materials mother nature provides us, what we need to work on is how we apply our knowledge in biological, genetic and information sciences to improve the productivity of land for different climatic conditions, improve the yield of the desired active ingredients for different species that we cultivate, while preserving if not enriching the ecological balance.

Particularly in those nations where a large percentages are still in the rural sector such a strategic shift is not only required from an ecological standpoint, it will also help the nations to activate their rural sector with a new vision. Such a vision will not follow the conventional urbanization route of economic advancement of the 19th and the 20th century, but it must activate each village to become value addition center of the agricultural/natural resource base of the local region and culture, in turn create self sufficient cells of economic activities, networked with other centers for efficient use of scarce resources and knowledge. In an era of broadband connectivity, it is a possibility that is a relatively easy to take realize, an avenue which we must not miss.³

Especially the nations in the tropical zones who enjoy biological diversity, extensive sunshine and rivers, if their leaderships view the potential of “*eco-friendly economic dynamics*” with a holistic, systems engineering and strategic perspectives, multiple industries could indeed leverage this “natural dynamic” to develop economic models which could be a source of inspiration for other regions to draw strength from.

In moving forward with such possibilities, we must realize that for the first time in our history, humankind has arrived at a point which offers us a “*generational opportunity*”⁴ to fundamentally change the relationship of man with nature, to counter today’s challenges of imbalances of the 3Es, and to explore the possibilities which are truly respectful of the divine potential of earth’s fragile ecosystem.

³ When intelligently networked & socialized with different communities (*much like the way internet & social media has formed communities*), a new form of “*economic-ism*” could indeed be in the realm of possibility, which I have often termed “*X-ism*”; an *economic -“ism”* which is at the cross roads of multiple disciplines, multiple lines of enquiry, and thought processes on socio-economic constructs.

⁴ By generational shift, I mean a discontinuous change in the ways we have evolved as a civilization, where our essential logic of development that has been “*human centered*” celebrating Darwinian theory, as articulated by Spencer “*survival of the fittest*”, at the cost of undermining the “*fitness of the whole*”. I believe we have to now accept that the “fitness of nature” should be first revered, which in turn will drive the fitness of our advancement. In the same spirit, within the mainstream thinking of our future economic rationale, we have to revive (i) the principles with which Aristotle worked to promote moral justice, fairness and ethics in the context of human interactions, and (ii) what Confucius (551-479 BC) preached and practiced - concern for the larger environment, what he termed as the Golden Rule: “*What you do not wish for yourself, do not do to others;*”, “*Since you yourself desire standing then help others achieve it, since you yourself desire success then help others attain it*”. In the same spirit, we should consider resurrecting the teachings on “*harmony with nature*” in the Vedas, which developed in the Indo-Gangetic plain (more than 3500 years ago). In order to enable the kind of *generational shift* that we require, we have to undertake define and programs for the survival of our planet, in turn make the basics of “*X-ism*” become possible.

Exhibit 2: The New S-Curve for Economic Advance

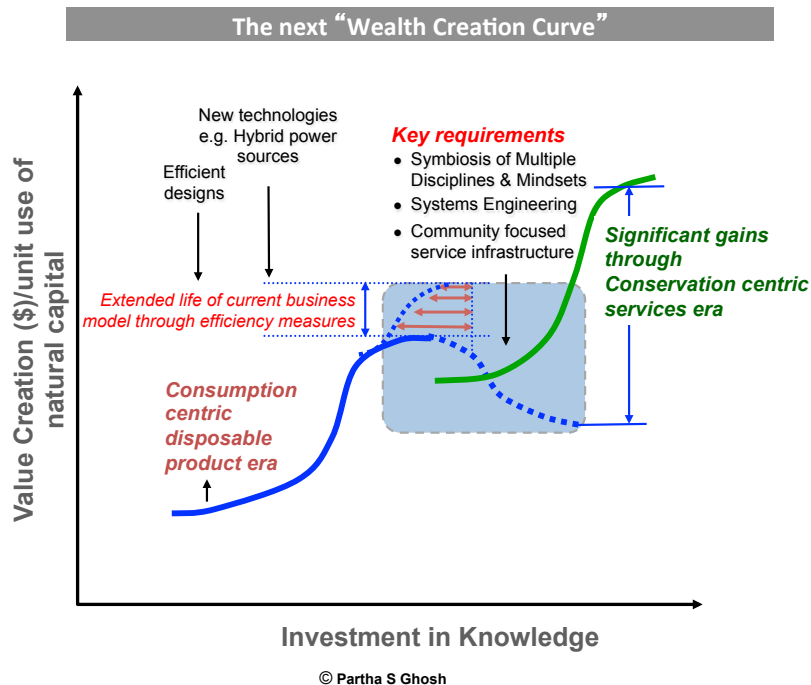


Exhibit 2 visualizes the nature of the change that could occur if we undertake three distinct types of fundamental programs to (i) improve productivity of raw materials through improved use of functionalities of materials facilitated by “solutions selling” (toward enhanced conservation) (ii) increase efficiency of conversion through bio-mimicry and process intensification routes, and (iii) enhance usability of scarce resources through advanced recovery systems supplemented by an expanded and enhanced role of agro based industries.

*Emerging Nations as Incubators new social constructs, Not
Just easy adopters of end of life cycle technologies*

Clearly the opportunities ahead in repurposing today’s delivery processes and value propositions, which are all 3E sensitive, are significant. Equally challenging is the magnitude of the obstacles that we must overcome in order to address the issues, and to build consensus toward a set of well coordinated action programs. While the leaderships of advanced markets perhaps are more conscious of the fragile nature of the ecosystem of today’s economies, the inertia and momentum of investment and consumption habits (in spite of all the incentives and penalties), will take time to change, - seriously increasing the possibility of our planet reaching an irreversible state of bio-chemical “draw down”, from where we could only move towards the collapse (*sudden death*) of our ecosystem.

So we must act now. And what better place we could begin the birth of the new concepts of economics and of living, -from *value creation to value delivery*, than those parts of the world, which are least, effected by the 19th and 20th century models. Although it underscores how modern economics has failed to spread the benefits of the marvels of modern technologies to large segments of the global population, it is indeed fortunate that close to three quarters of the world population is very little effected by the 20th century economic advance. So we have to relate with the bottom seventy percent of economy with a new perspective, as possible incubators of new economic models, such that as they are “proven-in”, the developed markets could ultimately accept them.

In order to prove in the “*new Ism*”, Business and Industry, Academia & Governments in concert with each other have to develop a “disengagement strategy” from the extractive relationship we have with nature, to enable a new relationship which will fundamentally enrich the nature toward a better thermodynamic and kinetic balance of our creative process, self expression and consumption behaviors.

3. **Managing convergence of multiple disciplines:** *Increasing significance of the “Art & Science of Systems dynamics” & “Cross-disciplinary” interplays?*

In order to achieve such a virtuous dynamics at the different echelons of value addition and economic being we have to drive the convergence of multiple disciplines of thinking and engineering with as much vigor, as we have to think of new “social constructs” with “out-of-the-box” possibilities with “*systems engineering*” perspective in our minds.

As a result we need to ensure that at macro-economic level in structuring policy choices and at micro economic level in shaping decisions, decision makers:

- Understand the *complex interdependencies* between variables that are directly and indirectly related, - both linear and non-linear, and most often not obvious
- Visualize and analyze the benefits and (*likely unintended consequences*) with wider *top down* and *bottom up* perspectives – including both hard (normally easy to measure) and soft (usually fuzzy but influential, hard to measure) factors
- Manage multiple trigger mechanisms so that benefits of any major technological disruption have positive effect at different echelons of economic being and decision making hierarchy

- Evaluate and manage overall progress in relation to specific objectives of various economic entities with both short term and long range perspectives; we should keep in mind quick fixes lead to consequences that are delayed and unintended, that neutralize, if not reverse immediate reforms
- Develop and build “forward-feed” loops so that “*unintended consequences*” could be avoided, as opposed to only relying on feed back mechanisms which naturally lead to reactive responses

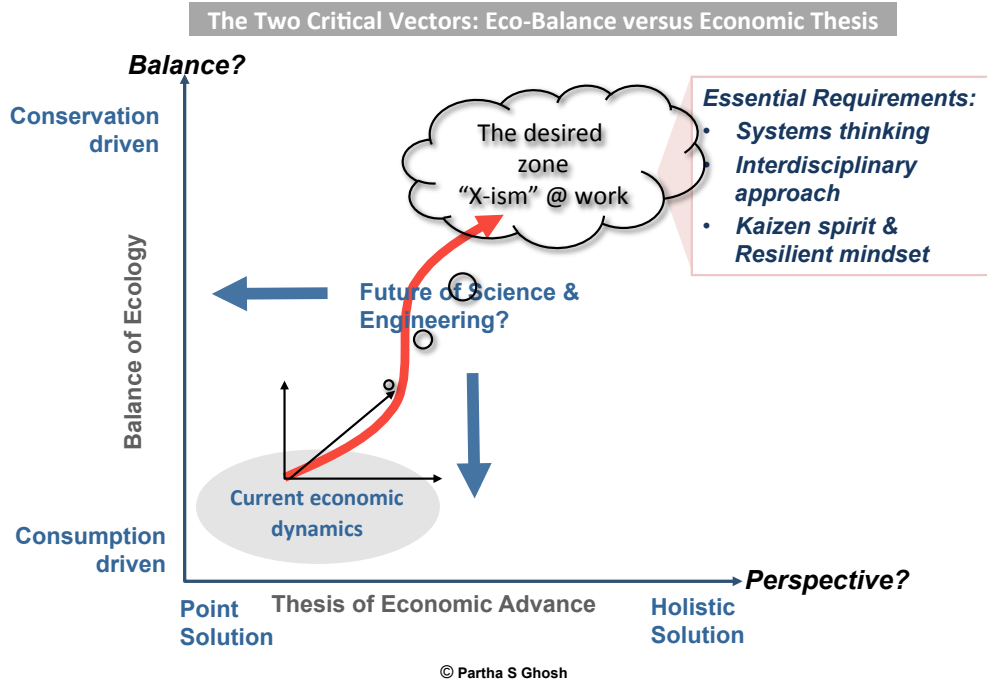
As we adopt more system dynamics approach in managing economic systems, we have to agree to new forms of human interactions between work and home, education and entertainment, providing for more economic resiliency and community spirit, driven by new forms of public transportation system and/or new forms of community oriented work spaces, significantly reducing work related travel and logistics requirements.

For example, through the renewal of Chemical Engineering discipline in integration with Information, Biological and Genetic Sciences for reinventing the 19th and 20th century industrial models for 21st century could open up new economic frontiers., The new models which are energy efficient/eco friendly and are agro based, - could not only create new jobs in the rural sectors world wide, but also accelerate wealth creation processes both in developed and developing regions of the world. Such a change over will require developing businesses, which beyond food and fibers are nature (renewable resource) based, are service focused to avoid extinction (disposable of non renewable resources) and enable extension of “*shortening life cycles*” of consumer durables. Most importantly, if engineered with open mind sets, the new dynamic could lead to development of a long over due “*equitable wealth creation engine*” – the fundamental promise of “X-ism”.

Indeed as modern civilization continues to uncover the laws of nature at an unprecedented speed leading to exponential growth of our technological power, today we do have the tools to launch and manage both - the disengagement process from the past, and the engagement dynamics with the future, in an economically viable and spiritually unperturbed fashion.

As the Exhibit 3 illustrates a framework that all industries both new and conventional could use to examine how their current value propositions and value delivery models could evolve along the two fundamental vectors: (i) *Balance of Ecology* and (ii) *Thesis of Economic advance*.

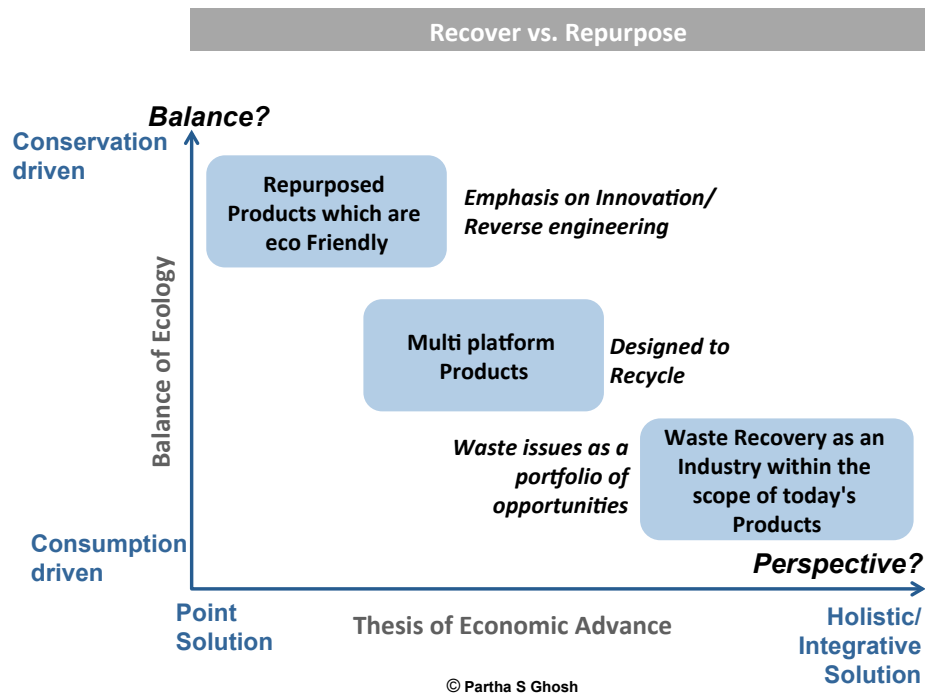
Exhibit 3: Future scope of Science & Engineering



The *Balance of Ecology* vector (the vertical vector in exhibit 3) emphasizes how future value propositions could be weighted more toward conservation in contrast to one way consumption of resources, while the second one *Thesis of Economic Advance* (the horizontal vector) captures the basic thesis of economic advance which leverages *systems engineering approach* to enable the development of integrative value propositions which are more holistic, not isolated remedies/point solutions.

The framework as shown in Exhibit 4 could help companies create multiple innovation platforms to transition their value propositions toward 3E friendly solutions. In view of the expanded space the two vectors help create, the Strategic degrees of freedom for almost all the industries, - from Aerospace, Automation to Consumer & Office Electronics, from Home Appliances to Healthcare equipment, to identify and develop new wealth creation opportunities could indeed expand dramatically, in giving birth to innovative services which will enable energy efficiency and eco friendliness, while ensuring more responsible stewardship of hardware. So in short, eco friendliness does not mean we have to give up on economic growth, in fact we could *accelerate our growth, that too in a more equitable fashion* – leading to the definition of “X-ism”. After all in the new environment, knowledge content of products will be significantly higher, the role of human imagination will be significantly enhanced.

Exhibit 4: Discovery of Ecofriendly Value Propositions



Given where we are in the advance of our civilization from monarchy to democratic set ups, from centrally planned economies to market economies, it cannot be sufficiently emphasized that building harmonic relationships between the most fundamental forces of nature, more now than ever before, is an urgent and essential requirement.

Let not the forces of the market limit human perception, let not the forces of self expression be constrained by the pre suppositions of the past, and let not the errors of the past limit our courage to venture in areas which are yet to be explored. Let us hope that the spirit of "X-ism" both at macro and micro levels will enable us to synthesize and harmonize different notes of nature to make superior judgment calls, - which will preserve the basic goodness and the divine power in each individual, and the global community at large.

As we move forward to *Two Thousand fifty* (2050) let's resolve that we could find and relate with new drivers of advancement, perhaps yet unknown, to create new constructs of markets and governance which will enable the "Power of Harmony", so that as different transactional and leadership instruments synchronize, and the resulting symphony, - is inspiring and all inclusive, puts goodness above

selfishness, truth above incompleteness, and removes all the constraints of doubts and “despair”.

Organizations will need to develop the leadership capacity to construct, deconstruct and reconstruct cross-industry ecosystems quickly, which often in a hierarchical command and control organization construct difficult to achieve. Accordingly at the heart of a future organization model, companies have to learn how to develop and operate a truly dynamic learning system, which enable them to stay competitive in terms of how they could stay strategically alert, operationally agile and organizationally adaptive. After all learning is a continuous process, which helps to keep an organization enlightened and engaged with frontier opportunities.

In order to do so, individuals in leadership roles must have the courage, creativity and stamina to challenge the presuppositions, which are based on success stories of the past; we must adjust our lenses that could stretch our vision, and must develop the resiliency of the mind to overcome discouragement, rejection and disappointment even it means facing personal misfortunes. During times of mega changes, stakes are too high to be limited by constraints of personal agenda.

Personal responsibility remains as an important issue when we sort through the carnage. Irrespective of where we belong Wall Street or Main Street, in privileged or unprivileged environments, - how the concept of X-ism will unfold, will not only be defined by our code of ethics and reasoning, morality and integrity, but also by how we as leaders connect with the bigger purpose of being, to rise above the confusion modern society is in. As leaders we should not be limited by the finite capacity of the earth, but powered by the unlimited access to humanity's imaginative spirit.

I do believe that we have the power within to trigger change, contribute to a cause which is larger than who we are, and in the process galvanize “*our will*” towards a higher-level purpose. I believe whether we like it or not, every citizen of this world holds a public office, and it is our responsibility that we, in concert with each other work towards public good, so that we could serve our inner need to express our goodness towards society.



Partha S. Ghosh (*Professor of Practice at Tufts Gordon Institute & MIT*) a true global citizen is a policy advisor and a strategist for Corporates and Governments. He is known worldwide as an innovator of Business and Economic models and currently enjoys advisory relationships with multiple organizations in more than half a dozen nations. He helps boards of companies to be strategically more effective and corporate governance more trustworthy. He has also done extensive work for heads of nations in assessing a country's competitive advantage in various industries and according assess strategic pathways a nation could take for accelerated socio-economic development. His clients view him as a "*creative problem solver*" and a

"visionary leader."

Partha Ghosh believes that in the next 25 years the world economy will undergo profound changes which civilization has never experienced before. Industries and governments will need to reinvent the basics of capitalism implying fundamental transformation of industry and economic models. He passionately advocates that through forward looking strategic and organization models, MNCs could uniquely lead the Global Renaissance.

Earlier Mr. Ghosh as a partner at McKinsey & Company and then as the founder/Managing director of Strategy/Policy advisory firm Partha S Ghosh & Associates he worked with corporate leaderships in Asia (Japan, South Korea, Taiwan China, SEA, India) Middle East, Africa, Europe and the Americas. Recipient of many awards and medals, *recently he received the prestigious Distinguished Alumnus Award from Indian Institute of Technology (IIT) for his outstanding professional accomplishments across industries worldwide.*

He has two advanced Engineering and Management degrees from Massachusetts Institute of Technology. He did his undergraduate work at Indian Institute of Technology. An avid public servant, he is one of the founding members of The Boston Pledge, and is involved with multiple philanthropic initiatives around the world. Given his wide range of interests from education reforms, philosophy, international relationships, science & engineering, business & economics, country management, public service, and his experience across cultures and industries, people who know him well, describe him as "*modern day renaissance man*".

Additional information: <http://www.web.mit.edu/psgleadership/parthaghosh.htm>
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