On a Quest for Change: If I had my way

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Suppose the nation is desirous of maintaining globally competitive positions, insure there are continuing prospects for realizing the American dream, improve health and reduce healthcare costs, and continue to be the leader of the free world. What changes might it make, how they would be implemented, and how might the progress be tracked. This article presents a perspective on these topics.

- **1.** A Change from unbridled Capitalism to *Karma Capitalism*. Unbridled capitalism is the notion of running a business for turning a profit but with no constraints on who else besides the owners need benefit from the enterprise. *Karma Capitalism* (Business Week, Oct. 30, 2006) encompasses the notion of well-being of all concerned parties (suppliers, employees, customers, and shareholders). The outcome measure indicative of success might be **the size of the middle class measured once a year**, as a faction of the total, which has been dwindling for some years.
- **2.** A Change from the old ways of performing activities to pursuing them the six sigma way. All activities (including business processes) must be operated in the best possible manner, generating the least possible defects reflective of customer dissatisfaction. Six sigma is the methodology to achieve this goal. Traditional approaches focus on *averages* while six sigma focuses on *variability* (averages *and* standard deviation). Bearing in mind that the aim is to improve system performance and not to engage in finger-pointing, the 2000 Presidential election in Florida is an example of what can happen when repetitive work processes are not operated the six sigma way. The problem subsequently surfaced in Italy and then in Mexico last year, indicative of lessons not learned. Hopefully, this will not recur here in the 2008 elections. The outcome measures are **defect levels in all products & services and productivity**, indicative of national competitiveness.
- 3. A Change in focus from cure with medicines to prevention of diseases with yoga Asanas (or other forms of exercises for the external systems, i.e., muscles & joints) and Pranayam (for internal systems and organs). Humanity has made phenomenal progress since India, home to Yoga and Pranayam (Patanjali ~ 500 BC), declined in the last cycle. Modern quest for cures of ailments must continue. However, many current medicines suffer from two drawbacks: (1) They can be expensive, and (2) Many have undesirable side effects. My scientific (six sigma) studies of Pranayam and the experience of Swami Ramdev, who popularized Pranayam among hundreds of million in India and abroad, lend credibility to the assessment that diligent pursuit of Pranayam may improve health and reduce national healthcare costs, reported to be \$2.1 trillion at present, provided it is pursued with six sigma principles. My colleague at the University of Louisville, Mark Schreck, a former Vice President at GE Appliance Park in Louisville, estimates that a mere 5% savings in healthcare costs at a company like GE may amount to \$194 million per year! This does not even include intangible benefits because of employees feeling better, there are fewer absentees, and so on! Two measures of success might be annual healthcare costs and consistent quality of healthcare. As a subset, one could track outcomes such as (i) number of people who regularly exercise, (ii) sale of pharmaceuticals (if the nation is getting healthier, the growth rate of prescriptions should not keep pace with the population growth rate, (iii) number of surgeries or occurrences of preventable portion of illnesses such as lung cancer, obesity, heart disease, etc.
- **4.** A change in focus from the notion of spreading democracy overseas to adopting a code of conduct for all nations to follow regardless of the type of Governments they have. There are fundamental reasons why adoption of democracy may not necessarily lead to the desired results (equality before law, respect for human rights, separation of church and state, freedom of religion, etc.) but it may be easier to develop a code of conduct for all nations to follow. **Number of fatalities or serious injuries per month because of conflict** may be suitable outcomes to gauge the extent of progress on this front. Several other measures could also be considered.

5. A Change in emphasis from freedom of religion to equal respect for all religions. The forefathers of this nation wisely embraced the notion of freedom of religion. However, equal respect for all faiths may be of a higher calling. "You are free to practice your faith, but my faith is better than yours", may be inconsistent with the laws of nature. It is inappropriate to discriminate among the various messengers of the Creator. They are all born to put societies back on the righteous path. If something in a scripture is bothersome it is because of what six sigma professionals call measurement validation problems, i.e., there is a disconnect between what the messenger(s) said, how it was understood by the early followers, and how we may be interpreting it today. (Probability of independent events is multiplicative; when there are a large number of steps in a work process, the yield loss can be very significant). Just be sure, Jesus too is in my prayers, both our daughter-in-laws are Christians (1 Protestant and 1 Catholic) and we would want them to remain true to their faith. Fundamentals also point to why racial (or caste-based, in the case of India) discrimination is inappropriate. **Quantitative data on religious strife and incidents of racial disharmony per year** might be appropriate measures of success. As a subset, one could the measure the number of religious congregations that are involved in interfaith projects; attendance at interfaith activities, etc. Strife being a lagging indicator, the latter measures might be preferable since they are leading indicators.

On the Need for Non-Muslim Scrutiny of Islam.

At the outset, nothing in this section should be construed as condoning the hideous acts of the wicked. My thesis in the just-released monograph, "A Small Step for Man: Zero to Infinity with Six sigma" is that transformation of the mindset is responsible for extreme tamasic behavior (suicide bombings, murders, assassinations, and the like); religion has very little to do with it. It is true that a disproportionate number of people engaged in such activities are Muslims. However, note that by and large they come from the Middle East, much of which is currently in the state of decline. Consider that very few if any of these folks are from India (a nation on the rise), home to over 200 million Muslims, second largest after Indonesia.

I continue to read about the need for a non-Muslim scrutiny of Islam. I wish to pose a question for illustration to Hindus and Christians: To Hindus, "Where in the profoundly introspective *Bhagvad Geeta* is caste discrimination sanctioned, a source of continuing challenge for modern-day India". To Christians, what in the holy Bible could possibly sanction inquisition and crusades of the middle ages? It is not what a scripture says but rather how we interpret it, is often the problem and this is where the mindset transformation plays a pivotal role. Sri Krishna's counsel to Arjuna (and through him, humanity) was to wage *jihad*, an internal war, and conquer the *tamasic* tendencies first. Only when that battle has been won, will it be possible to successfully wage an external war with a wicked enemy in pursuit of righteousness. If you see a tinge of anger in this communication, I apologize; I have not yet conquered my own *tamasic* tendencies. (Sri Krishna's counsel, *be thou of even mind, unaffected by success or failure*). Non-Muslim scrutiny of Islam is not likely to uncover anything different from these ideas.

On the Rise and Decline of the United States.

The theory or rise and decline proposes that rise and decline are natural phenomena. My wife and I, our two children and their spouses, and our five precious grandchildren, call this their home and if we had our way, we would not ever want this nation to decline. However, that is not in the plan of nature. Nonetheless, we ought not to hasten decline by shooting ourselves in the foot. The issues presented here if unresolved may well be tantamount to shooting ourselves in the foot. The theory allowed us to predict the rise of China and India (in that order) in the early nineties. I also project though not based on extensive data that the candidates for the next rise after the decline of China and India are Greece, Egypt, and Iran, The latter two are Islamic nations and many view Iran as an axis of evil. Finally, I mention the ancient advice, *do good, and cause no harm in words or deeds*. I hope I have not deviated from that counsel here.

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Biographical Information on Pradeep B. Deshpande

Pradeep B. Deshpande is Professor Emeritus in and a former Chair of the Department of Chemical Engineering at the University of Louisville. He is also a Visiting Professor of Management, Gatton College of Business & Economics, University of Kentucky and founder President and Chief Executive Officer of Louisville-based Six Sigma and Advanced Controls, Inc. (SAC). SAC specializes in six sigma and advanced control training and project executions for manufacturing industries and service companies.

SAC also offers software products for monitoring and optimization of batch and continuous processes. Among SAC's past and present clients are US Department of Defense, Ministry of Higher Education, State of Kuwait, Du Pont, Du Pont-Dow, Colgate-Palmolive, Frito Lay, Pidilite Industries, Ltd., Kuwait University, Providian Bancorp, Zeon Chemicals, and Oil & Natural Gas Corporation, Ltd., University of Kentucky, several B-Schools in Pune, India, among others.

SAC has made pioneering contributions to six sigma by deciphering what makes six sigma possible in the fundamental sense based on natural laws and by extending its applicability to dynamic systems. With these enhancements, it becomes possible to apply six sigma to *any* work process whether manufacturing or transactional, static or dynamic, linear or nonlinear, continuous, batch, or discrete parts-manufacturing.

Professor Deshpande has been the sole Leader of AIChE's training program, "Six Sigma for Global Competitiveness". Under a license from SAC, Prof. Deshpande introduced a three-credit advanced level course in Six Sigma at the University of Louisville, believed to be the first University in the world to do so. This course is being offered for the sixth time in the Fall 2007 Semester and the class is oversubscribed. Evaluations of the participants in all our training programs have been outstanding. Prof. Deshpande was also contracted to introduce a mandatory six sigma training program for MBA students at the University Kentucky Gatton College of Business & Economics . Pradeep has over thirty years of academic and full-time industrial experience and is perhaps the only educator in the world with internationally recognized expertise in six sigma.

Dr. Deshpande is an author or coauthor of six textbooks in process control related areas and has over 100 refereed technical papers and presentations to his credit. Professor Deshpande has supervised twenty Ph. D. Graduates and over fifty Master's graduates during his thirty years on the faculty at the University of Louisville. He consults for major companies in several countries and has done collaborative research with several of them. He has conducted many training programs in Asia, Middle East, Latin America, Europe, and the United States and has organized many joint activities in India, Kuwait, and Abu Dhabi. Partnering with a well-known B School in Pune, In 2005, Prof. Deshpande established **SCMHRD-SAC**, **USA Six Sigma Excellence Awards** for corporate India, the first of its kind in the world.

Dr. Deshpande is a recipient of numerous awards for teaching, research, and professional excellence, including ISA's Donald P. Eckman Award in Process Control Education. Dr. Deshpande is a Fellow of ISA, is listed in the Who's Who in the World, and has taught at IIT Kanpur, IIT Madras, and UDCT, all in India.