How to get America back into Innovation

WASHINGTON – A recent *Schumpete*r column in The Economist magazine (*"The Innovation Machine",* August 28 – September 3, 2010), provides interesting analysis on new insights about the "magic" and "mystery" of industrial innovation. Yes, mystery; because, notwithstanding scholarship, research and countless books on the subject, innovation is still more art than science: everybody wants it; but no one really has captured the secret of making it happen at will. Studies and formulas abund; but innovation remains elusive.

Ho do you make innovation happen?

Much of the problem rests in the fact that innovation is resisted. Indeed, real innovation supplants whatever may have existed before. Thus it is viewed as "the enemy" by all those managers, producers, marketers and others who benefit and profit from the current *status quo*. So, in the real, practical world, the notion that disruptive innovation can be nurtured from within a large corporation often meets barriers and opposition; because there are too many managers up and down the ladder who want things to continue as they are.

If this so, then does innovation happen entirely "out of the box"? Can it be pursued incrementally? Or does one need a business formula that is grounded on the notion of the necessary, rapid obsolescence of all we do today? Thus no sentimental attachment to today's gadget, because, sure enough, tomorrow we shall invent a better one?

All this is very interesting, of course, and the experts can continue to dissect all the variables and the issues trying to come up with the best list of ingredients and how to mix them properly.

What do we do when we lost it?

But, on a different level, what do we do when we realize that our rate of innovation is not what it used to be? What do we do when we see that we have fallen behind on most measures of competitiveness, for sure a consequence of a declining rate of innovation? What do we do when our education system loses ground, when the rate of domestic R& D goes down, when companies seem to have stronger incentives to invest abroad rather than at home? What do we do when competitors in relative as well as absolute terms are investing and innovating "more" in sectors in which we used to be leaders?

The erosion of US competitiveness predates the "Big Crisis"

These are unfortunately the negative trends confronting the US these days. And these serious problems, while in some measure exacerbated by the current "Big Crisis", certainly predate the financial meltdown that almost chocked the entire US economic system. Indeed, it was not Wall Street that caused chronic underinvestment in our secondary education and public universities. It was not Lehman Brothers that dictated policy on tax credits for R&D. It was not AIG or Citigroup that determined national policy on whether or not to favor the immigration of capable scientists and entrepreneurs. Which is to say that, unless we properly address America's declining competitiveness, even when we shall get out of this bad Wall Street/real estate bubble recession, when our housing markets will be stable again and our banks will be in better shape, many of the systemic problems that affect innovation and thus our ability to stay ahead in the global competitiveness race will stay unsolved, causing further harm and decline ahead.

The deterioration of a once coveted pro-business environment

Broadly speaking, it would appear that, due to lack of proper care, the vaunted, virtuous American innovation friendly "ecosystem" is rapidly deteriorating. That happy mix of good education institutions, easy industry-university cooperation, large doses of federal funds for a variety of research purposes, availability of venture capital to bankroll new enterprises and a generally receptive market place is unraveling. In fact, it is in such disrepair that, in the words of Paul Otellini, CEO of microprocessor king Intel Corporation, "The Next Intel may not happen here". Think of it: ***We, the ever inventive Americans, may have lost it. The future giants of high tech may find a better breeding ground and a more suitable home somewhere else.***

What is to be done? Well, at least "Do No Harm"

These and other sobering considerations were made by Paul Otellini, and former Hewlett Packard CEO Carly Fiorina, in the context of an Aspen Forum held in conjunction with the Technology Policy Institute (Aspen August 22- 24, 2010), a Washington, DC think tank chaired by Fiorina.

Again, as discussed above, nobody really knows the magic formula that will make valuable innovation happen. But, at the very least, we know that public policy may or may not create a more or less welcoming environment for new business and investments. And such an environment – while by itself no guarantee of success– is certainly ***a necessary precursor to innovation***. Indeed, we know that, if we create and preserve a good place for business and investments, innovation is more likely to happen. In this vein, at the very least, public policy should avoid doing harm. Paraphrasing Hippocrates, *"If you cannot help, at least do no harm".*

Paul Otellini: US policy-makers "flummoxed", unsure

But, public policy does not withstand even this minimal test of "doing no harm". According to Otellini, a respected leader who runs one of the few, and to date unchallenged US technology giants, and to Fiorina who has a long career in high tech and who is running as a Republican for a California

Senate seat in November, Washington is somehow tone deaf.

It would appear, indeed, that we have a *"digital country"* and an *"analog Hill",* (as in Capitol Hill, seat of the US Congress). Incredibly, in America, a country whose success is essentially predicated on rapid fire, quality innovation and enterprise, it seems that Washington is still stuck in an old tech ("analog") past. Policy makers are thus dangerously ignorant and thus disconnected from the new fast paced reality and do not understand what it takes to nurture it.

In short: Washington policy makers, not due to anti-business animosity, but mostly blindsided by obsolete public policy models, simply "do not understand" what it takes to create a pro-innovation environment. Otellini said this much in a segment of the Q&As following his Aspen speech.

Our technocrats do not get it

Think of the implications of this terse judgment offered by one of the most respected US industry leaders. Our policy makers, this small army of Ivy League graduates manning the federal ramparts in Washington, this august assembly of super educated members of the intellectual elites, including the Harvard educated President Barack Obama and National Economic Council Director Larry Summers, economic science genius, former Harvard faculty, former Treasury Secretary and finally former Harvard President, according to Otellini*, **simply do not get what it takes to care and repair the US innovation making machine**.*

The dire implications of bad economic stewardship

So, no help from Washington. In fact worse: policies that in the end discourage investments and thus the chance to get more innovation. And the implications of all this are pretty awful. If America's innovation machine stagnates or worse, forget our standard of living and our vaunted upward mobility; forget retaining our influence as a key economic player on the world scene; forget the US dollar as the world's primary means of payment, forget current levels of US foreign aid, forget being the largest share holder within the World Bank Group, forget having the largest defense budget on earth and ultimately forget the age of American power and influence. For it is on retaining or regaining our ability to be the 24/7 *laboratory-cum-workshop* that keeps generating the new, high value stuff that the world wants to buy that we find the true foundation of American prosperity and ultimately influence.

How bad is it? Really bad

But are things really that bad? Well, yes, they are. The US now ranks sixth world wide in innovation, according to independent measurements. This in itself is not horrible. ***But what is really worrisome is that we are now dead last among 40 OECD nations regarding all the metrics by which innovation progress has been rated for the past ten years. And this means that, unless something changes, we shall lose more positions in the overall rankings in the years ahead.***

Losing ground in higher education

In higher education, the US used to be number one in the world in terms of the percentage of the 25 to 34 years old population with a college degree. Now we have fallen to number 12. Looking further, the broader US public secondary education system –the pipeline that feeds American colleges and universities– is in complete disrepair. In this area, the Obama administration is really trying to have a major course correction, but it will take years of sustained effort before we can say that we turned the corner.

Business taxes are too high

The general investment climate is not that good. In his speech, Otellini indicated that, considering an overall $ 4 billion price tag for a new Intel plant, building one in the US represents an additional cost of $ 1 billion. And this is not about labor cost; but about taxes and lack of economic incentives, available elsewhere but not here, in the USA.

The US does not have a competitive R&D tax credit regime, while it has the second highest corporate tax rate in the world. In fact, R&D tax credits are a bit of a confusing guessing game. Instead of making them permanent, in order to offer a clear reference point to would be investors, the federal government makes these tax credits temporary and subject to renewal. The outcome is that these credits have expired and needed to be renewed 13 times. All this creates unnecessary confusion. It means that, for each new round, all industries, facing uncertainty and potentially higher costs to finance innovation, have to reengage in lobbying battles aimed at reaffirming what should be granted once and for all; thus aligning the USA with other countries that offer better tax treatment for R&D investments.

The cure: start with lower taxes and permanent R&D tax credits

If this is the picture, what policy changes would Otellini and Fiorina recommend in order to improve the general business environment, so that we can reverse the innovation downward trend? Their list is fairly elaborate.

But two items stand out:

1) Reduce corporate tax rates

2) Make more generous R&D tax credits permanent

Of course, all this needs to be fine tuned. There are broader fiscal implications for any major tinkering with the tax code, especially at a time in which Washington is trying to cope with astronomic fiscal imbalances. But the unassailable reality remains that, unless we create a more favorable business environment, mobile capital will flee where it is more welcome. End of story.

Favor the immigration of skilled professionals

On a different level, Fiorina indicated that we have to face up to our dearth of home grown qualified scientists, engineers and would be entrepreneurs. The number of highly skilled professionals legally allowed to come and work in the US, only 65,000 per year, is way too small to satisfy the needs of a large industrial environment. Until we can produce more of our own talent, it should be the policy of the United States to facilitate the immigration of more capable people, because these professionals reenergize our “brain power”. Indeed, very often they join and replenish the ranks of new wealth creating entrepreneurs. All this is amply documented by the figures of high tech start ups headed by capable immigrants.

Washington needs to learn how to do this

In the end, as Otellini said, it comes down to “getting it” regarding what should be done to nurture an innovative environment. In a non political way he ascribes the current non business friendly climate in Washington not to ideological “anti-business” animosity but to incompetence on the part of the crew right now running the show.

Policy confusion led to a policy vacuum that now discourages investments

A corollary to this lack of proper stewardship is the current policy vacuum. Money is parked in the sidelines because business leaders have no idea as to which way we are headed. There is confusion about the future of taxation, about future energy cost, about future environmental regulations and about future health care costs. It is up to Washington to clarify all these issues. Of course, depending on how these open policy issues will be settled, we can see a renaissance of investments and thus a boost to innovation or a faster exodus from America, thus hastening the pace of decline that we are already witnessing.

Let’s hope that the message sent by Fiorina, Otellini and many others will be listened to. Innovation is not just for Intel’s shareholders benefit. If we do not invent and market good stuff here anymore, the long and glorious history of American high tech leadership will come to an end –with damage to all of us.

Fast Trains for America?

WASHINGTON – The US is terribly late in grasping the advantages of high speed rail as a more efficient alternative to air travel or driving a car between relatively close large metropolitan centers, (Washington – New York – Boston, for example). Airports and air space are congested and so are most highways, making travel slower, more complicated and afr less efficient. And to all these diminishing returns one has to add the significant cost of our gigantic oil and oil products imports –more than 60 per cent of total consumption– necessary to fuel motor vehicles and airplanes.

Trains better than air travel or car trips

Trains, in contrast, are powered by electricity which is not imported. Relying more on domestic sources to fuel transportation helps our trade balance, while it reduces exposure to a serious strategic vulnerability. We have abundant electricity supply and in the future we should be able to generate more of it through renewable, non polluting technologies.

From the stand point of economic productivity, personal comfort and convenience, high speed trains will get passengers to their destinations faster than airplanes. Beyond actual flight time, if you consider all the additional time involved with getting to and from airports and of negotiating your way through security, plus routine delays due to congestion and weather, high speed trains become much more attractive .

If you would have opted for the car, the train will get you to your destination not only much faster but also without the fatigue, tensions and accident risk associated with driving in heavy traffic. For all these reasons, fast trains are old news in Europe, in Korea and Japan. And now China, on top of many completed projects, has undertaken a major plan aimed at creating a national network of high speed rail by 2020, with plans to build at least 13,000 km of new tracks suitable for high speed trains.

Obama’s small step for high speed rail

Given all these advantages and US historic delays in joining modernity, many cheered when the Obama team announced brand new plans for American high speed trains. Indeed, the Obama administration, as part of its stimulus plan, in 2009 launched a high speed rail initiative with federal funding up to $ 8 billion aimed at partially paying for initial feasibility studies and early work to be undertaken by states. So, at last, a good first step? Not quite.

Congress wants states to pay more

In fact, this big project is not going ahead very well. Caught in the ongoing downdraft of national economic stagnation and consequent lack of federal revenue, the US Congress this year added a proviso to the $ 8 billion funding whereby states, if they wanted to qualify for future high speed rail federal cash, have to commit to foot at least 20 per cent of the total cost of the projects they submit. This 20 per cent proviso does not sound so unreasonable; and it follows established practice in many areas in which the Federal Government undertakes huge capital projects in conjunction with states.

Cash strapped states bailed out

Except that in the current horrible fiscal predicament that sees revenue strapped states struggling to meet even their most basic budgeting goals for schools and police, coming up with tens of millions or more to pay for at least 20 per cent of new, large capital projects is out of the question. And so, many states simply withdrew from the competition aimed at securing federal money for these expensive rail projects.

Translation: if you want to see America develop a modern network of high speed rail links, do not hold your breath. It looks as if something will go ahead in Florida and in California; but not much else. The idea that America would quickly catch up and join the XXI Century is still a distant hope.

Chinese fast trains in South Africa?

Now, compare and contrast this uninspiring scenario with a recent news item. We learn that in the context of a recent high profile South African economic and trade mission to China led by South African President Jacob Zuma, China Railway Group, “the world’s second largest publicly traded heavy construction company”, (according to Bloomberg), announced that it is in talks with South African counterparts to examine the feasibility of a huge high speed rail project that would link Johannesburg, the country’s economic and industrial center, to the South African port of Durban on the Indian Ocean, thus easing the transportation of goods to and from the country’s industrial heartland. Most of the commercial loads between the two cities right now are carried by trucks. The journey on the 566 Km (352 miles) highway takes between 5 to 7 hours. High speed rail would cut this down to three hours.

$ 30 billion for a Johannesburg-Durban high speed rail link?

Approximate price tag for this little thing? Oh well, around $ 30 billion. You got that right: mighty US committed to spend only $ 8 billion for fast trains in the US, China talks about $ 30 billion projects in Africa. That is to say that China is considering investing in South Africa more than three times what the US Federal Government set aside as the initial sum to help fund the early development stages of high speed rail throughout the entire United States.

So, Washington hesitantly put forward just a little bit of cash for America's future rail. China talks about spending $ 30 billion for a new high speed rail project –not in China– but in Africa. (Indeed, as indicated above, enormous investments for high speed rail in China are already on a fast track). Got that? This is where America is. Totally outclassed in a key area of modern transportation system by a country that until yesterday was thought to be just an ambitious emerging economy.

True enough, this early China – South Africa announcement is only a rather generic declaration of intent. In other words, a lot needs to happen before Chinese crews start breaking ground to lay the new tracks for this future high speed rail link in South Africa. But the international media considers the whole idea quite credible and as such the news was widely reported.

China makes this big announcement and nobody thinks it is a joke

Now consider this: a major Chinese corporation talks about a $ 30 billion investment in South Africa, thousands of miles away from home; and nobody laughs, calling the whole thing totally preposterous. Indeed, why should they laugh? The Chinese have serious money, credible know how, based on their large domestic high speed rail expansion program, and a strong, long term strategic interest in strengthening their economic and commercial ties with south Africa, as they are already the country's number one –yes, number one– trading partner.

If the US made similar announcements, it would be laughable

Now, as contrast, imagine a different news item: "*General Electric and Bechtel to build high speed rail link between Johannesburg and Durban. Amtrak to provide consulting on operations*". Now this one would be a laughable headline. The US has practically no technological leadership in this sector, therefore zero credibility as builder and operator, let alone the ability to provide the huge funds necessary to implement the project.

In the US baby steps towards fast trains, while China builds around the world

So, this is where we are now. In America, once the world's foremost innovation laboratory and workshop, we have a puny little embryo of a domestic high speed rail project, now weakened by the Congressional 20 per cent mandate that has caused many states to bail out; while China, already committed to mega high speed rail projects at home, goes around talking about funding a huge capital project in South Africa. Clearly America could not even dream of discussing a high speed rail project of this magnitude, let alone acting on it, anywhere in the world.

So, what's this all about? Sadly, this is just another example of America's retreat from the frontiers of innovation, not to mention its increasing inability to participate in large scale international capital projects.

Fast trains a bad deal?

Of course, many would forcefully affirm that high speed rail is not such a great idea after all; and therefore we are better off saving our money for other, more productive enterprises. (Such as….?). But I would not be so sure of this.

The US is about 30 years behind Europe, (and now behind China in terms of current and projected investments), in the development of high speed trains. Again, some have argued that this is non issue, as high speed trains are expensive, money losing propositions suitable for Europeans who love large public works projects and subsidized travel; but out of place in our no nonsense America.

This observation conveniently avoids the point that directly and indirectly the US lavishly subsidizes air travel and the automobile. This is not to deny that, in some instances, the cost-effectiveness of high speed trains may be questionable and so each project should be examined individually.

Advantages of high speed trains

But when it comes to travel between large populations centers distancing 300 to 500 miles from each other, (the “Nort-East Corridor” going from Boston to New York to Washington, DC is a perfect example), the advantages of high speed rail versus available alternatives is obvious. In these cases, air travel is not that convenient; while trips by car are hampered by highway congestion that substantially reduce travel speed, not to mention adding to the stress, discomfort and danger for drivers and passengers.

Air travel hampered by congestion

If we look at air travel, increasingly popular in America since airline deregulation reduced cost, it is an old story that large US cities have overcrowded airports and overburdened air space. In theory we can fly from Washington DC to New York City in just one hour. However, after you have added the time (and additional cost) required to get to and from airports, at least 40 or 50 minutes each way on average, depending on your point of departure and intended final destination, after you set aside additional time for airports security screening and then inevitable delays before and after boarding the aircraft due to congestion or bad weather, the theoretical quick plane ride is not that quick any more. The one hour flight could easily turn into a three to four hour or more point to point trip, once you factor congestion and delays in the air and on the ground.

Real high speed gets you there faster and more comfortably

Alternatively, If you could have a real high speed train, (as opposed to the semi-fast Amtrak operated Acela train available now), covering the same Washington, DC – New York City distance in –say– two and half hours, with the advantage of an in town departure and arrival, then the convenience of the train versus the airplane for short haul travel between large metropolitan centers becomes much clearer. (On a different level, if anybody is concerned about the per passenger carbon foot print related to the two different means of travel, the difference is startling: 90 per cent higher carbon emissions if you choose air travel).

Obama's plan seemed a good first step

Because all of these advantages, the initial Obama administration plan to at least begin to look seriously at high speed rail development projects, budgeting about 8 billion for that purpose, seemed to be a good idea. Very little and very late, for sure; but, hey, better than doing nothing. And yet by now you can see that this plan is going neither far nor fast.

Our plans are too small, while China plans to build around the world

Objectively, the money provided for through the federal government is puny; while the new Congressional mandate for funding by the states automatically caused many to withdraw. So, the idea of a network of fast trains supplanting air travel as the most cost effective way to travel between large cities is destined to remain a dream in America.

In the meantime, we see our confident Chinese competitors planning huge new networks at home, while openly talking about expensive mega projects in far away emerging economies in which they already enjoy cozy relationships that we can only dream about.

Is anybody worried as to what all this indicates about America's growing inability to be not so much the technology leader but even a technology player at home and abroad?

I am.

Indiana: Blueprint for Lean, Smart Government

WASHINGTON – President Obama, perhaps overwhelmed by the number and magnitude of the issues already piled up –the banks, GM, the Freddie and Fannie gigantic sink holes, two costly and controversial wars, the BP oil spill debacle and intractably high unemployment– has lost his initial drive.

We need a "Grand Strategy for America"

Whatever the plans might have been, we do not have a President convincingly selling a badly needed "Grand Strategy for America". As for the existing Stimulus Plan, much less there than initially advertised. For instance, only a small portion of the funds allocated for infrastructure have actually been spent so far. Hence a more modest stimulus impact than initially advertised.

Unfortunately, no convincing great plan coming from the

Republican Party either. And this is a shame, as the country needs a credible renewal strategy to rally around. America needs a bold blueprint around which Washington could create a consensus for viable economic growth strategies and for swiftly dealing with our gigantic, systemic fiscal imbalances. For instance, much has been said about producing a White House-led, brand new energy policy that would spur large investments in new, green, non carbon technologies. But the President, while advocating new energy technologies, has yet to present a "Plan" around which he could fashion a national consensus –a Plan that would encourage the private sector, in partnership with the Federal Government, to invest the billions of dollars that would be required to take America on a new energy path.

Good news from Indiana

And yet, while Washington disappoints, there are successful policy initiatives undertaken elsewhere in America. While the two national parties are engaged in posturing and repetitive, empty sloganeering, something is getting done in the heartland. Perhaps Yankee ingenuity is still alive.

Take Indiana for example. Mitch Daniels, formerly Director of the Office of Management and Budget in 2001 – 2003 for President George W. Bush, did not stay much at the White House. He left Washington and was elected Governor of Indiana as a centrist Republican. Now, Indiana is no wonder state. It is no super achiever in almost any category. Within the 50 states, Indiana is middle of the road or less, in terms of its economy and overall performance. No super technology centers or other hubs of innovation. When Indiana was hit by the Big Recession, it did not have extra resources to fight it better than other states.

Daniels balanced the budget

And yet Governor Mitch Daniels managed to accomplish in

Indiana what almost none of his colleagues elsewhere where capable of. He overhauled public finances and cut spending. Big Recession notwithstanding, he did not increase taxes and in fact balanced the budget, something that almost no other state has come even close to in this historic downturn that saw revenue collapse in all states.

Daniels did not perform any magic. He simply started with the basic proposition that the state had to live within its means and that it might be possible to get more value for the tax dollars actually available. And so he did. By many measures, it would appear that service delivery actually improved in Indiana, with lower spending. All this means that careful stewardship and creative use of more limited funds is possible.

Sane fiscal policies: no panacea but a very good start

Again, balancing the Indiana state budget is not in itself the recipe for an economic boom. But this well crafted fiscal overhaul indicates that it is possible to eliminate or at lest reduce the drag on the nation's wealth caused by large public debt and consequent high interest payments that together absorb bigger and bigger chunks of revenue, this way limiting the scope of productive public investments. Well, if something workable can be engineered in Indiana, then there may be hope for replicating this success at the national level.

Washington: bigger numbers, similar issues

True, the Federal Government in Washington must deal with much bigger issues of gigantic entitlement programs, (Medicare and Social Security), not to mention the largest defense budget in the world that needs to be funded at great cost or restructured, along with two expensive, ongoing wars. And so, the political compromises necessary to reduce and eventually eliminate the Federal budget deficit will be much more complex. But, while the Federal problems are larger in terms of dollar amounts, the basic pitfalls are very similar. Unsustainable levels of public spending are, well, unsustainable. Unless we want to go the way of Greece or want to live with a perennial gigantic public debt, a la Japan –a debt so large that it will choke future economic growth– we have to reduce spending.

Fort Wayne and high tech local government

But there is more from Indiana. And this time it is about both, improving the way local governments deliver services as well as lowering cost. The lesson, in this instance, comes from Fort Wayne, the second largest city in the state, until recently led by centrist Democrat Mayor Graham Richard. As Mayor, Richard, a businessman in private life, managed to creatively leverage high technology tools to vastly improve the quality of services, while cutting cost. He took advantage of pilot initiatives aimed at spreading the availability of broadband internet connectivity to create new e-government public services and to streamline existing ones in Fort Wayne.

Better government services delivered

And so, from health care to street sweeping, from quick pot hole response service to street lighting, from red tape reduction to education, Fort Wayne has become a laboratory for new policies aimed at improving the speed and quality of public service delivery, while reducing overall cost. Thanks to new internet based applications, citizens can transmit medical records electronically, classrooms are all fully wired, adults have access to internet based continuing education programs as well as smart system to manage remotely energy consumption in their homes. Average city permitting time was reduced from 48 days to less than 10. Fort Wayne was the first municipality to adopt "Lean Six Sigma", a business management strategy originally introduced by tech giant Motorola that provides a method aimed at systematically identifying defects and introducing improvements.

Quality of life improved

The net result of all this is that the citizens of Fort Wayne enjoy significantly improved services, while the city shot up in the national rankings of favorite venues for new investments. And this is because superior internet connectivity, good and convenient services and a more tech literate work force are now among the top 5 selection criteria motivating new ventures to locate in one place as opposed to another.

After leaving office, Graham Richard created the High Performance Government Network and wrote a book titled "Performance is The Best Politics" on the subject of using technology to improve government services.

So: decline is not inevitable, change is possible

Well, what do we make of these examples? As a minimum, we can conclude that America is not on an irreversible course leading to terminal demise. The "decline" school of thought somehow postulates that all great countries at some point run out of vitality, they cannot cope with more energized new comers, (the Asian giants, in our case), and thus lose ground, either abruptly or more slowly, as the case may be. Looking at our mediocre economic performance, high debt and high unemployment, many think that America's days as economic and political leader are over.

Indiana proves that there is room for creative ideas

But these examples from Indiana, a state that does not have any inherent advantage in terms of geography, resources, lavishly funded Federal projects, superior education levels or income, prove that there is still ample vitality and intellectual creativity in America. Whatever our current predicament, there is still ample room in America to aim high and to achieve a lot more with the human and technological tools we have.

It is a fact that Governor Daniels can fix Indiana's budget, while visionary Fort Wayne Mayor Graham Richard could launch a successful, tech-based revamping of all public services, thus making his city a model to be admired and hopefully replicated elsewhere. As a minimum, these remarkable accomplishments prove that there is room for smart initiatives.

Lessons from England

Incidentally, we are also getting lessons on the aggressive adoption of deficit reduction strategies and new models for the delivery of public services from other countries, such as England. Until recently the UK appeared to be completely dominated by high spending welfare philosophies that would condemn it to fiscal choking and rapid decline. Well, not so. Surprisingly, after an inconclusive national election, contrary to expectations, under the Conservative Liberal-Democratic coalition, led by Prime Minister David Cameron and Deputy Prime Minister Nick Clegg, England immediately embarked on a brand new course.

Literally after a few days in office, the new coalition government announced what is by any measure an extremely aggressive spending cuts program aimed at drastically reducing the dangerously bloated deficit and public debt in the UK. At the same time, the coalition launched new ideas for the decentralization of services and the streamlining of existing ones, without eliminating traditional safety nets, such as a state run health service. So, if the seemingly welfare addicted Brits can have a dramatic change of heart, it is not impossible for Middle America to see the light and embrace a different model for its government, national and local.

Why are we stuck?

In all this, the really tough question is: "Why don't we see more widespread –indeed enthusiastic– adoption of what we see in Indiana? After all, these are policies that should be regarded, in a politically neutral fashion, as “best practices”. The answer is probably in the ideology saturated climate that we have created, whereby only pure, orthodox –and thus, almost by definition, impractical– models can get a hearing from the ultra orthodox audiences that are now leading political debates.

Solutions come from intelligent pragmatists

Indeed, it is not an accident that the Indiana accomplishments have been led by non ideological, essentially centrist, elected leaders: Mitch Daniels, the Republican Governor and Graham Richard, the Democratic Mayor. Recently Daniels was criticized by Republican purists for having advocated a national “truce” on divisive social issues, so that Democrats and Republicans could come together in Washington and work on addressing the much more vital economic problems that literally threaten America’s ability to be a high income country and the leading world power. The very fact that some people think that fighting the good fight, now, on school prayers and gay marriage is really crucial, while the ship is taking in water, is a measure of the prevailing, ideology driven, misplaced priorities. The only hope is that at least some of the common sense being put to work in America’s heartland will spread around.

In short: we need more leaders like Mitch Daniels and Graham Richard.

Unlucky Pakistan?

WASHINGTON – In an earlier piece I had expressed deep skepticism about the possible impact of a large (8 billion dollar), multiyear US development assistance package for Pakistan. A substantial bundle of money, yes; but not large enough to make a big difference in a huge country with a mostly poor, illiterate population of more than 170 million, (this is more than half the whole of the United States).

Needs greater than what the US can provide

Pakistan's inefficient government, embattled in a difficult and murky counterinsurgency against domestic and foreign Islamic radicals, (too many questions as to which side at least some elements within the Pakistani security services are really on), is not well positioned to effectively manage economic and social development. US assistance may help some, but not that much.

Nature conspiring against Pakistan

Since then, it would appear that nature conspired to make things a lot worse. The worst floods in recent memory have caused untold damage and the displacement of at least 14 million people who lived in some of the poorest and least developed parts of the country's North West. As events are still unfolding, impossible at this time to assess the actual extent of the damage. For sure, the country is ill equipped to deal with the inevitable consequences of lack of food and contaminated water. Diarrhea related deaths are exploding and there is concern about cholera outbreaks. International disaster relief assistance is coming in; but, as always, it will not be able to contain the enormous damage to people and property.

Human actions made things a lot worse

So, an already troubling picture has turned into really bad. But, sadly enough, it would appear that this natural disaster has been aided by human carelessness, in the form of inexistent flood prevention plans coupled with unwise deforestation. See this excerpt from the Op-Ed piece, "*Sixty-three and down on our knees*", by Ardeshir Cowasjee , published in the leading Pakistani daily Dawn, Sunday, 15 Aug, 2010:

"The true number of persons killed, displaced and affected by these tumultuous floods is not known. But it can safely be said that man in the form of the Pakistani has most ably assisted the wrath of nature. None amongst the provinces [affected by the flood] has been able to agree on whether dams should or should not be constructed and so for years the possibility of massive flooding has been on the cards and kept in abeyance.

Hillsides have been illegally denuded by various ministerial and timber mafias, forests have been chopped down, development has been shoddy – in short corruption, graft and greed have all played their part in what is happening along the banks of the great River Indus, and other rivers – today.

We must all of us bear some responsibility for the death and destruction now visited upon us. We have cast our ballots, we have brought in and acquiesced with corrupt and inept governments, we have welcomed in military 'great redeemers' with flowers and ladoos [traditional sweets] and then seen them off with scorn, as we have the politicians. We, all of us, are not worthy of being citizens of Pakistan – because Pakistan was never meant to be what it now is".

Dreams in Kabul?

"We have the ability to rule and govern our country [Afghanistan] and we have our sovereignty. We hope that NATO countries and the U.S. pay attention"

—Afghan President Hamid Karzai, speaking to Afghan civil servants, August 7, 2010. (Quoted in: *The Wall Street Journal*, August 9, 2010)

Hey, that's great news. They "have the ability to rule their country". And nobody told President Obama? Just a quick phone call to General David Petraeus, discuss a few details, and *presto*: all US and NATO troops go home. Why do we need the end of year review for our Afghan strategy? Why start withdrawing troops only in July 2011? Let's pack and go home now. Apparently our policies have been wildly successful. They can do whatever needs to be done on their own. Or so the President of Afghanistan says.

Only kidding?

Alright, I was kidding. But was President Karzai also kidding? This was an official speech delivered to an audience of government officials. If he was not kidding, then his statement, as a minimum incorrect, is troubling. One thing is a pep talk aimed at boosting morale of perhaps wavering civil servants, quite another is to misrepresent basic facts.

It is quite obvious that all of us would like to see an Afghan Government in total control and capable of running its business, including providing internal security and improving the country's primitive economy.

Aspirations and reality are different things

But let's not mix aspirations and today's reality. Afghanistan is still a mess; and likely to be a mess for quite a while

—even assuming great success of US actions there. (As I have written elsewhere in my www.SchirachReport.com , I have strong doubts about them).

The Trouble With The Automobile

WASHINGTON – Recently, President Barack Obama has made orchestrated appearances at several US auto manufacturing plants. In each case he pointed out that, thanks to the costly sector bailout arranged by his administration in 2009, hundreds of thousands of jobs at GM and Chrysler have been saved. And to these we should add, says Obama, jobs at scores of auto parts suppliers, plus thousands of people employed by car dealers and by the whole economic universe sustained by the auto sector. So —says our President— thanks to US government inspired actions, domestic brand auto manufacturing survived. With the aid of tax payer money it had a chance to retool and reorganize and is hopefully getting ready to spring back as good as new. So, can we say that smart public policy saved iconic private sector car enterprises that had got themselves into terminal crisis? Well, yes and no.

Auto bail out: good public policy?

In the short term, the answer would be "yes"; if you are looking at the economic and especially political upside, (America votes for congressional elections in November), of salvaging a substantial chunk of American manufacturing and all the jobs that depend on it. In a recession ravaged economy, with millions of unemployed, every bit of shoring up helps, and the auto sector, especially in the Mid-West, is still a traditional anchor.

Not so good

But, if we are looking at the long term, this massive auto bail out may not be as inspired a policy as it may appear. Years from now, an economic and transportation strategy still predominantly and stubbornly focused on private cars will not appear that smart. The big auto bail out may be viewed in the future as just another case of a "sorcerer apprentice" government unwisely trying to be entrepreneur, pouring huge resources into ill fated industries. To put it differently, even assuming near term success in the government funded reorganization of General Motors and Chrysler, it is not so clear that auto industries should be and will be the backbone of healthy manufacturing ten, twenty years from now.

The future of the automobile: not so promising

And I am not talking about growing public backlash against pollution connected to car use. Of course, the systemic threat of global warming largely tied to the still unresolved issue of transitioning away from internal combustion engines that use gasoline or whatever other polluting fuel is a problem. Yet, I submit that even if we assumed a totally transformed auto industry, (let's dream for a moment), ushering us into a new era of large scale production of affordable, zero emission electric cars running on electricity produced by renewable sources, this way magically eliminating the whole environmental dimension, I would still question the continuing value of the private automobile as the primary means for individual transportation in densely populated areas.

Congestion…

And the problem is massive, growing and intractable congestion, due to too many vehicles fighting for more and more crammed road surface. And congestion is not just a minor inconvenience that comes along with cars. Congestion levels are so high in large population centers that drivers are forced to crawl to most destinations at ridiculously low speed. Too many cars causing constant gridlock mean that the most basic value of the car, moving around fast, is essentially voided.

…..And its huge costs

The data is out there. Congestion, in America and elsewhere around the world has reached horrendous proportions in all large population centers. It means longer commuting time. It causes economic damage in terms of countless hours wasted every day by millions of drivers stuck in traffic, (not to mention rivers of gasoline burnt for no purpose). All these hours wasted affect economic productivity and quality of work performance by people stressed out by hours spent in traffic before getting to work. All this should amount to a fundamental reassessment as to the actual value of the car. Oddly enough, the car, a tool that is supposed to enhance quality of life, ends up diminishing it.

Congestion in emerging economies

Congestion has been an intractable factor already for decades in rich countries. And developing or middle income countries such as India, China, Indonesia, Vietnam, Brazil and others are catching up very fast. I have seen constant traffic jams and gridlock in Cairo, in Bangkok, in Paris, in Johannesburg, in Dhaka and in Beijing; but also in Maputo, Mozambique and in Lusaka, Zambia. All this indicates that, given the physical constraints of limited road surface and millions of motorist, (mostly only one per vehicle), competing for it, saturation point is quickly reached.

“Bus Rapid Transit” is an alternative to cars in cities

So, common sense would dictate that we have to devise alternative solutions, based on mass transit systems that can give people the same advantages of the car, minus the impediments of gridlock. And, among the many alternatives, ***Bus Rapid Transit, BRT****, seems to be the most cost effective; with the advantage of having been implemented in many different cities. BRT systems have been tried, tinkered with and refined in many large cities around the world, starting decades ago following inspired actions of forward looking city planners in Curitiba, Brazil. (More on this below).*

Myths about the car linger

But, while these alternatives are known and none of this is news, all of us, in the developed as well as in the developing world, are still psychological prisoners of a completely and demonstrably untrue idea whereby the car is still by far the best tool to get around.

Perverse parameters: gridlock is a sign of affluence

Beyond this, almost perversely, many cars on the roads are still touted with pride by policy-makers as evidence of increased societal affluence. Thus, more cars indicate more wealth. Plenty of cars: well, this means that we, as a society, “really made it”. It does not seem that we can get to a point of “too many cars”. As cars are the most tangible proof of increased wealth, then total gridlock must be “the sign” of true prosperity. Talk about being confused about the nature of “real” progress: i.e. a process that would deliver tools that truly enhance the quality of life. What value is there in being stuck in constant gridlock?

Was it better when we were poorer?

A funny sequence of vignettes I recently saw in a modern art museum in Beijing illustrates this point.

Vignette 1*: On one lane in a street hundreds of cyclists pedal* *away. But their eyes are fixated on the other lane in which a lone official car speeds away. Clearly there is an element of amazement mixed with envy in the expressions of the cyclists. The lone car and its passenger, probably a high ranking official, goes along very fast, while all the cyclists have to pedal to get to their destination.*

Vignette 2*: On one lane in a street hundreds of cars are stuck in infinite gridlock, inching forward in gigantic traffic. But all car drivers are fixated on the other lane in which a lone cyclist speeds away without any traffic impeding progress. They have the same expression of amazement and envy displayed by the people in the previous vignette.*

OK, you get the drift: too much of what was supposed to be a good thing, in the end is not good at all. The car, supposedly the tangible sign and the symbol of new wealth for an emerging Chinese middle class, is actually making life worse. The lone bicyclist goes much faster than all the new cars stuck in traffic.

If there are diminishing returns with too many cars, then what?

So, the vignettes illustrate –convincingly– that there are diminishing returns to the ever expanding presence of the automobile. But this fact has not percolated into the realm of economic activities and innovative public policy. We are stuck in a past era in which different criteria were appropriate simply because cars were not that common and there was plenty of room for more. But today the rationale for focusing on the private car as the primary means to provide the benefit of personal mobility, especially in the context of large population centers, is no longer there. The continuing exaggerated weight of the auto sector in the general mix of a modern industrial society reflects outmoded thinking and a gigantic misallocation of resources –including the US, Washington-led, 2009 auto bail out.

The car in perspective

The car was a fine innovation when it was first introduced more than a century ago. For the first time in human history some people had the real chance to go places on their own, at unprecedented speed, using a mechanical contraption that became more and more affordable thanks to the assembly line and mass production. The car did away with horses and all that was necessary to keep them as the only motor force that mankind had known for millennia. (Railways had already provided solutions for long distance travel long before the car. But trains do not get you around in cities).

Good for a while

Historically, as cars became more affordable and their numbers on the road increased, we increased capacity of cities and roadways. We built highways that could accomodate more cars. But, overall, when we started reaching a saturation point, we could only make only marginal, less and less effective improvements: ranging from building more roads, adding more lanes to the existing ones, building large underground parking garages in cities and new shopping centers away from city centers, and so on. In many mature, large metropolitan areas this is it. There is no more room for more cars.

Lessons not learned

And yet, perversely, we continue doing pretty much the same thing – buying more cars– hoping that, somehow, congestion will be magically eliminated. In some large cities, such as London, local authorities tried to discourage the use of the private car by imposing a congestion charge to enter the central areas where traffic is worst. But this economic deterrent produced only moderate returns. And why is it that many prefer to pay extra and continue to drive? Because the alternatives are not that good. Yes, there is underground rail and there are buses in London. But the underground does not go everywhere; while buses move at the same speed of the surface traffic. And so we are still stuck in slow moving traffic.

Developing countries: also over reliant on cars

And apparently no lessons are learned from the experience of diminishing returns for the car in developed economies. In developing countries the story is unfortunately repeating itself. In now more affluent India or China as millions of people get better jobs, they immediately rush to buy a car. Soon enough too many cars create gigantic road congestion, (Beijing is a perfect illustration of this, and so is Indian high tech city Bangalore); thus doing away with the theoretical advantage of owning one’s own private means of transportation: speed of movement.

Remedies

As for remedies, theoretically there are many. But the most popular ones come with staggering price tags. Of course, we know about underground metro rail systems. Several have been built all over the world. And this is good. The problem is that expanding or building from scratch these underground networks is horrendously expensive, given the huge cost of digging tunnels and underground stations. Thus new or significantly expanded underground rail systems that could provide a real alternative to the car for most people are inherently unaffordable in most instances.

Buses…

But, as mentioned above, there is a viable, affordable alternative in ***Bus Rapid Transit, BRT****. Yes, I say “bus”. I know that in general the “bus” conveys the notion of unreliable service; of overcrowded, noisy, smoke belching, old vehicles; of people waiting and waiting at a stop in the rain,* *cold weather or suffocating heat, depending on where you are. And then, when the old bus finally arrives, there is the hesitant journey, proceeding slowly because the bus, beyond its many stops, is constrained by the speed of the rest of the traffic. So, how can the old bus be a good idea, a true innovative breakthrough?*

…Provided that we have "bus only lanes"

Well, it can be truly innovative; but only if we stipulate that the bus is an advantageous alternative to the car only if it can use dedicated, "bus only lanes" with no cars or other vehicles slowing the flow of bus only traffic. If we can get to the creation of bus only lanes, at the same time building modern bus stations with the same features of metro stations for quickly boarding and changing buses, then we shall have the same advantages of underground systems in terms of speed and convenience; but at a substantially reduced cost, because you do not have to do the extremely expensive and time consuming underground digging. Buses travel on surface roads.

Why don't we do it?

Well, if this is so simple, then why don't we do it? Because there is still this fantastic psychological and truly emotional attachment to the car that makes it almost impossible for most people to think that it can be displaced in favor of public transportation. And this is the major obstacle for introducing BRT systems, as in most instances there is not enough space for both, dedicated bus lanes and private cars. If we go in favor of BRT, we have to ban or at least restrict cars. And this would be a tremendous change from all that we are accustomed to regarding mobility within large urban centers.

And so, gridolock notwthistanding, nobody dares to say that cars are the problem. There is fear of public backlash. It is assumed that people would idiosyncratically resist a ban or restrictions on cars, the only means of transportation they know and rely upon; while they will be suspicious of a public transportation alternative system that may not work as advertised and that may end up costing a lot more in terms of daily use.

Too many obstacles?

And here is the issue: psychological and ultimately political. Public administrators and civic leaders would have to stick their neck out and push forward something that most people would regard, at least at first glance, as crazy and unworkable. But, assuming the successful conversion of the public to this new way of getting around, how does all this work?

Bus Rapid Transit in reality

The bus system would work by creating a network of interconnected, dedicated bus lanes that would function just as the tracks work for metro rail, guaranteeing the unimpeded flow of buses at a consistently high speed. The buses would have user friendly, covered stops and stations that would allow easy and quick connections with other buses. These would function just like metro rail stations, allowing fast and easy transfers.

And there you have it. The same advantages of an underground metro system, minus the horrendous cost of digging the tunnels in which metro trains run. Conceptually this is simple. But is this unreachable utopia? Not really. While not main stream, BRT systems do exist. Decades of good records would indicate that this is a viable mass transit solution. Large cities have experimented with BRT and overtime have improved its functionality creating now models that can be replicated in different localities.

Successful implementation in Latin America and Australia, among others

Diverse large cities such as Curitiba, (population 1.6 million), capital of the state of Parana in Brazil, Bogota, (population 6.8 million), capital of Colombia and Brisbane, (population 1.8 million), in Queensland, on the east coast of Australia and the country's third largest city, are good examples of the successful introduction of BRT systems. Through these bus systems people move around easily and comfortably at a reasonable cost.

Private cars still exist

Private cars still exist and they are used in these cities. But they are no longer the only default system for lack of alternatives. Indeed, data show that many people, while they still own their cars, use them far less. They prefer to go to work by bus, thus making their daily commute faster and far less stressful. Beyond that, fewer cars on the road mean less pollution and less money spent on gasoline –an added bonus.

Improved quality of life for city dwellers

Moreover, and perhaps most important, it is obvious that a user friendly public transportation system improved the overall quality of life for citizens. As moving around gets easier, it is also easier to access parks, public places, cultural and business centers and shopping. And this intangible impact that improves the way citizens experience city life is probably the most valuable positive change brought about by easy mobility. So, we know that BRT solutions that strongly reduce the multiple disadvantages of gridlock are out there. They are not utopias.

Can we get Americans on board this bus?

But, if this is indeed so, why is it that novelty hungry and efficiency obsessed Americans have not been in the forefront of this transportation revolution aimed at improving quality of life, something that we Americans always seek and appreciate? Why is it that we do not see delegations of US local authorities flocking to the municipalities around the world in which BRT systems have been successfully implemnted, in order to learn more? Who knows exactly why.

A key reason is that America is the country in which the love affair with the automobile is so old and so deeply rooted that it is almost impossible to create the mental space for alternative thinking about mobility solutions, let alone alternative experimentation. So, concrete evidence of successful bus based systems notwithstanding, there is little interest in them.

The powerful headwinds of the US auto and oil sectors

Of course, US public opinion has been shaped by powerful forces. For decades in America the auto and oil industries have had inordinate influence. The two combined have used their vast economic power to pay for lobbying aimed at safeguarding their vested interest in the endless perpetuation of transportation policies and systems founded on the private, gasoline fueled car. Their lobbying actions, resulting in direct and indirect subsidies to the oil sector, cars and road building, blended with the force of habit of people who never thought beyond owing a car, created an extremely powerful economic and political coalition favoring the *status quo:* in America there will be cars and nothing else. All this was and is still aided by a deeply entrenched popular culture that reinforces the enduring love affair with the automobile.

Cars forever?

As a consequence, most Americans honestly believe that the car is and will continue to be the only way to get around. And, as the conventional wisdom tells them that there are no alternatives, then millions of Americans are prepared to suffer in daily traffic, if this is the penalty to be paid for moving around in private vehicles.

The massive failure of the US auto makers in 2008 could have been an opportunity to pause and rethink the whole idea of the car as the default choice for getting around. But this was not done, because, in the midst of economic chaos, public officials in Washington did not think that they had the luxury to start a national conversation about the future of personal mobility strategies. In that chaotic period, public policy was all about containing the damage of economic meltdown. The decision to bail out Detroit was not made in the context of a careful rethinking of future personal mobility choices. The bail out was about salvaging jobs in a sinking industry, once upon a time a national icon. And so it was.

Will there ever be political space for fresh ideas?

But, by doing this, and by showing no interest in any new thinking on this subject more than one year after the emergency bail out, as illustrated by the President telling America how good the prospects are for US car manufacturers, the Obama administration is proving to be just as unimaginative and timid as all its predecessors. We are stuck in this vicious cycle whereby we still bet on cars because we do not even consider alternatives. The only reason why congestion is not getting much worse in this recession is because people do not have money and thus they buy fewer cars.

In the meantime, the citizens of Brisbane and Curitiba have the choice of moving around in convenient, affordable buses. And we thought that America was leading the world in user friendly innovation.