

Weak Signals and Wild Cards

Prepared by Wendy McGuinness

Think Piece 4

August 2008

SUMMARY

The annual World Futures Conference was held in Washington D.C. from the 25-29 July. Over 1000 'futurists' met to discuss the results of their scanning: weak signals, wild cards, counter trends and mega trends. Futurists study the future in much the same way that historians study the past. They look for patterns and identify milestones in order to understand what, when, where and how quantum leaps might occur. Success in forecasting is about useful thinking, rather than being right. Imagining these futures allows us to develop consensus over what we want, collectively, and how best to get there. Our purpose in exploring the future is to promote long-term thinking in New Zealand, and my attendance at the conference was to help our team to develop a national strategy for New Zealand. What follows is a little of what I found 'out of the ordinary'.

I was pleased to discover that our methodology at Sustainable Future was tight and in many ways aligned well with the work of others involved in the conference, specifically The Millennium Project. Fortunately, Jerome C. Glenn, the Project's director, agreed to be videoed so New Zealanders have an opportunity to hear his insights. He really has the ability to transport the listener to 2058 – see this [interview](#) on our website.

What I discovered was that the future is far closer than we thought. Many of the milestones we expected in 2058 may occur as early as the late 30s. An example of this is the expectation of a machine with the brain power of a human by 2029 and man leaving the planet in the 2050s.

Our premise is that thinking about our future in fifty years requires looking back at least 150 years. We already have significant communication technologies and Moore's Law predicts exponential growth in digital technology, with performance expected to double every two years. Figure 1 provides a reality check as to the speed of change in the last century. The degree of change this generation will undergo will be huge, so it is important to understand that change is cyclical, and that while key events and challenges may not always repeat they will inevitably rhyme.

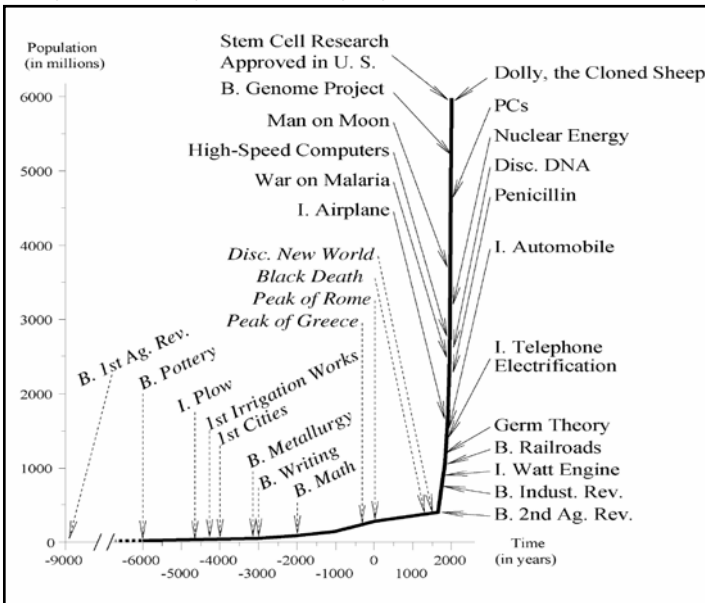


Figure 1: The Growth of World Population and some major events in the History of technology  
Source: Fogel, R. 1999. *Catching Up With the Economy*. American Economic Review. 89 (1) (March):1-21

The implications are that without exploring the future we are likely as a society to be shocked by the nature of the change ahead. We are not alone in this, but societies that are informed, educated and creative are more likely to cope with change better than those that do not. One essay that I recommend reading is 'Gin, Television and Social Surplus' by Clay Shirky, author of *Here Comes Everybody*. He argues that when mankind is faced with big change, our reaction has been to hide in the comfort of stupor— gin-induced after the industrial revolution and TV-induced in the 20<sup>th</sup> Century. The net effect is that these vices allowed large masses of the population to hibernate. The rise of the blog, Wikipedia, YouTube and other interactive media indicates a reemergence of the populous, and provides mankind with a great cognitive surplus.

As a result of this 'awakening of the masses' we can expect the collapse and re-design of mainstays of society, such as the newspaper and the educational system. This change can hurt – it's what Alan Greenspan calls Creative Destruction – but it has always happened and will happen again: it is a part of growth.

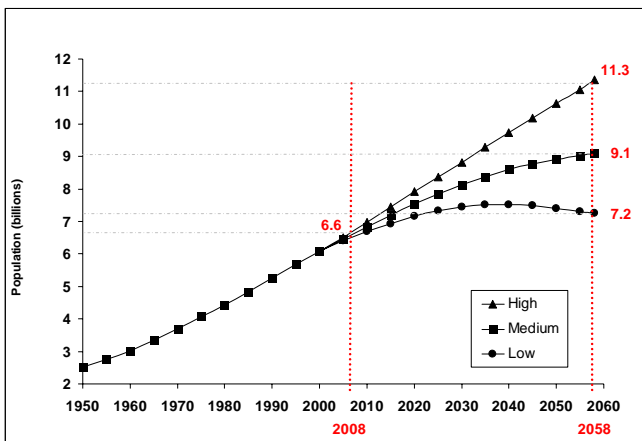


Manhattan—50 Floors Up

Without any significant changes, the trends indicate that we can expect an increase of 3 billion to approximately 10 billion in 2058 (See Figure 2). It is not that we cannot build cities to effectively cope with large population: Manhattan, New York, feeds and shelters three-quarters of New Zealand's population during the day (approximately 3 million) in an area equivalent to two thirds the area of Waiheke Island. The problem is not the ability to

build for large populations but the level of inequity we allow to exist.

By 2058, almost a quarter of the world population is expected to be over 60 years of age, but we need to look more closely at what comprises this figure to understand the full implications. The important point is that when dissected, 25% of the world population (including China but excluding Africa) will be over sixty, whereas only 10% of the population in Africa will be over 60.



**Figure 2: Estimated Population**

Adapted from World Population to 2300, United Nations: New York, 2004.

This means that within fifty years, the three billion living today on \$2 or less could increase to 6 billion. This would put in place a significant change where those living in poverty, currently 40% of the population, will become 60 percent of the population in fifty years time. In addition, if the World Health Organisation is correct with its prediction that by 2015, 3 billion people will be overweight or obese, the implications could be that 40 percent of the population will be aging, overweight and wealthy, while 60 percent will be young and hungry, none of which bodes well for the future.

Another impact on our future will lie in possible ties between organized crime and terrorism. Global illicit trade is currently estimated at \$1 trillion each year, a figure equivalent to the combined military budgets of the entire world. In order to prepare for this wildcard, we will need to address how effective national policing of crime can be when dealing with a global network of this magnitude.

In order for society to adjust to the quantum leaps ahead, there is a need to prevent shock. To achieve this, we need to be designing the steps that will enable us to reach these new heights now, a point made to me by Peter Bishop, professor and coordinator of the Future Studies Program at the University of Houston-Clear Lake. Key to this process is the idea of focus. Using the analogy of the black and white silhouette image of the vase, or the two faces, Edie Weiner outlined the importance of what we choose to focus on, and what then suffers for lack of our attention— for example, the importance of focusing on learning rather than education; or wellness rather than health.

New Zealand has a great brand and we are 'world class.' This was reinforced at the conference, so our challenge is not how to get there, but how to stay there. To do this we need leaders who can define the problem, develop consensus and design a solution. I believe we are fortunate to have some of the most effective politicians scattered throughout all our political parties – but we need them to be excellent, not just good. We need to demand excellence – of thought, of transparency, of honesty and lastly, of strategy. The responsibility lies not with leaders alone, but with each and every New Zealander.

**Weak signals** are early indicators of changes in trends or systems. If they are picked up, these signals offer the possibility of anticipatory action.

**Wildcards** are low-probability and high-impact events that have the potential to vastly impact upon our future, such as outbreaks of pandemics, or acts of terrorism.

New Zealand has attempted to progress a national strategy many times in the past – such as the Knowledge Wave, the Sustainable Development Plan of Action and Michael J. Porter's book *Upgrading New Zealand's Competitive Advantage* – but we have not succeeded – and I think it is timely to ask why. My view is that we have not defined 'all the problems' in such a way as to understand the interconnections and opportunities; nor have we engaged all the people of New Zealand. It's like we have formulated our solutions before exploring the questions. So I believe we need to define the problem, explore the question, and lastly, find a group of actions that move New Zealand forward – and by this I mean a national strategy.

Writing a national strategy is not a plan that should be strictly followed, but a blueprint that outlines what New Zealand intends to pursue as well as clarifying what we will not pursue. It will be a vehicle for aligning policy and proactivity amongst the four million New Zealanders living in New Zealand, the one million New Zealanders currently overseas, and the citizens of the world that are actively looking for partners to help manage the world in the long term future.

What is clear from our analysis is that it is no longer just about making New Zealand survive the long term future, we are all in this together and without being fully aware of the implications of our actions and developing a comprehensive strategy, the status quo will deliver us to a place we clearly will not enjoy. We have work to do and I am reminded of the words of John F. Kennedy:

*"All this will not be finished in the first 100 days. Nor will it be finished in the first 1000 days, nor in the life time of this administration, nor even perhaps in our lifetime on this planet. But let us begin"*

#### Links to learn more

- Watch the '[nanotechnology factory](#)' video
- Track the [Technology Revolution](#)
- View an innovative way of [tracking crime](#) in Brazil
- Read [Gin, Television and Social Surplus](#)

#### Selected references

- [Obesity](#)
- [World Population 2300](#)
- [Aging Populations](#)
- [Machines 'to match man by 2029'](#)

#### Great Books

- *The Way We Will Be 50 Years from Today*
- *2008 State of the Future*
- *The Age of Turbulence: Adventures in a New World*
- *Futurecast*

-These books, and more, can be found on our monthly book review on our [Blog](#).

#### Interviews from the World Future Conference

See Jerome C. Glenn, Joseph Coates and others discuss the future, available on our [website](#).

#### Find Out More...

This think piece was prepared to accompany a presentation made by Wendy McGuinness at the 7X7 Ideas Forum, 26 August 2008. To see the video, go to the [7X7 website](#), to see the slideshow, go to our [Publications](#) section on our website.