

IS SINGULARITY THE RIGHT ANSWER TO OUR FUTURE.

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Abstract:

Back in 1977 Ken Olson, president, chairman and founder of Digital Equipment Corporation, said: "There is no reason anyone would want a computer in their home." How far is that from the truth today – do you know of a household (in a developed world), that does not own a computer these days?

Carl Johan Calleman discovered the Mayan calendar where the ninth wave activated on March 9, 2011 providing energies that are conducive to the human beings co-creating unity consciousness.

John Naisbitt predicts religious revival of the third millennium. In his book Megatrends 2000 he wrote that science and technology do not tell us what life means. WE learn that through literature, the art and spirituality.

Some authors in human resources management suggest that there are two possible venues for this field in the future. In one, human resources play a critical role in decision making. In the second human resources as we know them today it will disappear and will be replaced by outsourcing and technology. The assumption that human resources will be any different in the future is based on some significant trends.

Raymond Kurzweil, one of the worlds' leading inventors, thinkers, and futurists, predicts the "new" Singularity era in which our intelligence will become increasingly non-biological and trillions of times more powerful than it is today. Non-biological intelligence will match the range and subtlety of human intelligence.

If the Singularity is really our future then we must be able to learn from the future in the way we have been learning from the past.

Keywords: human brains, future, singularity, non-biological intelligence

Introduction:

"Predicting is Very Difficult, Especially if It's About the Future." In the past century, renowned experts were often very mistaken.. Back in 1899 *Charles Duell, head of the U.S. Patent Office seed* »Everything that can be invented has been invented." *Thomas Watson, chairman of IBM in 1943*, thought there is a world market for maybe five computers. Also Bill Gates made a big mistake, when in 1981 said " Who in their right mind would ever need more than 640k of ram!?". Back in 1977 Ken Olson, president, chairman and founder of Digital Equipment Corporation, said: "There is no reason anyone would want a computer in their home." How far is that from the truth today – do you know of a household (in a developed world), that does not own a computer these days? In 1977, actually 30 years ago only 50 stores in USA catered to computer hobbyists. In five years they increase to 30.000 (Naisbitt 1984).

Unlike technologically oriented sages, some futurists see the future as a return to spiritual values. Carl Johan Calleman discovered the Mayan calendar where the ninth wave activated on March 9, 2011 providing energies that are conducive to the human beings co-creating unity consciousness.

The Mayan calendar is associated with nine creation cycles, which represent nine levels of consciousness or Underworlds as symbolized by the Mayan pyramids. This pyramidal structure of consciousness development can explain things as disparate as the common origin of world religions and the modern complaint that time seems to be moving faster.

Time, in fact, is speeding up as we transition from the materialist Planetary Underworld that still governs us to a new and higher frequency of consciousness, the Galactic Underworld, in preparation for the final Universal level of conscious Enlightenment.

The Mayan calendar is thus a spiritual device that enables a greater understanding of the evolution of consciousness driving human history and the concrete steps we can take to align ourselves with this cosmic evolution toward Enlightenment (Calleman 2010) .

John Naisbitt international best-selling author predicts religious revival of the third millennium. In his book *Megatrends 2000* he wrote that science and technology do not tell us what life means. We learn that through literature, the art and spirituality (Naisbitt & Aburdene. 1990). He continues his work exploring trends in China.

“We were in search of China’s Megatrends. We were aware that we were looking at a country undergoing great change in a very complex way, with each region and each city moving at different levels and at different speeds.

“What we found was of much greater dimension and importance than we had expected. China is creating an entirely new social and economic system. In the next decades China will not only change the conditions of global economics, the Chinese model challenges the Western democracy as the only governing model capable of reducing poverty and providing the social and economic rights required” (Naisbitt & Naisbitt 2010).

Some authors in human resources management suggest that there are two possible venues for this field in the future. In one, human resources play a critical role in decision making. In the second, human resources as we know them today, [it] will disappear and will be replaced by outsourcing and technology. The assumption that human resources will be any different in the future is based on some significant trends.

What will be our future?

Already some decades ago, the information society, which in its extent is more significant than industrial society, was in the predictions of the future. But they came upon difficulties

when trying to give a name to what follows the information civilization.

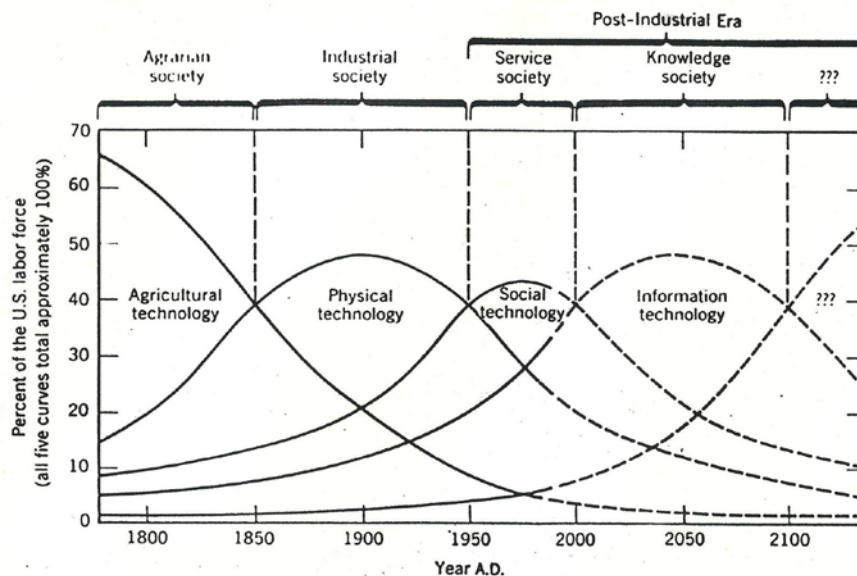
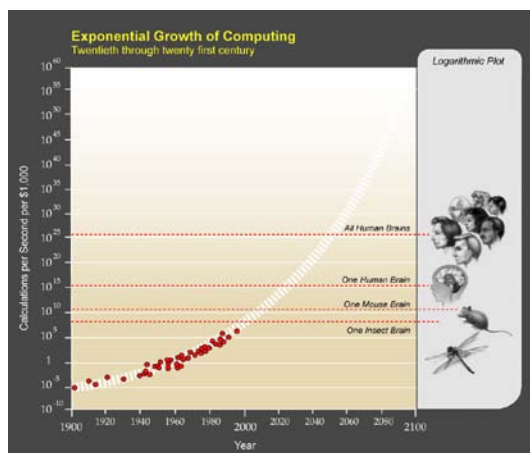


Figure 2-1. The evolution of technology.

Source: "The Life Cycle of Evolution," *Technological Forecasting and Social Change* (forthcoming).

Source: W. Halal 1986

Perhaps the right answer lies in the integration, the connection, between biological and technical resources, as seen by Raymond Kurzweil, one of the worlds' leading inventors, thinkers, and futurists. His prediction is "Singularity". Era in which our intelligence will become increasingly non-biological and trillions of times more powerful than it is today. Non-biological intelligence will match the range and subtlety of human intelligence (Kurzweil 2005).



His arguments are the concept of exponential growth, radical life expansion, and how we will transcend our biology, which can be found in his book "The Singularity is near". He believes that most long-term forecasts of technological feasibility in the future [time periods] dramatically underestimate the power of future technology because they are based on linear view of technological progress. Kurtzweil suggests another approach, exponential view. An analysis of the history of technology shows that technological

change is exponential, contrary to the common-sense “intuitive linear” view. So we won’t experience 100 years of progress in the 21st century — it will be more like 20,000 years of progress (at today’s rate). The “returns,” such as the chip speed and cost-effectiveness, also increase exponentially.

Kurzweil organises his observations into what he calls the law of accelerating returns as follows:

- *Evolution applies positive feedback in that the more capable methods resulting from one stage of evolutionary progress are used to create the next stage. As a result, the*
- *rate of progress of an evolutionary process increases exponentially over time. Over time, the “order” of the information embedded in the evolutionary process (i.e., the measure of how well the information fits a purpose, which in evolution is survival) increases.*
- *A correlate of the above observation is that the “returns” of an evolutionary process (e.g., the speed, cost-effectiveness, or overall “power” of a process) increase exponentially over time.*
- *In another positive feedback loop, as a particular evolutionary process (e.g., computation) becomes more effective (e.g., cost effective), greater resources are deployed toward the further progress of that process. This results in a second level of exponential growth (i.e., the rate of exponential growth itself grows exponentially).*
- *Biological evolution is one such evolutionary process.*
- *Technological evolution is another such evolutionary process. Indeed, the emergence of the first technology creating species resulted in the new evolutionary process of technology. Therefore, technological evolution is an outgrowth of—and a continuation of—biological evolution.*
- *A specific paradigm (a method or approach to solving a problem, e.g., shrinking transistors on an integrated circuit as an approach to making more powerful computers) provides exponential growth until the method exhausts its potential. When this happens, a paradigm shift (i.e., a fundamental change in the approach) occurs, which enables exponential growth to continue (Kurzweil 2001).*

These quite convincing arguments still leave some questions for those who sceptically have doubts about such a rapid development, and view information technology as a social threat that intervenes in privacy and human relationships. There is nothing new about this, as every innovation has been accompanied by scepticism and fear of its consequences. Even the invention of the bicycle inspired fear of the ‘dire’ consequences.

There is more relevance in reflections on the role of the human mind alongside superior technology. If the Singularity is really our future then we must be able to learn from the future in the way we have been learning from the past.

When speaking of co-existence between humans and nature, sustainable development and climatic changes, Kurtzweil is also a great optimist. “Every two years, we have twice as much solar energy in the world. Today, solar is still more expensive than fossil fuels, and in most situations it still needs subsidies or special circumstances, but the costs are coming down rapidly -- we are only a few years away from parity. And then it's going to keep coming down, and people will be gravitating towards solar, even if they don't care at all about the environment, because of the economics.«

We also rightly expect assistance from new technologies in waste management, recycling, the preservation of clean air, and the production and distribution of food.

In this area, too, there have still been dramatic differences. A family in the Bridjing refugee camp spends \$1.26 per week on food, whilst a German family spends \$500 over the same period (Menzel & D'Aluisio 2007). Will we also make an exponential leap in this area?

Kurzweil promises even more.

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