

The Synergy between Business Intelligence and Big Data – lowering the gap between the Future and Present Day

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Abstract: The knowledge and the information economy are part of the 21st century Economics. Business Intelligence and Big Data working together will result in the synergy of facts, global facts that now could be forecasted. The autonomous forecast could represent the new breakthrough for statistics and economic development by creating an instrument for lowering the number of choices you have in developing a new path, because from those paths, when you filter them with the time factor, feasibility and financial determinant a limited number of choices would represent a competitive advantage by itself.

Key words: big data, business intelligence, synergy, dot.com bubble.

1. Introduction

In the year 1986 the price of a computer was of approximately 20 million USD, now being found 2.500 times faster and 30.000 times cheaper in the case of an iPhone 6, resulting in a 75 million times rise in processing power for every US dollar spent.

The chances that in the next 25 years the exponential growth will keep the same pace regarding also available technology at that time is valid from every point of view [1].

2. The Fringe between Man and Machine

These days, investments are massively targeted towards the Information Technology sector and for developing automated response systems for when in need, but a proactive workflow with tendencies to level any systemic irregularity before it could be conceived.

A century ago on the farm the tractor was used for the first time, and back then economists announced the tragedy: the unemployment will grow and the number of jobs in agriculture will decrease and automation will tip the balance towards the technical capital side, not the human capital one. Did that happen? No, actually there were created millions of new (types) of jobs.

Karl Marx foreseen the functional side of evolution and embracing it as a solution to get to future faster. Also, John Maynard Keynes saw the future, but path dependence was quite strong back then and he only highlighted the power of the future and its functional side, but wasn't able to describe it at its full potential.

The machine of the future, the one that is new on the farm it isn't the tractor, but the computer. Also like in physics, we are evolving from mechanics towards quantum physics and soon we will use quantum processing computers, but it would not create new jobs, this (r)evolution will consume jobs as we see them with our 2015 point of view, it will transform them and create new compensation paths for assuring a income for the unemployed of the future.

The biggest futurology expert of our time, Ray Kurzweil lately he made two statements: that till the year 2030 humans will be surpassed by Artificial Intelligence and until the year 2045 biological intelligence will auto-limit itself [6]. What does this mean for the actual way we approach Economics? It means that traffic controllers, taxi and truck drivers and waiters are the first in the automation process, they will be replaced by mechano-intelligent entities.

Successive recessions lead towards the replacement of labor with capital, but the issue arises from the fact that economic growth is reignited each time, the economic output re-enters its normal trend, the workflow or labor quantity decreases, this way jobs are lost for good.

3. Creative Destruction with a *bit* of Information Technology

Economists, starting from Joseph Schumpeter followed the scientific purpose of creating sustainable economic growth that could also be shifted towards emergent markets [4; 5]. Also Robert Solow followed the idea and created the theory that caught up momentum in the early '80s, but it was rapidly replaced by financial growth theories that sustain the idea that our economy could be developed by following the intangible side of the

economy, be it financial derivate, the service side of the demand or going further to the information economy that goes hand in hand with the knowledge society [1; 3]. All these are deeply segmented in the old school of economic thought reaching also the Austrian side of economic thought.

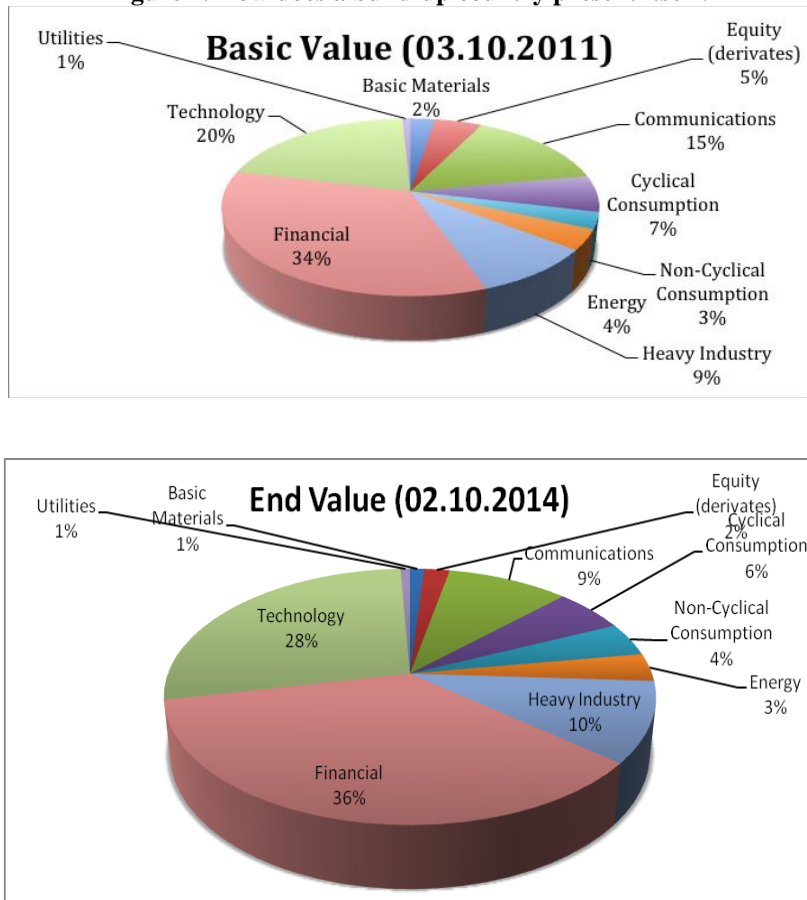
The intangible evolutionary component represents also the fringe and in the same time the acceleration towards the future: the need to ride the innovation wave for positioning human kind on the enlightened side of evolution, the side that allows lowering losses, decreasing the number of paths to follow developed at state, regional or union level (e.g.: infrastructure, recreating comparative advantages, creating competitive poles, etc.).

3.1. The Bright Side of the Economics

How could you develop a country in a functional manner and not by using unification processes, national consciousness and historical dependence?

Macroeconomic performance shows in a relative way how economic evolution is ignited in a country, but also the quality and life standard are important details in the path of development.

Figure 1. How does a build-up country present itself?



Source: own computations

From the graphs above we could see that in three years the functionally [2; 3] developed economy (country) evolved better than all economies worldwide (it almost doubled in volume), but in its sectorial evolution it did not move quite a bit when it comes to internal development. The only red light we could stress is the Technology sector that grew by 40% (from 20% to 28%, while the economy doubled in volume that means it grew actually in size by 2,8 times from the initial value of the sector, and all these in just three years. The pace of the technology sector represents an anomaly because all other sectors grew around 10% in three years when it comes to volume (2,1 times in financial value), which represents an ordinary pace. Another anomaly is the diffusing of the Communications sector, because it decreased from 15% to 9% in total volume, but because the economy doubled, it actually did not grow with the pace of the others, it grew only by 20% from the initial financial value.

4. Conclusion

Testing different models I realized that all hypothesis followed and the results obtained converge towards the idea of decision automation (not understood as taking a decision in an automatic manner through predetermined algorithms, but by stimulating the idea of accessing only some paths to follow and flow proactivity in the work process). Decision automation represents a normal step in the circuit of knowledge flow

obtained in the quantic (r)evolution and by treating information not as a final good, but as an intermediary flow that could have a multitude of endings, everything depending of the user's purpose.

The feasibility of this concept is in flow state; during the research realizing that we are on the verge of a new dot.com bubble, which this time is not created by Wall Street or Silicon Valley, but by the Quantitative Easing procedures that injected (almost) free money in the global economy.

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