

# Consciousness and the International Business Planning

Laskai András

## Abstract:

The most significant background motivational force of this study is GNR, the advent of artificial intelligence, which this study to be the most important transformation of the century. Data mining instruments become the driving force of development. Companies use systems applying artificial intelligence for intelligent data mining in every sector of industry. This intelligent data mining allows the system to make astonishingly accurate predictions regarding what quantity will be needed of each product in specific size businesses. In this correlation the system of relationships transforms from the aspect of consciousness as well. From the aspect of the above, the theoretical part of my present work is constituted by the theoretical foundation of consciousness, and as methodological support I applied software using data mining artificial intelligence, never before used self-developed data extraction models and programs as well as software developments expediting applied research, in summary hybrid data mining instruments. My present work creates a model of consciousness, in the cross section of the correlations of financial instruments constituting the business planning of international companies. The consciousness boundary values described in theoretical professional literature are mostly identical with the results of my analyses. The model and the selection system are applicable to all areas of economics, and can be further developed independent of the type of company groups.



**IJSB**  
Accepted 22 December 2018  
Published 02 January 2019  
DOI: 10.5281/zenodo.2528383

**Keywords:** Data mining, Artificial network, International Business Planning, Financial instruments, Consciousness

## About Author

**Dr. Laskai András**, (PhD-Candidate), University of Sopron, István Széchenyi Management and Organisation Sciences Doctoral School, Sopron, Hungary

**1. Introduction**

Consciousness can be interpreted and mapped on a system level. The appearance of human decisions in accounting reports is one of the end points of this consciousness. In the structure arranged according to the same principles, international business planning and its elements, financial instruments, are the end point of conscious business and the entire superstructure. Conscious companies have defined patterns and arrangements, which allows for the interpretation of the condition that proves the existence of consciousness  $\Phi (X(\text{mech},x_1)) > 0$ , (Tononi, 2008) thus for financial datasets, which can be interpreted and measured by tools involving hybrid data mining and artificial intelligence. The basic tools of discovering consciousness are hybrid data mining approaches, techniques and methods. The financial instruments of international companies and their annual or quarterly data show correlations, patterns, arrangements according to Pearson correlation coefficients. Factoring and clustering have shown the primary elements, which can also be considered the “inner core” of datasets. The predictions prove that neural networks can fit into the consciousness model.

The financial and accounting data that constitute the business planning of international companies are consciously planned. This appears in the fact that they understand the changes in their circumstances, and project those onto the level of financial instruments. Consciousness is also demonstrated in monitoring changes and planning goals. On the level of financial instruments this is realized in the way that the planning of companies function in an innovative manner after finding the optimal level, imbedded into identical systems of correlations, projecting identical patterns irrespective of time. Company planning follows the patterns of the functioning of a human organism. Consciousness, such as company planning has a survival value. Consciousness and company planning provide survival value and operational advantages. Just as in the case of an individual, for the organization as one of the manifestations of consciousness, business planning provides operational advantages. The organic system of the human brain is similar to a system of decision making monitored by value priorities, and in which conscious phenomena provide certain operational advantages, which can be adapted into consciousness independent systems. (Sperry, 1979)

**2. Finding and discussion**

The database for my research was provided by the July 2017 version of the Orbis Bureau van Dijk international business database (hereinafter referred to as: Orbis). Sampling was performed by the random sampling generated by Orbis.

If and when,

$$|H|_y = \begin{bmatrix} \left\| \begin{matrix} V_1 & j_1 \\ I_{jk1} & k_1 \end{matrix} \right\| & \left\| \begin{matrix} V_1 & j_2 \\ I_{kj1} & k_2 \end{matrix} \right\| & \left\| \begin{matrix} V_1 & j_3 \\ I_{jk1} & k_3 \end{matrix} \right\| & \dots & \left\| \begin{matrix} V_1 & j_m \\ I_{jk1} & k_m \end{matrix} \right\| \\ \left\| \begin{matrix} V_2 & j_1 \\ I_{jk2} & k_1 \end{matrix} \right\| & \left\| \begin{matrix} V_2 & j_2 \\ I_{jk2} & k_2 \end{matrix} \right\| & \left\| \begin{matrix} V_2 & j_3 \\ I_{jk2} & k_3 \end{matrix} \right\| & \dots & \left\| \begin{matrix} V_2 & j_m \\ I_{jk2} & k_m \end{matrix} \right\| \\ \left\| \begin{matrix} V_3 & j_1 \\ I_{jk3} & k_1 \end{matrix} \right\| & \left\| \begin{matrix} V_3 & j_2 \\ I_{jk3} & k_2 \end{matrix} \right\| & \left\| \begin{matrix} V_3 & j_3 \\ I_{jk3} & k_3 \end{matrix} \right\| & \dots & \left\| \begin{matrix} V_3 & j_m \\ I_{jk3} & k_m \end{matrix} \right\| \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ \left\| \begin{matrix} V_m & j_1 \\ I_{jkm} & k_1 \end{matrix} \right\| & \left\| \begin{matrix} V_m & j_2 \\ I_{jkm} & k_2 \end{matrix} \right\| & \left\| \begin{matrix} V_m & j_3 \\ I_{jkm} & k_3 \end{matrix} \right\| & \dots & \left\| \begin{matrix} V_m & j_m \\ I_{jkm} & k_m \end{matrix} \right\| \end{bmatrix}$$

where:

$|H|_x$  H the set’s cardinality is the number of its elements

V(i) International company (1-1000)

$I_{(jk)}$  Innovation quality variable (annual and quarterly value (1-21))  
 $j(i)$  Quality variable's annual value (1-10)  
 $k(i)$  Quality variable's quarterly value (1-10)

$$\text{elements of consciousness} = \begin{bmatrix} \left\| \begin{matrix} V_1 & j_1 \\ I_{jk1} & k_1 \end{matrix} \right\| & \left\| \begin{matrix} V_1 & j_2 \\ I_{kj1} & k_2 \end{matrix} \right\| & \left\| \begin{matrix} V_1 & j_3 \\ I_{jk1} & k_3 \end{matrix} \right\| & \dots & \left\| \begin{matrix} V_1 & j_m \\ I_{jk1} & k_m \end{matrix} \right\| \\ \left\| \begin{matrix} V_2 & j_1 \\ I_{jk2} & k_1 \end{matrix} \right\| & \left\| \begin{matrix} V_2 & j_2 \\ I_{jk2} & k_2 \end{matrix} \right\| & \left\| \begin{matrix} V_2 & j_3 \\ I_{jk2} & k_3 \end{matrix} \right\| & \dots & \left\| \begin{matrix} V_2 & j_m \\ I_{jk2} & k_m \end{matrix} \right\| \\ \left\| \begin{matrix} V_3 & j_1 \\ I_{jk3} & k_1 \end{matrix} \right\| & \left\| \begin{matrix} V_3 & j_2 \\ I_{jk3} & k_2 \end{matrix} \right\| & \left\| \begin{matrix} V_3 & j_3 \\ I_{jk3} & k_3 \end{matrix} \right\| & \dots & \left\| \begin{matrix} V_3 & j_m \\ I_{jk3} & k_m \end{matrix} \right\| \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ \left\| \begin{matrix} V_m & j_1 \\ I_{jkm} & k_1 \end{matrix} \right\| & \left\| \begin{matrix} V_m & j_2 \\ I_{jkm} & k_2 \end{matrix} \right\| & \left\| \begin{matrix} V_m & j_3 \\ I_{jkm} & k_3 \end{matrix} \right\| & \dots & \left\| \begin{matrix} V_m & j_m \\ I_{jkm} & k_m \end{matrix} \right\| \end{bmatrix}$$

where:

$V(i)$  International company (1-1000)

$I(jk)$  Innovation strength.

Portfolio value min, Innovation strength. Portfolio value max, Innovation strength. Total IP quality, Innovation strength. Total IP quality peer group, Innovation strength. IP relevance, Innovation strength. Technical quality, Innovation strength. Technical quality peer group, Innovation strength. Market Attractiveness, Innovation strength. Market Attractiveness peer group, Innovation strength. Market Coverage, Innovation strength. Market Coverage peer group, Innovation strength. Assignee score, Innovation strength. Assignee score peer group, Innovation strength. Legal score, Innovation strength. Legal score peer group, Innovation strength. IP efficiency, Innovation strength. IP efficiency peer group, Innovation strength. IP value trend, Innovation strength. IP value trend description, Innovation strength. Number of patents, Innovation strength. Number of inventions, Innovation strength. Number of companies within the group, Operating revenue Turnover, Cash flow, Total assets, Shareholders funds, Current ratio, Profit margin, ROE using P per L before tax, ROCE using P per L before tax, Net Debt, Net Income, Sale of Business, Gross margin, EBITDA margin, Net assets turnover, Liquidity ratio, Shareholders funds per employee, Working capital per employee, Total assets per employee, Dividend Pay Out, Profit per employee, Operating revenue per employee

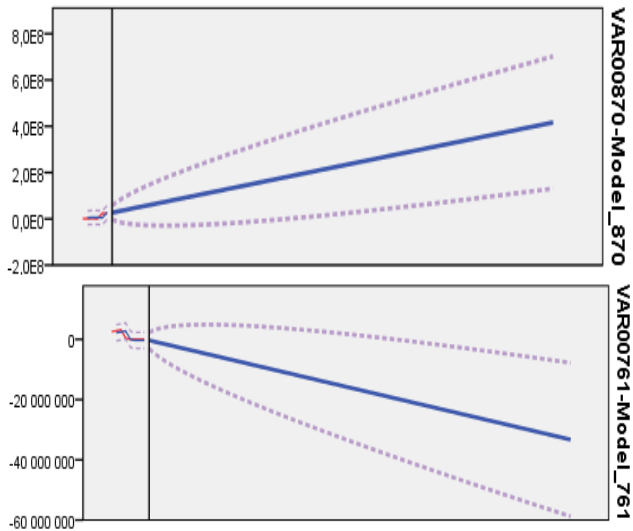
$j(i)$  Quality variable's annual value (1-10)

$k(i)$  Quality variable's quarterly value (1-10)

in that case  $|H|$  the correlation coefficient of the dataset and the elements of consciousness is the value of the Pearson correlation coefficient, the value of the KMO factoring, the result of the main component analysis, the results of the two-step cluster analysis, the results of the ARIMA modeling, the results of neural networks, with the appropriate levels, in the case of both international companies (hereinafter referred to as: Infoalldt) and mixed companies (hereinafter referred to as: NAICS2012), carry an individually displayable pattern that satisfies the conditions: financial instruments of the business planning of international companies  $\Phi (X(\text{mech},x_1)) > 0$ .

Figure 1: A characteristic example for the predictions of NAICS2012 companies. Own source, self-edited.

Pattern of the model number 870 conscious company, and the model number 761 nonconscious company.



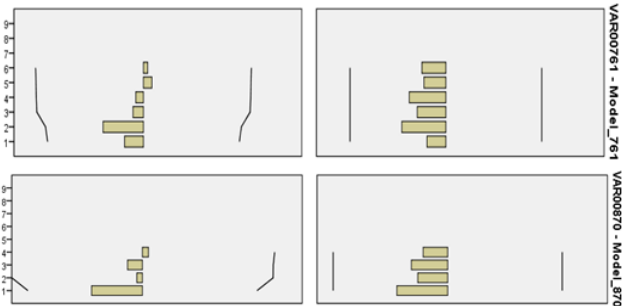
Pattern of the model number 870 conscious company ARIMA (0,1,0) displayed with colors, based on the consciousness model:



Pattern of the model number 761 nonconscious company ARIMA (0,1,0) displayed with colors, based on the consciousness model:



Pattern image of the autocorrelation and partial autocorrelation functions applicable to the companies with model number 761 and 870:



### 3. Fundamental research conclusions

We have at least the same level of superficial depth data and information of the functioning and network connections of the human brain and human DNA, as we have regarding the basic principles defining international business, financial systems and their structures, business planning and the correlations of their network systems. Consciousness is the key to understanding the problem. Consciousness is the way we sense and observe the world, the way we think, the sum and the display of our intentions, our feelings, emotions, and their projections in various abstract manners, thus in the system of the concepts of international business and finance as well. Living consciously means that we are open to the observable world surrounding us and we pay attention to the ongoing processes within ourselves.

Consciousness is fulfilled when we understand our circumstances and we decide how to react to them in a way that we respect our needs, values and goals. Within the individual conscious enterprise facilitates peace, happiness, respect for the community and solidarity, as well as facilitates the achievement of the most fundamental goals within the organization of the enterprise. (Sisodia, 2009; Kaufman, 2006). Irrespective of time and the type of company group, conscious companies carry continuously recognizable patterns and shapes in the datasets describing their operations. If we unwrap these attributes, we find a multitude of correlations, which show business patterns and business planning. During the operation of companies, we can also find correlations between financial instruments and the components of innovation. Innovation by itself is also a set of correlations and well definable elements, which are linked to each other as well. Innovation carries the pattern of consciousness to the largest extent as an indicator value, which is the key to the company's survival, irrespective of time.

The correlations between the business planning of international companies and their financial instruments can be interpreted based on consciousness as a cross section filter. Based on the Tonnoni theory, it becomes measurable, and appears as a theoretical quantity.  $\Phi$  is the starting point in the determination of consciousness and at the same time provides the framework for concrete deduction. Generally consciousness is definable and projectable. International business planning and its elements, financial instruments, are the end point of conscious business and the entire conscious system, the superstructure. The entire structure is arranged according to the same principles. Basically, the appearance of human decisions in international business planning is one of the end points of infinite consciousness. (Helfert, 2001; Virág et al, 2013)

#### 4. Conclusions

My fundamental assumption is that because of the existence of consciousness in the function system described by Tonnoni, 2008, as a result of the simple partition (derived and non-derived elements) and selection, they comprise a system filled with correlations. It has been proven that the datasets carry periodically returning patterns and shapes. These are well displayed by data visualization maps and patterns, which show the correlations irrespective of company groups. This appears the most intensely and noticeably in the innovation indicators. This is one of the cores, one of the strengths of consciousness. This is also shown by self-organizing maps. In the case of financial instrument (in the elements of the consciousness model) consciousness is most noticeably present in innovation elements.

#### References

- Helfert, E. A. (2001) *Financial Analysis: Tools and Techniques. A Guide for Managers. McGraw and Hill.*
- Kaufman, F. (2006) *Conscious Business: How to Build Value Through Values. Sounds True.*
- Kurzweil, R. (2013) *A szingularitás küszöbén. Ad Astra Kiadó.*
- Kurzweil, R. (2012) *Virtually Human. The Promise-and the Peril- of Digital Immortality. New York, St. Martins's Press.*
- Kurzweil, R. (2005) *How to Create a Mind. The Secret of Human Thought Revealed. New York, Viking Books.*

- Sisodia, R. S. (2009) Doing business in the age of conscious capitalism. *Journal of Indian Business Research*, 1 (2/3), 188 – 192.
- Sperry, R. W. (1979) Consciousness, Free Will and Personal Identity, in *Brain, Behaviour and Evolution*.
- Tononi, G. (2008): Consciousness as integrated information: a provisional manifesto. *Biology Bulletin*, 215 (3), 216-242.
- Virág Miklós-Kristóf Tamás-Fiáth Attila-Varsányi Judit (2013) Pénzügyi elemzés, csődelőrejelzés, válságkezelés. *Kossuth Kiadó*.

**Cite this article:**

**Laskai, A. (2019).** Consciousness and the International Business Planning. *International Journal of Science and Business*, 3(1), 1-6. doi: <https://doi.org/10.5281/zenodo.2528383>

Retrieved from <http://ijsab.com/wp-content/uploads/301.pdf>

## Published by

