

Coping with Robust Development. Contribution to Lengthen Life & Pleasure

■

Carmen Costea

The Bucharest Academy of Economic Studies

cecosteaa@yahoo.com

***Abstract.** THuman beings' work and life are similar to flowers that last longer depending on the conditions quality they endure. Deeper awareness and calculated responsibility generate better understanding of what being self-motivated is. It also shows another way of appreciating and enjoying Life and Work by treating Environment and Society properly. We combat here the myth of no choices in choosing policies that affect our lives. By exploring new approaches of economy and society, by taking the commercial company as example, we enlarge the results to the societal level. The paper demonstrates the need to use complex systems and apply them to both economic and social levels to turning the trends into societal advantages as a handy alternative to believe in.*

Keywords: complexity; soundness; added value; environment; change management.

■

JEL Codes: D8, D83, F15, H79, I20, I31.

REL Codes: 5C, 7G, 12C.

1. Carrying the torch of development

The frequent changes happened under the Science's stars are influencing Society and Life in a very complex way. Largely based on information, the scientific results have taken the world apart and put it together, with wide and complex understanding of both environment and business.

The word *complex* has even more challenging associations, with processes happening at both economic and social level, with a light perception on some consequences for the future development of the Society. It is at that level that many factors and variables bring into equation *unrevealed* explanations and potential outcomes to which the logic power tries to give a real sense. When the right tools are applied at both social and economic level, using a complex approach of understanding the results, the wellbeing sounds robust and promising. Under the super-networks implications, more and more people realize that there is no knowledge of parts giving accurate insights into the organization and functioning of complex wholes. Within this idea the behavioural approach took the research advantage with both economic and social inclinations and consequences. The circumstances of the recent economic turmoil brought macroeconomic concerns to the fore. What began as a basically management-oriented study is now situated firmly in the realms of political economy.

We keep in mind that economy is a constant engine of change: innovation and

creativity are beyond the mass production from which it differ deeply enough to differentiate from each other in creating common value or isolation and separation. This new economy should be understood as the richest one in meaning, as the most appropriate to figure out the main streams of development inside a solid net inducing sectorial turbulences at all levels. It may not be the *perfect* but definitely can be the *right* one.

As complex systems generally include people, companies, and their behavioural attributes, the interactions between such elements – connected to each other – leads to this new economy with complex patterns, permanently changing under fluctuations, *n*-dimensionally, in space and time. It is not difficult at all to point the axes of this new economy, as follows: prosperity as the result of innovation not of optimization; need to crop the unknown versatility and use it for the common benefit; communication as the core of inter-relating inside the new well-net development; sharing the knowledge without any fears of competitors by developing robust alliances.

If we consider some fundamental principles in developing a new approach of economy and society – connection, fulfilment, exponential added value, reverse evolution of prices, tolerance, generosity and emotional transfer by connecting individual and corporate values, performance by fast innovation – the point where less can be more and bigger isn't better is already got. And this happens because things may be better than they look to be.

2. Complex opinion for market and society

An economy is not always an aggregation of components but depends on a higher-level organization that grows out of interactions among those components. We live in a complex, mercurial world that cannot be described only by simplistic concepts. Under globalization process we assume and require levels of flexibility and sophistication that we never had to make explicit before, and that will mean real changes in thinking too. Valuable tools in this process will be networking and coaching partnerships (Costea, 2008, p. 19). This does not mean at all marketing campaigns, promotions or ethical trade focus groups, rather actual (economic and societal) awareness transformed into profit and power that is shared with partners, any time, everywhere. The action space is shown as a 3D ellipses game, each one having two foci. These action spaces are positioned in an orthogonal coordinate system. Each of the three parts tries to reach its own optimum. To a very great extent, the optimum of the universe cannot be reached for a certain time period.

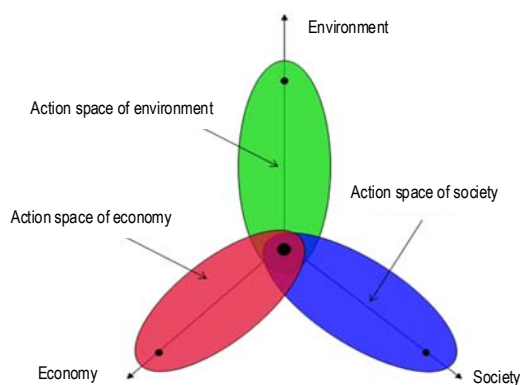


Figure 1. *The natural situation*

Maybe it cannot be reached at any time. The effort of each subsystem is represented by a vector of interactions as shown in the Figure 1.

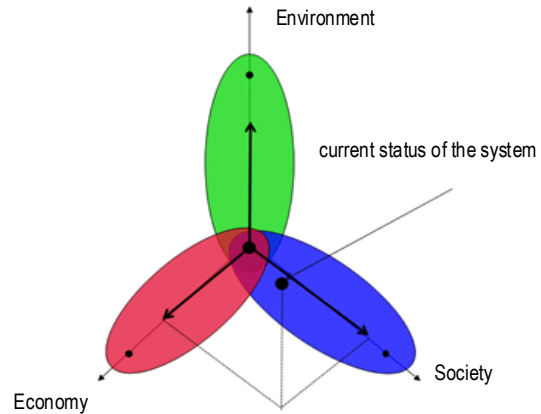


Figure 2. *The current situation*

The length of each interaction vector represents the power of each subsystem. So the current status of the system is the result of the addition of the three vectors as shown in Figure 2. The same happens with any subsystem, including organizations. There is good evidence that networks of small and medium sized firms can work effectively and to the mutual benefit of all participants. The networks system is not reliable when conceived only horizontally. It is required to set it up vertically to link individuals with society, at the interest level. Whether regional or global, if it is effectively connected, the communication will be self sustaining. Economic markets and supply chains, human body and behaviour both at work and inside the society – with their ups and downs – can't be understood from conventional perspective. They challenge and surprise us, aboveboard, with irregular architecture and structures, environmental noise, with patterns that rebound reality under entropy and enthalpy influences.

It is worth the need to see correctly the economy and society as it should be if we want to build the right business that requires not only study but also understanding of the business as both a complex matter and a framework established inside the nature and society. The vision of a networked knowledge-based society brought into discussion new angles of the old topics of management systems. The complex approaches of life and profit, of goals and wishes, of objectives and targets are searching for customize ways of operations and behaviour to be considered, new ideas to sustain explanations, new tools to be used. This should be that State-of-Art, the knowledge bridge, able to carry out the gap between natural, social and economic environment and build the right world in a society that wants to be proud of it.

The social and economic importance of life and business complexity and their link with high standards and profit is, sometimes, risky. Under such circumstances, unexpected demands are brought out when growing global stands for higher integration of business processes and improved efficiency, sometimes unfortunately connected to failures or bankruptcy when exposed to unknown risks.

Changing the style of action may bring to us in front of a new *Law of Success*: use the sensorial to identify the weak signals of the market, develop mental agility to detect innovation, use all resources to develop connections and reliable relations bringing with them the best of solutions, develop the culture of acting *Big*.

Looking beyond the words, understanding individuals and groups,

improving the listening skills, generate no boundaries communication, where everybody is somebody, where any asked question gets an answer, where the knowledge limits are moved on as there is always something more to get acknowledge of. Good *net workers* may create great leaders – and *systems* enabling the connection with others: joining networks, connoting valuable lifetime connections with *key players* and other members (Henderson, 2005, p. 19) mastering innovation and creativity. Innovation doesn't require large efforts: matching creatively the right opportunity and the right competencies help a lot. Not exclusively focused on new technology, innovation help developing new models and strategies under which every bit is important. These count but must be coupled with an organization, metrics and rewards to make innovation manageable and things happen better under the right behaviour.

Superior innovation enables companies to grow faster, better and smarter, partially by protecting tangible and intangible assets from the competition erosion. Innovation requires solid management skills and organizations that get things done and not *alchemy* (Henderson, 2005, p. 19) mystifying transformation.

Innovation tackles with key business functions coming up with the right idea, selected and implemented in the right way, at the right time. Innovation is not solely about processes and tools. Facts have proved this happening inside networks, where:

- creation of value is encouraged by stronger leadership;
- innovation is considering as a part of the business mentality;

- business strategy is relying on matching innovation by balancing creativity;
- real value capture is easier managed if innovation networks both inside and outside the company under the fairness and performance rules. Under competition it looks different when competitors struggle to judge, evaluate or interpret each other situations. This may happen because confusions may connect to information and knowledge (Prusak, 2006, pp. 18-20).

Usually customers focus on bits and pieces of information they foregather rather than seeing the whole picture. While some clients find the time and patience to examine all possible choices, with pros and cons, means they enjoy the rational dynamic approach of decision taking while there are others that like to take decisions based on perceptions, sensations or emotional reasons and explanations. Rational linear choices do not necessarily make life easier for oneself while others may explain a great deal of the shadow side of decision making.

There are also recognized behavioural characteristics that everyone has. Knowledge of profiling methods as used in the intelligence and law enforcement realms simply allows analysts to take what would appear to be innocuous traits of a subject and extrapolate behaviours. If we know that a particular executive displays particular traits that individual's responses in various scenarios are, to a degree variable with the number of data points, predictable. This is not about a *mass psychological screening of every employee* (Prusak, 2006, pp. 18-20). Each of them may access different types of

information and value it differently. A standardized policy regarding the knowledge of information and the power of the right processing operations can be a good step in applying a new but challenging technique, emotional competitive intelligence in business. The value of employee and the way they value their own training in task-related psychological skills is widely – and increasingly – acknowledged in the corporate sector. According to Lawrence Prusak (2006) information is a one-dimensional *message*, represented by an *image*, a *document* or any other pattern or physical configuration. It's most special quality is to be stored and disseminated anytime, any where, as *knowledge results from the assimilation and connecting of information through experience* (Prusak, 2006, pp. 18-20). The experience, as a result of mentoring, training, coaching and learning process, helps to embed the knowledge required by organizations in ways that *have largely evaded codification*.

Intelligence – often cited as the world's second oldest profession – remains today much as it has been for the last half of century: a tough discipline that relies on the smarts of its analysts to interpret and communicate uniquely insights and implications to decision-makers and policymakers. While the meaning of intelligence in business is quite understood, the put together combination, emotional intelligence in business competitiveness may refer at landscapes, scenarios, development, war games, competitor lifecycle profiles, and portfolio analysis to understand what the competitors may do, what the potential customers may look for; in one word, to

understand the right dimensions of market of tomorrow.

To reach the point some priorities issue for to consider:

- Branding fundamentals system to expand the environment of emotional business intelligence (EBI), addict specialists, strengthen its role and promote excellence practices. The brand positioning statement must provide the vision of the beneficiaries, and the benefit of the customers;

- Rethinking the value of the management button line and EBI insights by repositioning the intellectual property as strategically as possible compared to the competitors;

- Making alliances and advocacy the market no matter the purpose of the activity is: a market report, a long term strategy or business development design. Once shared, the insight can influence the powers to facilitate change. This will help to see and bring new opportunities there where others see only *impossibilities* (Poissant et al., 1989).

For many companies business intelligence (BI) is only a small function located and kept up in a varying department of the business, operating as part of a market research. In fact, BI supports different types of business activities and assortment of BI and CI (competitive intelligence) tools, supply intelligence to multiple levels of management through different intelligence deliverables. When asked what changes would allow improvement the company activity, the top responses involve accessing, integrating and sharing information together with better education at all management levels.

3. When less is more and better is bigger: from the old techniques towards alternative approaches

Competitive Intelligence (CI) professionals apply many analytical techniques to turn information into actionable intelligence. But CI practitioners generally prefer to use only a few techniques, and those preferences have not changed much over the years:

- *collection*: competitive intelligence leverages a variety of primary and secondary sources of which the internal employees and publications (websites) are the most valuable;
- *analysis*: competitor analysis and SWOT sound familiar to most practitioners;
- *dissemination*: despite the need of a professional integration of the final information, a large audience from internal and external environment could be interested in the CI results and techniques (emails, hard reports, fast personal courier).

There is, of course, a safer way to improve CI standings by leveraging awareness and visibility, by creating a large exposure to senior management, demonstrate the value and the potential to strengthen the sales forces: neutralizing the competitors (trivializing) the competitors high points; opposing another point of view to claims made by competitors; turning up negative references; identifying new competitors trends changes, purposes; reducing competitors' credibility by any handy means; finding competitive responses to requests for proposal (RFP) when the entire

set of information with regard at pricing, project timing, key personnel, product positioning in the competitors' pattern are on the website; incorporating the feedback information in the analyze; uncovering the customers' dissatisfaction, as strategic long term exercises fitting the decisions to the correct direction-setting.

Education by teaching and coaching followed by long life mentoring may give a new vision of the staff over this activity. Used to set up better goals, this new education maps the right strategies and look for improving the professional skill. No matter life is the real test, when it comes down to opportunities, training and mentoring may open more windows to abilities and alternatives. True education happens when practitioners are afforded the opportunity for long-life on the job learning from supervisors, mentors or external coaches. With it, little becomes more.

Market people do not always believe to what they hear. Often they do the opposite they are advice to do. And there are also other people who prefer to buy while the others are selling and vice versa. Sometimes people do not make choices in their own interest, then, you may need policy to direct people to make choices in their interest. People have reasons for behaviour other way than enlightening self-interest. Some other times, in investment transactions, the intensity of motivation of buyers and sellers has not been the same when sectors that are buying are more motivated than sectors that are selling (the price will rise, and the opposite occurs when selling groups are more motivated than buying groups). Negotiators look for compromises, usually following

advices from brokers or some commentators. Such opinion leader of a market guru is several times cited with fixed coordinates and its effect is kept constant. Therefore something has to be done in order to reduce the number of indecisive actors and determine them to act but under the condition of decreasing the fund for advertising. This way the profit will increase from both ends as antithetical people in the society are needed for better utilization of such results.

As already said business intelligence is the foundation for performance management using analysis of relational data new trends, threats and opportunities may be discovered. This will always shorten the time to act, reduce the demand on resources for constant vigilance. Breaking the limits, the combination of Business Intelligence and planning (SAP) capabilities is core to a complete, closed loop performance system connected to forecasts, targets, and reports.

Companies will be successful in the market if their customers are satisfied, and made to feel important. The primary rule still remains how to know the potential customers and transform them in real customers.

The most frustrating part of this scenario is that the data needed to make better planning and forecasting decisions are at companies' finger. The tools to integrate the analysis and eliminate restrictions and risk limits are missing. The ability to extract data and provide meaningful planning and forecasting analysis is desirable for any management teams. Generating in real time available reports founded on reliable sources tailored to meet any companies requests, will provide unattainable yet but very competitive advantages.

Optimizing customer knowledge and profitability with integrated analytics to avoid any potential risk will achieve its goals when efficiency gains will function systematically towards performance, working in a multiple and extensible network. Successfully organizations recognize that integrated analytics will drive the organization ability to maximize revenues.

The irony of the consistent failure of companies to formalize data activities in their projects is that many of these same companies are currently in the throes of a quality program like Six Sigma for which the purpose of “zero defects” not affect only the company bottom line but individual compensation. Data accuracy is one of a project’s many measurable success criteria. If companies aren’t factoring the quality of their asset into their projects in a rigorous and permanent way is not only a financial risk, it contradicts the “ongoing enculturation of their quality-ay-any-cost-philosophies” (Poissant et al., 1989).

Each customer should be treated as a high value customer (real or potential to become real). Their high profile business requirements and associated business rules should be very clearly stated. This involves examination data with regard at:

- a min-max value generated and counted for all fields;
- the elimination of invalid figures or corrupted/incomplete data;
- checking the data hierarchy and their cross-joined cardinality records.

The lack of adequate fact-based decision making, the inability to pursuing new business opportunities or for management to having an accurate view of business

operation are among the biggest impact of poor data quality. Therefore the first priority for companies is to be able to accept the bad there where it is and decide to change it with new orientation to cover the lack information by initiating a data quality audit and start recording complaints about it. This will bring together friends from business owners open to collaboration and quality data improvement in a formal pattern. This is the single way to create an excellence Data center.

The institutionalization of information may enable by its executive the rethinking of the data management and eliminate the inaccurate information to be delivered to market under enormous saving of time and money. When it comes to acknowledged business priorities most managers do not know the cost of data quality until abandoned work or cancelled projects are obvious. Educating business into hidden costs management and projects can spur managers into action. Starting with a clean up effort and a real audit report they may learn to correct their approach of data quality necessity and dedicate more time to it, promoting a large manager program of excellence in quality finalized with lower costs or additional revenues.

To be effective, leaders must inspire their group toward a common goal, being able to relate to these groups by empathizing with their emotions, taking time to reflect how to learn from ups and downs, encourage appropriate and constructive feed-back, in a world work at the same vision as a managerial team inspiring performance and a partnership model. This will give more power and motivation to empathize with other and find the balance in everything.

Some important rules would be rethought and considered as compulsory: potential customers should be turned into real ones; the errors and the hidden procedures managing to risky activities and low profits be identified; the customers' knowledge be assimilated as a complementary method between marketing, ERC, CRM and BI.

Customer knowledge refers to understanding all customers' profiles, habits and needs. What they do, how they behave, where they buy from and what is essential if a company intends to align its processes, products and services and build a real strategic partnership with. Many companies do have the knowledge of their own customers, but frequently this is in a fragmented form and difficult to share or analyze if not incomplete.

Nowadays, under a sharp and ferocious competition in the battle for new markets, customer knowledge is quite a big topic. Recent study of business failures agreed to the idea that often failure can be put down to complacency creating a gap between what you think customers want and will put up with, compared to what customers really want and will go to your competitors for.

To avoid additional risks some orientation are underlined to be considered: the identification of all possibilities of gains by wide increased efficiency; transparent functionality; high quality performance; integrated approach of both shops/companies and clients inside the same complex system; rethinking n-dimensionally the consolidation and partnership extension with any client. Customer knowledge can be approached under two aspects.

The first one runs as a *collection of information* and *viewpoints* that an organization has

about its customers. Using such definition, the role of customer knowledge management is to capture and organize this data to allow it to be shared and discussed throughout the company. The central point under this approach is that for good results a stronger customer relationship needs to be built. This is why the current knowledge about customers is never sufficient.

The second step takes into consideration the axiom that customers (De Vries et al., 2002) are *more knowledgeable* than we realize. Thoughts, behaviours, wishes, habits, actions are always important fields providing new information. Therefore the balance should always be inclined towards the right value to get from the information needed than the collection of information already had. To create emotional business data bases involve the connecting of information through experience and the knowledge of large competitive circumstances may impact an organization's a future strategy to compete. There is neither intelligence nor creativity outside the knowledge. There are dozens of business intelligence specific software tools that litter the market excel at managing and handling information. The *Shakespearean* commercial question will refer at the future of knowledge and business intelligence: will they by a distinct human endeavour or will be replaced by IT software tools and new models?

Individual or group experiences in applications, competitor behaviour, possible future solutions together with quantitative insights, a wider variety of less structured information as their own ways of gaining, sharing and expanding knowledge with other customers that will help to build insights into customer relationships. It should include information about:

- individuals (emotional too),
- customer experience and creativity,
- loyalty schemes,
- active lobbying knowledge and knowledge partner,
- customer success,
- innovation,
- organizational learning, performance against budget; customer retention rate; performance in terms of customer satisfaction. That helps explaining who those individuals are, what they do and what they are looking for, and may enable broader analysis of customer base as a whole.

The new aim of companies should be to setting up a strong systemic network of customers so that they can build and manage customer knowledge and relationships over longer terms. To bring some help a new application of the use of Formation of Languages; Equality, Hierarchy and Teachers models is suggested (Tuncay, 2007, pp. 1061-1070). In this respect, we propose to use the above mentioned model - created by Tuncay (and Stauffer) and developed later into another application (Costea, 2008, pp. 267-270) where languages are replaced with N hypermarkets brands with a different number of shops spread into a certain geographical area. Each shop has k real customers with M needs ($wki, k \leq N, i \leq M$). For any need there may exist many related items assortments or varieties belonging to different classes of products (j) underlining, symbolically, five different subentries at most. So we take $1 \leq j \leq jmax$ for every need w and for each j we assign a representative real number r . The maximum number $jmax$ of subentries r is also determined randomly

between 1 and 5, independently for any need w . Clearly, $rkij = 0$ ($wki = \{0, 0, 0, 0, 0\}$) corresponds to an unknown need of the customer k . Customers' needs are groups of up to five real numbers: $wki = \{rkij\}$ (Tuncay, 2007, pp. 1061-1070). Initially there is no consensus about purchases, but the consensus may be set through several processes.

Thinking for example, consumption - not only as a concept or a culture but a measurable integrated culture (A,B) underlining the trends, the risk of authenticity, external assets integrated in the world economy will give another approach and meaning of it and each contribution will be easier emphasized as in the Figure 3. It may permit to emphasise the efforts (W_F) inside relationships between quantities (Objectives), of different dimensions, in connection with other quantities (parameters) applicable to any field. It will result an ϕ net individual/corporate contribution that, taken into consideration as a new indicator, could change the future destiny of the society.

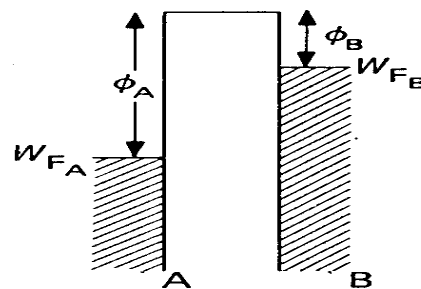


Figure 3. Measurement of net economic or social contribution

The brand will emerge in that area with the number of customers where the clients walk to a certain shop L_k varies from

customer to customer, mainly at the opening of the shop and this fluctuation fades down with time since $L_k \rightarrow L$, if convergence occurs. Later, by assigning to each customer a random real number (rank; greater than or equal to zero, and less than one) a hierarchy may be established. Some leaders opinions with ultimate rank of unity into decisions to choose a certain brand should also bring some more information.

Applying the Caglar Tuncay's model, the values for initial r_{kij} 's should be changed into time dependent ones, i.e. $r_{kij}(t)$. The purpose is to check the customers' behaviour and the way they look for satisfying their needs and buy from one place or another, from one hypermarket brand or the competitors', on their own need or under the impulse of opinion's leader.

This model may bring interesting information on what they buy, when they buy, why and how much for. In the long term the company may think to design new products with more added value incorporated in order to satisfy those needs issued from emotional behaviours. This way (Toffler, 1980, p. 25), customers will fill the dual role of both producer and consumer in creating net value inside a team-based co-learning process where mutual innovation and joint intellectual property are obviously considered. There is no point in thinking wealth and durable profit underestimating the customers diversity and falling into the possible "trap" of over-reliance on (existing) customer knowledge without appropriate sensing of wider environmental impacts and influences.

Mutual understanding, reliance and confidentiality must be agreed upon and

consistently implemented. Careful consideration has to be given to degrees of openness in sharing of knowledge, and cultural issues of respect, trust and ways of interacting have to adequately co-shaped and optimized.

It is quite a challenge to build successful models of a wide range of socio-economic phenomena in which the agents operate with low cognition, both in their ability to gather information and process it. This is in direct contrast to the high levels of cognition assigned in economic theory, even under bounded rationality. A key feature of all these models is that agents operate on networks. A particular interest is the extent to which assigning greater cognition to agents means that models become successful in terms of their dynamic consistency with stylized facts. In order to model natural human behaviour, it is firstly necessary to capture this behaviour.

The start consists in modelling behaviour for specific situations; once human behaviour captured, the following experiments perform. Given a virtual environment, a sufficient number of subjects are asked to execute a human task in this virtual environment. The hypothesis is that the combination of the motion paths and the clues for making/changing decisions will provide decision rules to make reliable predictions about human behaviour under the same conditions when using virtual persons. Later, if the traditional definition of customer is expanding, other parties such as suppliers can also be included. They may be a new step forward, another rich source of valuable knowledge for companies, and a source that lies beyond the usual corporate boundaries.

References

- Costea, Carmen, „Complexity: new opportunities for understanding consumption”, Proc. of *SPIE*, Vol. 6802 680219-4, 2008, p. 19
- Costea, Carmen, „Application of Tuncay’s Language Teacher Model to Business-Customer Relations”, *International Journal of Modern Physics C*, Volume 19, Issue 02, 2008, pp. 267-270
- Henderson, R., (2005) “Leadership” *Excellence Magazine*, October 2005, p. 19
- Poissant, Ch.A, Godefroy, C., (1989). *How to think like a millionaire*, Thorsons Publishing Group USA (HBG), p. 22
- Prusak, L., „The world is round”, *Harvard Business Review*, April, 2006, pp. 18-20
- Tuncay, C. (2007). „Formation of languages: Equality, hierarchy and teachers”, *International Journal of Modern Physics C*, 18(6), 2007, pp. 1061-1070
- Toffler, A. (1980). *The Third Wave*, NY, New York: William Morrow and Co., Inc, p. 25
- Vries, De B., Jessurun, A.J. Dijkstra, J., „Conformance Checking by Capturing and Simulating Human Behavior”, *Built Environment Proceedings of the 6th Conference on Design and Decision Support Systems in Architecture and Urban Planning*, Ellecom, Eindhoven University of Technology Design Systems Group The Netherlands, 2002 (www.ds.arch.tue.nl)